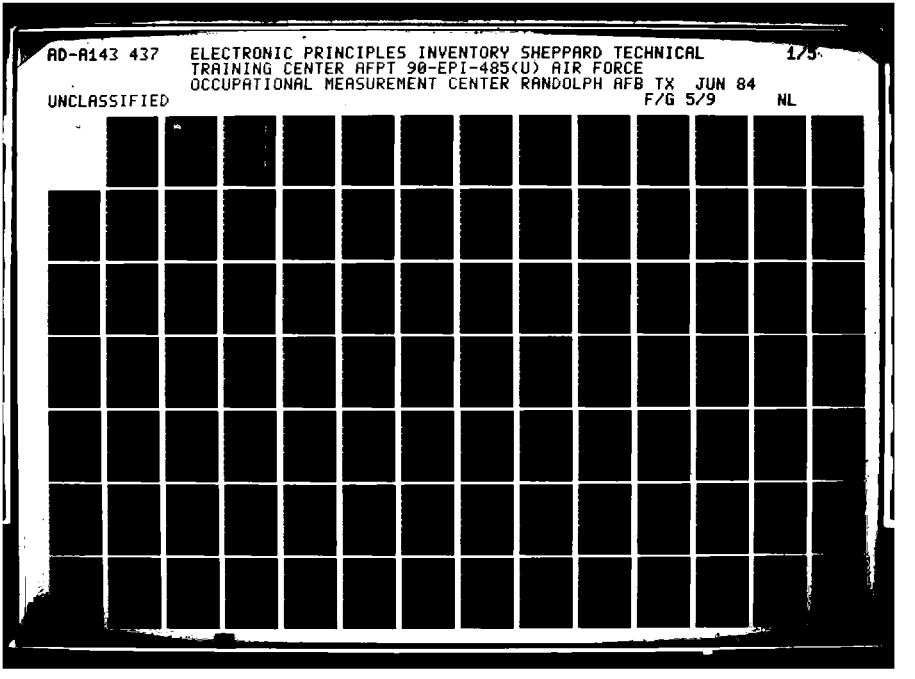
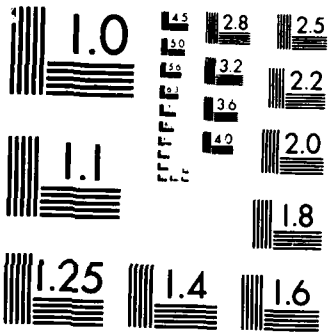
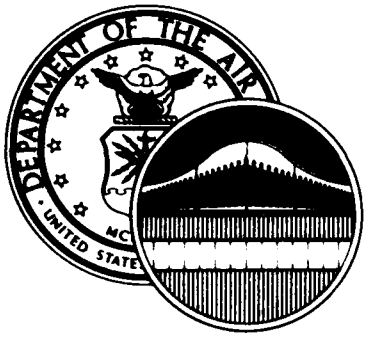

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ELECTRONIC PRINCIPLES INVENTORY

SHEPPARD TECHNICAL TRAINING CENTER

AFPT 90-EPI-485

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TABLE OF CONTENTS

PAGE NUMBER

PREFACE.....iii

SUMMARY.....iv

INTRODUCTION.....1

History.....1

SURVEY ADMINISTRATION.....3

5-Skill Level Use of Electronics Principles.....9

7-Skill Level Use of Electronics Principles.....10

Plan of Instruction (POI).....10

Summary.....14

PREFACE

This report presents the results of an Air Force Electronics Principles Survey of those specialties for which electronics training is provided at Sheppard Technical Training Center, Sheppard AFB, Texas. Authority for conducting electronics principles surveys is contained in AFR 35-2.

The survey instrument used to collect data from career ladder incumbents, the Electronics Principles Inventory (EPI), was originally developed by Dr. Hendrick W. Ruck and Major Thomas J. O'Connor in 1976. It was revised and updated in 1979 by Mr. James L. Slovak and Captain Frederick B. Bower, Jr. Mr. Slovak further refined and updated the instrument in 1981.

Second Lieutenant H. A. Goodman analyzed the data and wrote the final report. Computer support was provided by Ms. Olga Velez. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78150.

Copies of this report are available to Air Staff sections, major commands, and other training and management personnel. Requests for additional copies should be addressed to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150.

PAUL T. RINGENBACH, Colonel, USAF
Commander
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Chief, Occupational Analysis Branch
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SUMMARY

1. Sample: Eight AFSCs and a total of 861 members completed the Electronics Principles Inventory (EPI). This covered at least 50 percent of the assigned strengths of each of the electronics AFSCs serviced by Sheppard Technical Training Center.

2. Administration: Inventories were administered to a stratified random sample of 5- and 7-skill level career ladder incumbents between August 1983 and January 1984.

3. Skill Level Findings: Two AFSCs, 31650F and 91850, were found to have percent members performing figures which reflect very different needs for electronics fundamentals than other AFSCs in the study. The 316X0F AFS had very low percent members performing figures on EPI items, while the 918X0 AFS had, on the average, extremely high figures. No systematic differences were found to exist between the 5- and 7-skill levels.

4. Course POI: Based on the percent members performing figures of inventory items, a need for updating of the POI seems to be indicated. The match of POI paragraphs and subparagraphs to inventory items was not always consistent with percent members performing.

ELECTRONICS PRINCIPLES INVENTORY
SHEPPARD AFB, TEXAS

INTRODUCTION

The USAF Occupational Measurement Center provides specialty task data to training personnel in the form of occupational survey reports (OSR) and training extracts. Such data are presented in task statements quantified according to percent members performing, relative time spent, task difficulty, and training emphasis. This task data provides a precise picture of the kinds of functions personnel in a specific AFS actually perform at a specific point in time. When properly applied, OSR data can be a powerful tool in the design of training content.

Generally speaking, OSR task statements can sometimes be difficult to translate into knowledge requirements. This is especially true of tasks which require some degree of electronics knowledge. Prior to development of the Electronics Principles Inventory, training managers and command representatives had to rely on subjective interpretations of task statements to arrive at the kinds of knowledge required to perform electronics-oriented tasks. This requirement for more objective criteria for determining the amount of electronics knowledge necessary to perform the job resulted in the development of a new type of USAF job inventory, called the Electronics Principles Inventory

Electronics Principles Inventory

The (EPI) is a knowledge-based job inventory which identifies the range of electronics principles personnel must understand to perform any electronics-oriented job. Training managers can use EPI data in conjunction with OSR data to determine precisely what specialists do and what electronics principles they employ on the job. By using EPI and OSR data in this manner, training managers satisfy one of the most important aspects of the instructional systems development (ISD) process: determine what specialists do on the job before developing a course to train individuals to perform the job. The EPI booklet differs from the usual task-oriented survey in two major respects. First, the EPI asks two general questions: "What do you do?" and "What electronics knowledge do you use in performing your job?" The second difference is the EPI can be administered to anyone who works with electronics. That is, it is general in nature, unlike the usual job inventory, which is aimed at a single specialty within a career field.

History

In 1974, the initial request to develop a method of determining electronics fundamentals used on the job was made by Major General Charles G. Cleveland, Deputy Chief of Staff, Technical Training, Air Training Command. At the time, General Cleveland needed some means of accurately measuring how much electronics fundamentals training was actually used on the job. He envisioned using EPI data to streamline training by eliminating "nice-to-know" information in the area of electronics security.

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At the General's request, Dr. Walter E. Driskill, Chief of the Occupational Analysis Branch, set up a task force to conceptualize, develop, and apply a method for measuring job usage of electronics principles. The task force was composed of personnel from the Occupational Analysis Branch who were well qualified in theoretical physics and electronics. These personnel also had considerable expertise in task analysis and survey development. With assistance by these individuals, electronics experts from 5 ATC Technical Training Centers, averaging 12 years maintenance experience and 4 years of electronics principles instruction experience, spent 3 weeks working on the development of the EPI. This tentative EPI then was reviewed and refined by over 300 maintenance personnel from SAC, TAC, ADC, MAC, and AFSC, as well as personnel at the Electronics Engineering Department of the USAF Academy and the Air Force Human Resources Laboratory. The resulting EPI contained 1,257 items under 62 subject-matter areas covering all electronics principles training given at the 5 ATC Technical Training Centers.

During 1977, this EPI was administered to more than 11,000 airmen in 54 different Air Force specialties. Since the aim of the EPI was to determine the extent electronics fundamentals were actually used in the performance of Air Force jobs, the logical person to survey was one at the worker level with sufficient time on the job to understand all it entailed. Consequently, only 5-skill level personnel with more than 18 months active duty service were surveyed. Results from this project were used extensively by the various training managers to refine their respective plans of instruction.

This original EPI was revised in 1978 and 1979 to more accurately reflect some of the computer-oriented and various other electronics principles. The revision was accomplished by Mr. James L. Slovak, Inventory Development Specialist, and Captain Frederick Bower, Occupational Analyst, after consultation with electronics principles instructors at each of the technical training centers. Mr. Slovak conducted a further revision of the EPI in 1981, following additional consultation with electronics principles experts. Following this extensive review, the EPI was reprinted in its current format which includes 1,366 items.

SURVEY ADMINISTRATION

The Electronics Principles Inventory (EPI) was administered to 5- and 7-skill level personnel in those specialties for which electronics training is provided at Sheppard AFB. These AFSs included:

306X1	Elect-Mech Comm and Crypto Equip Systems Spec
306X2	Telecomm Systems Equip Maint Spec
316X0F	Missile Systems Analyst
316X2F	Missile Electronics Equip Spec
362X1	Telephone Central Off Switching Spec
362X3	Missile Control Communications Spec
362X4	Telephone Equip Installation and Repair Spec
918X0	Biomedical Equip Maintenance Spec

Inventories were administered to a stratified random sample of career ladder incumbents. In each specialty surveyed, booklets were sent to career ladder incumbents randomly selected across the 5- and 7-skill levels. No more than 500 booklets were administered to any given specialty due to computer restrictions. These personnel were selected so as to accurately represent all specialty groups. Seven-skill level were also surveyed; however, their data is collected for use in a later study and is also utilized for purposes of comparison with 5-skill level personnel. The inventories were administered between August 1983 and January 1984.

Table 1 displays survey representation across specialties. Maximum sample is the total number of incumbents by AFS who were selected to be surveyed. Final sample represents the total number of individuals from the maximum sample who actually completed and returned survey booklets. The table shows at least 50 percent of the maximum for any one of the eight AFSCs surveyed. This ensures acceptable representation across specialties.

TABLE 1

SPECIALTY REPRESENTATION IN SHEPPARD EPI SAMPLE

AFSC	TOTAL ASSIGNED	MAXIMUM SAMPLE*	FINAL SAMPLE	PERCENT OF ASSIGNED IN SAMPLE	PERCENT OF MAXIMUM IN SAMPLE**
306X1	390	211	108	35	51
306X2	977	500	267	27	53
316X0F	179	102	51	28	50
316X2F	93	39	22	24	56
362X1	606	327	184	30	56
362X3	117	62	36	31	58
362X4	658	369	194	29	53
918X0	371	179	99	27	55

* Specialties with few members were oversampled to ensure some representation in the final sample; for large specialties, a maximum of 500 cases were selected.

** A minimum acceptable level of 50 percent was used as a cutoff for closing field administration.

TABLE 2

ELECTRONICS PRINCIPLES WITH 30-50 PERCENT MEMBERS PERFORMING IN ALL 8 AFSCs

ELECTRONICS PRINCIPLES	PERCENT MEMBERS PERFORMING BY AFSC							
	DAFSC 30651	DAFSC 30652	DAFSC 31650F	DAFSC 31652F	DAFSC 36251	DAFSC 36253	DAFSC 36254	DAFSC 91850
001 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	70	74	66	81	70	71	48	98
467 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES?	89	80	86	81	45	81	87	93
289 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS?	64	45	51	81	58	52	45	91
290 DO YOU USE OR REFER TO SPST, (NORMALLY CLOSED) (NC) SCHEMATIC SYMBOLS FOR RELAYS?	64	45	52	81	58	52	46	91
468 DO YOU INSPECT POWER SUPPLIES?	85	80	69	75	44	81	83	91
023 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM "WATTAGE"?	61	74	90	81	60	67	41	98
471 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL	86	75	55	63	36	81	58	91
293 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS?	52	35	35	31	69	43	43	84
291 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS?	50	34	48	81	50	43	37	89
292 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS?	52	34	48	81	48	38	44	89
063 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE POWER?	36	47	34	31	53	43	3	[illegible]

Underlined Numbers Indicate the Minimum Percent Members Performing the Electronics Principles Across the Specialties.

TABLE 3

ELECTRONICS PRINCIPLES WITH 50-100 PERCENT MEMBERS PERFORMING IN ALL 8 AFSCs

ELECTRONICS PRINCIPLES	PERCENT MEMBERS PERFORMING BY AFSC							
	DAFSC 30651	DAFSC 30652	DAFSC 31650F	DAFSC 31652F	DAFSC 36251	DAFSC 36253	DAFSC 36254	DAFSC 91850
012 DO YOU USE (PERHAPS IN TECHNICAL ORDERS) THE TERMS "VOLTAGE" OR "VOLT" (V)?	92	96	100	100	94	100	96	100
014 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM "OHM?"	86	92	90	100	92	91	83	100
022 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM "CURRENT?"	89	93	90	100	89	95	83	100
061 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE VOLTAGE?	86	91	93	88	91	86	81	100
060 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE RESISTANCE?	82	89	83	88	91	86	75	100
017 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM "AMPHERE"?	83		76	88	88	86	74	100
277 DO YOU WORK WITH RELAYS IN YOUR PRESENT JOB?	79	66	69	81	74	81	77	91
809 DO YOU WORK WITH METERS IN YOUR PRESENT JOB?	68	73	86	75	67	67	62	89
281 DO YOU TROULESHOOT RELAYS?	73	61	66	81	80	81	75	93
816 DO YOU ZERO OHMMETERS?	67	75	72	81	68	67	61	84
813 DO YOU READ METER SCALES?	68	76	86	75	66	67	60	89
062 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE CURRENT?	71	85	52	81	84	67	68	98

Underlined Numbers Indicate the Minimum Percent Members Performing that Electronics Principle across the Eight Specialties

TABLE 4

REPRESENTATIVE ELECTRONICS PRINCIPLES NOT UTILIZED BY MISSILE SYSTEMS ANALYST (316XOF) PERSONNEL

		PERCENT MEMBERS PERFORMING BY AFSC							
ELECTRONICS PRINCIPLES		DAFSC 30651	DAFSC 30652	DAFSC 31650F	DAFSC 31652F	DAFSC 36251	DAFSC 36253	DAFSC 36254	DAFSC 91850
033	DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY SLIDE TAP?	17	29	0	56	24	33	8	91
098	DO YOU INSPECT CAPACITORS?	83	82	0	81	57	76	33	93
102	DO YOU DISCHARGE CAPACITORS?	83	71	0	63	43	67	29	86
109	DO YOU USE OR REFER TO WORKING VOLTAGE RATING OR CAPACITORS?	55	49	0	63	36	43	11	32
128	DO YOU CLEAN TRANSFORMERS?	52	59	0	69	21	48	15	73
234	DO YOU INSPECT FILTER CIRCUITS?	55	37	0	31	9	43	11	71
264	DO YOU SOLDER CONNECTIONS?	88	88	0	81	34	81	36	9[illegible]
269	DO YOU MAKE HARDWIRE CONNECTIONS?	83	81	0	81	79	71	81	91
279	DO YOU CLEAN RELAYS?	76	55	0	75	80	81	79	91
310	DO YOU INSPECT SPEAKERS?	26	4	0	19	10	81	53	71
324	DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB?	89	78	0	81	38	71	8	96
343	DO YOU INSPECT DIODES?	77	67	0	75	40	67	14	93
355	DO YOU USE THE SYMBOL ON DIODE WHICH INDICATES THE CATHODE END?	82	63	0	69	29	52	[illegible]	93
473	DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES?	73	76	0	63	28	71	[illegible]	91

TABLE 5

REPRESENTATIVE ELECTRONICS PRINCIPLES UTILIZED MORE BY BIOMEDICAL EQUIPMENT SPECIALISTS (918X0) THAN THE OTHER SEVEN SPECIALTIES

		PERCENT MEMBERS PERFORMING BY AFSC							
	ELECTRONICS PRINCIPLES	DAFSC 30651	DAFSC 30652	DAFSC 31650F	DAFSC 31652F	DAFSC 36251	DAFSC 36253	DAFSC 36254	DAFSC 91850
505	DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27	8	3	6	6	14	1	68
540	DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB?	21	16	3	6	2	5	1	73
033	DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY SLIDE TAP?	17	29	0	56	24	33	8	91
081	DO YOU USE OR REFER TO HENRIES?	21	21	0	19	13	5	2	63
122	DO YOU WORK WITH VARIABLE CAPACITORS?	27	26	0	31	18	14	13	77
137	DO YOU WORK WITH AUTOTRANSFORMERS?	8	7	0	19	51	10	1	89
164	DO YOU INSPECT THREE-PHASE TRANSFORMERS?	14	6	7	31	8	0	2	77
163	DOES YOUR JOB INVOLVE ANT TASKS DEALING WITH THREE-PHASE TRANSFORMERS?	17	6	14	44	6	0	0	82
199	DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	17	12	0	6	2	0	0	64
215	DO YOU CHECK INDUCTORS USING OHMMETERS?	24	24	0	19	9	19	4	66
254	DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING?	47	20	0	19	6	10	1	82
259	DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS?	20	17	0	6	6	5	3	71
445	DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER AMPLIFIERS?	23	14	0	19	3	24	1	80
464	DO YOU USE OR REFER TO PROGRAMMABLE UNIJUNCTION TRANSISTOR (PUT) COMPONENTS?	8	2	0	6	2	0	0	86
516	DO YOU WORK WITH SERIES HARTLEY SINUSODIAL OSCILLATORS?	11	4	0	0	1	0	0	46

5-Skill Level Use of Electronics Principles

Five-skill level personnel across the eight specialties were compared for electronics principles use. The objective of this comparison was to identify the core principles utilized by 5-skill level personnel in all 8 Sheppard Electronics Principles Inventory AFSs at 30 to 50 percent, and 50 to 100 percent members performing. Table 2 lists those electronics principles where at least 30 percent members are performing, and Table 3 lists those electronics principles where at least 50 percent members are performing. This information should be useful to technical school personnel who need to identify core electronics principles for training. As the tables display, there are 23 electronics principles common to all AFSs which have a significant enough level of percent members performing (at least 30 percent) to justify a need for them to be addressed in the Sheppard EPI Course.

Two areas of significant dissimilarity between the specialties also emerged during the analysis. The first concerns Missile Systems Analyst (316X0F) personnel who are using electronics principles much less than the other seven AFSs. In fact, in many instances, 316X0F personnel will have no members using an electronics principle where the other AFSs show percent members performing into the 90 percent range. Table 4 provides a representative sample of electronics principles not performed by 316X0F personnel which are performed by the other AFSs. The total of all electronics principles where this occurs would be too numerous to list in a standard table; however, this information is supplied in FACPRT 4 of Appendix A.

The second specialty which is markedly different from the others is the Biomedical Equipment Maintenance Specialists (918X0). In contrast to Missile Systems Analyst personnel, the 918X0s are using electronics principles to a much greater degree than any of the other specialties. Table 5 provides a representation of electronics principles utilized by 918X0s and shows how this compares with the other seven AFSCs.

This information should be useful to Sheppard Electronics Principles training personnel in designing blocks specific to the various specialties. Other than the differences noted in the Missile Systems Analyst and Biomedical Equipment personnel specialties, 5-skill level personnel in the other four specialties seem to utilize about the same amount of electronics principles. There are no major differences which exist between the 5- and 7-skill levels; however, this will be discussed in the next section.

7-Skill Level Use of Electronics Principles

Five-skill level members were compared to 7-skill level members between the 8 specialties (30651 to 30671, 30652 to 30672, etc.) to determine if there were any differences. After reviewing the percent members performing each electronics principle in the inventory and the time spent by members on those principles, it is clear that no major differences exist between skill levels.

Members who reach the 7-skill level seem to become a tier of "super" technicians. They continue to perform tasks which require the same electronics principles used by the 5-skill level workers (though the 7-skill level members have become more experienced in electronics principles applications). For a description of differences by AFS, refer to the 5-skill level section.

Plan of Instruction (POI)

Technical school training personnel were tasked with matching EPI survey knowledge items with the appropriate objectives from their plan of instruction, dated 31 March 1983. This matching was necessary to determine if the POI was fulfilling the training needs of the various fields it supports.

There are 1,366 items in the survey which needed to be matched against 187 objectives of the POI. Of the 1,366 survey items, 855 were not matched to POI objectives. Many of these 855 knowledge items had sufficient members performing (greater than 30 percent) in at least one of the AFSCs to justify being referenced in the POI; however, it is also understood that when only one AFSC has 30 percent or greater members performing, and the others do not, this may be an item that could best be taught in a separate block or, perhaps, through OJT or at a follow-on training school. For this reason, it was necessary to examine the data in several ways.

First, the Electronics Principles were screened to identify those where there were 30 percent or more members performing a survey knowledge item in at least 4 of the AFSCs, (4 was chosen because it represents 50 percent of those AFSCs which utilize the Sheppard EPI course). A secondary screening was made for items where at least 50 percent members are performing in at least 4 AFSCs, and, finally, where 30 percent or more are performing in only 1 AFSC. These data were then compared to the POI match to determine if survey items matched to POI paragraphs and subparagraphs had sufficient percent members performing (at least 30 percent) to justify their being trained.

Many of those survey items which were not matched to the POI were found to have extremely high percent members performing figures in at least 4 AFSCs, while many of those tasks which were matched had an extremely low percent members performing across all 8 AFSCs (less than 30 percent). For specific examples of these areas, refer to Table 6 (where only 1 AFSC has 30 percent or more members performing), Table 7 (where at least 30 percent are performing in at least 4 of the AFSCs), and Table 8 (where at least 50 percent are performing across at least 4 AFSCs). A complete listing of all knowledge items and their corresponding percent members performing figures can be found in the FACPRTS which accompany this report.

TABLE 6

EXAMPLES OF TASKS NOT MATCHED TO POI WITH 30 PERCENT OR MORE MEMBERS PERFORMING IN 1 AFSC

SURVEY KNOWLEDGE ITEMS	PERCENT MEMBERS PERFORMING BY AFSC							
	DAFSC 30651	DAFSC 30652	DAFSC 31650F	DAFSC 31652F	DAFSC 36251	DAFSC 36253	DAFSC 36254	DAFSC 91850
DO YOU WORK WITH MASTER STATION TIMING CIRCUITS?	38	6	0	6	1	10	0	25
DO YOU CONSTRUCT TRUTH TABLES FOR COMBINERS?	33	4	0	6	1	0	0	11
DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS OR ALTERNATORS?	30	5	17	0	4	0	0	27
DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER TRANSMIT SECTIONS?	30	4	3	6	4	0	0	16
DO YOU USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED) CIRCUITS?	26	16	7	0	4	0	1	39
DO YOU USE OR REFER TO INCANDESCENT DISPLAYS?	23	12	14	19	4	5	1	30
DO YOU WORK WITH OSCILLATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD	12	5	4	6	11	33	1	23

All Percent Members Performing Figures Rounded to the Nearest Whole Number

TABLE 7

EXAMPLES OF TASKS NOT MATCHED TO POI WITH 30 PERCENT OR MORE MEMBERS PERFORMING ACROSS 4 OR MORE AFSCs

SURVEY KNOWLEDGE ITEMS	PERCENT MEMBERS PERFORMING BY AFSC							
	DAFSC 30651	DAFSC 30652	DAFSC 31650F	DAFSC 31652F	DAFSC 36251	DAFSC 36253	DAFSC 36254	DAFSC 91850
IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS	86	35	38	44	3	15	2	77
DO YOU USE OR REFER TO LEDs?	61	44	31	31	12	5	3	50
DO YOU EXTEND THE RANGE OF VOLTMETERS?	38	40	41	25	37	24	25	52
DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL?	46	20	0	31	9	38	8	84
DO YOU CLEAN FILTER CIRCUITS?	47	31	0	25	9	33	8	52
DO YOU ZERO AMMETERS?	24	29	31	63	32	14	24	57
DO YOU INSPECT FILTER CIRCUITS?	55	37	0	31	9	43	11	71
DO YOU INSPECT TRANSISTOR AMPLIFIERS?	39	22	0	31	11	48	6	84
DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER?	36	18	0	31	12	48	5	80

All Percent Members Performing Figures Rounded to the Nearest Whole Number

TABLE 8

EXAMPLES OF TASKS NOT MATCHED TO POI WITH 50 PERCENT OR MORE MEMBERS PERFORMING ACROSS 4 OR MORE AFSCs

	PERCENT MEMBERS PERFORMING BY AFSC							
SURVEY KNOWLEDGE ITEMS	DAFSC 30651	DAFSC 30652	DAFSC 31650F	DAFSC 31652F	DAFSC 36251	DAFSC 36253	DAFSC 36254	DAFSC 91850
IN YOUR PRESENT JOB, DO YOU CONNECT ELECTRONIC CIRCUITS USING SOLDERLESS CONNECTIONS OR SOLDERING TECHNIQUES?	86	84	7	75	76	81	79	98
DO YOU ALIGN OR ADJUST POWER SUPPLIES?	86	68	62	75	36	76	19	91
DO YOU TROUBLESHOOT RELAYS?	73	61	66	81	80	81	75	93
DO YOU TROUBLESHOOT POWER SPPLY COMPONENTS?	86	68	69	75	29	81	39	93
DO YOU DISCHARGE CAPACITORS?	83	71	0	63	44	67	28	86
DO YOU REMOVE OR REPLACE RELAYS?	74	64	24	81	76	81	61	91
DO YOU PERFORM HIGH RELIABILITY SOLDERING?	73	62	0	75	59	71	47	36
DO YOU CLEAN RESISTORS?	64	63	3	69	42	67	16	73

All Percent Members Performing Figures Rounded to the Nearest Whole Number

Many of the items matched to paragraphs in the POI did not have even 30 percent responding in any 1. Table 9 gives examples of these survey items. These items should be considered for deletion.

Summary

After a careful review of the POI and survey knowledge items, both matched and unmatched, the following findings were noted:

1. Many of the items matched with the POI had very low percent members performing figures across all AFSCs.

2. Of the survey items which were not matched to the course POI, many had 30 percent members performing, or greater, across at least 4 (usually more) AFSCs.

3. Personnel in the 918 AFS have a much higher average of percent members performing in most items, and seem to be using more than any of the other AFSs. Careful consideration should be given to the data concerning the treatment of this AFS.

The EPI is unlike the standard OSR in that survey items are knowledge items, rather than tasks. This difference makes a review of the course POI a difficult task requiring that each item be reviewed individually. The need for this individual reviewing process is due to the fact that knowledge items may be required as building blocks in a process to the understanding of more difficult areas. It is suggested that training personnel consider this as they review the course POI in relation to percent members performing figures for independent survey items.

This information should be useful to training personnel in updating their POI. The data seem to support a need for this, as displayed by the tables. Many items referenced had percent members performing figures which did not justify continued inclusion in the POI, and many items not referenced had high enough percent members performing to justify inclusion.

For an in-depth study of survey data by training personnel, computer FACPRTS have been provided in the following pages. For assistance in interpreting and using these data, please contact 2d Lt Howard Goodman, USAFOMC/OMYO (AUTOVON 487-5811).

TABLE 9

EXAMPLES OF TASKS MATCHED TO POI WITH LOW PERCENT MEMBERS PERFORMING

SURVEY KNOWLEDGE ITEMS	PERCENT MEMBERS PERFORMING BY AFSC							
	DAFSC 30651	DAFSC 30652	DAFSC 31650F	DAFSC 31652F	DAFSC 36251	DAFSC 36253	DAFSC 36254	DAFSC 91850
POI TITLE I IIA								
DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS?	17	11	3	6	13	0	3	23
DO YOU USE OR REFER TO FLUX DENSITY?	11	6	0	6	7	0	2	16
DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM?	3	4	0	6	5	0	3	
POI TITLE III 1C								
DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS?	5	3	0	6	1	0	2	13
DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT?	3	5	3	6	3	5	1	18
POI TITLE IV 1F								
DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS?	5	3	0	0	1	0	1	23
POI TITLE VI 2C								
DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC CIRCUITS?	8	5	0	6	1	0	0	16
DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC CIRCUITS?	8	6	0	13	1	0	[illegible]	[illegible]

All Percent Members Performing Figures Are Rounded to the Nearest Whole Number

REPORT NUMBER	REPORT ID	REPORT TITLE	PAGE NUMBER
1	TOC	TABLE OF CONTENTS	1
2	FCPT01	SHEPPARD ELECTRONIC PRINCIPLES INVENTORY DATA	2
3	FCPT02	SHEPPARD ELECTRONIC PRINCIPLES INVENTORY DATA	69
4	FCPT03	TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS	136
5	FCPT04	PERCENT 5-SKILL LEVEL MEMBERS PERFORMING	185
6	FCPRT5	POI MATCHED WITH SURVEY DATA	235
7	FCPRT6	ELECTRONIC PRINCIPLES INVENTORY DATA ON 5-LEVELS	324
8	FCPRT7	EPI INVENTORY DATA FOR 7-SKILL LEVELS	386

SHEPPARD EPI CAREER LADDERS, ELECTRONIC PRINCIPLES INVENTORY (EPI) DATA ARE PRESENTED BELOW EACH DUTY TITLE. DATA FOR THIS PRINTOUT WERE COLLECTED FROM CAREER LADDER INCUMBENTS DURING THE PEROID AUGUST 1983 THROUGH JANUARY 1984.

USE OF EPI PRINTOUT: THE PERCENT OF VARIOUS CAREER LADDER GROUPS RESPONDING TO EPI QUESTIONS IS LISTED TO THE RIGHT OF EACH EPI ITEM. THUS, THE APPROPRIATE SAMPLE CRITERION GROUPS CAN BE IDENTIFIED WITH THE COLUMN HEADINGS AT THE TOP RIGHT OF EACH PRINTOUT PAGE. THEN THE PERCENT OF THAT GROUP USING THE CONCEPT OR PIECE OF EQUIPMENT CAN BE IDENTIFIED.

USE OF EPI DATA: THESE DATA MAY BE USED IN HELPING TO IDENTIFY, DELINEATE, AND VALIDATE ELECTRONIC PRINCIPLES ITEMS IN THE STS. CRITERIA LISTED IN ATCR 52-22 FOR ABR TRAINING MAY BE USEFUL IN HELPING DEVELOP ENTRY-LEVEL ELECTRONIC PRINCIPLE COURSES. ALSO, CDC WRITERS MAY USE EPI DATA TO HELP DETERMINE AREAS TO EMPHASIZE IN 5- AND 7-SKILL LEVEL CDCS, CONSISTENT WITH STS CODES.

FOR ASSISTANCE IN USING PRINTOUTS PHONE USAFOMC/OMYO, AUTOVON 487-5811.

VECTOR TYPE CODES:

(T) = % TIME SPENT BY ALL MEMBERS
(M) = % MEMBERS PERFORMING
(F) = TASK FACTOR
(D) = DICHOTOMOUS SET
(B) = % TIME SPENT BY MEMBERS PERFORMING
(-) = PROGRAM GENERATED VECTOR

NO	TYPE	VECTOR	/MEMBERS/ MEAN - SD	DESCRIPTION	FACTOR #
1	M	306 51	66	DAFSC 30651 AIRMEN	2
2	M	306 52	161	DAFSC 30652 AIRMEN	4
3	M	31650F	29	DAFSC 31650F AIRMEN	6
4	M	31652F	16	DAFSC 31652F AIRMEN	8
5	M	362 51	106	DAFSC 36251 AIRMEN	10
6	M	362 53	21	DAFSC 36253 AIRMEN	12
7	M	362 54	114	DAFSC 36254 AIRMEN	14
8	M	918 50	44	DAFSC 91850 AIRMEN	16

SHEPPARD EPI CAREER LADDERS, ELECTRONIC PRINCIPLES INVENTORY (EPI) DATA ARE PRESENTED BELOW EACH DUTY TITLE. DATA FOR THIS PRINTOUT WERE COLLECTED FROM CAREER LADDER INCUMBENTS DURING THE PEROID AUGUST 1983 THROUGH JANUARY 1984.

USE OF EPI PRINTOUT: THE PERCENT OF VARIOUS CAREER LADDER GROUPS RESPONDING TO EPI QUESTIONS IS LISTED TO THE RIGHT OF EACH EPI ITEM. THUS, THE APPROPRIATE SAMPLE CRITERION GROUPS CAN BE IDENTIFIED WITH THE COLUMN HEADINGS AT THE TOP RIGHT OF EACH PRINTOUT PAGE. THEN THE PERCENT OF THAT GROUP USING THE CONCEPT OR PIECE OF EQUIPMENT CAN BE IDENTIFIED.

USE OF EPI DATA: THESE DATA MAY BE USED IN HELPING TO IDENTIFY, DELINEATE, AND VALIDATE ELECTRONIC PRINCIPLES ITEMS IN THE STS. CRITERIA LISTED IN ATCR 52-22 FOR ABR TRAINING MAY BE USEFUL IN HELPING DEVELOP ENTRY-LEVEL ELECTRONIC PRINCIPLE COURSES. ALSO, CDC WRITERS MAY USE EPI DATA TO HELP DETERMINE AREAS TO EMPHASIZE IN 5- AND 7-SKILL LEVEL CDCS, CONSISTENT WITH STS CODES.

FOR ASSISTANCE IN USING PRINTOUTS PHONE USAFOMC/OMYO, AUTOVON 487-5811.

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A		MATHEMATICS (A1), DIRECT CURRENT (A2), RESISTANCE AND RESISTIVE CIRCUITS (A3)								
A	1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	69.7	73.9	65.5	81.3	69.8	71.4	48.2	97.7
A	2	A1-2 DO YOU USE PUBLICATIONS, SUCH AS TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB?	33.3	32.3	27.6	68.8	34.9	47.6	21.1	70.5
A	3	A1-3 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS?	27.3	13.7	13.8	68.8	17.0	4.8	8.8	77.3
A	4	A1-4 DO YOU CALCULATE THE SQUARE ROOT OF A QUANITITY?	7.6	6.2	.0	12.5	7.5	.0	3.5	36.4
A	5	A1-5 DO YOU SOLVE FOR UNKNOWN QUANTITIES SUCH AS SOLVING FOR X IN THE EQUATION X + 6 = 8?	15.2	11.2	10.3	43.8	17.9	4.8	10.5	68.2
A	6	A1-6 DO YOU USE LOGARITHM TABLES?	3.0	3.1	.0	.0	3.8	4.8	1.8	15.9
A	7	A1-7 DO YOU SOLVE QUADRATIC EQUATIONS SUCH AS SOLVING FOR X IN THE EQUATION X**2 + 4X + 4 =0?	3.0	2.5	.0	.0	4.7	.0	2.6	27.3
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	3.0	4.3	.0	6.3	1.9	4.8	.9	18.2
A	9	A1-9 DO YOU USE TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT?	7.6	4.3	.0	6.3	2.8	4.8	1.8	15.9
A	10	A1-10 DO YOU SOLVE OR USE PROPORTIONS? AN EXAMPLE OF A PROPORTION IS 2 : 5 :: 4 : 10. ANOTHER WAY TO EXPRESS THE SAME RELATIONSHIP IS 2/5 = 4/10. SOMETIMES, ONE OF THE QUANTITIES IS UNKNOWN AND HAS TO BE SOLVED FOR, SUCH AS 2 : X :: 4 : 10 (X IN THIS CASE IS UNKNOWN).	15.2	9.9	10.3	37.5	9.4	23.8	5.3	61.4
A	11	A1-11 DO YOU USE MATHEMATICAL EXPONENTS OR SUBSCRIPTS IN OTHER THAN POWERS OF 10?	31.8	13.0	6.9	37.5	12.3	9.5	3.5	54.5
A	12	A2-1 DO YOU USE (PERHAPS IN TECHNICAL ORDERS) THE TERM VOLTAGE OR VOLT (V)?	92.4	95.7	100.0	100.0	94.3	100.0	95.6	100.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (F)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	13	A2-2 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTROMOTIVE FORCE (EMF)?	39.4	49.7	13.8	25.0	38.7	38.1	27.2	72.7
A	14	A2-3 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM OHM?	86.4	91.9	89.7	100.0	91.5	90.5	83.3	100.0
A	15	A2-4 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ION?	6.1	7.5	10.3	81.3	7.5	.0	3.5	72.7
A	16	A2-5 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM DYNE?	1.5	5.0	6.9	.0	2.8	.0	4.4	29.5
A	17	A2-6 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM AMPERE?	83.3	88.8	75.9	87.5	87.7	85.7	73.7	100.0
A	18	A2-7 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM NEUTRON?	18.2	14.9	6.9	18.8	13.2	.0	4.4	54.5
A	19	A2-8 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM COULOMB?	6.1	8.1	6.9	6.3	5.7	9.5	.9	54.5
A	20	A2-9 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM PROTON?	19.7	16.1	3.4	18.8	16.0	.0	3.5	56.8
A	21	A2-10 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTRON?	40.9	42.9	24.1	56.3	30.2	33.3	10.5	72.7
A	22	A2-11 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM CURRENT?	89.4	92.5	89.7	100.0	88.7	95.2	82.5	100.0
A	23	A2-12 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	60.6	73.9	89.7	81.3	60.4	66.7	43.9	97.7
A	24	A2-13 DO YOU DETERMINE IF TWO OR MORE BATTERIES MUST BE CONNECTED IN SERIES OR PARALLEL TO ACHIEVE A SPECIFIC VOLTAGE AND/OR CURRENT?	24.2	34.2	17.2	56.3	48.1	28.6	33.3	79.5
A	25	A. I DO YOU WORK WITH RESISTORS OR RESISTIVE CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM B1-1; IF YES, CONTINUE.	80.3	78.3	17.2	62.5	68.9	71.4	43.0	77.3
A	26	A. 2 DO YOU INSPECT RESISTORS?	83.3	82.6	3.4	81.3	60.4	85.7	36.0	90.9
A	27	A3-3 DO YOU CLEAN RESISTORS?	63.6	62.7	3.4	68.8	41.5	66.7	15.8	72.7
A	28	A3-4 DO YOU ADJUST RESISTORS?	80.3	77.0	6.9	75.0	47.2	76.2	20.2	97.7

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	29	A3-5 DO YOU MEASURE RESISTORS?	81.8	80.7	13.8	81.3	66.0	85.7	33.3	97.7
A	30	A3-6 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASK YOU PERFORM?	19.7	17.4	.0	25.0	15.1	4.8	2.6	52.3
A	31	A3-7 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY CARBON?	27.3	37.3	6.9	56.3	46.2	42.9	21.9	72.7
A	32	A3-8 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED WIRE?	62.1	61.5	6.9	62.5	67.0	61.9	36.0	90.9
A	33	A3-9 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY SLIDE TAP?	16.7	29.2	.0	56.3	23.6	33.3	7.9	90.9
A	34	A3-10 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY RHEOSTAT?	50.0	57.8	10.3	75.0	63.2	61.9	37.7	97.7
A	35	A3-11 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY POTENTIOMETER?	84.8	77.0	13.8	75.0	63.2	66.7	32.5	97.7
A	36	A3-12 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED FILM?	16.7	9.3	3.4	31.3	13.2	19.0	2.6	59.1
A	37	A3-13 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE?	78.8	74.5	6.9	75.0	59.4	76.2	23.7	97.7
A	38	A3-14 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE?	68.2	64.0	3.4	62.5	48.1	71.4	12.3	93.2
A	39	A3-15 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE?	30.3	30.4	3.4	50.0	25.5	33.3	6.1	47.7
A	40	A3-16 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES?	84.8	82.6	27.6	75.0	74.5	76.2	46.3	95.5
A	41	A3-17 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	59.1	58.7	13.8	56.3	53.8	61.9	27.7	90.9
A	42	A3-18 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	53.0	54.7	10.3	56.3	50.9	57.1	27.7	88.6
A	43	A3-19 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	56.1	56.5	13.8	50.0	45.3	57.1	27.7	97.7

D	TSK	TITLES	206 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	44	A3-20 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	40.9	41.0	13.8	50.0	33.0	23.8	12.3	72.7
A	45	A3-21 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	51.5	52.8	13.8	37.5	49.1	61.9	26.3	84.1
A	46	A3-22 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	54.0	10.3	43.8	48.1	47.6	27.2	86.4
A	47	A3-23 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	56.5	13.8	37.5	41.5	42.9	20.2	95.5
A	48	A3-24 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.4	47.2	6.9	31.3	35.8	33.3	19.3	88.6
A	49	A3-25 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	37.9	41.0	10.3	31.3	31.1	23.8	10.5	72.7
A	50	A3-26 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	53.0	51.6	13.8	37.5	46.2	57.1	20.2	81.8
A	51	A3-27 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	48.5	52.8	10.3	37.5	46.2	42.9	21.9	84.1
A	52	A3-28 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	45.5	52.8	10.3	37.5	39.6	38.1	17.5	88.6
A	53	A3-29 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	39.4	45.3	6.9	31.3	36.8	28.6	15.8	86.4
A	54	A3-30 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	34.8	37.3	10.3	31.3	32.1	19.0	9.6	70.5
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.5	44.7	10.3	37.5	42.5	47.6	16.7	79.5
A	56	A3-32 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	39.4	42.2	10.3	37.5	41.5	23.8	16.7	81.8
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	37.9	42.9	6.9	37.5	38.7	23.8	13.2	88.6

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	31.8	36.6	6.9	37.5	34.9	19.0	12.3	81.8
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	25.8	30.4	6.9	31.3	30.2	14.3	7.9	70.5
B		METERS/MULTIMETERS (B1), ALTERNATING CURRENT (AC) (B2), INDUCTORS AND INDUCTIVE REACTANCE (B3)								
B	60	B1-1 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE RESISTANCE?	81.8	88.2	82.8	87.5	90.6	85.7	74.6	100.0
B	61	B1-2 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE VOLTAGE?	86.4	91.3	93.1	87.5	90.6	85.7	80.7	100.0
B	62	B1-3 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE CURRENT?	71.2	84.5	51.7	81.3	84.0	66.7	68.6	97.7
B	63	B1-4 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE POWER?	36.4	47.2	74.5	31.3	52.8	42.9	33.7	59.1
B	64	B1-5 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE FREQUENCY?	68.2	49.1	70.5	75.0	58.9	71.4	25.4	84.1
B	65	B1-6 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE TEMPERATURE?	20.2	7.5	37.9	21.7	13.7	28.6	5.7	54.5
B	66	B1-7 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE PRESSURE?	36.4	9.7	34.5	50.0	25.5	9.5	4.1	72.7
B	67	B1-8 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE LIGHT LEVELS?	33.3	1.9	6.9	6.3	1.9	4.8	4.1	47.7
B	68	B2-1 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM EFFECTIVE VOLTAGE (RMS) IN YOUR PRESENT JOB?	45.5	47.8	20.7	37.5	37.8	52.4	16.7	68.2

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
B	69	B2-2 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PEAK TO PEAK VOLTAGE IN YOUR PRESENT JOB?	80.3	68.9	13.8	81.3	30.2	76.2	14.9	93.2
B	70	B2-3 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM AVERAGE VOLTAGE (DC) IN YOUR PRESENT JOB?	51.5	62.1	31.0	75.0	43.4	57.1	28.9	86.4
B	71	B2-4 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM WAVE LENGTH IN YOUR PRESENT JOB?	53.0	46.0	13.8	75.0	36.8	47.6	7.9	81.8
B	72	B2-5 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM FREQUENCY IN YOUR PRESENT JOB?	72.7	59.6	51.7	68.8	63.2	90.5	20.2	93.2
B	73	B2-6 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM INSTANTANEOUS VALUE IN YOUR PRESENT JOB?	12.1	13.7	3.4	18.8	10.4	.0	.9	52.3
B	74	B2-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	54.5	37.3	27.6	50.0	21.7	23.8	5.3	88.6
B	75	B3-1 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C1-1; IF YES, CONTINUE.	37.9	36.6	6.9	37.5	21.7	14.3	12.3	68.2
B	76	B3-2 DO YOU INSPECT INDUCTORS?	40.9	38.5	.0	56.3	18.9	14.3	7.9	75.0
B	77	B3-3 DO YOU CLEAN INDUCTORS?	31.8	28.6	.0	56.3	14.2	9.5	6.1	59.1
B	78	B3-4 DO YOU ADJUST INDUCTORS?	18.2	19.3	3.4	43.8	13.2	.0	1.8	56.8
B	79	B3-5 DO YOU MEASURE INDUCTORS?	25.8	28.0	.0	43.8	17.0	9.5	3.5	61.4
B	80	B3-6 DO YOU USE OR REFER TO INDUCTANCE?	31.8	31.7	.0	50.0	21.7	14.3	6.1	81.8
B	81	B3-7 DO YOU USE OR REFER TO HENRIES?	21.2	20.5	.0	18.8	13.2	4.8	1.8	68.2
B	82	B3-8 DO YOU USE OR REFER TO INDUCTIVE REACTANCE?	13.6	18.6	.0	18.8	17.0	9.5	1.8	63.6
B	83	B3-9 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS?	6.1	3.7	.0	.0	7.5	.0	.9	36.4
B	84	B3-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS?	6.1	5.0	.0	.0	3.8	.0	.9	34.1
B	85	B3-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS?	4.5	6.2	.0	.0	9.4	.0	.9	38.6
B	86	B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL?	10.6	9.9	.0	.0	12.3	4.8	2.6	36.4

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
B	87	B3-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE?	6.1	7.5	.0	.0	10.4	4.8	1.8	31.8
B	88	B3-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH?	4.5	6.8	.0	6.3	9.4	4.8	1.8	29.5
B	89	B3-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMABILITY OF THE CORE MATERIAL?	7.6	8.1	.0	6.3	11.3	4.8	2.6	36.4
B	90	B3-16 DO YOU CALCULATE INDUCTANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	4.5	9.3	.0	37.5	10.4	.0	4.4	36.4
B	91	B3-17 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS?	12.1	18.0	.0	12.5	14.2	14.3	4.4	61.4
B	92	B3-18 DO YOU CALCULATE INDUCTIVE REACTANCE?	7.6	9.3	.0	6.3	10.4	.0	3.5	40.9
B	93	B3-19 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTAIONAL TO FREQUENCY?	6.1	9.3	.0	6.3	16.0	9.5	2.6	43.2
B	94	B3-20 DO YOU WORK WITH POWER INDUCTORS?	25.8	26.1	6.9	31.3	13.2	9.8	4.4	63.6
B	95	B3-21 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS?	16.7	11.2	3.4	.0	16.0	9.5	6.1	52.7
B	96	B3-22 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS?	13.6	9.3	3.4	.0	7.5	.0	.9	50.0
C		CAPACITORS AND CAPACITIVE REACTANCE (C1), TRANSFORMERS (C2), MAGNETISM (C3)								
C	97	C1-1 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C2-1; IF YES, CONTINUE.	80.3	75.8	17.2	75.0	62.3	57.1	10.4	93.2
C	98	C1-2 DO YOU INSPECT CAPACITORS?	83.3	82.0	.0	81.3	56.6	75.2	33.3	97.7
C	99	C1-3 DO YOU CLEAN CAPACITORS?	57.6	64.6	.0	68.8	45.3	47.6	15.8	61.4

SHEPPARD ELECTRONIC PRINCIPLES INVENTORY DATA — FCPTO1 PAGE 10 — OCCUPATIONAL ANALYSIS PROGRAM USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	100	C1-4 DO YOU ADJUST CAPACITORS?	27.3	25.5	.0	43.8	21.7	14.3	3.5	70.5
C	101	C1-5 DO YOU TEST CAPACITORS?	75.8	75.8	3.4	68.8	54.7	52.4	28.9	93.2
C	102	C1-6 DO YOU DISCHARGE CAPACITORS?	83.3	71.4	.0	62.5	43.4	66.7	28.1	86.4
C	103	C1-7 DO YOU MEASURE CAPACITORS?	53.0	60.2	.0	62.5	41.5	38.1	20.2	79.5
C	104	C1-8 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE?	9.1	14.9	.0	18.8	11.3	9.5	2.6	22.7
C	105	C1-9 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC?	4.5	3.1	.0	6.3	4.7	4.8	.0	11.4
C	106	C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS?	69.7	68.9	3.4	62.5	47.2	57.1	19.3	93.2
C	107	C1-11 DO YOU USE OR REFER TO CAPACITANCE?	65.2	72.7	3.4	62.5	62.3	57.1	28.1	88.6
C	108	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT?	7.6	9.3	.0	.0	12.3	.0	.0	31.8
C	109	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS?	54.5	49.1	.0	62.5	35.8	47.6	11.4	81.8
C	110	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE?	28.8	39.8	.0	37.5	29.2	14.3	6.1	65.9
C	111	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES?	19.7	20.5	.0	37.5	14.2	9.5	5.3	43.2
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	87.9	83.9	13.8	81.3	73.6	76.2	48.2	97.7
C	113	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	83.3	80.1	10.3	81.3	51.9	71.4	44.7	95.5
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
C	115	C1-19 DO YOU CALCULATE CAPACITANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	21.2	16.8	.0	6.3	22.6	14.3	9.6	40.9
C	116	C1-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT?	10.6	7.5	.0	.0	16.0	4.8	3.5	25.0
C	117	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS?	9.1	6.8	.0	6.3	15.1	.0	3.5	27.3
C	118	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO?	36.4	38.5	6.9	43.8	31.1	28.6	17.5	72.7

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	119	C1-23 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS?	18.2	24.2	.0	18.8	23.6	23.8	10.5	61.4
C	120	C1-24 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY?	12.1	13.7	.0	.4	18.9	9.5	7.0	43.2
C	121	C1-25 DO YOU CALCULATE CAPACITIVE REACTANCE?	12.1	8.1	.0	6.7	14.2	.0	3.5	40.9
C	122	C1-26 DO YOU WORK WITH VARIABLE CAPACITORS?	27.3	25.5	.0	31.7	17.0	14.3	17.2	77.7
C	123	C1-27 DO YOU WORK WITH TRIMMER CAPACITORS?	12.1	14.7	.0	18.8	8.5	.0	2.6	68.2
C	124	C1-28 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS?	84.8	75.8	3.4	68.8	50.9	71.4	71.4	90.9
C	125	C1-29 DO YOU WORK WITH OTHER FIXED CAPACITORS?	72.7	68.8	3.4	81.3	41.0	57.1	77.3	95.
C	126	C2-1 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C3-1; IF YES, CONTINUE.	71.2	67.7	27.6	75.0	38.2	57.1	[illegible]	97.7
C	127	C2-2 DO YOU INSPECT TRANSFORMERS?	69.7	67.7	[illegible]	68.8	26.4	[illegible]	71.4	95.4
C	128	C2-3 DO YOU CLEAN TRANSFORMERS?	51.5	59.4	[illegible]	65.6	[illegible]	[illegible]	[illegible]	[illegible]
C	129	C2-4 DO YOU ADJUST TRANSFORMERS?	19.7	28.3	[illegible]	43.8	17.6	9.5	[illegible]	61.4
C	130	C2-5 DO YOU TROUBLESHOOT TRANSFORMERS?	60.6	55.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	131	C2-6 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)?	3.0	3.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	132	C2-7 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M?	6.1	3.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	133	C2-8 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS?	6.1	6.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	134	C2-9 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS?	12.1	3.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	135	C2-10 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS?	27.3	9.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	136	C2-11 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS?	6.1	2.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	137	C2-12 DO YOU WORK WITH AUTOTRANSFORMERS?	7.6	6.3	[illegible]	12.5	[illegible]	[illegible]	[illegible]	[illegible]
C	138	C2-13 DO YOU WORK WITH POWER TRANSFORMERS?	24.2	28.3	17.2	9.4	[illegible]	[illegible]	[illegible]	[illegible]
C	139	C2-14 DO YOU WORK WITH AUDIO TRANSFORMERS?	15.2	14.3	[illegible]	12.5	[illegible]	[illegible]	17.2	[illegible]
C	140	C2-15 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS?	12.1	7.5	[illegible]	6.2	[illegible]	[illegible]	[illegible]	[illegible]

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	141	C2-16 DO YOU WORK WITH SATURABLE CORE TRANSFORMERS?	3.0	4.3	.0	25.0	2.8	.0	.0	36.4
C	142	C2-17 DO YOU WORK WITH SENSING TRANSFORMERS?	6.1	3.1	3.4	18.8	4.7	.0	.9	31.8
C	143	C2-18 DO YOU WORK WITH CONTROL TPANSFORMERS?	13.6	9.3	3.4	25.0	8.5	.0	2.6	59.1
C	144	C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE?	56.1	60.2	3.4	62.5	25.5	47.6	11.4	93.2
C	145	C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE?	53.0	55.9	3.4	56.3	23.6	47.6	13.2	84.1
C	146	C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES?	59.1	50.3	3.4	43.8	18.9	38.1	12.3	81.8
C	147	C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	19.7	26.1	.0	6.3	9.4	19.0	2.6	50.0
C	148	C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	27.3	35.4	.0	12.5	13.2	33.3	4.4	86.4
C	149	C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS?	74.2	69.6	24.1	75.0	29.2	66.7	20.2	95.5
C	150	C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS?	62.1	46.0	10.3	68.8	20.8	38.1	11.4	95.5
C	151	C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	54.5	52.2	13.8	62.5	18.9	33.3	8.8	95.5
C	152	C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	69.7	62.7	13.8	68.8	23.6	38.1	8.8	95.5
C	153	C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	27.3	16.1	6.9	25.0	13.2	14.3	4.4	59.1
C	154	C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	37.9	24.2	3.4	25.0	17.9	23.8	8.8	70.5
C	155	C2-30 DO YOU REFER TO VARIABLE TRANSFORMER SCHEMATIC SYMBOLS?	19.7	27.3	3.4	56.3	17.0	23.8	5.3	86.4
C	156	C2-31 DO YOU REFER TO COMBINATIONS OF SCHEMATIC SYMBOLS FOR TRANSFORMERS?	45.5	36.0	10.3	62.5	16.0	38.1	7.9	90.9

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C 157	C2-32 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS?	34.8	23.6	3.4	25.0	11.3	19.0	4.4	91.8
C 158	C2-33 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH?	22.7	8.1	.0	12.5	6.6	4.8	2.6	36.4
C 159	C2-34 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO?	16.7	12.4	.0	18.8	4.7	14.3	.9	65.9
C 160	C2-35 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS?	28.8	36.0	.0	31.3	9.4	23.8	6.1	86.4
C 161	C2-36 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	15.2	7.5	.0	6.3	2.8	14.3	.0	52.3
C 162	C2-37 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	10.6	6.2	.0	6.3	2.8	4.8	.0	34.1
C 163	C2-38 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS?	16.7	6.2	13.8	43.8	5.7	.0	.0	81.8
C 164	C2-39 DO YOU INSPECT THREE PHASE TRANSFORMERS?	13.6	5.6	6.9	31.3	7.5	.0	1.8	77.3
C 165	C2-40 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS?	6.1	3.7	.0	6.3	5.7	.0	.9	54.8
C 166	C2-41 DO YOU ADJUST THREE PHASE TRANSFORMERS?	.0	3.1	.0	6.3	5.7	.0	.9	53.8
C 167	C2-42 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS?	7.6	3.7	.0	31.3	5.7	.0	.9	72.7
C 168	C3-1 DO YOU USE OR REFER TO PERMANENT MAGNETS?	27.3	44.7	10.3	31.3	20.8	23.8	12.5	86.3
C 169	C3-2 DO YOU USE OR REFER TO TEMPORARY MAGNETS?	34.8	39.1	3.4	37.5	29.2	28.6	14.0	95.5
C 170	C3-3 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS?	10.6	8.7	3.4	6.3	19.8	.0	2.6	20.5
C 171	C3-4 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS?	16.7	11.2	3.4	6.3	13.2	.0	2.6	22.7
C 172	C3-5 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS?	12.1	10.6	3.4	6.3	14.2	.0	3.5	25.0
C 173	C3-6 DO YOU USE OR REFER TO RESIDUAL MAGNETISM?	13.6	20.5	3.4	12.5	57.5	14.3	6.1	79.5
C 174	C3-7 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX?	21.2	18.6	6.9	12.5	17.9	4.8	3.1	47.7

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	175	C3-8 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM?	6.1	3.7	.0	.0	3.8	.0	3.5	15.9
C	176	C3-9 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM?	3.0	3.7	.0	6.3	4.7	.0	2.6	15.9
C	177	C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION?	22.7	21.7	3.4	6.3	18.9	9.5	10.5	45.5
C	178	C3-11 DO YOU USE OR REFER TO FLUX DENSITY?	10.6	5.6	.0	6.3	6.6	.0	1.8	15.9
C	179	C3-12 DO YOU USE OR REFER TO SATURABLE REACTANCE?	4.5	3.7	.0	6.3	9.4	.0	1.8	18.2
D		RCL CIRCUITS (D1), TIME CONSTANTS (D2), FILTERS (D3)								
D	180	D1-1 DO YOU WORK WITH RC, LR, OR RCL CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM D2-1; IF YES, CONTINUE.	31.8	25.5	3.4	12.5	9.4	14.3	4.4	77.3
D	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	4.5	3.1	.0	.0	2.8	4.8	.0	29.5
D	182	D1-3 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	6.1	3.7	.0	.0	4.7	4.8	.0	22.7
D	183	D1-4 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS?	7.6	1.9	.0	6.3	4.7	.0	.0	25.0
D	184	D1-5 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS?	6.1	1.9	.0	6.3	4.7	.0	.0	22.7
D	185	D1-6 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS?	3.0	1.9	.0	.0	4.7	.0	.0	27.3
D	186	D1-7 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	16.7	16.1	3.4	18.8	6.6	4.8	2.6	54.5
D	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.9	29.5
D	188	D1-9 DO YOU USE OR REFER TO MAXIMUM POWER (P SUB M) WHEN WORKING WITH RCL CIRCUITS?	4.5	5.6	.0	.0	5.7	.0	.0	27.3
D	189	D1-10 DO YOU USE OR REFER TO AVERAGE POWER (P SUB AVE) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.0	31.8

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	190	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	3.0	5.0	.0	.0	4.7	.0	.0	20.5
D	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	4.5	6.2	.0	.0	4.7	.0	.0	25.0
D	192	D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIPCUITS?	12.1	8.1	.0	6.3	5.7	4.8	2.6	54.5
D	193	D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS?	7.6	5.6	.0	12.5	1.9	4.8	.0	40.9
D	194	D1-15 DO YOU USE OR PEFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS?	6.1	4.3	.0	6.3	3.8	9.5	.0	29.5
D	195	D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS?	10.6	6.2	.0	12.5	3.8	4.8	.0	52.3
D	196	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS?	4.5	4.3	.0	6.3	1.9	.0	.0	29.5
D	197	D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS?	3.0	4.3	.0	.0	1.9	.0	.0	38.6
D	198	D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS?	6.1	1.9	.0	.0	.9	.0	.0	22.7
D	199	D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	16.7	11.8	.0	6.3	1.9	.0	.0	63.6
D	200	D1-21 DO YOU DETERMINE VALUES OR TRIGONOMETRIC FUNCTIONS USING FORMULAS SUCH AS: SINE OF AND ANGLE = OPPOSITE SIDE/ HYPOTENUSE?	1.5	1.9	.0	.0	2.8	.0	.0	13.6
D	201	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS?	4.5	4.3	.0	6.3	3.8	4.8	.9	25.0
D	202	D1-23 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS?	10.6	10.6	.0	.0	6.6	4.8	.9	29.5
D	203	D1-24 DO YOU USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS?	6.1	3.7	.0	.0	4.7	.0	.0	25.0
D	204	D1-25 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS?	9.1	8.1	.0	.0	7.5	4.8	.9	38.6

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	205	D1-26 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS?	4.5	3.7	.0	.0	4.7	4.8	.0	20.5
D	206	D1-27 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) FOR SERIES RCL CIRCUITS?	3.0	3.1	.0	.0	2.8	.0	.0	15.9
D	207	D1-28 DO YOU USE OR REFER TO TRUE POWER (P SUB T) FOR SERIES RCL CIRCUITS?	4.5	5.6	.0	.0	2.8	.0	.0	25.0
D	208	D1-29 DO YOU USE OR REFER TO POWER FACTORS (PF) FOR SERIES RCL CIRCUITS?	3.0	5.0	.0	.0	2.8	.0	.0	22.7
D	209	D1-30 DO YOU USE OR REFER TO TOTAL CURRENT FOR PARALLEL RCL CIRCUITS?	16.7	10.6	.0	6.3	4.7	4.8	.9	43.2
D	210	D1-31 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS?	4.5	2.5	.0	.0	3.8	.0	.0	18.2
D	211	D1-32 DO YOU USE THE ASSUMED VOLTAGE METHOD FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	6.1	4.3	.0	.0	2.8	.0	.0	20.5
D	212	D1-33 DO YOU USE OHM'S LAW FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	18.2	10.6	.0	12.5	7.5	4.8	1.8	45.5
D	213	D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS?	34.8	27.3	.0	18.8	10.4	28.6	7.9	72.7
D	214	D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION?	21.2	15.5	.0	12.5	3.8	19.0	2.6	61.4
D	215	D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS?	24.2	23.6	.0	18.8	8.5	19.0	4.4	65.9
D	216	D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION?	13.6	13.0	.0	6.3	3.8	14.3	3.5	50.0
D	217	D1-38 DO YOU CHECK RESISTORS USING OHMMETERS?	37.9	27.3	.0	25.0	12.3	28.6	7.9	77.3
D	218	D1-39 DO YOU CHECK RESISTORS USING SUBSTITUTION?	18.2	13.7	.0	6.3	3.8	19.0	3.5	52.3
D	219	D1-40 DO YOU USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (P SUB A) = TRUE POWER (P SUB T) FOR RESONANT CIRCUITS?	3.0	3.1	.0	.0	2.8	.0	.9	13.6
D	220	D1-41 DO YOU USE OR REFER TO RESONANT FREQUENCIES FOR RCL CIRCUITS?	6.1	6.2	.0	6.3	4.7	.0	1.8	50.0
D	221	D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS?	6.1	5.6	.0	6.3	3.8	.0	.9	43.2

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	222	D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS?	6.1	5.6	.0	.0	1.9	.0	.0	36.4
D	223	D1-44 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 OF THE PEAK CURRENT VALUE?	6.1	6.2	.0	.0	1.9	.0	.0	38.6
D	224	D1-45 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE COIL (Q)?	1.5	3.7	.0	.0	.9	.0	.0	27.3
D	225	D1-46 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	9.5	.0	31.8
D	226	D2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS? IF NO, GO TO ITEM D3-1; IF YES, CONTINUE.	10.6	5.6	.0	.0	2.8	.0	.0	38.6
D	227	D2-2 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)?	10.6	3.7	.0	.0	3.8	.0	.9	34.1
D	228	D2-3 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS?	4.5	3.7	3.4	.0	.9	.0	.9	22.7
D	229	D2-4 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS?	4.5	3.1	.0	.0	.9	.0	.9	22.7
D	230	D2-5 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS?	6.1	3.7	.0	.0	.9	.0	.0	29.5
D	231	D2-6 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES?	3.0	4.3	.0	.0	.9	.0	.0	22.7
D	232	D2-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS?	4.5	3.1	.0	.0	1.9	.0	.0	29.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	233	03-1 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM E1-1; IF YES, CONTINUE.	68.2	42.2	6.9	31.3	11.3	57.1	18.4	75.0
D	234	03-2 DO YOU INSPECT FILTER CIRCUITS?	54.5	36.6	.0	31.3	8.5	42.9	10.5	70.5
D	235	03-3 DO YOU CLEAN FILTER CIRCUITS?	47.0	31.1	.0	25.0	8.5	33.3	7.9	52.3
D	236	03-4 DO YOU ALIGN OR ADJUST FILTER CIRCUITS?	28.8	16.1	.0	25.0	5.7	28.6	5.3	68.2
D	237	03-5 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL?	56.1	29.8	.0	31.3	5.7	47.6	12.3	77.3
D	238	03-6 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF FILTER CIRCUITS?	57.6	31.7	6.9	25.0	4.7	14.3	7.0	77.3
D	239	03-7 DO YOU WORK WITH LOW PASS FILTERS?	34.8	20.5	.0	12.5	2.8	52.4	.9	61.4
D	240	03-8 DO YOU WORK WITH HIGH PASS FILTERS?	24.2	16.8	.0	12.5	4.7	28.6	.9	61.4
D	241	03-9 DO YOU WORK WITH BANDPASS FILTERS?	18.2	6.2	.0	6.3	3.8	14.3	2.6	52.3
D	242	03-10 DO YOU WORK WITH BAND-REJECT FILTERS?	7.6	3.7	.0	12.5	3.8	4.8	.9	31.8
D	243	03-11 DO YOU WORK WITH FILTERS BUT DON'T REMEMBER WHICH TYPE?	31.8	22.4	6.9	25.0	7.5	9.5	14.0	29.5
D	244	03-12 DO YOU WORK WITH L-SECTION FILTER CONFIGURATIONS?	24.2	9.3	.0	6.3	.9	4.8	2.6	38.6
D	245	03-13 DO YOU WORK WITH T-SECTION FILTER CONFIGURATIONS?	18.2	8.1	.0	12.5	.9	.0	1.8	36.4
D	246	03-14 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATIONS?	18.2	8.7	.0	6.3	1.9	.0	1.8	34.1
D	247	03-15 DO YOU WORK WITH YTTRIUM IRON GARNET (YIG) FILTERS?	.0	.0	.0	6.3	.9	.0	.0	9.1
D	248	03-16 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS?	9.1	1.9	.0	6.3	1.9	.0	.9	18.2
E		COUPLING (E1), SOLDERING OR SOLDERLESS CONNECTIONS(E2), RELAYS (E3)								
E	249	E1-1 DO YOU WORK WITH COUPLING DEVICES OR CIRCUITRY IN YOUR PRESENT JOB? IF NO, GO TO ITEM E2-1; IF YES, CONTINUE.	45.5	24.2	.0	18.8	7.5	14.3	7.9	79.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
E	250	E1-2 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING?	47.0	19.9	.0	25.0	4.7	9.5	.9	77.3
E	251	E1-3 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING (MATCHING)?	37.0	14.9	.0	6.3	4.7	14.3	5.3	68.2
E	252	E1-4 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH OPTICAL COUPLING?	4.5	7.5	.0	6.3	2.8	.0	.0	45.5
E	253	E1-5 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING?	24.2	19.3	.0	18.8	5.7	14.3	4.4	68.2
E	254	E1-6 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING?	47.0	19.9	.0	18.8	5.7	9.5	.9	81.8
E	255	E1-7 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING?	36.4	13.7	.0	6.3	6.6	14.3	6.1	72.7
E	256	E1-8 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING?	27.3	17.4	.0	18.8	7.5	19.3	4.4	70.5
E	257	E1-9 DO YOU WORK WITH DIRECT COUPLED CIRCUITS?	37.9	22.4	.0	18.8	5.7	14.3	3.5	81.8
E	258	E1-10 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS?	47.9	18.6	.0	18.8	5.7	9.5	2.6	79.5
E	259	E1-11 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS?	19.7	16.8	.0	6.3	5.7	4.8	2.6	70.5
E	260	E1-12 DO YOU WORK WITH OPTICAL COUPLING?	4.5	6.2	.0	.0	2.8	.0	.0	43.2
E	261	E1-13 DO YOU WORK WITH OPTICAL COUPLING CIRCUITS?	4.5	6.2	.0	.0	2.8	.0	.0	40.9
E	262	E1-14 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS?	22.7	16.1	.0	18.8	6.6	14.3	4.4	70.5
E	263	E2-1 IN YOUR PRESENT JOB, DO YOU CONNECT ELECTRONIC CIRCUITS USING SOLDERLESS CONNECTIONS OR SOLDERING TECHNIQUES? IF NO, GO TO ITEM E3-1; IF YES, CONTINUE.	86.4	83.9	6.9	75.0	76.4	81.0	78.9	97.7
E	264	E2-2 DO YOU SOLDER CONNECTIONS?	87.9	88.2	.0	81.3	84.0	81.0	86.1	97.7
E	265	E2-3 DO YOU DESOLDER CONNECTIONS?	87.9	88.2	.0	81.3	85.9	81.0	83.3	97.7

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
E	266	E2-4 DO YOU PERFORM HIGH RELIABILITY SOLDERING?	72.7	61.5	.0	75.0	58.5	71.4	46.5	86.4
E	267	E2-5 DO YOU INSPECT SOLDERED CONNECTIONS?	87.9	87.6	.0	81.3	85.8	81.0	79.8	95.5
E	268	E2-6 DO YOU CLEAN OR TIN CONNECTIONS?	86.4	85.7	.0	81.3	83.0	81.0	78.9	95.5
E	269	E2-7 DO YOU MAKE HARDWIRE CONNECTIONS?	83.3	81.4	.0	81.3	79.2	71.4	80.7	90.9
E	270	E2-8 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS?	87.9	80.7	3.4	81.3	38.7	57.1	21.1	95.5
E	271	E2-9 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS?	87.9	85.7	.0	81.3	69.8	81.0	32.5	97.7
E	272	E2-10 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS?	87.9	79.5	.0	75.0	48.1	71.4	22.8	95.5
E	273	E2-11 DO YOU SOLDER ACTIVE COMPONENTS, SUCH AS INTEGRATED CIRCUITS?	81.8	47.8	.0	43.8	21.7	38.1	10.5	93.2
E	274	E2-12 DO YOU PERFORM WIRE WRAPPING IN LIEU OF SOLDERING?	68.2	31.1	.0	31.3	78.3	57.1	77.2	36.4
E	275	E2-13 DO YOU PERFORM CRIMPING IN LIEU OF SOLDERING?	69.7	55.3	.0	81.3	46.2	38.1	50.9	84.1
E	276	E2-14 DO YOU PERFORM WIRE CONNECTIONS USING A 714 PUNCH-ON TOOL IN LIEU OF SOLDERING?	15.2	8.7	.0	6.3	42.5	23.8	80.7	13.6
E	277	E3-1 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB? IF NO, GO TO ITEM F1-1; IF YES, CONTINUE.	78.8	67.7	69.0	81.3	73.6	81.0	77.2	90.9
E	278	E3-2 DO YOU ADJUST RELAYS?	36.4	39.1	.0	68.8	77.4	76.2	68.4	68.2
E	279	E3-3 DO YOU CLEAN RELAYS?	75.8	55.3	.0	75.0	80.2	81.0	78.9	90.9
E	280	E3-4 DO YOU INSPECT RELAYS?	75.8	61.5	27.6	81.3	81.1	81.0	79.8	93.2
E	281	E3-5 DO YOU TROUBLESHOOT RELAYS?	72.7	60.9	65.5	81.3	80.2	81.0	75.4	93.2
E	282	E3-6 DO YOU MONITOR BIAS OUTPUT ON RELAYS?	22.7	15.5	3.4	12.5	29.2	23.8	12.3	29.5
E	283	E3-7 DO YOU REMOVE OR REPLACE RELAYS?	74.2	64.0	24.1	81.3	76.4	81.0	60.5	90.9
E	284	E3-8 DO YOU PERFORM TASKS ON CONTACTS OF RELAYS?	68.2	51.6	10.3	81.3	81.1	81.0	76.3	93.2
E	285	E3-9 DO YOU PERFORM TASKS ON CORES OF RELAYS?	21.2	18.6	3.4	31.3	52.8	33.3	8.8	40.9
E	286	E3-10 DO YOU PERFORM TASKS ON COILS OF RELAYS?	31.8	28.6	3.4	43.8	56.6	38.1	11.4	61.4
E	287	E3-11 DO YOU PERFORM TASKS ON ARMATURES OF RELAYS?	54.5	46.0	3.4	68.8	78.3	52.4	36.8	72.7
E	288	E3-12 DO YOU PERFORM TASKS ON SPRINGS OF RELAYS?	57.6	45.3	3.4	68.8	82.1	61.9	54.4	77.3
E	289	E3-13 DO YOU USE OR REFER TO SINGLE POLE SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS?	63.6	45.3	51.7	81.3	57.5	52.4	44.7	90.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
E	290	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS?	63.6	44.7	51.7	81.3	57.5	52.4	45.6	90.9
E	291	E3-15 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS?	50.0	33.5	48.3	81.3	50.0	42.9	46.5	88.6
E	292	E3-16 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS?	51.5	33.5	48.3	81.3	48.1	38.1	43.9	88.6
E	293	E3-17 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS?	51.5	34.8	34.5	81.3	68.9	47.6	48.2	84.1
E	294	E3-18 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE?	50.0	47.2	10.3	68.8	66.0	57.1	31.6	88.6
F		MICROPHONES AND SENSING DEVICES (F1), SPEAKERS (F2), OSCILLOSCOPES (F3)								
F	295	F1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES OR OTHER SENSING DEVICES SUCH AS TRANSDUCERS? IF NO, GO TO ITEM F2-1; IF YES, CONTINUE.	6.1	6.2	13.8	31.3	7.5	66.7	20.2	75.9
F	296	F1-2 DO YOU INSPECT MICROPHONES?	1.5	3.7	.0	12.5	7.5	61.9	14.9	68.2
F	297	F1-3 DO YOU CLEAN MICROPHONES?	.0	3.7	.0	12.5	6.6	52.4	12.3	40.9
F	298	F1-4 DO YOU OPERATE MICROPHONES?	3.0	4.3	13.8	12.5	7.5	57.1	15.8	63.6
F	299	F1-5 DO YOU TROUBLESHOOT MICROPHONES WIRE CONNECTIONS?	1.5	3.7	.0	12.5	8.5	57.1	15.5	65.9
F	300	F1-6 DO YOU TROUBLESHOOT MICROPHONE COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	1.5	3.1	.0	6.3	4.7	23.8	4.4	38.6
F	301	F1-7 DO YOU REMOVE AND REPLACE COMPLETE MICROPHONES?	1.5	3.7	.0	18.8	6.6	66.7	16.7	63.6
F	302	F1-8 DO YOU REMOVE OR REPLACE MICROPHONE COMPONENT PARTS?	1.5	3.7	.0	12.5	5.7	19.0	9.4	40.9
F	303	F1-9 DO YOU PERFORM TASKS ON CARBON MICROPHONES?	1.5	2.5	3.4	.0	3.5	66.7	15.8	18.2
F	304	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES?	1.5	1.9	.0	.0	3.8	19.0	1.8	13.6
F	305	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES?	.0	1.9	.0	.0	2.8	4.8	.9	36.4
F	306	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES?	1.5	1.9	3.4	6.3	2.8	28.6	.9	36.4
F	307	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES?	.0	.0	.0	.0	1.9	.0	.9	6.8

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
F	308	F1-14 DO YOU PERFORM TASKS ON TRANSDUCERS?	.0	1.2	.0	18.8	2.8	4.8	3.5	72.7
F	309	F2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS? IF NO, GO TO ITEM F3-1; IF YES, CONTINUE.	27.3	5.0	6.9	18.8	11.3	81.0	57.9	72.7
F	310	F2-2 DO YOU INSPECT SPEAKERS?	25.8	4.3	.0	18.8	10.4	81.0	52.6	70.5
F	311	F2-3 DO YOU CLEAN SPEAKERS?	22.7	4.3	.0	12.5	7.5	66.7	38.6	40.9
F	312	F2-4 DO YOU OPERATE SPEAKERS?	21.2	3.7	6.9	12.5	9.4	76.2	51.8	59.1
F	313	F2-5 DO YOU TROUBLESHOOT SPEAKER WIRE CONNECTIONS?	25.8	4.3	.0	18.8	8.5	76.2	53.5	70.5
F	314	F2-6 DO YOU TROUBLESHOOT SPEAKER COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	16.7	2.5	.0	.0	1.9	66.7	21.9	31.8
F	315	F2-7 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS?	25.8	4.3	.0	18.8	8.5	81.0	52.6	68.2
F	316	F2-8 DO YOU REMOVE OR REPLACE SPEAKER PARTS?	13.6	3.1	.0	.0	1.9	52.4	18.4	13.6
F	317	F2-9 DO YOU PERFORM ANY TASKS ON CONE SPEAKER PARTS?	3.0	1.9	.0	.0	1.9	9.5	2.6	15.9
F	318	F2-10 DO YOU PERFORM ANY TASKS ON SPIDER SPEAKER PARTS?	.0	1.2	.0	.0	1.9	9.5	.9	9.1
F	319	F2-11 DO YOU PERFORM ANY TASKS ON FIELD COIL SPEAKER PARTS?	.0	1.2	.0	.0	1.9	14.3	.9	15.9
F	320	F2-12 DO YOU PERFORM ANY TASKS ON VOICE COIL SPEAKER PARTS?	.0	1.2	.0	.0	2.8	14.3	3.5	15.9
F	321	F2-13 DO YOU PERFORM ANY TASKS ON PERMANENT MAGNET SPEAKER PARTS?	4.5	1.2	.0	.0	1.9	9.5	1.8	15.9
F	322	F2-14 DO YOU PERFORM ANY TASKS ON ELECTROMAGNET SPEAKER PARTS?	.0	1.9	.0	.0	1.9	14.3	.9	13.6
F	323	F2-15 DO YOU PERFORM ANY TASKS ON SOFT IRON CORE SPEAKER PARTS?	1.5	1.9	.0	.0	1.9	4.8	.9	9.1
F	324	F3-1 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G1-1; IF YES, CONTINUE.	89.4	78.3	.0	81.3	37.7	71.4	7.9	95.5
F	325	F3-2 DO YOU PERFORM OPERATIONAL CHECKS USING OSCILLOSCOPES?	86.4	69.6	.0	81.3	32.1	57.1	6.1	93.2
F	326	F3-3 DO YOU PERFORM ALIGNMENTS OR ADJUSTMENTS USING OSCILLOSCOPES?	80.3	65.8	.0	68.8	31.1	52.4	5.3	88.6
F	327	F3-4 DO YOU TROUBLESHOOT ELECTRONIC CIRCUITS USING OSCILLOSCOPES?	80.3	76.4	.0	81.3	31.1	61.9	4.4	86.4
F	328	F3-5 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCIES?	69.7	48.4	.0	75.0	32.1	61.9	6.1	90.9
F	329	F3-6 DO YOU USE OSCILLOSCOPES TO MEASURE TIME?	68.2	39.1	.0	81.3	17.9	42.9	.0	93.2

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
F	330	F3-7 DO YOU USE OSCILLOSCOPES TO OBSERVE LISSAJOUS PATTERNS?	59.1	10.6	.0	18.8	6.6	9.5	.0	27.3
F	331	F3-8 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES.	57.6	46.0	.0	31.3	15.1	23.8	.9	84.1
F	332	F3-9 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS?	42.4	26.7	.0	37.5	15.1	14.3	.0	54.5
F	333	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGES?	80.3	71.4	.0	81.3	19.8	61.9	3.5	93.2
F	334	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGES?	86.4	77.0	.0	75.0	28.3	61.9	3.5	93.2
F	335	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS?	36.4	32.9	.0	43.8	17.0	38.1	4.4	75.0
F	336	F3-13 DO YOU USE OSCILLOSCOPES TO OBSERVE DATA PATTERNS?	86.4	62.7	.0	62.5	19.8	19.0	1.8	68.2
F	337	F3-14 DO YOU USE OSCILLOSCOPES TO MEASURE RIPPLE VOLTAGES?	86.4	44.7	.0	81.3	13.2	42.9	.9	79.5
F	338	F3-15 DO YOU USE OSCILLOSCOPES TO MEASURE PHASE JITTERS?	22.7	12.4	.0	18.8	13.2	14.3	.0	43.2
F	339	F3-16 DO YOU USE OSCILLOSCOPES TO DISPLAY SWEEP GENERATOR PATTERNS?	42.4	31.1	.0	25.0	12.3	9.5	.9	77.3
F	340	F3-17 DO YOU USE OSCILLOSCOPES TO OBSERVE PHASE RELATIONSHIPS?	69.7	37.3	.0	43.8	15.1	14.3	2.6	88.6
F	341	F3-18 DO YOU USE OSCILLOSCOPES TO OBSERVE SAMPLING DISPLAYS?	37.9	21.7	.0	31.3	12.3	33.3	.9	65.9
G		SEMICONDUCTOR DIODES (G1), TRANSISTORS (G2), TRANSISTOR AMPLIFIERS (G3)								
G	342	G1-1 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G2-1; IF YES, CONTINUE.	81.8	70.2	3.4	75.0	47.2	66.7	11.4	93.2
G	343	G1-2 DO YOU INSPECT DIODES?	77.3	67.1	.0	75.0	39.6	66.7	9.6	93.2
G	344	G1-3 DO YOU CHECK DIODES?	77.3	68.9	.0	68.8	43.4	61.9	9.6	90.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	345	G1-4 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES?	12.1	8.1	.0	6.3	2.8	4.8	.0	18.2
G	346	G1-5 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE?	28.8	13.7	.0	12.5	9.4	19.0	.9	47.7
G	347	G1-6 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES?	28.8	14.3	.0	25.0	8.5	9.5	.0	43.2
G	348	G1-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES?	53.0	39.8	3.4	43.8	24.5	23.8	3.5	72.7
G	349	G1-8 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE?	68.2	56.5	.0	43.8	34.0	47.6	8.8	88.6
G	350	G1-9 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW?	18.2	9.9	.0	12.5	5.7	14.3	.0	29.5
G	351	G1-10 DO YOU MEASURE FORWARD BIAS RESISTANCE?	57.6	46.0	.0	56.3	18.9	23.8	1.8	79.5
G	352	G1-11 DO YOU MEASURE REVERSE BIAS RESISTANCE?	56.1	46.0	.0	56.3	17.9	23.8	1.8	79.5
G	353	G1-12 DO YOU READ DIODE COLOR CODING?	31.8	17.4	.0	37.5	8.5	9.5	.9	18.2
G	354	G1-13 DO YOU READ DIODE NUMBERING SYSTEM, SUCH AS IN 538?	54.5	46.0	.0	62.5	17.0	42.9	2.6	81.8
G	355	G1-14 DO YOU USE THE SYMBOL ON DIODE WHICH INDICATES THE CATHODE END?	81.8	63.4	.0	68.8	29.2	52.4	7.0	93.2
G	356	G1-15 DO YOU DETERMINE DIRECTION OF CURRENT THROUGH A DIODE?	81.8	65.2	3.4	50.0	41.5	52.4	9.6	93.2
G	357	G1-16 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON?	16.7	6.8	.0	25.0	5.7	19.0	.0	63.6
G	358	G1-17 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OR RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)?	33.3	18.6	3.4	18.8	13.2	14.3	.0	68.2
G	359	G1-18 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)?	22.7	12.4	.0	6.3	9.4	28.6	2.6	54.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	360	G1-19 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS?	51.5	40.4	.0	18.8	18.9	28.6	5.3	81.8
G	361	G1-20 DO YOU NEED AN UNDERSTANDING OF VALENCE BAND IN SEMICONDUCTOR MATERIALS?	6.1	11.8	.0	12.5	6.6	4.8	.9	40.9
G	362	G1-21 DO YOU NEED AN UNDERSTANDING OF FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS?	3.0	9.9	.0	12.5	5.7	4.8	.9	27.3
G	363	G1-22 DO YOU NEED AN UNDERSTANDING OF CONDUCTION BAND IN SEMICONDUCTOR MATERIALS?	6.1	11.2	.0	12.5	6.6	4.8	.9	45.5
G	364	G1-23 DO YOU NEED AN UNDERSTANDING OF CONVALENT BONDING IN SEMICONDUCTOR MATERIALS?	4.5	10.6	.0	12.5	6.6	4.8	.9	27.3
G	365	G1-24 DO YOU NEED AN UNDERSTANDING OF ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS?	6.1	10.6	.0	18.8	6.6	4.8	.9	45.5
G	366	G1-25 DO YOU NEED AN UNDERSTANDING OF ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS?	21.2	18.0	.0	18.8	9.4	9.5	1.8	56.8
G	367	G1-26 DO YOU NEED AN UNDERSTANDING OF DONOR IMPURITY IN SEMICONDUCTORS?	7.6	10.6	.0	12.5	5.7	4.8	.9	31.8
G	368	G1-27 DO YOU NEED AN UNDERSTANDING OF ACCEPTOR IMPURITY IN SEMICONDUCTORS?	4.5	9.9	.0	18.8	5.7	4.8	.9	31.8
G	369	G1-28 DO YOU NEED AN UNDERSTANDING OF P-TYPE SEMICONDUCTOR MATERIAL?	45.5	24.8	.0	31.3	11.3	23.8	3.5	72.7
G	370	G1-29 DO YOU NEED AN UNDERSTANDING OF N-TYPE SEMICONDUCTOR MATERIAL?	47.0	24.8	.0	25.0	11.3	23.8	3.5	72.7
G	371	G1-30 DO YOU NEED AN UNDERSTANDING OF MAJORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.3	.0	12.5	5.7	4.8	.9	43.2
G	372	G1-31 DO YOU NEED AN UNDERSTANDING OF MINORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.9	.0	12.5	5.7	4.8	.9	43.2
G	373	G1-32 DO YOU NEED AN UNDERSTANDING OF JUNCTION RECOMBINATION IN SEMICONDUCTORS?	7.6	11.2	.0	18.8	6.6	4.8	.9	36.6
G	374	G1-33 DO YOU NEED AN UNDERSTANDING OF DEPLETION REGION IN SEMICONDUCTORS?	6.1	12.4	.0	12.5	7.5	4.8	.9	50.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	375	G1-34 DO YOU NEED AN UNDERSTANDING OF RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL?	9.1	13.7	.0	12.5	7.5	4.8	.9	47.7
G	376	G1-35 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES?	28.8	17.4	.0	18.8	4.7	4.8	1.8	45.5
G	377	G1-36 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS?	7.6	6.2	.0	.0	5.7	4.8	.9	20.5
G	378	G1-37 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION?	31.8	20.5	.0	25.0	6.6	28.6	.9	81.8
G	379	G1-38 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS?	15.2	14.3	.0	12.5	4.7	.0	.0	70.5
G	380	G1-39 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS?	9.1	12.4	.0	6.3	4.7	.0	.0	52.3
G	381	G1-40 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS?	16.7	11.8	3.4	12.5	4.7	.0	.0	54.5
G	382	G1-41 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS?	19.7	15.5	.0	18.8	4.7	4.8	.0	72.7
G	383	G2-1 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM G3-1; IF YES, CONTINUE.	84.8	80.1	6.9	75.0	30.2	71.4	19.3	95.5
G	384	G2-2 DO YOU INSPECT TRANSISTORS?	83.3	76.4	3.4	75.0	26.4	71.4	14.0	93.2
G	385	G2-3 DO YOU CHECK TRANSISTORS?	83.3	78.9	3.4	62.5	24.5	71.4	16.7	93.2
G	386	G2-4 DO YOU NEED AN UNDERSTANDING OF EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS?	75.8	65.2	3.4	43.8	23.6	47.6	7.0	90.9
G	387	G2-5 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND RESISTANCE MEASUREMENTS?	74.2	66.5	3.4	62.5	19.8	47.6	7.9	86.4
G	388	G2-6 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS?	74.2	67.1	3.4	62.5	20.8	47.6	7.9	86.4
G	389	G2-7 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION?	51.5	32.3	3.4	31.3	11.3	28.6	3.5	70.5
G	390	G2-8 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION?	48.5	32.3	3.4	31.3	11.3	23.8	3.5	65.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	391	G2-9 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE, AND EMITTER)?	54.5	39.1	3.4	43.8	13.2	47.6	4.4	81.8
G	392	G2-10 DO YOU USE OR REFER TO LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR?	19.7	28.6	.0	18.8	5.7	14.3	2.6	52.3
G	393	G2-11 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS?	86.4	77.0	6.9	81.3	22.6	61.9	13.2	95.5
G	394	G2-12 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, A2, A3, ETC.?	84.8	77.0	3.4	75.0	20.8	61.9	11.4	93.2
G	395	G2-13 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION?	59.1	44.7	.0	13.8	11.3	38.1	3.5	95.5
G	396	G2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT I(SUB B) IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT I(SUB E) USUALLY I(SUB B) BEING 2 TO 8 PERCENT OF I(SUB E)?	36.4	34.2	.0	18.8	5.7	19.0	.9	68.2
G	397	G2-15 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS?	50.0	50.3	.0	31.3	8.5	19.0	5.3	84.1
G	398	G2-16 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES?	15.2	20.5	.0	12.5	5.7	14.3	1.8	52.3
G	399	G2-17 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES?	6.1	10.6	.0	19.8	.9	9.5	.9	43.2
G	400	G2-18 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS?	3.0	13.0	.0	6.3	.9	.0	1.8	20.5
G	401	G2-19 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS?	.0	12.4	.0	6.3	.9	.0	1.8	15.9
G	402	G2-20 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS?	.0	11.8	.0	6.3	.9	.0	1.8	13.6
G	403	G2-21 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCB/VBE)?	3.0	6.2	3.4	6.3	1.9	4.8	.9	22.7
G	404	G2-22 DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)?	3.0	5.0	3.4	6.3	2.8	4.8	.9	18.2

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	405	G2-23 DO YOU USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRNSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI X AV)?	4.5	5.6	3.4	6.3	1.9	4.8	.9	22.7
G	406	G2-24 DO YOU PERFORM TRANSISTOR MATCHING THROUGH THE USE OF CURVE TRACING?	.0	1.9	.0	12.5	.9	.0	.0	22.7
G	407	G3-1 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM H1-1; IF YES, CONTINUE.	48.5	24.8	.0	31.3	16.0	38.1	8.8	84.1
G	408	G3-2 DO YOU INSPECT TRANSISTOR AMPLIFIERS?	39.4	22.4	.0	31.3	11.3	47.6	6.1	84.1
G	409	G3-3 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS?	24.2	13.7	.0	25.0	12.3	42.9	7.0	65.9
G	410	G3-4 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL?	45.5	19.9	.0	31.3	9.4	38.1	7.9	84.1
G	411	G3-5 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS?	43.9	21.1	.0	18.8	5.7	28.6	2.6	81.8
G	412	G3-6 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER?	36.4	18.0	.0	31.3	12.3	47.6	5.3	79.5
G	413	G3-7 DO YOU REMOVE OR REPLACE AMPLIFIER CIRCUIT COMPONENTS?	39.4	20.5	.0	18.8	3.8	23.8	1.8	81.8
G	414	G3-8 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR CURRENT RESULTS FROM A CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	15.2	14.3	.0	12.5	1.9	9.5	.9	52.3
G	415	G3-9 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO SPECIFIC CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	4.5	6.2	.0	6.3	1.9	9.5	.9	31.8
G	416	G3-10 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE RESULTS FROM A CHANGE IN BASE CURRENT?	18.2	13.7	.0	12.5	1.9	9.5	.9	61.4
G	417	G3-11 DO YOU USE OR REFER TO THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	24.2	14.3	.0	18.8	1.9	14.3	.9	59.1
G	418	G3-12 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE; THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	10.6	8.1	.0	6.3	1.9	9.5	.9	36.4
G	419	G3-13 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS TTHIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)?	4.5	2.5	.0	6.3	.9	.0	1.8	18.2

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	420	G3-14 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR?	12.1	6.2	.0	6.3	1.9	4.8	1.8	31.8
G	421	G3-15 DO YOU MEASURE VOLTAGE GAIN CONCERNING TRANSISTOR AMPLIFIERS?	27.3	14.9	.0	25.0	3.8	19.0	2.6	65.9
G	422	G3-16 DO YOU MEASURE CURRENT GAIN CONCERNING TRANSISTOR AMPLIFIERS?	19.7	14.9	.0	25.0	4.7	14.3	1.8	50.0
G	423	G3-17 DO YOU MEASURE POWER GAIN CONCERNING TRANSISTOR AMPLIFIERS?	16.7	10.6	.0	18.8	4.7	4.8	1.8	38.6
G	424	G3-18 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE CHANGE OF THE BASE COLLECTOR VOLTAGE?	10.6	5.0	.0	12.5	3.8	.0	.0	25.0
G	425	G3-19 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION?	18.2	10.6	.0	18.8	1.9	9.5	.0	45.5
G	426	G3-20 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION?	13.6	6.8	.0	18.8	1.9	9.5	.0	40.9
G	427	G3-21 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION?	16.7	9.9	.0	12.5	1.9	4.8	.0	38.6
G	428	G3-22 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION?	24.2	11.8	.0	18.8	1.9	9.5	.9	43.2
G	429	G3-23 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TRUBLESHOOTING THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION?	24.2	12.4	.0	18.8	1.9	4.8	.9	38.6
G	430	G3-24 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION?	6.1	7.5	.0	12.5	1.9	4.8	.0	38.6
G	431	G3-25 DO YOU IDENTIFY OR TROUBLESHOOT AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS?	17.6	11.2	.0	12.5	1.9	28.6	.0	56.8

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	432	G3-26 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS?	12.1	11.2	.0	6.3	2.8	23.8	.0	50.0
G	433	G3-27 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS?	9.1	6.2	.0	12.5	2.8	9.5	.0	47.7
G	434	G3-28 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS?	4.5	7.5	.0	6.3	.9	.0	.0	43.2
G	435	G3-29 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	18.2	6.2	.0	6.3	3.8	14.3	.9	34.1
G	436	G3-30 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	1.5	3.7	.0	6.3	1.9	.0	.9	40.9
G	437	G3-31 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	19.7	10.6	.0	18.8	3.8	19.0	.0	72.7
G	438	G3-32 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS?	3.0	4.3	.0	6.3	1.9	4.8	.0	31.8
G	439	G3-33 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	7.6	1.9	.0	12.5	1.9	.0	.0	40.9
G	440	G3-34 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	10.6	3.7	.0	12.5	1.9	.0	.0	56.8
G	441	G3-35 DO YOU TROUBLESHOOT OR REPAIR VOLTAGE MULTIPLIERS (DOUBLERS/TRIPLERS)?	16.7	9.3	.0	25.0	1.9	.0	.9	72.7
G	442	G3-36 DO YOU TROUBLESHOOT OR REPAIR RF AMPLIFIERS?	24.2	6.8	.0	12.5	2.8	4.8	.0	70.5
G	443	G3-37 DO YOU TROUBLESHOOT OR REPAIR WIDEBAND AMPLIFIERS (VIDEO AMPS)?	3.0	3.1	.0	.0	1.9	.0	.0	40.9
G	444	G3-38 DO YOU TROUBLESHOOT OR REPAIR AUDIO AMPLIFIERS?	15.2	5.0	.0	18.8	6.6	38.1	1.8	61.4
G	445	G3-39 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER AMPLIFIERS?	22.7	13.7	.0	18.8	2.8	23.8	.9	79.5
G	446	G3-40 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	1.5	3.7	.0	.0	1.9	.0	.0	36.4
G	447	G3-41 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY AMPLIFIERS?	3.0	4.3	.0	.0	1.9	4.8	.0	29.5
G	448	G3-42 DO YOU TROUBLESHOOT OR REPAIR IF AMPLIFIERS?	4.5	5.6	.0	12.5	2.8	.0	.0	34.1
G	449	G3-43 DO YOU TROUBLESHOOT OR REPAIR DIFFERENTIATING AMPLIFIERS (DIFF AMPS)?	24.2	3.7	.0	12.5	1.9	.0	.0	79.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	450	G3-44 DO YOU TROUBLESHOOT OR REPAIR OPERATIONAL AMPLIFIERS (OP AMPS)?	12.1	6.8	.0	18.8	1.9	.0	.0	81.8
G	451	G3-45 DO YOU TROUBLESHOOT OR REPAIR INTEGRATING AMPLIFIERS?	16.7	6.8	.0	18.8	1.9	.0	.0	79.5
G	452	G3-46 DO YOU TROUBLESHOOT OR REPAIR SUMMING AMPLIFIERS?	1.5	1.9	.0	.0	.9	.0	.0	45.5
H		SOLID-STATE SPECIAL PURPOSE DEVICES (H1), POWER SUPPLIES (H2), OSCILLATORS (H3)								
H	453	H1-1 DO YOU USE OR REFER TO VARACTORS/VARICAP COMPONENTS?	7.6	9.3	.0	18.8	3.8	.0	.9	38.6
H	454	H1-2 DO YOU USE OR REFER TO TUNNEL DIODE COMPONENTS?	34.8	14.9	.0	12.5	2.8	.0	.0	61.4
H	455	H1-3 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTOR COMPONENTS?	27.3	18.0	.0	25.0	2.8	9.5	.0	95.5
H	456	H1-4 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTOR COMPONENTS?	62.1	25.5	.0	31.3	4.7	4.8	.9	93.2
H	457	H1-5 DO YOU USE OR REFER TO ZENER DIODE COMPONENTS?	86.4	75.8	24.1	81.3	17.0	61.9	25.4	93.2
H	458	H1-6 DO YOU USE OR REFER TO INTEGRATED CIRCUIT COMPONENTS?	87.9	62.7	13.8	81.3	19.8	19.0	22.8	93.2
H	459	H1-7 DO YOU USE OR REFER TO PIN DIODE COMPONENTS?	9.1	13.7	.0	6.3	5.7	4.8	3.5	34.1
H	460	H1-8 DO YOU USE OR REFER TO LED'S/LCD'S COMPONENTS?	77.3	46.6	20.7	68.8	18.9	19.0	22.8	95.5
H	461	H1-9 DO YOU USE OR REFER TO FANTAIL TRANSISTOR COMPONENTS?	7.6	7.5	.0	.0	2.8	.0	.0	20.5
H	462	H1-10 DO YOU USE OR REFER TO SILICON CONTROL RECTIFIER (SCR) COMPONENTS?	78.8	22.4	6.9	68.8	4.7	14.3	2.6	95.5
H	463	H1-11 DO YOU USE OR REFER TO TRIAC COMPONENTS?	24.2	24.2	.0	18.8	2.8	.0	.0	93.2
H	464	H1-12 DO YOU USE OR REFER TO PROGRAMMABLE UNIJUNCTION TRANSISTOR (PUT) COMPONENTS?	7.6	1.9	.0	6.3	1.9	.0	.0	86.4
H	465	H1-13 DO YOU USE OR REFER TO SILICON CONTROLLED SWITCH (SCS) COMPONENTS?	10.6	3.7	.0	6.3	1.9	.0	.0	75.0
H	466	H1-14 DO YOU USE OR REFER TO SILICON UNILATERAL SWITCH (SUS) COMPONENTS?	6.1	1.9	.0	.0	1.9	.0	.0	77.3

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H	467	H2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES? IF NO, GO TO ITEM H3-1; IF YES, CONTINUE.	89.4	79.5	86.2	81.3	45.3	81.0	86.8	93.2
H	468	H2-2 DO YOU INSPECT POWER SUPPLIES?	84.8	79.5	69.0	75.0	44.3	81.0	82.5	90.9
H	469	H2-3 DO YOU CLEAN POWER SUPPLIES?	86.4	75.8	6.9	81.3	43.4	76.2	72.8	77.3
H	470	H2-4 DO YOU ALIGN OR ADJUST POWER SUPPLIES?	86.4	67.7	62.1	75.0	35.8	76.2	19.3	90.9
H	471	H2-5 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL?	86.4	75.2	55.2	62.5	35.8	81.0	57.9	90.9
H	472	H2-6 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS?	86.4	68.3	69.0	75.0	29.2	81.0	38.6	93.2
H	473	H2-7 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES?	72.7	75.8	.0	62.5	28.3	71.4	83.3	90.9
H	474	H2-8 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS?	86.4	68.3	3.4	75.0	25.5	76.2	30.7	93.2
H	475	H2-9 DO YOU INSPECT OR SERVICE COOLANT LEVELS?	6.1	4.3	6.9	12.5	9.4	19.0	3.5	40.9
H	476	H2-10 DO YOU WORK WITH HALF-WAVE RECTIFIERS?	72.7	50.9	3.4	56.3	20.8	19.0	7.0	93.2
H	477	H2-11 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS?	71.2	57.1	3.4	62.5	26.4	33.3	4.4	88.6
H	478	H2-12 DO YOU WORK WITH BRIDGE RECTIFIERS?	81.8	57.8	10.3	75.0	18.9	47.6	12.3	93.2
H	479	H2-13 DO YOU WORK WITH THREE-PHASE RECTIFIERS?	30.3	18.0	3.4	50.0	18.9	9.5	2.6	68.2
H	480	H2-14 DO YOU USE OR REFER TO INPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	81.8	68.3	37.9	81.3	34.0	66.7	27.2	93.2
H	481	H2-15 DO YOU USE OR REFER TO INPUT FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	43.9	29.8	24.1	25.0	13.2	33.3	10.5	72.7
H	482	H2-16 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	65.2	50.3	13.8	43.8	25.5	38.1	18.4	81.8
H	483	H2-17 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	66.7	52.2	17.2	50.0	30.2	23.8	26.3	70.5
H	484	H2-18 DO YOU USE OR REFER TO RIPPLE AMPLITUDE IN YOUR WORK WITH RECTIFIERS?	72.7	28.0	.0	56.3	9.4	19.0	2.6	68.2
H	485	H2-19 DO YOU USE OR REFER TO RIPPLE FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	50.0	21.7	.0	25.0	6.6	4.8	1.8	61.4
H	486	H2-20 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGES IN YOUR WORK WITH RECTIFIERS?	25.8	18.6	.0	18.8	8.5	4.8	2.6	70.5
H	487	H2-21 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS IN YOUR WORK WITH RECTIFIERS?	53.0	44.7	.0	31.3	5.7	33.3	3.5	84.1

D	TSK	TITLE	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H	488	H2-22 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	56.1	42.9	13.8	50.0	21.4	33.3	13.2	79.5
H	489	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS?	80.7	51.6	13.8	50.0	14.2	42.9	13.2	84.1
H	490	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS?	43.9	32.9	6.9	25.0	13.2	14.3	12.3	81.8
H	491	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS?	30.4	21.1	.0	12.5	3.6	9.5	2.6	65.9
H	492	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS?	27.3	16.1	.0	6.3	4.7	4.8	1.8	60.9
H	493	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS?	22.7	11.2	.0	12.5	3.8	4.8	1.8	72.3
H	494	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS?	31.8	11.8	.0	12.5	3.8	9.5	2.6	52.3
H	495	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER?	9.1	5.0	.0	12.5	2.1	.0	3.9	9.1
H	496	H2-30 DO YOU WORK WITH POWER SUPPLY REGULATOR CIRCUITS OTHER THAN SOLID-STATE?	25.8	24.2	.0	25.0	13.2	33.3	3.9	38.6
H	497	H2-31 DO YOU WORK WITH SOLID-STATE POWER SUPPLY REGULATOR CIRCUITS?	68.2	56.5	6.9	71.7	13.2	76.2	44.7	84.1
H	498	H3-1 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 11-1; IF YES, CONTINUE.	54.1	17.4	6.9	37.5	30.2	71.4	6.6	72.7
H	499	H3-2 DO YOU INSPECT OSCILLATORS?	45.5	15.8	3.4	6.	17.9	66.7	2.6	7.6
H	500	H3-3 DO YOU ALIGN OR ADJUST OSCILLATORS?	42.4	12.4	.0	12.5	19.9	57.1	2.6	7.6
H	501	H3-4 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS?	47.4	15.0	.0	12.5	15.0	61.9	.9	6.8
H	502	H3-5 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS?	25.8	12.4	.0	12.5	4.6	14.3	1.8	2.3
H	503	H3-6 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL?	40.9	14.9	.0	12.5	13.2	57.1	.9	7.6
H	504	H3-7 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS?	24.8	14.3	.0	6.3	7.5	9.5	.0	7.6
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	4.7	14.3	.9	68.2

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H	509	H3-12 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT (CRYSTAL OSCILLATIONS)?	16.7	8.7	3.4	.0	1.9	.0	.0	59.1
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
H	511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1
H	512	H3-15 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS?	33.3	11.8	.0	12.5	3.8	19.0	.0	65.9
H	513	H3-16 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN CRYSTALS?	40.9	10.6	3.4	6.3	3.8	.0	.0	65.9
H	514	H3-17 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN PHASE LOCK LOOPS (PLL)?	10.6	4.3	.0	.0	4.7	.0	.0	34.1
H	515	H3-18 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	12.1	5.0	3.4	6.3	11.3	33.3	.9	22.7
H	516	H3-19 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS?	10.6	3.7	.0	.0	.9	.0	.0	45.5
H	517	H3-20 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS?	18.2	4.3	.0	6.3	.9	.0	.0	50.0
H	518	H3-21 DO YOU WORK WITH COLPITTS SINUDOIDAL OSCILLATORS?	4.5	2.5	.0	.0	.9	.0	.9	22.7
H	519	H3-22 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS?	6.1	2.5	.0	.0	.9	.0	.9	20.5
H	520	H3-23 DO YOU WORK WITH VOLTAGE CONTROL SINUSOIDAL OSCILLATO	16.7	3.1	.0	12.5	.9	9.5	.0	40.9
H	521	H3-24 DO YOU WORK WITH CRYSTAL SINUSOIDAL OSCILLATORS?	34.8	8.1	.0	6.3	1.9	.0	.0	59.1
H	522	H3-25 DO YOU WORK WITH VOLTAGE CONTROL OSCILLATORS (VCO) SINUSOIDAL OSCILLATORS?	13.6	4.3	.0	12.5	.9	.0	.0	40.9
H	523	H3-26 DO YOU WORK WITH WIEN BRIDGE OSCILLATORS SINUSOIDAL OSCILLATORS?	9.1	5.0	.0	6.3	.0	.0	.0	50.0
H	524	H3-27 DO YOU WORK WITH - DON'T KNOW WHICH TYPE OF SINUSOIDAL OSCILLATOR?	16.7	8.7	3.4	6.3	14.2	28.6	.9	29.5
H	525	H3-28 DO YOU WORK WITH PULSE GENERATING CIRCUITS?	31.8	15.5	3.4	6.3	10.4	4.8	.0	65.9

S ITM	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
M 526	H3-29 DO YOU WORK WITH BLOCKING OSCILLATORS?	2.0	3.7	.0	6.3	1.9	.0	.0	43.2
M 527	H3-30 DO YOU WORK WITH BURST GENERATORS?	3.0	2.5	.0	6.3	1.9	.0	.0	34.1
M 528	H3-31 DO YOU WORK WITH LOCKED OSCILLATORS?	1.5	1.9	.0	6.3	.9	.0	.0	30.7
I	MULTIVIBRATORS (I1), LIMITERS AND CLAMPERS (I2), ELECTRON TUBES (I3)								
I 529	I1-1 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I2-1; IF YES, CONTINUE.	65.2	24.2	.0	6.3	1.9	9.5	.9	84.1
I 530	I1-2 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUIT FREQUENCY DETERMINING DEVICES (FDD)?	21.2	12.4	.0	.0	.0	9.5	.9	69.7
I 531	I1-3 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORK FREQUENCY DETERMINING DEVICES (FDD)?	43.9	18.0	.0	6.3	.9	9.5	.9	68.2
I 532	I1-4 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTAL FREQUENCY DETERMINING DEVICES (FDD)?	36.4	13.0	.0	.0	.0	.9	.0	70.5
I 533	I1-5 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	15.2	6.8	.0	.9	1.9	.0	.9	29.5
I 534	I1-6 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS?	60.6	21.1	.0	6.3	1.9	4.8	.9	81.8
I 535	I1-7 DO YOU WORK WITH MONOSTABLE (ONE SHOT) MULTIVIBRATORS?	63.6	23.9	.0	6.3	.9	4.8	.9	79.5
I 536	I1-8 DO YOU WORK WITH BISTABLE (FLIP FLOP) MULTIVIBRATORS?	68.2	24.8	.0	6.3	.9	4.8	.9	77.3
I 537	I1-9 DO YOU WORK WITH R-S FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	16.7	9.3	.0	6.3	.9	4.8	.9	52.3
I 538	I1-10 DO YOU WORK WITH J-K FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	65.2	21.1	.0	6.3	.9	4.8	.9	71.6
I 539	I1-11 DO YOU WORK WITH "D" FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	19.7	6.8	.0	6.3	.9	4.8	.9	43.2
I 540	I2-1 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I3-1; IF YES, CONTINUE.	21.2	16.1	3.4	6.3	1.9	4.8	.9	70.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
I	541	I2-2 DO YOU WORK WITH SERIES DIODE LIMITERS?	9.1	11.2	.0	.0	.9	.0	.0	68.2
I	542	I2-3 DO YOU WORK WITH SHUNT DIODE LIMITERS?	9.1	12.4	3.4	.0	.9	.0	.0	68.2
I	543	I2-4 DO YOU WORK WITH LIMITERS WITH BIAS?	7.6	10.6	.0	.0	.9	.0	.0	54.5
I	544	I2-5 DO YOU WORK WITH ZENER DIODE LIMITERS?	16.7	14.9	3.4	6.3	1.9	4.8	.0	75.0
I	545	I2-6 DO YOU WORK WITH TRANSISTOR LIMITERS?	15.2	11.8	3.4	.0	.9	4.8	.0	65.9
I	546	I2-7 DO YOU WORK WITH TRIODE LIMITERS?	3.0	3.1	.0	.0	.9	.0	.0	34.1
I	547	I2-8 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS?	19.7	8.7	.0	.0	.0	.0	.0	61.4
I	548	I2-9 DO YOU WORK WITH BIAS DIODE CLAMPING CIRCUITS?	13.6	6.2	.0	.0	.9	.0	.0	56.8
I	549	I2-10 DO YOU WORK WITH DC RESTORERS?	4.5	4.3	.0	.0	1.9	.0	.0	31.8
I	550	I3-1 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS BASIC ELECTRON TUBES (FOR PURPOSES OF THIS QUESTION DO NOT CONSIDER HIGH-FREQUENCY DEVICES SUCH AS KLYSTRONS, TRAVELING WAVE TUBES, BACKWARD WAVE OSCILLATORS, OR MAGNETRONS AS ELECTRON TUBES)? IF NO, GO TO ITEM J1-1; IF YES, CONTINUE.	3.0	11.2	.0	56.3	7.5	4.8	2.6	52.3
I	551	I3-2 DO YOU CHECK THE CONDITION OF ELECTRON TUBES?	1.5	11.2	.0	62.5	5.7	.0	.9	43.2
I	552	I3-3 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES?	1.5	3.1	.0	43.8	4.7	.0	.0	40.9
I	553	I3-4 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES?	4.5	5.0	.0	62.5	3.8	4.8	.9	50.0
I	554	I3-5 DO YOU USE SCOPES TO CHECK ELECTRON TUBES?	4.5	6.2	.0	25.0	1.9	4.8	.0	50.0
I	555	I3-6 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES?	6.1	10.6	.0	43.8	2.8	.0	1.8	40.9
I	556	I3-7 DO YOU USE OR REFER TO CUTOFF?	.0	6.2	.0	18.8	2.8	.0	1.8	38.6
I	557	I3-8 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING?	1.5	2.5	.0	18.8	3.8	.0	1.8	31.8
I	558	I3-9 DO YOU USE OR REFER TO PEAK CURRENT RATING?	1.5	3.7	.0	18.8	2.8	4.8	1.8	29.5
I	559	I3-10 DO YOU USE OR REFER TO TRANSIT TIME?	.0	1.9	.0	18.8	1.9	.0	1.8	20.5
I	560	I3-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING?	.0	1.9	.0	6.3	3.8	.0	1.8	20.5
I	561	I3-12 DO YOU USE OR REFER TO SATURATION?	1.5	5.0	.0	18.8	4.7	.0	.9	38.6
I	562	I3-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE?	.0	2.5	.0	6.3	2.8	.0	.9	25.0
I	563	I3-14 DO YOU USE OR REFER TO PLATE VOLTAGE?	.0	5.0	.0	50.0	4.7	.0	.9	47.7
I	564	I3-15 DO YOU USE OR REFER TO PLATE CURRENT?	.0	4.3	.0	18.8	1.9	.0	.9	38.6
I	565	I3-16 DO YOU USE OR REFER TO GRID VOLTAGE?	.0	5.6	.0	56.3	4.7	.0	1.8	47.7
I	566	I3-17 DO YOU USE OR REFER TO GRID CURRENT?	.0	5.0	.0	25.0	1.9	.0	.9	38.6

WEAPONS ELECTRONIC PRINCIPLES INVENTORY DATA — FCPTDI PAGE 37

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 5QF (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
I	567	I3-18 DO YOU USE OR REFER TO CATHODE VOLTAGE?	.0	5.6	.0	62.3	4.7	.0	.9	47.7
I	568	I3-19 DO YOU USE OR REFER TO CATHODE CURRENT?	.0	5.0	.0	25.0	3.9	.0	.9	40.9
I	569	I3-20 DO YOU USE OR REFER TO FILAMENT VOLTAGE?	.0	5.0	.0	56.3	2.8	.0	.9	50.0
I	570	I3-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODE IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)?	.0	1.2	.0	6.3	.9	.0	.0	20.5
I	571	I3-22 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC.) AMPLIFICATION FACTORS?	.0	1.2	.0	.0	1.9	.0	1.8	25.0
I	572	I3-23 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)?	.0	.6	.0	.0	.9	.0	1.8	15.9
I	573	I3-24 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE?	.0	1.2	.0	.0	.9	.0	1.8	11.4
I	574	I3-25 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCES?	.0	1.9	.0	.0	.9	.0	1.8	15.9
I	575	I3-26 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES?	.0	1.2	.0	6.3	.9	.0	1.8	20.5
I	576	I3-27 DO YOU USE OR REFER TO PLATE VOLTAGE FOR A SPECIFIED BIAS?	.0	4.3	.0	37.5	1.9	.0	.9	36.4
I	577	I3-28 DO YOU USE OR REFER TO PLATE CURRENT FOR A SPECIFIED BIAS?	.0	3.7	.0	12.5	1.9	.0	.9	29.5
I	578	I3-29 DO YOU USE OR REFER TO BIAS REQUIRED FOR CUTOFF?	1.5	5.0	.0	12.5	.9	[illegible]	.9	25.0
I	579	I3-30 DO YOU USE OR REFER TO BIAS REQUIRED FOR SATURATION?	1.5	5.0	.0	12.5	1.9	.0	.9	20.5
I	580	I3-31 DO YOU USE OR REFER TO GAIN?	.0	3.1	.0	43.7	.9	[illegible]	.9	36.4
I	581	I3-32 DO YOU USE OR REFER TO EFFICIENCY?	.0	2.5	.0	6.3	.9	6.6	.0	29.5
I	582	I3-33 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	1.5	4.3	.0	43.8	2.8	[illegible]	.9	52.2
I	583	I3-34 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	1.5	5.0	.0	37.5	.9	6.6	[illegible]	43.1
I	584	I3-35 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	.0	1.2	.0	18.8	.9	.0	.9	15.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
I	585	I3-36 DO YOU USE OR REFER TO TUBE SOCKET NOTATION?	1.5	5.6	.0	50.0	2.8	.0	.0	43.2
I	586	I3-37 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS?	3.0	8.1	.0	56.3	6.6	.0	.0	47.7
I	587	I3-38 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS?	.0	3.1	.0	18.8	3.8	.0	.0	45.5
I	588	I3-39 DO YOU USE OR REFER TO ELECTRON TUBE DIODES?	1.5	1.9	.0	12.5	2.8	.0	.0	36.4
J		ELECTRON TUBE AMPLIFIERS AND CIRCUITS (J1), SPECIAL PURPOSE ELECTRON TUBES (J2), HETERODYNING AND MODULATION - DEMODULATION (MODEMS) (J3)								
J	589	J1-1 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM J2-1; IF YES, CONTINUE.	1.5	3.1	.0	6.3	3.8	.0	.9	31.8
J	590	J1-2 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	.0	1.2	.0	.0	.9	.0	.0	15.9
J	591	J1-3 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.0	18.2
J	592	J1-4 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	.0	1.2	.0	.0	.9	.0	.0	27.3
J	593	J1-5 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.0	20.5
J	594	J1-6 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.9	20.5
J	595	J1-7 DO YOU TROUBLESHOOT OR REPAIR - DON'T KNOW WHICH TYPE OF AMPLIFIER?	.0	1.2	.0	6.3	2.8	.0	.0	6.8
J	596	J2-1 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)?	1.5	2.5	.0	25.0	3.8	.0	.9	43.2
J	597	J2-2 DO YOU WORK WITH CATHODE-RAY TUBES (CRT)?	10.6	26.1	6.9	18.8	6.6	9.8	2.6	79.5
J	598	J2-3 DO YOU WORK WITH BEAM POWER TUBES?	1.5	1.2	.0	.0	1.9	.0	.0	38.6
J	599	J2-4 DO YOU WORK WITH THYRATRONS?	1.5	1.9	.0	6.3	.0	.0	.0	31.8

T	TSK	TITLES	306 51 (M)	306 52 (M)	316 >0F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
J	600	J2-5 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)?	4.5	13.7	.0	6.3	2.8	4.8	.9	50.0
J	601	J2-6 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	6.1	10.6	.0	18.8	1.9	.0	.9	52.3
J	602	J2-7 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	4.5	9.3	.0	6.3	1.9	.0	.9	38.6
J	603	J2-8 DO YOU USE OR REFER TO PHOSPHOR SCREENS CONCERNING CRT'S?	6.1	13.7	3.4	6.3	1.9	4.8	.0	72.7
J	604	J2-9 DO YOU USE OR REFER TO AQUADAG COATINGS CONCERNING CRT'S?	1.5	1.9	.0	.0	.9	.0	.0	29.5
J	605	J2-10 DO YOU USE OR REFER TO ELECTRON OPTICS CONCERNING CRT'S?	1.5	3.1	.0	6.3	1.9	.0	.0	38.6
J	606	J2-11 DO YOU USE OR REFER TO PERSISTENCE CONCERNING CRT'S?	1.5	1.9	.0	.0	2.8	.0	.0	25.0
J	607	J2-12 DO YOU USE OR REFER TO DECAY TIMES CONCERNING CRT'S?	.0	3.1	.0	.0	1.9	.0	.0	36.4
J	608	J2-13 DO YOU USE OR REFER TO FLOURESCENCE CONCERNING CRT'S?	1.5	5.0	3.4	6.3	1.9	.0	.0	56.8
J	609	J2-14 DO YOU USE OR REFER TO PHOSPHORESCENCE CONCERNING CRT'S?	3.0	5.6	.0	.0	[illegible]	.0	.0	54.5
J	610	J2-15 DO YOU USE OR REFER TO SHADOW MASK CONCERNING CRT'S?	1.5	3.1	.0	.0	1.9	.0	.0	25.0
J	[illegible]	J3-1 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K1-1; IF YES, CONTINUE.	72.7	36.0	10.3	.0	26.4	23.8	27.2	18.2
J	612	J3-2 DO YOU PERFORM TASKS ON FREQUENCY CONVERTER SYSTEMS STAGES?	18.7	9.3	3.4	.0	7.5	.0	.0	13.6
J	613	J3-3 DO YOU PERFORM TASKS ON FREQUENCY MIXER SYSTEMS STAGES?	13.6	3.1	3.4	.0	7.8	.0	.9	13.6
J	614	J3-4 DO YOU PERFORM TASKS ON MODEM SYSTEMS STAGES?	68.2	14.3	3.4	.0	15.1	.0	11.4	11.4
J	615	J3-5 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS?	6.1	.6	.0	.0	5	.0	.0	11.4
J	616	J3-6 DO YOU PERFORM TACKS ON REACTANCE MODULATOR SYSTEM STAGES?	4.5	.0	3.4	.0	.0	.0	.0	11.4

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
J	617	J3-7 DO YOU PERFORM TASKS ON MODULATED OSCILLATOR SYSTEM STAGES?	27.3	1.9	3.4	.0	2.8	4.8	.0	13.6
K		AM SYSTEMS (K1), FM SYSTEMS (K2), NUMBERING SYSTEMS (K3)								
K	618	K1-1 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K2-1; IF YES, CONTINUE.	4.5	2.5	3.4	.0	1.9	.0	1.8	9.1
K	619	K1-2 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	3.4	.0	.9	.0	.9	9.1
K	620	K1-3 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.0	.0	.9	6.8
K	621	K1-4 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.9	9.1
K	622	K1-5 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	3.4	.0	.9	.0	.9	9.1
K	623	K1-6 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	.0	.0	.9	.0	.0	6.8
K	624	K1-7 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.9	9.1
K	625	K1-8 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	.0	.0	.9	.0	.0	6.8
K	626	K1-9 DO YOU PERFORM TASKS ON RF OSCILLATORS/SYNTHESIZERS?	1.5	.6	.0	.0	.9	.0	.0	6.8
K	627	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	1.5	.6	.0	.0	.9	.0	.0	9.1
K	628	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	1.5	1.2	.0	.0	.0	.0	.0	9.1
K	629	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	1.5	.6	.0	.0	.0	.0	.0	9.1
K	630	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS?	1.5	.6	.0	.0	.9	.0	.0	6.8
K	631	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	.0	.6	.0	.0	.0	.0	.0	6.8
K	632	K1-15 DO YOU PERFORM TASKS ON DETECTORS?	1.5	.6	.0	.0	.0	.0	.0	9.1
K	633	K1-16 DO YOU PERFORM TASKS ON MIXER AMPLIFIERS?	1.5	.6	.0	.0	.9	.0	.0	6.8
K	634	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS?	.0	1.9	.0	.0	1.9	.0	.9	6.8
K	635	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS?	.0	1.9	.0	.0	.9	.0	.0	6.8

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
K	636	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS?	.0	1.2	.0	.0	.9	.0	.0	6.8
K	637	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS?	1.5	1.9	.0	.0	.0	.0	.0	6.8
K	638	K2-1 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K3-1; IF YES, CONTINUE.	7.6	1.2	3.4	.0	3.8	.0	1.8	6.8
K	639	K2-2 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	3.4	.0	.9	.0	.9	9.1
K	640	K2-3 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	.0	.0	.9	.0	.9	6.8
K	641	K2-4 DO YOU ALIGN TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	.0	.0	.9	.0	.9	9.1
K	642	K2-5 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	3.4	.0	.9	.0	1.8	9.1
K	643	K2-6 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS?	1.5	.6	3.4	.0	.9	.0	.0	6.8
K	644	K2-7 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	.0	.0	.9	.0	.9	9.1
K	645	K2-8 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS?	3.0	.6	.0	.0	.9	.0	.0	6.8
K	646	K2-9 DO YOU PERFORM LINK PERFORMANCE ASSESSMENTS?	3.0	.6	.0	.0	.9	.0	.0	2.3
K	647	K2-10 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	4.5	.6	.0	.0	1.9	.0	.0	11.4
K	648	K2-11 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS?	4.5	.6	.0	.0	1.9	.0	.0	9.1
K	649	K2-12 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8
K	650	K2-13 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	4.5	.6	.0	.0	1.9	.0	.0	6.8
K	651	K2-14 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	9.1
K	652	K2-15 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8
K	653	K2-16 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8
K	654	K2-17 DO YOU PERFORM TASKS ON LIMITERS?	1.5	.6	.0	.0	.9	.0	.0	9.1
K	655	K2-18 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS?	1.5	.6	.0	.0	.9	.0	.9	6.8
K	656	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS?	3.0	.6	.0	.0	.9	.0	.9	9.1
K	657	K2-20 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS?	3.0	.6	.0	.0	1.9	.0	.9	9.1

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
K	658	K2-21 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSCEIVERS?	1.5	.6	.0	.0	.9	.0	.0	9.1
K	659	K2-22 DO YOU PLOT RECEIVE SIGNAL LEVEL CURVES (RSL)?	1.5	.6	.0	.0	.9	.0	.0	2.3
K	660	K3-1 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS?	31.8	6.8	44.8	50.0	4.7	.0	.9	40.9
K	661	K3-2 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS?	48.5	13.7	13.8	62.5	6.6	9.5	2.6	61.4
K	662	K3-3 DO YOU CONVERT DECIMAL NUMBERS TO HEXADECIMAL (BASE 16) NUMBERS?	18.2	5.6	3.4	50.0	5.7	.0	.9	36.4
K	663	K3-4 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS?	33.3	6.2	51.7	50.0	2.8	4.8	.9	40.9
K	664	K3-5 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS?	30.3	6.2	10.3	43.8	2.8	.0	.9	43.2
K	665	K3-6 DO YOU CONVERT OCTAL NUMBERS TO HEXADECIMAL NUMBERS?	12.1	5.0	.0	50.0	1.9	.0	.0	36.4
K	666	K3-7 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS?	53.0	13.7	6.9	56.3	7.5	4.8	1.8	59.1
K	667	K3-8 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS?	33.3	6.8	20.7	37.5	3.8	.0	.0	40.9
K	668	K3-9 DO YOU CONVERT BINARY NUMBERS TO HEXADECIMAL NUMBERS?	13.6	5.6	.0	62.5	4.7	.0	.0	38.6
K	669	K3-10 DO YOU CONVERT HEXADECIMAL NUMBERS TO DECIMAL NUMBERS?	15.2	5.6	3.4	62.5	3.8	.0	.0	38.6
K	670	K3-11 DO YOU CONVERT HEXADECIMAL NUMBERS TO OCTAL NUMBERS?	12.1	5.0	3.4	50.0	1.9	.0	.0	36.4
K	671	K3-12 DO YOU CONVERT HEXADECIMAL NUMBERS TO BINARY NUMBERS?	12.1	5.6	.0	62.5	5.7	.0	.0	38.6
K	672	K3-13 DO YOU ADD BINARY NUMBERS?	43.9	17.4	10.3	50.0	6.6	9.5	4.4	61.4
K	673	K3-14 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD?	27.3	11.8	.0	25.0	2.8	.0	1.8	45.5
K	674	K3-15 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD?	37.9	13.0	.0	43.8	3.8	4.8	4.4	50.0
K	675	K3-16 DO YOU ADD OCTAL NUMBERS?	22.7	6.8	24.1	31.3	1.9	.0	1.8	36.4
K	676	K3-17 DO YOU SUBTRACT OCTAL NUMBERS?	21.2	6.8	17.2	31.3	1.9	.0	1.8	36.4
K	677	K3-18 DO YOU ADD HEXADECIMAL NUMBERS?	12.1	5.6	.0	56.3	1.9	.0	1.8	36.4
K	678	K3-19 DO YOU SUBTRACT HEXADECIMAL NUMBERS?	10.6	5.6	.0	56.3	1.9	.0	.9	36.4
K	679	K3-20 DO YOU DIVIDE BINARY NUMBERS?	27.3	8.7	.0	25.0	2.8	4.8	4.4	36.4
K	680	K3-21 DO YOU MULTIPLY BINARY NUMBERS?	27.3	8.1	.0	31.3	2.8	4.8	4.4	36.4
K	681	K3-22 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	27.3	8.1	6.9	43.8	4.7	4.8	1.8	40.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
K	682	K3-23 DO YOU USE OR REFER TO GRAY CODE?	3.0	1.9	.0	6.3	1.9	.0	1.8	22.7
K	683	K3-24 DO YOU USE OR REFER TO ICAO CODE?	1.5	.6	.0	6.3	.0	.0	2.6	9.1
K	684	K3-25 DO YOU USE OR REFER TO EXCESS-3 CODE?	1.5	1.2	.0	.0	.9	.0	1.8	13.6
L		LOGIC FUNCTIONS (L1), BOOLEAN EQUATIONS (L2), COUNTERS (L3)								
L	685	L1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS? IF NO, GO TO ITEM L2-1; IF YES, CONTINUE.	66.4	34.8	37.9	43.8	2.8	14.3	1.8	77.3
L	686	L1-2 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	51.5	19.9	6.9	12.5	1.9	4.8	.0	75.0
L	687	L1-3 DO YOU CONSTRUCT TRUTH TABLES FOR 'OR' LOGIC SYSMBOLS OR GATES?	50.0	19.3	6.9	12.5	1.9	4.8	.0	75.0
L	688	L1-4 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	51.5	18.0	6.9	12.5	1.9	4.8	.0	72.7
L	689	L1-5 DO YOU CONSTRUCT TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS OR GATES?	51.5	17.4	6.9	12.5	.9	.0	.0	75.0
L	690	L1-6 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	71.2	32.3	13.8	25.0	1.9	14.3	.0	75.0
L	691	L1-7 DO YOU USE OR REFER TO TRUTH TABLES FOR 'OR' LOGIC SYMBOLS OR GATES?	71.2	32.3	13.8	25.0	1.9	14.3	.0	75.0
L	692	L1-8 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	69.7	30.4	13.8	25.0	1.9	14.3	.0	75.0
L	693	L1-9 DO YOU USE OR REFER TO TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS?	69.7	29.8	6.9	31.3	1.9	4.8	.0	75.0
L	694	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'AND' GATES?	83.3	35.4	37.9	43.8	1.9	14.3	.9	77.3
L	695	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'OR' GATES?	83.3	35.4	37.9	37.5	1.9	14.3	1.8	77.3
L	696	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'NAND' OR 'NOR' GATES?	83.3	35.4	34.5	37.5	1.9	14.3	.9	77.3

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
L	697	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'EXCLUSIVE OR' GATES?	81.8	32.3	20.7	31.3	1.9	14.3	.0	77.3
L	698	L1-14 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR INHIBITED 'AND' GATES?	78.8	34.2	24.1	31.3	.9	14.3	.0	75.0
L	699	L1-15 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "B" BARS?	60.6	4.3	.0	.0	1.9	.0	.0	13.6
L	700	L1-16 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "M" BARS?	60.6	3.1	.0	.0	.9	.0	.0	13.6
L	701	L1-17 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR COMBINERS?	68.2	8.7	.0	6.3	.9	.0	.0	25.0
L	702	L1-18 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS?	75.8	29.8	3.4	31.3	.9	19.0	.0	72.7
L	703	L1-19 DO YOU USE OR REFER TO ONE-SHOT MULTIVIBRATOR SYMBOLS?	71.2	22.4	3.4	18.8	.9	9.5	.0	70.5
L	704	L1-20 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT OR SCHEMATIC DIAGRAMS?	81.8	31.7	13.8	18.8	1.9	19.0	.9	72.7
L	705	L1-21 DO YOU USE OR REFER TO ONE-SHOT CIRCUIT OR SCHEMATIC DIAGRAMS?	71.2	21.7	10.3	18.8	.9	9.5	.0	70.5
L	706	L1-22 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES?	63.6	29.8	.0	18.8	1.9	14.3	.0	61.4
L	707	L1-23 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	45.5	17.4	.0	12.5	.0	.0	.0	45.5
L	708	L1-24 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS?	48.5	17.4	.0	12.5	.9	.0	.0	45.5
L	709	L1-25 DO YOU USE OR REFER TO NONCOMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	39.4	14.3	3.4	6.3	.9	.0	.0	43.2
L	710	L1-26 DO YOU CONSTRUCT TRUTH TABLES FOR "B" BARS?	25.8	1.2	.0	6.3	.9	.0	.0	9.1
L	711	L1-27 DO YOU CONSTURCT TRUTH TABLES FOR "M" BARS?	27.3	1.2	.0	6.3	.9	.0	.0	9.1
L	712	L1-28 DO YOU CONSTRUCT TRUTH TABLES FOR COMBINERS?	33.3	4.3	.0	6.3	.9	.0	.0	11.4
L	713	L1-29 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS?	57.6	19.9	.0	25.0	.9	4.8	.9	61.4
L	714	L1-30 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS?	54.5	19.9	.0	12.5	.9	.0	.9	47.7
L	715	L1-31 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	53.0	18.6	.0	12.5	.9	4.8	.9	45.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
L	716	L1-32 DO YOU TRACE DATA FLOW THROUGH NONCOMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	48.5	16.1	.0	12.5	.9	.0	.0	45.5
L	717	L1-33 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS?	47.0	16.1	.0	6.3	.9	.0	.0	45.5
L	718	L2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS? IF NO, GO TO ITEM L3-1; IF YES, CONTINUE.	47.0	16.1	6.9	18.8	2.8	.0	1.8	40.9
L	719	L2-2 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS?	7.6	5.0	.0	.0	.9	.0	.0	29.5
L	720	L2-3 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	7.6	5.0	.0	6.3	.9	.0	.0	15.9
L	721	L2-4 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS?	16.7	5.6	.0	.0	.9	.0	.0	27.3
L	722	L2-5 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES?	37.9	14.3	.0	18.8	1.9	.0	.0	45.5
L	723	L2-6 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS?	12.1	6.2	.0	.0	1.9	.0	.0	25.0
L	724	L2-7 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA?	15.2	5.6	.0	.0	2.8	.0	.0	27.3
L	725	L2-8 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES?	15.2	8.1	3.4	6.3	1.9	.0	.0	31.8
L	726	L2-9 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	7.6	5.6	.0	12.5	.9	.0	.0	20.5
L	727	L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE?	36.4	16.0	6.9	18.8	.9	.0	.0	45.5
L	728	L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS?	15.2	5.6	.0	.0	.9	.0	.0	22.7
L	729	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS?	22.7	8.7	.0	.0	.9	.0	.0	29.5
L	730	L3-1 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M1-1; IF YES, CONTINUE.	72.7	22.4	.0	25.0	4.7	9.5	.0	59.1
L	731	L3-2 DO YOU USE OR REFER TO UP-COUNTERS?	63.6	20.5	.0	25.0	4.7	14.3	.0	52.3

C	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
L	732	L3-3 DO YOU USE OR REFER TO DOWN-COUNTERS?	59.1	17.4	.0	18.8	1.9	9.5	.0	50.0
L	733	L3-4 DO YOU USE OR REFER TO SERIAL COUNTERS?	63.6	20.5	.0	6.3	1.9	9.5	.0	40.9
L	734	L3-5 DO YOU USE OR REFER TO PARALLEL COUNTERS?	54.5	16.1	.0	6.3	.9	9.5	.0	38.6
L	735	L3-6 DO YOU USE OR REFER TO RING COUNTERS?	34.8	10.6	3.4	6.3	1.9	.0	.0	31.8
L	736	L3-7 DO YOU USE OR REFER TO DECADE (MOD 10) COUNTERS?	21.2	8.7	.0	12.5	1.9	.0	.9	40.9
L	737	L3-8 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS?	42.4	13.7	3.4	12.5	.9	9.5	.9	45.5
L	738	L3-9 DO YOU USE OR REFER TO DOWN CLOCKS?	50.0	16.8	3.4	6.3	1.9	9.5	.0	52.3
L	739	L3-10 DO YOU USE OR REFER TO UP CLOCKS?	50.0	16.1	3.4	6.3	1.9	9.5	.0	54.5
L	740	L3-11 DO YOU USE OR REFER TO OTHER MODULOUS COUNTERS?	27.3	5.6	.0	6.3	.9	.0	.0	34.1
L	741	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS?	53.0	16.8	.0	12.5	.9	.0	.9	47.7
L	742	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS?	50.0	14.9	.0	12.5	.9	.0	.9	45.5
L	743	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-DOWN COUNTERS?	39.4	12.4	.0	12.5	.9	.0	.9	43.2
L	744	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS?	27.3	8.1	.0	6.3	.9	.0	.9	38.6
L	745	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS?	30.3	9.3	.0	6.3	.9	.0	.9	29.5
L	746	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF COUNTERS FEEDING STORAGE REGISTERS?	43.9	14.3	6.9	6.3	1.9	.0	.9	36.4
L	747	L3-18 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS?	60.6	14.9	3.4	6.3	1.9	.0	.0	34.1
L	748	L3-19 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS?	37.9	6.2	.0	.0	1.9	4.8	.0	27.3
L	749	L3-20 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS?	16.7	4.3	.0	6.3	.9	.0	.0	31.8
L	750	L3-21 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES?	34.8	11.2	.0	6.3	.9	.0	.0	31.8
L	751	L3-22 DO YOU DETERMINE THE APPROPRIATE 'AND' GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT?	51.5	13.7	.0	6.3	1.9	.0	.0	40.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
M		TIMING CIRCUITS (M1), USE OF SIGNAL GENERATORS (M2), MOTORS AND GENERATORS (M3)								
M	752	M1-1 DO YOU WORK WITH SAWTOOTH WAVE GENERATOR TIMING CIRCUITS?	42.4	12.4	.0	12.5	.0	.0	.0	75.0
M	753	M1-2 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATOR TIMING CIRCUITS?	15.2	5.6	.0	6.3	.9	.0	.0	54.5
M	754	M1-3 DO YOU WORK WITH PULSED OSCILLATOR TIMING CIRCUITS?	37.9	14.9	.0	12.5	1.9	4.8	.9	72.7
M	755	M1-4 DO YOU WORK WITH BLOCKING OSCILLATOR TIMING CIRCUITS?	15.2	5.6	.0	6.3	.9	.0	.0	38.6
M	756	M1-5 DO YOU WORK WITH MASTER STATION TIMING CIRCUITS?	37.9	6.2	.0	6.3	.9	9.5	.0	25.0
M	757	M1-6 DO YOU USE OR REFER TO RISE TIME?	33.3	14.9	.0	50.0	.9	.0	.0	68.2
M	758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	21.2	14.3	.0	50.0	.9	.0	.0	56.8
M	759	M1-8 DO YOU USE OR REFER TO SWEEP TIME?	39.4	19.3	.0	43.8	3.8	.0	.0	77.3
M	760	M1-9 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS?	16.7	11.2	.0	6.3	1.9	.0	.0	56.8
M	761	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS?	22.7	13.0	.0	12.5	1.9	.0	.0	56.8
M	762	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS?	16.7	7.5	.0	6.3	1.9	.0	.0	45.5
M	763	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS?	15.2	6.8	.0	6.3	1.9	.0	.0	43.2
M	764	M2-1 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M3-1; IF YES, CONTINUE.	28.8	59.0	.0	68.8	27.4	81.0	15.8	75.0
M	765	M2-2 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS?	22.7	55.3	.0	56.3	20.8	71.4	12.3	75.0
M	766	M2-3 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS?	21.2	47.2	.0	31.3	14.2	28.6	7.9	59.1
M	767	M2-4 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS?	19.7	44.7	.0	12.5	10.4	28.6	7.0	54.5
M	768	M2-5 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS?	18.2	32.3	.0	12.5	4.7	14.3	1.8	52.3
M	769	M2-6 DO YOU USE AUDIO SINE-WAVE GENERATORS?	18.2	8.7	.0	50.0	11.3	52.4	4.4	52.3
M	770	M2-7 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE?	12.1	5.0	.0	31.3	.9	.0	.0	47.7
M	771	M2-8 DO YOU USE RF GENERATORS LESS THAN 1,000 MH?	4.5	5.0	.0	6.3	3.8	.0	.9	40.9
M	772	M2-9 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH?	4.5	1.2	.0	6.3	1.9	.0	.9	27.3
M	773	M2-10 DO YOU USE WHITE NOISE GENERATORS?	.0	.6	.0	.0	1.9	.0	.0	38.6
M	774	M2-11 DO YOU USE PATTERN GENERATORS?	4.5	37.9	.0	.0	2.8	4.8	.0	36.4
M	775	M2-12 DO YOU USE PSEUDO-RANDOM GENERATORS?	.0	5.0	.0	.0	1.9	.0	.0	11.4
M	776	M2-13 DO YOU USE TIME MARK GENERATORS?	.0	15.5	.0	6.3	1.9	.0	.0	54.5
M	777	M2-14 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS?	7.6	19.3	.0	25.0	8.5	9.5	.9	50.0
M	778	M3-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS, GENERATORS (SERVO), OR ALTERNATORS? IF NO, GO TO ITEM M4-1; IF YES, CONTINUE.	72.7	77.0	51.7	25.0	19.8	19.0	10.5	88.6
M	779	M3-2 DO YOU INSPECT MOTORS?	72.7	79.5	44.8	25.0	18.9	9.5	6.1	90.9
M	780	M3-3 DO YOU CLEAN OR LUBRICATE MOTORS?	74.2	76.4	13.8	25.0	18.9	9.5	3.5	90.9
M	781	M3-4 DO YOU OPERATE MOTORS?	66.7	72.0	44.8	25.0	18.9	9.8	5.3	90.9
M	782	M3-5 DO YOU REMOVE OR REPLACE COMPLETE MOTORS?	74.2	77.0	.0	25.0	12.3	9.5	3.5	90.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
M	783	M3-6 DO YOU REMOVE OR REPLACE MOTOR PARTS?	48.5	73.3	.0	6.3	11.3	.0	.0	88.6
M	784	M3-7 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS?	65.2	73.9	24.1	18.8	15.1	4.8	7.9	90.9
M	785	M3-8 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS?	37.9	71.4	17.2	6.3	9.4	.0	.0	86.4
M	786	M3-9 DO YOU PERFORM TASKS ON MOTOR FIELD COILS?	19.7	52.2	.0	6.3	2.8	.0	.0	59.1
M	787	M3-10 DO YOU PERFORM ANY TASKS ON MOTOR ARMATURES?	28.8	66.5	3.4	.0	5.7	.0	.0	75.0
M	788	M3-11 DO YOU PERFORM ANY TASKS ON MOTOR ROTORS?	24.2	51.6	3.4	.0	4.7	.0	.0	63.6
M	789	M3-12 DO YOU PERFORM ANY TASKS ON MOTOR BRUSHES?	34.8	68.9	3.4	.0	10.4	.0	.0	86.4
M	790	M3-13 DO YOU PERFORM ANY TASKS ON MOTOR SLIP RINGS?	19.7	49.7	3.4	.0	5.7	.0	.0	45.5
M	791	M3-14 DO YOU PERFORM ANY TASKS ON MOTOR COMMUTATORS?	12.1	48.4	3.4	.0	6.6	.0	.0	52.3
M	792	M3-15 DO YOU PERFORM ANY TASKS ON MOTOR POLE PIECES?	12.1	39.8	3.4	6.3	4.7	.0	.0	34.1
M	793	M3-16 DO YOU DETERMINE OR MEASURE FORCE OR TORQUE CREATED BY A MOTOR?	7.6	21.7	.0	.0	1.9	.0	.0	18.2
M	794	M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR?	13.6	26.1	.0	6.3	2.8	.0	.0	40.9
M	795	M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS?	6.1	16.8	.0	.0	1.9	.0	.0	25.0
M	796	M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS?	25.8	73.9	3.4	6.3	8.5	.0	1.8	81.8
M	797	M3-20 DO YOU WORK WITH INDUCTION MOTORS?	18.2	10.6	.0	.0	7.5	.0	.9	79.5
M	798	M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS?	12.1	6.2	3.4	12.5	4.7	.0	.9	52.3
M	799	M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS?	22.7	11.8	10.3	12.5	11.3	4.8	.0	68.2
M	800	M3-23 DO YOU WORK WITH SERVOS OR SYNCHROS MOTORS?	9.1	13.0	3.4	6.3	5.7	.0	.0	72.7
M	801	M3-24 DO YOU WORK WITH SHADED-POLE MOTORS?	4.5	1.9	.0	.0	1.9	.0	.0	31.8
M	802	M3-25 DO YOU INSPECT GENERATORS OR ALTERNATORS?	60.6	8.1	34.5	.0	6.6	.0	.0	40.9
M	803	M3-26 DO YOU CLEAN OR LUBRICATE GENERATORS OR ALTERNATORS?	59.1	6.8	6.9	.0	6.6	.0	.0	40.9
M	804	M3-27 DO YOU OPERATE GENERATORS OR ALTERNATORS?	57.6	7.5	37.9	.0	7.5	.0	.0	40.9
M	805	M3-28 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS OR ALTERNATORS?	62.1	5.6	3.4	.0	3.8	.0	.0	31.8
M	806	M3-29 DO YOU REMOVE OR REPLACE GENERATOR, ALTERNATOR, OR PARTS?	40.9	6.2	3.4	.0	4.7	.0	.9	29.5
M	807	M3-30 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS OR ALTERNATORS?	50.0	5.6	20.7	.0	5.7	.0	.9	36.4
M	808	M3-31 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS OR ALTERNATORS?	30.3	5.0	17.2	.0	3.8	.0	.0	27.3
N		METER MOVEMENTS (N1), SATURABLE REACTORS AND MAGNETIC AMPLIFIERS (N2), WAVESHAPING CIRCUITS (N3)								
N	809	N1-1 DO YOU WORK WITH METERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N2-1; IF YES, CONTINUE.	68.2	73.3	86.2	75.0	67.0	66.7	62.3	88.6
N	810	N1-2 DO YOU CONSIDER THE FUNCTIONS OF PERMANENT MAGNET INTERNAL METER PARTS?	7.6	32.9	3.4	43.8	13.2	14.3	5.3	43.2
N	811	N1-3 DO YOU CONSIDER THE FUNCTIONS OF MOVING COIL INTERNAL METER PARTS?	13.6	31.7	3.4	18.8	17.9	9.5	4.4	45.5
N	812	N1-4 DO YOU CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS INTERNAL METER PARTS?	10.6	17.4	3.4	18.8	14.2	14.3	.9	43.2

SHEPPARD ELECTRONIC PRINCIPLES INVENTORY DATA — FCPT01 PAGE 49

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
N	813	N1-5 DO YOU READ METER SCALES?	68.2	76.4	86.2	75.0	66.0	66.7	59.6	88.6
N	814	N1-6 DO YOU EXTEND THE RANGE OF AMMETERS?	25.8	31.1	27.6	18.8	30.2	14.3	15.8	45.5
N	815	N1-7 DO YOU EXTEND THE RANGE OF VOLTMETERS?	37.9	39.8	41.4	25.0	36.8	23.8	24.6	52.3
N	816	N1-8 DO YOU ZERO OHMMETERS?	66.7	75.2	72.4	81.3	67.9	66.7	60.5	84.1
N	817	N1-9 DO YOU ZERO AMMETERS?	24.2	29.2	31.0	62.5	32.1	14.3	23.7	56.8
N	818	N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)?	33.3	36.0	24.1	50.0	22.6	23.8	18.4	54.5
N	819	N1-11 DO YOU CONSIDER BALLASTIC RESPONSE OF METER MOVEMENTS?	6.1	6.2	3.4	.0	7.5	.0	2.6	18.2
N	820	N1-12 DO YOU CONSIDER OTHER METER MOVEMENTS?	22.7	28.0	20.7	25.0	24.5	14.3	17.5	43.2
N	821	N2-1 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N3-1; IF YES, CONTINUE.	1.5	.6	.0	25.0	1.9	.0	.0	13.6
N	822	N2-2 DO YOU INSPECT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	12.5	1.9	.0	.0	9.1
N	823	N2-3 DO YOU CLEAN SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	12.5	1.9	.0	.0	6.8
N	824	N2-4 DO YOU ADJUST SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	6.3	1.9	.0	.0	6.8
N	825	N2-5 DO YOU TROUBLESHOOT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	18.8	.9	.0	.0	9.1
N	826	N2-6 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS?	.0	.6	.0	18.8	.9	.0	.0	9.1
N	827	N2-7 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS?	.0	.6	.0	18.8	.0	.0	.0	6.8
N	828	N2-8 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS?	.0	.6	.0	.0	.9	.0	.0	4.5
N	829	N2-9 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	.0	1.2	.0	6.3	.0	.0	.0	6.8
N	830	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	1.5	.6	.0	12.5	.9	.0	.0	9.1
N	831	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS?	1.5	1.9	.0	6.3	.0	.0	.0	6.8
N	832	N2-12 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS?	1.5	1.9	.0	18.8	.0	.0	.0	9.1
N	833	N3-1 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM O1-1; IF YES, CONTINUE.	43.9	21.1	3.4	12.5	3.8	.0	1.3	63.2
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	31.8	15.5	.0	.0	1.9	.0	.0	59.1
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	34.8	16.8	.0	.0	2.8	.0	.0	61.6
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	19.7	11.8	.0	.0	2.8	.0	.0	54.5
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	18.2	9.3	3.4	.0	2.8	.0	.0	54.5
N	838	N3-6 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS?	28.8	7.5	.0	.0	1.9	.0	.0	47.1
N	839	N3-7 DO YOU USE OR REFER TO INTEGRATING CIRCUITS?	39.4	11.2	.0	6.3	1.9	.0	.0	61.6
N	840	N3-8 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT?	16.7	9.3	.0	6.3	.0	.0	.0	61.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
N	841	N3-9 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION?	15.2	5.0	.0	.0	.0	.0	.0	34.1
N	842	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATOR SOLID STATE CIRCUITS?	33.3	18.6	.0	6.3	.0	.0	.0	68.2
N	843	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATOR SOLID STATE CIRCUITS?	9.1	7.5	.0	.0	.0	.0	.0	52.3
N	844	N3-12 DO YOU WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATOR SOLID STATE CIRCUITS?	21.2	9.9	.0	6.3	.0	.0	.0	65.9
N	845	N3-13 DO YOU WORK WITH RAMP (TRAPEZOIDAL) GENERATOR SOLID STATE CIRCUITS?	7.6	7.5	.0	.0	.0	.0	.0	63.6
N	846	N3-14 DO YOU WORK WITH FUNCTION GENERATOR SOLID STATE CIRCUITS?	10.6	5.0	.0	.0	.0	.0	.0	68.2
N	847	N3-15 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS?	28.8	12.4	.0	6.3	.9	.0	.9	61.4
N	848	N3-16 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS?	21.2	10.6	.0	6.3	.9	.0	.9	61.4
N	849	N3-17 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS?	12.1	8.1	.0	.0	.0	.0	.9	61.4
N	850	N3-18 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS?	27.3	13.0	.0	6.3	.9	.0	.9	61.4
N	851	N3-19 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS?	30.3	10.6	.0	.0	.9	.0	.0	59.1
N	852	N3-20 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS?	28.8	9.9	.0	6.3	.9	.0	.9	59.1
N	853	N3-21 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS?	30.3	11.8	.0	.0	.9	.0	.9	61.4
O		SINGLE OR INDEPENDENT SIDEBAND SYSTEMS (01), PULSE MODULATION SYSTEMS (02), ANTENNAS (03)								
O	854	01-1 DO YOU WORK ON SINGLE OR INDEPENDENT SIDEBAND SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 02-1; IF YES, CONTINUE.	3.0	1.2	13.8	.0	1.9	4.8	.0	.0
O	855	01-2 DO YOU INSPECT SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	6.9	.0	1.9	4.8	.0	.0
O	856	01-3 DO YOU CLEAN SINGLE SIDE BAND (SSB) OR INDEPENENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	.0	.0	1.9	4.8	.0	.0
O	857	01-4 DO YOU ALIGN SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	3.4	.0	1.9	4.8	.0	.0
O	858	01-5 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	10.3	.0	1.9	4.8	.0	.0
O	859	01-6 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	3.4	.0	.0	4.8	.0	.0
O	860	01-7 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	3.0	.6	3.4	.0	.9	4.8	.0	.0
O	861	01-8 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	3.0	.6	.0	.0	.9	4.8	.0	.0

O	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	716 50F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
O	862	01-9 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM AUDIO AMPLIFIER STAGE?	1.0	1.2	.0	.0	.9	.0	.0	.0
O	863	01-10 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM BALANCED MODULATOR STAGE?	1.5	1.2	.0	.0	.0	.0	.0	.0
O	864	01-11 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CARRIER OSCILLATOR STAGE?	1.5	1.2	.0	.0	.0	.0	.0	.0
O	865	01-12 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM LC FILTER STAGE?	1.5	.6	.0	.0	.0	.0	.0	.0
O	866	01-13 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CRYSTAL FILTER STAGE?	.0	.6	.0	.0	.9	.0	.0	.0
O	867	01-14 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MECHANICAL FILTER STAGE?	.0	.6	.0	.0	.9	.0	.0	.0
O	868	01-15 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM OSCILLATOR STAGE?	3.0	1.2	3.4	.0	.9	.0	.0	.0
O	869	01-16 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MIXER STAGE?	1.5	1.2	.0	.0	.9	.0	.0	.0
O	870	01-17 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DRIVER STAGE?	3.0	1.2	.0	.0	.0	.0	.0	.0
O	871	01-18 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM POWER AMPLIFIER STAGES?	1.5	1.2	6.9	.0	.0	.0	.0	.0
O	872	01-19 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM RF AMPLIFIER STAGE?	1.5	.6	3.4	.0	.0	.0	.0	.0
O	873	01-20 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM FREQUENCY CONVERTER STAGES?	.0	.6	3.4	.0	.9	.0	.0	.0
O	874	01-21 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM IF AMPLIFIER STAGE?	.0	1.2	.0	.0	.0	.0	.0	.0
O	875	01-22 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DEMODULATOR STAGE?	1.5	1.2	6.9	.0	.9	.0	.0	.0
O	876	01-23 DO YOU USE OR REFER TO SELECTIVE FADING WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	3.4	.0	.0	.0	.0	.0
O	877	01-24 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	3.4	.0	.0	.0	.0	.0
O	878	01-25 DO YOU USE OR REFER TO FREQUENCY STABILITY WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	.0
O	879	01-26 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.6	.0	.0	.0	.0	.0	.0
O	880	01-27 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB OR ISB TRANSMITTERS?	.0	.6	.0	.0	.0	.0	.0	.0
O	881	01-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB TRANSMITTER SCHEMATIC DIAGRAMS?	1.5	1.2	.0	.0	.0	.0	.0	.0
O	882	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB RECEIVER SCHEMATIC DIAGRAMS?	1.5	.6	.0	.0	.0	.0	.0	.0
O	883	01-30 DO YOU PERFORM AERONAUTIC STATION ASSESSMENT PROGRAMS (ASAP)?	.0	.6	.0	.0	.0	.0	.0	.0
O	884	02-1 DO YOU OPERATE PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 03-1; IF YES, CONTINUE.	1.5	1.2	.0	.0	2.8	.0	1.8	15.6
O	885	02-2 DO YOU INSPECT PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	2.8	.0	1.8	15.6
O	886	02-3 DO YOU CLEAN PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	2.8	.0	1.8	15.6
O	887	02-4 DO YOU ALIGN PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	2.8	.0	.0	15.6

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	888	02-5 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	2.6	13.6
0	889	02-6 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS?	1.5	1.2	.0	.0	.9	.0	1.8	13.6
0	890	02-7 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	2.6	11.4
0	891	02-8 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS?	1.5	1.2	.0	.0	.0	.0	1.8	13.6
0	892	02-9 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) PULSE MODULATION SYSTEMS?	1.5	.0	.0	.0	1.9	.0	.0	15.9
0	893	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) PULSE MODULATION SYSTEMS?	3.0	.6	.0	.0	1.9	.0	1.8	15.9
0	894	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) PULSE MODULATION SYSTEMS?	1.5	.0	.0	.0	2.8	.0	.9	11.4
0	895	02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) PULSE MODULATION SYSTEMS?	4.5	.0	.0	.0	.9	.0	.9	11.4
0	896	02-13 DO YOU WORK ON LINE PULSING MODULATION PULSE MODULATION SYSTEMS?	3.0	.6	.0	.0	2.8	.0	1.8	11.4
0	897	02-14 DO YOU WORK ON TIME DIVISION MULTIPLEXING (TDM) PULSE MODULATION SYSTEMS?	4.5	.6	.0	.0	.9	.0	.0	13.6
0	898	02-15 DO YOU WORK ON - DON'T KNOW WHICH TYPE OF MODULATION SYSTEM?	3.0	.0	.0	.0	.9	.0	2.6	6.8
0	899	02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLY STAGE?	.0	.6	.0	.0	.9	.0	.0	15.9
0	900	02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODE STAGE?	.0	.0	.0	.0	.0	.0	.0	15.9
0	901	02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORK STAGE?	1.5	.6	.0	.0	2.8	.0	.9	15.9
0	902	02-19 DO YOU PERFORM TASKS ON PULSE MODULATIN SYSTEM TIMER STAGE?	1.5	.0	.0	.0	.9	.0	.0	15.9
0	903	02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRON STAGE?	.0	.0	.0	.0	.0	.0	.0	13.6
0	904	02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMER STAGE?	1.5	.0	.0	.0	.9	.0	.0	13.6
0	905	02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBE STAGE?	.0	.6	.0	.0	.9	.0	.0	11.4
0	906	02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIER STAGE?	1.5	.6	.0	.0	.0	.0	.0	13.6
0	907	02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTER STAGE?	1.5	.6	.0	.0	1.9	.0	.0	15.9
0	908	02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIER STAGE?	1.5	.6	.0	.0	1.9	.0	.0	13.6
0	909	02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTOR STAGE?	1.5	.6	.0	.0	.0	.0	.9	15.9
0	910	02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIER STAGE?	.0	1.2	.0	.0	.0	.0	.0	11.4
0	911	02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIER STAGE?	.0	.6	.0	.0	.9	.0	.0	6.8
0	912	02-29 DO YOU USE OR REFER TO PULSE RECURRANCE FREQUENCY (PRF) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	.6	.0	.0	.9	.0	.0	13.6

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	913	02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	.9	.0	.0	13.6
0	914	02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.0	15.9
0	915	02-32 DO YOU USE OR REFER TO PULSE SHAPE WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	.0	.0	.0	15.9
0	916	02-33 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	13.6
0	917	02-34 DO YOU USE OR REFER TO AVERAGE POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	11.4
0	918	02-35 DO YOU USE OR REFER TO DUTY CYCLE (DC) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	.6	.0	.0	.0	.0	.0	11.4
0	919	02-36 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	1.5	.6	.0	.0	.0	.0	.0	9.1
0	920	02-37 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	1.5	.6	.0	.0	.0	.0	.0	11.4
0	921	02-38 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS?	1.5	.0	.0	.0	.0	.0	.0	6.8
0	922	02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS?	1.5	1.2	.0	.0	.9	.0	1.8	13.6
0	923	02-40 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS?	1.5	.6	.0	.0	.9	.0	.9	13.6
0	924	03-1 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P1-1; IF YES, CONTINUE.	1.5	5.6	20.7	.0	.9	.0	1.8	6.8
0	925	03-2 DO YOU INSPECT ANTENNAS?	1.5	4.3	17.2	.0	.0	.0	.9	6.8
0	926	03-3 DO YOU CLEAN ANTENNAS?	1.5	3.7	.0	.0	.0	.0	.0	2.3
0	927	03-4 DO YOU PHYSICALLY ALIGN ANTENNAS?	1.5	3.1	6.9	.0	.0	.0	.0	4.5
0	928	03-5 DO YOU ELECTRICALLY ALIGN ANTENNAS?	.0	2.5	3.4	.0	.0	.0	.0	2.3
0	929	03-6 DO YOU TROUBLESHOOT TO ANTENNAS?	1.5	3.1	24.1	.0	.0	.0	.0	4.5
0	930	03-7 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS?	.0	1.9	6.9	.0	.0	.0	.0	4.5
0	931	03-8 DO YOU REMOVE OR INSTALL ANTENNAS?	1.5	3.1	.0	.0	.0	.0	.0	4.5
0	932	03-9 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS?	.0	1.9	.0	.0	.0	.0	.0	4.5
0	933	03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES?	.0	2.5	.0	.0	.0	.0	.0	2.3
0	934	03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES?	.0	1.9	.0	.0	.0	.0	.0	2.3
0	935	03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS?	1.5	1.9	.0	.0	.0	.0	.0	2.3
0	936	03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS RESISTIVE LOADS TO THE GENERATOR?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	937	03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR?	1.0	.6	.0	.0	1.8	.0	1.8	2.3
0	938	03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR?	1.5	.6	.0	.0	.0	.0	.9	2.3
0	939	03-16 DO YOU WORK WITH HERTZ BASIC ANTENNAS?	.0	1.2	13.8	.0	.0	.0	.0	2.3
0	940	03-17 DO YOU WORK WITH MARCONI BASIC ANTENNAS?	.0	.6	3.4	.0	.0	.0	.0	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	941	03-18 DO YOU WORK WITH RHOMBIC BASIC ANTENNAS?	.0	.6	.0	.0	.0	.0	.0	.0
0	942	03-19 DO YOU WORK WITH DIPOLE BASIC ANTENNAS?	.0	3.1	6.9	.0	.9	.0	.0	2.3
0	943	03-20 DO YOU WORK WITH SCIMITAR BASIC ANTENNAS?	.0	.0	.0	.0	.9	.0	.0	.0
0	944	03-21 DO YOU WORK WITH PARABOLIC BASIC ANTENNAS?	.0	3.1	.0	.0	.0	.0	.0	.0
0	945	03-22 DO YOU WORK WITH GROUND PLANE BASIC ANTENNAS?	.0	3.7	3.4	.0	.0	.0	.0	4.5
0	946	03-23 DO YOU WORK WITH FOLDED DIPOLE BASIC ANTENNAS?	.0	2.5	6.9	.0	.0	.0	.0	2.3
0	947	03-24 DO YOU WORK WITH BROADSIDE ARRAYS?	.0	1.2	.0	.0	.0	.0	.0	.0
0	948	03-25 DO YOU WORK WITH END-FIRE ARRAYS?	1.5	1.2	3.4	.0	.0	.0	.0	.0
0	949	03-26 DO YOU WORK WITH CARDIOID ARRAYS?	1.5	1.2	.0	.0	.0	.0	.0	.0
0	950	03-27 DO YOU WORK WITH COLLINEAR ARRAYS?	1.5	.6	.0	.0	.0	.0	.0	.0
0	951	03-28 DO YOU WORK WITH PHASE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0
0	952	03-29 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	4.5
0	953	03-30 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS?	.0	.6	.0	.0	.0	.0	.0	.0
0	954	03-31 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS?	.0	1.2	.0	.0	.0	.0	.0	4.5
0	955	03-32 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0
0	956	03-33 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	957	03-34 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	958	03-35 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	959	03-36 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED?	.0	.6	.0	.0	.0	.0	.0	.0
0	960	03-37 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON?	.0	.6	.0	.0	.0	.0	.0	2.3
0	961	03-38 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS?	.0	2.5	.0	.0	.0	.0	.0	2.3
0	962	03-39 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS?	.0	1.2	.0	.0	.0	.0	.0	.0
0	963	03-40 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS?	.0	1.2	.0	.0	.0	.0	.0	.0
0	964	03-41 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN - DON'T KNOW WHAT KIND OF ELEMENT?	.0	2.5	17.2	.0	.0	.0	.0	2.3
0	965	03-42 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS?	.0	3.7	6.9	.0	.0	.0	.0	.0
0	966	03-43 DO YOU WORK ON BIDIRECTIONAL ANTENNAS?	.0	3.7	3.4	.0	.0	.0	.0	.0
0	967	03-44 DO YOU WORK ON OMNIDIRECTIONAL ANTENNAS?	1.5	4.3	17.2	.0	.0	.0	.0	4.5
0	968	03-45 DO YOU WORK WITH ROTARY ANTENNA ARRAYS?	.0	2.5	3.4	.0	.0	.0	.0	.0

P TRANSMISSION LINES (P1), WAVEGUIDES AND CAVITY RESONATORS (P2), MICROWAVE AMPLIFIERS AND OSCILLATORS (P3)

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P	969	P1-1 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES? (DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES.) IF NO, GO TO ITEM P2-1; IF YES, CONTINUE.	7.6	14.9	.0	.0	39.6	23.8	34.2	4.5
P	970	P1-2 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE COPPER LOSS OR 'I SUB 2 R' LOSS IN TRANSMISSION LINES?	1.5	1.9	.0	.0	5.7	4.8	1.8	2.3
P	971	P1-3 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES?	1.5	.6	.0	.0	6.6	.0	.9	2.3
P	972	P1-4 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE RADIATION LOSS?	3.0	3.1	.0	.0	9.7	.0	.0	2.3
P	973	P1-5 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE DIELECTRIC LOSS?	3.0	1.2	.0	.0	8.5	.0	.0	2.3
P	974	P1-6 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE LEAKAGE LOSSES?	4.5	5.0	.0	.0	10.4	.0	3.5	2.3
P	975	P1-7 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE FARADAY SHIELD?	1.5	2.5	.0	.0	3.8	.0	1.8	2.3
P	976	P1-8 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES?	3.0	10.6	.0	.0	36.8	23.8	26.3	.0
P	977	P1-9 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES?	1.5	8.1	.0	.0	16.0	4.8	14.0	2.3
P	978	P1-10 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES?	4.5	8.7	.0	.0	18.9	4.8	14.0	2.3
P	979	P1-11 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES?	6.1	11.8	.0	.0	11.3	.0	7.9	4.5
P	980	P1-12 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES?	3.0	5.6	.0	.0	5.7	.0	2.6	.0
P	981	P1-13 DO YOU TROUBLESHOOT TRANSMISSION LINES?	4.5	10.6	.0	.0	35.8	19.0	33.3	4.5
P	982	P1-14 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)?	3.0	8.7	.0	.0	22.6	4.8	7.0	2.3
P	983	P1-15 DO YOU SELECT APPROPRIATE TRANSMISSION LINE TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS?	3.0	1.9	.0	.0	5.7	.0	.0	4.5
P	984	P1-16 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS?	7.0	7.5	.0	.0	15.1	19.0	5.6	4.5
P	985	P1-17 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	.0	.6	.0	.0	1.9	.0	.0	2.3
P	986	P1-18 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	.0	.6	.0	.0	1.9	.0	.0	2.3
P	987	P1-19 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS?	.0	.6	.0	.0	1.9	.0	.0	2.3
P	988	P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS?	1.5	1.9	.0	.0	14.2	14.3	2	2.3
P	989	P1-21 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING?	.0	.0	.0	.0	1.9	.0	[illegible]	[illegible]
P	990	P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES?	.0	.0	.0	.0	5.7	.0	[illegible]	[illegible]
P	991	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES?	.0	.0	.0	.0	9.5	.0	[illegible]	[illegible]

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P 992	P1-24 DO YOU USE OR REFER TO THE TERM CUT OFF FREQUENCY OF TRANSMISSION LINES?	.0	.0	.0	.0	4.7	.0	.0	2.3
P 993	P2-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES?	.0	.0	.0	.0	2.8	.0	.0	2.3
P 994	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES?	.0	1.2	.0	.0	2.8	.0	.9	2.3
P 995	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTHS FOR GIVEN FREQUENCIES?	.0	1.2	.0	.0	1.9	.0	.9	2.3
P 996	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES?	.0	1.9	.0	.0	5.7	.0	1.8	2.3
P 997	P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES?	1.5	1.9	.0	.0	5.7	.0	3.5	4.5
P 998	P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES?	1.5	.6	.0	.0	5.7	4.8	3.5	2.3
P 999	P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING?	1.5	.0	.0	.0	1.9	.0	.9	2.3
P1000	P2-1 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P3-1; IF YES, CONTINUE.	.0	.0	.0	.0	.9	.0	.0	6.8
P1001	P2-2 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	6.8
P1002	P2-3 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	6.8
P1003	P2-4 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1004	P2-5 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1005	P2-6 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	6.8
P1006	P2-7 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1007	P2-8 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1008	P2-9 DO YOU REMOVE OR INSTALL DUMMY LOADS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1009	P2-10 DO YOU REMOVE OR INSTALL E BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1010	P2-11 DO YOU REMOVE OR INSTALL H BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1011	P2-12 DO YOU REMOVE OR INSTALL OTHER BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1012	P2-13 DO YOU REMOVE OR INSTALL CHOKE JOINTS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1013	P2-14 DO YOU REMOVE OR INSTALL ROTATING JOINTS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1014	P2-15 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1015	P2-16 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1016	P2-17 DO YOU REMOVE OR INSTALL DUPLEXERS OR MIXERS?	1.5	.0	.0	.0	.0	.0	.0	6.8
P1017	P2-18 DO YOU REMOVE OR INSTALL WAVEGUIDE SHUTTERS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1018	P2-19 DO YOU REMOVE OR INSTALL TRANSMIT (TR) OR ANTITRANSMIT (ATR) TUBES?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1019	P2-20 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	.0
P1020	P2-21 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	.0
P1021	P2-22 DO YOU USE OR REFER TO CUT OFF FREQUENCY OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	4.5
P1022	P2-23 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	4.5
P1023	P2-24 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	4.5
P1024	P2-25 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	4.5

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P1025	P2-26 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.9	4.5
P1026	P2-27 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.9	4.5
P1027	P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OR .7 WAVELENGTHS OF THE OPERATING FREQUENCY?	.0	.0	.0	.0	.0	.0	.0	.0
P1028	P2-29 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 AS AN AVERAGE?	.0	.0	.0	.0	.0	.0	.9	[illegible]
P1029	P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION?	.0	.0	.0	.0	.0	.0	.0	[illegible]
P1030	P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES?	.0	.0	.0	.0	[illegible]	.0	[illegible]	[illegible]
P1031	P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	[illegible]	.0	[illegible]	[illegible]
P1032	P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1033	P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
P1034	P2-35 DO YOU WORK WITH HIGH POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	[illegible]	[illegible]
P1035	P2-36 DO YOU WORK WITH LOW POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	[illegible]	[illegible]	[illegible]	.0	[illegible]	[illegible]
P1036	P2-37 DO YOU WORK WITH LOOP ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
P1037	P2-38 DO YOU WORK WITH APERTURE (WINDOW OR IRISES) ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
P1038	P2-39 DO YOU WORK WITH CHOKE JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
P1039	P2-40 DO YOU WORK WITH ROTATING JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
P1040	P2-41 DO YOU WORK WITH JOINTS IN WAVEGUIDES OR CAVITY RESONATORS OR DON'T KNOW WHICH KIND?	.0	.0	.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
P1041	P2-42 DO YOU TUNE CAVITY RESONATORS USING ELECTRICAL METHODS?	.0	.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
P1042	P2-43 DO YOU TUNE CAVITY RESONATORS USING MECHANICAL METHODS?	[illegible]	.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1046	P3-3 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0
P1047	P3-4 DO YOU USE OR REFER TO LEAD INDUCTANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTINAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0
P1048	P3-5 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0
P1049	P3-6 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION?	.0	.0	.0	.0	.9	.0	1.8	2.3
P1050	P3-7 DO YOU USE OR REFER TO ELECTRON BUNCHING?	.0	.0	.0	.0	.0	.0	.9	2.3
P1051	P3-8 DO YOU WORK WITH TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1052	P3-9 DO YOU WORK WITH THREE-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1053	P3-10 DO YOU WORK WITH REFLEX KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	2.3
P1054	P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0
P1055	P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1056	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1057	P3-14 DO YOU WORK WITH MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1058	P3-15 DO YOU WORK WITH BACKWARD WAVE OSCILLATORS (BWO)?	.0	.0	.0	.0	.0	.0	.0	.0
P1059	P3-16 DO YOU INSPECT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1060	P3-17 DO YOU CLEAN KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1061	P3-18 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1062	P3-19 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1063	P3-20 DO YOU PERFORM OPERATIONAL CHECKS ON KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1064	P3-21 DO YOU TROUBLESHOOT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1065	P3-22 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRONS OR TWT'S?	.0	.0	.0	.0	.0	.0	.0	2.3
P1066	P3-23 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1067	P3-24 DO YOU INSPECT PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1068	P3-25 DO YOU CLEAN PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0
P1069	P3-26 DO YOU ADJUST PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0
P1070	P3-27 DO YOU TUNE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0
P1071	P3-28 DO YOU PERFORM OPERATIONAL CHECKS ON PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1072	P3-29 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1073	P3-30 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1074	P3-31 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1075	P3-32 DO YOU INSPECT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1076	P3-33 DO YOU CLEAN MAGNETRONS?	.0	.6	.0	.0	.0	.0	.0	.0
P1077	P3-34 DO YOU ADJUST MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1078	P3-35 DO YOU TUNE MAGNETRONS?	.0	.6	.0	.0	.0	.0	.0	.0
P1079	P3-36 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1080	P3-37 DO YOU TROUBLESHOOT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0

PREPARED ELECTRONICS PRINCIPLES INVENTORY DATA — REPORT PAGE 55

S TSK	TITLE	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 52 (M)	362 54 (M)	918 50 (M)
P1081	P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1082	P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1083	P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR PLATE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1084	P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1085	P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1086	P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FEEDBACK LOOP COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1087	P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF DRIFT SPACE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P108	P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P108	P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1090	P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CONTROL GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1091	P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF OUTPUT COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P10	P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REPELLER (OR REPELLER) PLATE COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	.0
P10	P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF [illegible] COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	.0
P10	P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID CAVITY CAP COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	.0
P10	P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF RESONANT CAVITY COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	.0
P10	P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETIC FOCUSING COIL COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	.0
P10	P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	.0
P1098	P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE [illegible] OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	.0
P10	P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF [illegible] COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	.0
	P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT [illegible] OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
	P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF [illegible] OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
	P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF [illegible] COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
	P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF [illegible] OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
	P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF [illegible] OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
	P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF [illegible] COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1106	P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNET COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1107	P3-64 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ATTENUATOR COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1108	P3-65 DO YOU PERFORM TASKS ON FERRITE CIRCULATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.0	.0
P1109	P3-66 DO YOU PERFORM TASKS ON SIGNAL CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1110	P3-67 DO YOU PERFORM TASKS ON IDLER CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1111	P3-68 DO YOU PERFORM TASKS ON VARACTOR DIODE COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1112	P3-69 DO YOU PERFORM TASKS ON FERRITE ISOLATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1113	P3-70 DO YOU PERFORM TASKS ON REVERSE-BIAS BATTERY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1114	P3-71 DO YOU PERFORM TASKS ON ANODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1115	P3-72 DO YOU PERFORM TASKS ON ANODE COOLING PIN COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1116	P3-73 DO YOU PERFORM TASKS ON COUPLING LOOP COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1117	P3-74 DO YOU PERFORM TASKS ON HEATER LEAD COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1118	P3-75 DO YOU PERFORM TASKS ON RESONANT CAVITY COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1119	P3-76 DO YOU PERFORM TASKS ON CATHRODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1120	P3-77 DO YOU PERFORM TASKS ON MAGNET COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
Q	REGISTERS (Q1), STORAGE DEVICES (Q2), DIGITAL-TO-ANALOG AND DIGITAL-TO-DIGITAL CONVERTERS (Q3)								
Q1121	Q1-1 DO YOU USE OR REFER TO STORAGE RESISTERS?	69.7	31.1	13.8	18.8	2.8	.0	.0	54.5
Q1122	Q1-2 DO YOU USE OR REFER TO SHIFT REGISTERS?	77.3	34.8	.0	18.8	2.8	4.8	.0	56.8
Q1123	Q1-3 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS?	72.7	33.5	3.4	18.8	1.9	.0	.0	54.5
Q1124	Q1-4 DO YOU USE OR REFER TO LOGIC SYMBOLS OR STORAGE REGISTERS?	66.7	30.4	3.4	18.8	1.9	.0	.0	54.5
Q1125	Q1-5 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTER CIRCUITS?	77.3	32.9	.0	18.8	.9	4.8	.9	54.5
Q1126	Q1-6 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPES OF REGISTER CIRCUITS?	63.6	27.3	3.4	18.8	.9	.0	1.8	52.3
Q1127	Q1-7 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED?	72.7	27.3	.0	12.5	1.9	.0	.9	50.0

TSK	TITLES	306 51 (M)	306 52 (M)	316 SOF (M)	319 (M)	362 51 (M)	362 53 (M)	364 54 (M)	918 SO (M)
01168	Q2-1 DO YOU WORK WITH STORAGE DEVICES IN YOUR PRESENT JOB? IF NO, GO TO ITEM Q3-1; IF YES, CONTINUE.	71.2	26.7	31.0	25.0	10.8	.0	.0	36.4
01169	Q2-2 DO YOU USE OR REFER TO DELAY LINES?	10.6	4.3	.0	.0	.0	.0	.0	13.6
01170	Q2-3 DO YOU USE OR REFER TO MAGNETIC CORES OR BIMAGS?	54.5	5.0	7.4	.7	1.9	.0	.0	11.4
01171	Q2-4 DO YOU USE OR REFER TO MAGNETIC DRUMS?	6.1	3.7	3.4	.0	2.8	.0	.0	11.4
01172	Q2-5 DO YOU USE OR REFER TO MAGNETIC TAPES?	6.1	15.6	3.4	.0	9.4	.0	.0	25.0
01173	Q2-6 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OF MEMORY SYSTEMS?	47.0	8.7	3.4	6.3	2.5	.7	1.7	7.3
01174	Q2-7 DO YOU USE OR REFER TO STORAGE CAPACITY OF MEMORY SYSTEMS?	59.1	13.0	13.8	6.3	4.4	.0	.0	20.0
01175	Q2-8 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS?	28.8	8.1	3.4	6.3	2.5	.0	.0	25.0
01176	Q2-9 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES?	16.7	3.1	.0	.0	1.3	.0	.0	4.1
01177	Q2-10 DO YOU USE OR REFER TO MAGNETIC DISKS?	6.1	7.7	.0	18.9	1.9	.0	.0	13.6
01178	Q2-11 DO YOU USE OR REFER TO THIN FILMS?	3.0	3.1	.0	3.2	.0	.0	.0	18.2
01179	Q2-12 DO YOU USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED CIRCUITS)?	25.8	16.1	6.9	.0	.0	.0	.0	29.5
01180	Q2-13 DO YOU USE OR REFER TO BUBBLE MEMORIES?	.0	2.5	3.4	6.3	1.3	.0	.0	11.4
01181	Q2-14 DO YOU USE OR REFER TO PUNCH CARDS?	59.1	5.6	3.4	.0	.0	.0	.0	2.3
01182	Q2-15 DO YOU USE OR REFER TO PAPER TAPES?	60.1	19.9	31.0	12.5	2.5	1.3	.0	4.5
01183	Q2-16 DO YOU USE OR REFER TO RANDOM ACCESS MEMORIES (RAM)?	65.5	18.0	7.2	3.2	.0	.0	.0	2.3
01184	Q2-17 DO YOU USE OR REFER TO READ ONLY MEMORIES (ROM)?	13.6	10.6	10.3	9.5	4.4	.0	.0	6.8
01185	Q2-18 DO YOU USE OR REFER TO PROGRAMMABLE READ ONLY MEMORIES (PROM)?	7.6	10.6	3.4	12.5	.0	.0	.0	2.3
01186	Q2-19 DO YOU USE OR REFER TO TRANSFORMER READ ONLY STORAGES (TROS)?	.0	3.1	.0	.0	.0	.0	.0	.0
01187	Q2-20 DO YOU USE OR REFER TO CAPACITY READ ONLY STORAGES (CROSS)?	.0	1.9	.0	.0	.0	.0	.0	.0
[illegible]	Q2-21 DO YOU USE OR REFER TO MAGNETIC BUBBLE DEVICES?	59.1	2.5	3.4	.0	.0	.0	.0	.0
[illegible]	Q2-22 DO YOU USE OR REFER TO CHARGE COUPLED DEVICES?	59.1	11.2	.0	.0	.0	.0	.0	.0
[illegible]	Q2-23 DO YOU USE OR REFER TO MAGNETIC RESISTIVE DEVICES?	61.0	16.1	.0	.0	.0	.0	.0	.0
[illegible]	Q2-24 DO YOU USE OR REFER TO PROBE DEVICES?	21.2	17.4	.0	12.5	.0	.0	.0	2.3
[illegible]	Q2-25 DO YOU USE OR REFER TO MEMORY SYSTEM STORAGE DEVICES?	68.5	17.4	.0	.0	.0	.0	.0	.0
[illegible]	Q2-26 DO YOU USE OR REFER TO REPLACEABLE SUBASSEMBLIES OR COMPONENTS OF SOFTWARE DEVICES?	61.5	21.8	.0	.0	.0	.0	.0	.0
[illegible]	Q3-1 DO YOU USE OR REFER TO ANALOG OR DIGITAL DEVICES USING [illegible] TECHNIQUES?	31.1	10.1	7.8	.0	.0	.0	.0	.0
[illegible]	Q3-2 DO YOU WORK WITH DIGITAL-TO-ANALOG [illegible] CONVERTERS? IF NO, GO TO ITEM Q3-3; IF YES, CONTINUE.	65.1	5.0	.0	.0	.0	.0	.0	.0
[illegible]	Q3-3 DO YOU USE OR REFER TO ANALOG-TO-DIGITAL (A/D) CONVERTERS FOR ELECTROMECHANICAL [illegible] SYSTEMS?	4.7	3.9	.0	.0	.0	.0	.0	.0
[illegible]	Q3-4 DO YOU USE OR REFER TO THE DIGITAL CODE THAT THE ANALOG [illegible] CONVERTERS IS [illegible] REPRESENTATIVE OF THE VOLTAGES?	4.7	3.2	.0	.0	.0	.0	.0	.0
[illegible]	Q3-5 DO YOU USE OR REFER TO [illegible] OF THE ANALOG-TO-DIGITAL CONVERTERS?	3.4	.0	.0	.0	.0	.0	.0	.0
[illegible]	Q3-6 DO YOU USE OR REFER TO [illegible] OF DIGITAL-TO-ANALOG CONVERTERS?	3.4	3.9	.0	.0	.0	.0	.0	.0
[illegible]	Q3-7 DO YOU USE OR REFER TO [illegible] OF CONVERTER CIRCUITS?	.0	.0	.0	.0	.0	.0	.0	.0

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Q1160	Q3-6 DO YOU PERFORM TASKS ON HOLD FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	4.5	1.9	.0	.0	1.9	.0	.0	36.4
Q1161	Q3-7 DO YOU PERFORM TASKS ON COMPARE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	9.1	1.9	.0	.0	1.9	.0	.0	34.1
Q1162	Q3-8 DO YOU PERFORM TASKS ON DIGITIZE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	3.0	1.9	.0	.0	1.9	.0	.0	36.4
Q1163	Q3-9 DO YOU PERFORM TASKS ON PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS BUT DON'T KNOW WHICH FUNCTION?	16.7	2.5	.0	6.3	.9	.0	.0	9.1
Q1164	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS?	9.1	1.9	.0	.0	.9	.0	.0	36.4
Q1165	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS?	4.5	1.9	.0	.0	.9	.0	.0	38.6
Q1166	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS?	10.6	1.9	.0	.0	.9	.0	.0	34.1
Q1167	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS?	13.6	1.9	.0	.0	.9	.0	.0	38.6
Q1168	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS?	4.5	1.9	.0	.0	1.9	.0	.0	27.3
Q1169	Q3-15 DO YOU PERFORM ANY TASKS ON ELECTRONIC A/D CONVERTERS?	24.2	3.7	.0	.0	2.8	.0	.0	47.7
Q1170	Q3-16 DO YOU PERFORM ANY TASKS ON DIGITAL-TO-ANALOG (D/A) CONVERTERS?	24.2	4.3	.0	.0	2.8	.0	.0	45.5
Q1171	Q3-17 DO YOU OPERATE COMPUTER KEYBOARDS?	15.2	1.9	.0	12.5	3.8	.0	.0	29.5
Q1172	Q3-18 DO YOU WORK AT OR WITH COMPUTER TERMINALS?	19.7	3.7	.0	12.5	3.8	.0	.0	18.2
Q1173	Q3-19 HAVE YOU BEEN SENT TO FACTORY TRAINING OR TO ANY OTHER SCHOOL FOR THE SPECIFIC PURPOSE OF RECEIVING COMPUTER OR LOGIC CIRCUIT RELATED TRAINING?	24.2	3.1	.0	6.3	2.8	.0	.0	18.2
Q1174	Q3-20 DO YOU HAVE MICROPROCESSORS OR COMPUTER EQUIPMENT LOCATED AT YOUR WORK STATION WHICH IS OPERATED OR MAINTAINED BY CONTRACTOR PERSONNEL?	24.2	3.1	.0	6.3	1.9	.0	1.8	34.1
Q1175	Q3-21 WAS THE COMPUTER OR LOGIC CIRCUIT TRAINING YOU RECEIVED IN YOUR 3-LEVEL AWARDING COURSE ADEQUATE IN TERMS OF YOUR PRESENT DUTIES?	25.8	3.1	.0	.0	.9	.0	.0	9.1
Q1176	Q3-22 ARE YOU ASSIGNED AGAINST A POSITION WHICH REQUIRES A "D" PREFIX?	.0	.6	.0	.0	.9	.0	.0	.0
R	PHANTASTRON (R1), SCHMITT TRIGGERS (R2), CABLE FABRICATION (R3)								
R1177	R1-1 DO YOU WORK WITH PHANTASTRON CIRCUITRY? IF NO, GO TO ITEM R2-1. IF YES, CONTINUE.	7.6	2.5	.0	.0	.9	.0	.0	2.3
R1178	R1-2 PHANTASTRON CIRCUITRY HAS VARIABLE-DELAY APPLICATIONS IN MY JOB.	4.5	.6	.0	.0	1.9	.0	.0	4.5
R1179	R1-3 PHANTASTRON CIRCUITRY HAS SEARCH-LOCK AUTOMATIC FREQUENCY CONTROLS (AFC) APPLICATIONS IN MY JOB.	1.5	.6	.0	.0	1.9	.0	.0	4.5
R1180	R1-4 PHANTASTRON CIRCUITRY HAS MONOSTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	7.6	2.5	.0	.0	1.9	.0	.0	4.5

	FORTRAN PAGE 13				OCCUPATIONAL ANALYSIS PROGRAM			
	2C6	306	5&6	5&7	3G2	3G2	3G2	918
	51	52	3CF	72F	51	52	51	50
	(M)	(M)	(M)	(M)	(M)	(M)	(M)	(M)
[illegible]	7.6	2.5	.2	.	1.9	.2	.	1.5
[illegible]	4.3	1.9	.2	.	1.9	.2	.	.
[illegible]	62.6	42.2	.2	58.8	7.8	4.2	.2	42.2
[illegible]	62.1	39.8	.2	13.5	1.2	4.2	.2	9.2
[illegible]	42.1	25.9	.	17.5	7.4	5.7	.	17.2
[illegible]	9.1	21.1	.2	54.7	21.7	4.2	.	20.2
[illegible]	7.4	18.6	.2	2.4	1.2	.7	.	2.2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

C TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
S1210	S3-4 DO YOU MEASURE EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	18.2
S1211	S3-5 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	20.5
S1212	S3-6 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	.0	.0	.0	.0	.0	22.7
S1213	S3-7 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	3.4	.0	.0	.0	.0	22.7
S1214	S3-8 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.0	.0	.0	.0	.0	.0	25.0
S1215	S3-9 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	3.4	.0	.0	.0	.0	27.3
T	INFRARED (T1), LASERS (T2), DISPLAY TUBES (T3), TELEVISION (T4)								
T1216	T1-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS? IF NO, GO TO ITEM T2-1; IF YES, CONTINUE.	.0	.6	.0	43.8	.9	.0	.9	9.1
T1217	T1-2 DO YOU INSPECT INFRARED SYSTEMS?	.0	.0	.0	43.8	.0	.0	.0	9.1
T1218	T1-3 DO YOU CLEAN INFRARED SYSTEMS?	.0	.0	.0	43.8	.9	.0	.0	9.1
T1219	T1-4 DO YOU SERVICE INFRARED SYSTEMS?	.0	.6	.0	43.8	.9	.0	.0	9.1
T1220	T1-5 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1221	T1-6 DO YOU OPERATE INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	6.8
T1222	T1-7 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1223	T1-8 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1224	T1-9 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1225	T1-10 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	1.5	.6	.0	43.8	.0	.0	.0	9.1
T1226	T1-11 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1227	T1-12 DO YOU USE OR REFER TO FAR REGIONS?	.0	.0	.0	.0	.9	.0	.0	2.3
T1228	T1-13 DO YOU USE OR REFER TO INTERMEDIATE REGIONS?	1.5	.0	.0	.0	.9	.0	.0	2.3
T1229	T1-14 DO YOU USE OR REFER TO NEAR REGIONS?	1.5	.0	.0	.0	.9	.0	.0	2.3
T1230	T1-15 DO YOU USE OR REFER TO MICRONS (M)?	1.5	.0	.0	6.3	.0	.0	.0	2.3
T1231	T1-16 DO YOU USE OR REFER TO GRAY BODIES?	1.5	.0	.0	.0	.0	.0	.0	2.3
T1232	T1-17 DO YOU USE OR REFER TO BLACK BODIES?	1.5	.0	.0	.0	.0	.0	.0	2.3
T1233	T1-18 DO YOU USE OR REFER TO ABSORPTION?	1.5	.0	.0	12.5	.0	.0	.0	6.8
T1234	T1-19 DO YOU USE OR REFER TO SCATTERING?	1.5	.0	.0	.0	.0	.0	.0	6.8
T1235	T1-20 DO YOU USE OR REFER TO ABSOLUTE ZERO?	1.5	.0	.0	12.5	.0	.0	.0	4.5
T1236	T1-21 DO YOU PERFORM TASKS ON BLITZ?	.0	.0	.0	.0	.9	.0	.0	.0
T1237	T1-22 DO YOU PERFORM TASKS ON TARGET BUTTONS?	.0	.0	3.4	.0	.9	.0	.0	.0
T1238	T1-23 DO YOU PERFORM TASKS ON ERECTOR LENSES?	.0	.0	.0	.0	.9	.0	.0	.0
T1239	T1-24 DO YOU PERFORM TASKS ON OCULAR LENSES?	.0	.0	.0	.0	.9	.0	.0	6.8

AM AIRBAND ELECTRONIC PRINCIPLES INVENTORY DATA

REPORT BASE OF

CODE	TITLE	306 51 (M)	306 52 (M)	316 SOF (M)	316 SOF (M)	362 51 (M)	362 52 (M)	362 54 (M)	426 30 (M)
T1240	T1-25 DO YOU PERFORM TASKS ON CORRECTION LENSES?	.0	.0	.0	5.1	.9	.0	.0	2.3
T1241	T1-26 DO YOU PERFORM TASKS ON FILTERS?	.0	.0	.0	13.8	.9	.0	.0	6.8
T1242	T1-27 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS?	.0	.0	.0	6.3	.0	.0	.0	2.7
T1243	T1-28 DO YOU PERFORM TASKS ON PLANE MIRRORS?	.0	.0	.0	6.3	.9	.0	.0	4.5
T1244	T2-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS? IF NO, GO TO ITEM T3-1; IF YES, CONTINUE.	4.5	.0	.0	.0	1.9	.0	.0	11.4
T1245	T2-2 DO YOU INSPECT LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	11.4
T1246	T2-3 DO YOU CLEAN LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	6.8
T1247	T2-4 DO YOU SERVICE LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	4.5
T1248	T2-5 DO YOU OPERATE LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	5.8
T1249	T2-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS?	3.0	.0	.0	.0	.0	.0	.0	5.8
T1250	T2-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS?	1.5	.0	.0	.0	.0	.0	.0	6.8
T1251	T2-8 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS?	1.5	.0	.0	.0	.9	.0	.0	8.5
T1252	T2-9 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	5.5
T1253	T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS?	1.5	.0	.0	.0	.9	.0	.0	4.5
T1254	T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)?	.0	.0	.0	.0	.9	.0	.0	3.4
T1255	T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS?	.0	.0	.0	.0	1.9	.0	.0	4.5
T1256	T2-13 DO YOU USE OR REFER TO GROUND STATE?	.0	.0	.0	.0	1.9	.0	.0	4.5
T1257	T2-14 DO YOU USE OR REFER TO EXCITED STATE?	.0	.0	.0	.0	1.9	.0	.0	4.5
T1258	T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION?	.0	.0	.0	.0	1.9	.0	.0	4.5
T1259	T2-16 DO YOU USE OR REFER TO PHOTONS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1260	T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSIONS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1261	T2-18 DO YOU USE OR REFER TO STIMULATED EMISSIONS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1262	T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE?	.0	.0	.0	.0	.9	.0	.0	4.5
T1263	T2-20 DO YOU USE OR REFER TO INVERSION LEVELS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1264	T2-21 DO YOU USE OR REFER TO MONOCHROMATIC?	.0	.0	.0	.0	.9	.0	.0	4.5
T1265	T2-22 DO YOU WORK WITH ACTIVE MATERIALS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1266	T2-23 DO YOU WORK WITH PUMPING SOURCES?	.0	.0	.0	.0	.9	.0	.0	4.5
T1267	T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS?	1.5	.0	.0	.0	1.9	.0	.0	4.5
T1268	T2-25 DO YOU WORK WITH HALF SILVERED (50% REFLECTIVE) MIRRORS?	1.5	.0	.0	.0	.9	.0	.0	4.5
T1269	T2-26 DO YOU WORK WITH XENON FLASHTUBES?	1.5	.0	.0	.0	1.9	.0	.0	4.5
T1270	T2-27 DO YOU WORK WITH RUBY MATERIALS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1271	T2-28 DO YOU WORK WITH NEODYMIUM MATERIALS?	1.5	.0	.0	.0	.9	.0	.0	4.5
T1272	T2-29 DO YOU WORK WITH HELIUM-NEON MATERIALS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1273	T2-30 DO YOU WORK WITH ARGON MATERIALS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1274	T2-31 DO YOU WORK WITH CARBON-DIOXIDE MATERIALS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1275	T2-32 DO YOU WORK WITH EPOXY MATERIALS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1276	T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS MATERIALS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1277	T2-34 DO YOU WORK WITH GALLIUM ARSENIDE MATERIALS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1278	T2-35 DO YOU WORK WITH OSCILLOSCOPES WITH DISPLAY SCREENS (CRT), MULTIPLE TRACE CAPABILITY, AND CAMERAS? IF YES, CONTINUE.	.0	.0	.0	.0	.9	.0	.0	4.5
T1279	T2-36 DO YOU WORK WITH LASER?	1.5	.0	.0	.0	.9	.0	.0	4.5

O TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
T1280	T3-3 DO YOU CLEAN DVST OR MMST?	1.5	1.2	.0	.0	.9	.0	.0	6.8
T1281	T3-4 DO YOU ADJUST OR CALIBRATE DVST OR MMST?	1.5	.6	.0	.0	.0	.0	.0	4.5
T1282	T3-5 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST?	1.5	.0	.0	.0	.0	.0	.0	4.5
T1283	T3-6 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS?	1.5	1.2	.0	.0	.0	.0	.0	4.5
T1284	T3-7 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS?	1.5	.0	.0	.0	.0	.0	.0	4.5
T1285	T3-8 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF DVST?	.0	.0	.0	.0	.0	.0	.9	.0
T1286	T3-9 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF MMST?	.0	.0	.0	.0	.0	.0	.9	.0
T1287	T3-10 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF SCT?	.0	.0	.0	.0	.0	.0	.9	2.3
T1288	T3-11 DO YOU PERFORM TASKS ON FLOOD GUNS?	.0	.0	.0	.0	.9	.0	.0	.0
T1289	T3-12 DO YOU PERFORM TASKS ON WRITE GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1290	T3-13 DO YOU PERFORM TASKS ON READ GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1291	T3-14 DO YOU PERFORM TASKS ON ATTACK GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1292	T3-15 DO YOU PERFORM TASKS ON ERASE GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1293	T3-16 DO YOU PERFORM TASKS ON STORAGE GRIDS?	.0	.6	.0	.0	1.9	.0	.0	2.3
T1294	T4-1 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS DEALING WITH TELEVISION SYSTEMS INCLUDING LOW LIGHT TELEVISION? IF NO, GO TO ITEM U1-1; IF YES, CONTINUE.	.0	1.2	17.2	6.3	.9	.0	.0	38.6
T1295	T4-2 DO YOU INSPECT TELEVISION SYSTEMS?	.0	1.2	10.3	.0	.9	.0	.0	40.9
T1296	T4-3 DO YOU CLEAN TELEVISION SYSTEMS?	.0	1.2	3.4	.0	.9	.0	.0	38.6
T1297	T4-4 DO YOU ADJUST OR CALIBRATE TELEVISION SYSTEMS?	.0	1.2	10.3	.0	.9	.0	.0	36.4
T1298	T4-5 DO YOU OPERATE TELEVISION SYSTEMS?	.0	1.2	17.2	6.3	.9	.0	.0	38.6
T1299	T4-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF TV SYSTEMS?	.0	1.2	6.9	.0	.9	.0	.0	40.9
T1300	T4-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF TV SYSTEMS?	.0	1.2	6.9	.0	.9	.0	.0	31.8
T1301	T4-8 DO YOU TROUBLESHOOT DOWN TO TV SYSTEM COMPONENT PARTS?	.0	1.2	3.4	.0	.9	.0	.0	29.5
T1302	T4-9 DO YOU REMOVE OR REPLACE TV SYSTEM MAJOR ASSEMBLIES?	.0	.6	.0	.0	.9	.0	.0	31.8
T1303	T4-10 DO YOU REMOVE OR REPLACE TV SYSTEM COMPONENT PARTS?	.0	.6	.0	.0	.9	.0	.0	29.5
U	COMPUTERS, MICROPROCESSORS, AND PROGRAMMING (U1), DB AND POWER RATIOS (U2)								
U1304	U1-1 IN YOUR PRESENT JOB, DO YOU PERFORM MAINTENANCE ROUTINES OR PROGRAMMING TASKS? IF NO, GO TO ITEM U2-1; IF YES, CONTINUE.	34.8	5.6	20.7	31.3	9.4	.0	2.6	29.5
U1305	U1-2 DO YOU USE OR REFER TO DECIMAL SYSTEMS?	21.2	1.9	10.3	6.3	4.7	.0	.0	25.0
U1306	U1-3 DO YOU USE OR REFER TO OCTAL SYSTEMS?	18.2	.0	17.2	.0	3.8	.0	.0	22.7
U1307	U1-4 DO YOU USE OR REFER TO PARITY DETECTORS/GENERATORS?	28.8	4.3	3.4	.0	3.8	.0	.0	15.9
U1308	U1-5 DO YOU USE OR REFER TO HEXADECIMAL SYSTEMS?	13.6	1.2	.0	25.0	3.8	.0	.0	25.0
U1309	U1-6 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS?	9.1	.6	6.9	.0	2.8	.0	.0	13.6
U1310	U1-7 DO YOU USE OR REFER TO FOUR SYSTEMS?	6.1	.0	.0	.0	.9	.0	.0	11.4
U1311	U1-8 DO YOU USE OR REFER TO BINARY SYSTEMS?	34.8	3.7	13.8	12.5	5.7	.0	.0	27.3
U1312	U1-9 DO YOU USE OR REFER TO TIME-SHARING (MULTI-SEQUENCING)?	9.1	1.2	.0	.0	2.8	.0	.9	15.9
U1313	U1-10 DO YOU USE OR REFER TO DATA WORDS?	22.7	4.3	6.9	12.5	5.7	.0	.0	15.9

Q TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
U1314	U1-11 DO YOU USE OR REFER TO ADDRESS WORDS?	16.7	4.3	3.4	12.5	7.5	.0	.0	15.9
U1315	U1-12 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS?	19.7	3.1	3.4	12.5	6.6	.0	.9	13.6
U1316	U1-13 DO YOU USE OR REFER TO STEERING/INFORMATION?	12.1	2.5	6.9	6.3	2.8	.0	.0	11.4
U1317	U1-14 DO YOU USE OR REFER TO INSTRUCTION WORDS?	10.6	3.1	6.9	6.3	6.6	.0	.0	15.9
U1318	U1-15 DO YOU USE OR REFER TO DAP-16?	.0	.0	.0	.0	.9	.0	.0	6.8
U1319	U1-16 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	16.7	1.9	10.3	6.3	2.8	.0	.0	22.7
U1320	U1-17 DO YOU USE OR REFER TO CONTROL WORDS?	9.1	4.3	.0	18.8	4.7	.0	.0	13.6
U1321	U1-18 DO YOU USE OR REFER TO RESPONSE WORDS?	7.6	2.5	.0	25.0	3.8	.0	.0	9.1
U1322	U1-19 DO YOU USE OR REFER TO WRAPAROUND WORDS?	.0	1.2	.0	.0	1.9	.0	.0	6.8
U1323	U1-20 DO YOU USE OR REFER TO TEST OR DIAGNOSTIC PROGRAMS?	18.2	3.1	6.9	25.0	7.5	.0	.9	22.7
U1324	U1-21 DO YOU USE OR REFER TO RELIABILITY PROGRAMS?	6.1	.6	3.4	18.8	.9	.0	.0	11.4
U1325	U1-22 DO YOU USE OR REFER TO COMPILERS?	.0	.0	.0	.0	.9	.0	.0	9.1
U1326	U1-23 DO YOU USE OR REFER TO ASSEMBLERS?	.0	.0	.0	.0	.9	.0	.0	9.1
U1327	U1-24 DO YOU USE OR REFER TO MACHINE LANGUAGE?	4.5	1.2	.0	6.3	4.7	.0	.0	15.9
U1328	U1-25 DO YOU USE OR REFER TO MNEMONICS?	18.2	1.2	.0	6.3	4.7	.0	.9	11.4
U1329	U1-26 DO YOU USE OR REFER TO ROUTINES OR SUBROUTINES?	13.6	1.2	3.4	.0	5.7	.0	.9	13.6
U1330	U1-27 DO YOU USE OR REFER TO FLOW CHARTS OR DIAGRAMS?	12.1	3.1	10.3	12.5	4.7	.0	.9	18.2
U1331	U1-28 DO YOU USE OR REFER TO 'ATLAS'?	.0	.0	.0	.0	.9	.0	.0	4.5
U1332	U1-29 DO YOU USE OR REFER TO 'ELAN'?	.0	.0	.0	.0	.9	.0	.0	4.5
U1333	U1-30 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING SYSTEMS?	4.5	.0	.0	.0	1.9	.0	.9	11.4
U1334	U1-31 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING SYSTEMS?	.0	.6	3.4	.0	2.8	.0	.9	9.1
U1335	U1-32 DO YOU WRITE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	.0	.0	.0	.0	2.8	.0	.9	.0
U1336	U1-33 DO YOU USE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	3.0	1.9	6.9	25.0	6.6	.0	1.9	18.2
U1337	U1-34 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER CONTROL SECTIONS?	27.3	2.5	6.9	6.3	2.8	.0	.0	13.6
U1338	U1-35 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT SECTIONS?	28.8	3.1	10.3	6.3	7.5	.0	.0	22.7
U1339	U1-36 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT SECTIONS?	30.3	3.1	10.3	6.3	6.6	.0	.9	20.5
U1340	U1-37 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR SECTIONS?	25.8	2.5	10.3	6.3	4.7	.0	.0	13.6
U1341	U1-38 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER TRANSMIT SECTIONS?	30.3	4.3	3.4	6.3	4.7	.0	.0	18.2
U1342	U1-39 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER RECEIVE SECTIONS?	28.8	5.0	3.4	.0	3.8	.0	.0	13.6
U1343	U1-40 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT DEVICES?	30.3	3.7	6.9	6.3	4.7	.0	.0	18.2
U1344	U1-41 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER STORAGE DEVICES?	24.2	4.3	3.4	.0	3.8	.0	.0	9.1
U1345	U1-42 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT DEVICES?	27.3	3.1	6.9	6.3	3.8	.0	.0	9.1
U1346	U1-43 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER POWER DEVICES?	24.2	3.7	3.4	6.3	4.7	.0	.0	9.1
U1347	U1-44 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR DEVICES?	25.8	3.7	6.9	6.3	3.8	.0	.0	9.1

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
U1348	U1-45 DO YOU USE FORTRAN PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	2.3
U1349	U1-46 DO YOU USE COBOL PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	4.5
U1350	U1-47 DO YOU USE RPG PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	2.3
U1351	U1-48 DO YOU USE OR PERFORM TASKS ON MICROPROCESSOR BASED EQUIPMENT?	6.1	2.5	3.4	.0	3.8	4.8	1.8	22.7
U1352	U1-49 DO YOU USE INPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	4.5	1.9	.0	.0	1.9	.0	.0	22.7
U1353	U1-50 DO YOU USE OUTPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	1.9	.0	.0	1.9	.0	.0	22.7
U1354	U1-51 DO YOU USE RAM MEMORY CIRCUITS (STATIC OR DYNAMIC) IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	4.3	3.4	.0	3.8	.0	.0	29.5
U1355	U1-52 DO YOU USE ROM MEMORY CIRCUITS (INCLUDES PROM, EPROM, ETC.) IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	3.7	.0	.0	3.8	.0	.0	29.5
U1356	U1-53 DO YOU USE TRI-STATE CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	1.5	.6	.0	.0	.9	.0	.0	22.7
U1357	U1-54 DO YOU USE CLOCK GENERATOR CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.6	3.1	3.4	.0	3.8	.0	.0	27.3
U1358	U1-55 DO YOU USE STATUS LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	4.5	1.9	.0	.0	1.9	.0	.9	20.5
U1359	U1-56 DO YOU USE BIDIRECTIONAL BUFFER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	6.1	1.2	.0	.0	3.8	.0	.9	20.5
U1360	U1-57 DO YOU USE ENCODER/DECODER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	6.1	1.9	.0	.0	2.8	4.8	.0	22.7
U1361	U2-1 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION?	15.2	9.9	.0	.0	47.2	71.4	15.8	38.6
U1362	U2-2 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS?	4.5	2.5	.0	.0	6.6	.0	.0	11.4
U1363	U2-3 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS?	3.0	2.5	.0	.0	5.7	.0	.9	11.4
U1364	U2-4 DO YOU USE VTVM (DB METERS) TO CHECK FOR NOISE OR SIGNAL LEVEL?	21.2	13.7	.0	6.3	54.7	76.2	17.5	31.8
U1365	U2-5 DO YOU USE VTVM (DB METERS) TO CHECK OR ADJUST AUDIO AMPLIFIERS?	16.7	6.2	.0	6.3	43.4	76.2	12.3	25.0
U1366	U2-6 DO YOU USE A HP3550 OR 344A TEST SET TO ALIGN AUDIO EQUIPMENT?	7.6	3.1	.0	.0	47.2	33.3	7.0	2.3

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USE OF EPI PRINTOUT: THE PERCENT OF VARIOUS CAREER LADDER GROUPS RESPONDING TO EPI QUESTIONS IS LISTED TO THE RIGHT OF EACH EPI ITEM. THUS, THE APPROPRIATE SAMPLE CRITERION GROUPS CAN BE IDENTIFIED WITH THE COLUMN HEADINGS AT THE TOP RIGHT OF EACH PRINTOUT PAGE. THEN THE PERCENT OF THAT GROUP USING THE CONCEPT OR PIECE OF EQUIPMENT CAN BE IDENTIFIED.

USE OF EPI DATA: THESE DATA MAY BE USED IN HELPING TO IDENTIFY, DELINEATE, AND VALIDATE ELECTRONIC PRINCIPLES ITEMS IN THE STS. CRITERIA LISTED IN ATCR 52-22 FOR ABR TRAINING MAY BE USEFUL IN HELPING DEVELOP ENTRY-LEVEL ELECTRONIC PRINCIPLE COURSES. ALSO, CDC WRITERS MAY USE EPI DATA TO HELP DETERMINE AREAS TO EMPHASIZE IN 5- AND 7-SKILL LEVEL CDCS, CONSISTENT WITH STS CODES.

FOR ASSISTANCE IN USING PRINTOUTS PHONE USAFOMC/OMYO, AUTOVON 487-5811.

VECTOR TYPE CODES:

(T) = % TIME SPENT BY ALL MEMBERS
(M) = % MEMBERS PERFORMING
(F) = TASK FACTOR
(D) = DICHOTOMOUS SET
(B) = % TIME SPENT BY MEMBERS PERFORMING
(-) = PROGRAM GENERATED VECTOR

NO	TYPE	VECTOR	/MEMBERS/ MEAN	SD	DESCRIPTION	FACTOR #
1	M	306 71	42		DAFSC 30671 AIRMEN	3
2	M	306 72	106		DAFSC 30672 AIRMEN	5
3	M	31670F	3		DAFSC 31670F AIRMEN	7
4	M	31672F	6		DAFSC 31672F AIRMEN	9
5	M	362 71	78		DAFSC 36271 AIRMEN	11
6	M	362 73	15		DAFSC 36273 AIRMEN	13
7	M	362 74	20		DAFSC 36274 AIRMEN	15
8	M	918 70	39		DAFSC 91870 AIRMEN	17

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FOR ASSISTANCE IN USING PRINTOUTS PHONE USAFOMC/OMYO, AUTOVON 487-5811.

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A		MATHEMATICS (A1), DIRECT CURRENT (A2), RESISTANCE AND RESISTIVE CIRCUITS (A3)								
A	1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	66.7	55.7	40.9	83.3	60.3	53.3	32.5	92.7
A	2	A1-2 DO YOU USE PUBLICATIONS, SUCH AS TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB?	52.4	30.2	18.2	66.7	37.2	26.7	26.2	60.0
A	3	A1-3 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS?	35.7	20.8	9.1	66.7	33.3	26.7	11.2	69.1
A	4	A1-4 DO YOU CALCULATE THE SQUARE ROOT OF A QUANITITY?	9.5	8.5	.0	33.3	6.4	.0	.0	27.3
A	5	A1-5 DO YOU SOLVE FOR UNKNOWN QUANTITIES SUCH AS SOLVING FOR X IN THE EQUATION X + 6 = 8?	28.6	17.0	4.5	50.0	25.6	20.0	7.5	60.0
A	6	A1-6 DO YOU USE LOGARITHM TABLES?	7.1	4.7	.0	.0	7.7	.0	.0	20.0
A	7	A1-7 DO YOU SOLVE QUADRATIC EQUATIONS SUCH AS SOLVING FOR X IN THE EQUATION X**2 + 4X + 4 =0?	11.9	2.8	4.5	.0	6.4	6.7	.0	14.5
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	7.1	6.6	.0	.0	2.6	.0	.0	23.6
A	9	A1-9 DO YOU USE TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT?	2.4	3.8	.0	.0	6.4	.0	.0	16.4
A	10	A1-10 DO YOU SOLVE OR USE PROPORTIONS? AN EXAMPLE OF A PROPORTION IS 2 : 5 :: 4 : 10. ANOTHER WAY TO EXPRESS THE SAME RELATIONSHIP IS 2/5 = 4/10. SOMETIMES, ONE OF THE QUANTITIES IS UNKNOWN AND HAS TO BE SOLVED FOR, SUCH AS 2 : X :: 4 : 10 (X IN THIS CASE IS UNKNOWN).	21.4	13.2	13.6	33.3	10.3	13.3	5.0	49.1
A	11	A1-11 DO YOU USE MATHEMATICAL EXPONENTS OR SUBSCRIPTS IN OTHER THAN POWERS OF 10?	31.0	19.8	9.1	16.7	12.8	13.3	7.5	52.7
A	12	A2-1 DO YOU USE (PERHAPS IN TECHNICAL ORDERS) THE TERM VOLTAGE OR VOLT (V)?	88.1	85.8	90.9	100.0	93.6	86.7	82.5	100.0

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 72F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A	13	A2-2 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTROMOTIVE FORCE (EMF)?	31.0	42.5	13.6	33.3	52.6	13.3	23.7	72.9
A	14	A2-3 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM OHM?	83.3	83.0	86.4	100.0	91.0	80.0	78.7	98.2
A	15	A2-4 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ION?	9.5	11.3	13.6	83.3	3.8	.0	1.2	69.1
A	16	A2-5 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM DYNE?	2.4	7.5	.0	33.3	3.8	.0	2.5	25.5
A	17	A2-6 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM AMPERE?	83.3	82.1	63.6	83.3	84.6	66.7	78.7	100.0
A	18	A2-7 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM NEUTRON?	14.3	15.1	.0	33.3	15.4	6.7	7.5	56.4
A	19	A2-8 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM COULOMB?	14.3	11.3	.0	.0	7.7	.0	2.5	45.5
A	20	A2-9 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM PROTON?	14.3	17.0	.0	33.3	14.1	6.7	7.5	50.9
A	21	A2-10 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTRON?	54.8	41.5	13.6	83.3	44.9	20.0	16.2	85.5
A	22	A2-11 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM CURRENT?	85.7	87.7	63.6	100.0	89.7	66.7	81.3	100.0
A	23	A2-12 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	76.2	74.5	63.6	100.0	79.5	60.0	47.5	100.0
A	24	A2-13 DO YOU DETERMINE IF TWO OR MORE BATTERIES MUST BE CONNECTED IN SERIES OR PARALLEL TO ACHIEVE A SPECIFIC VOLTAGE AND/OR CURRENT?	28.6	37.7	18.2	83.3	57.7	40.0	25.0	83.6
A	25	A3-1 DO YOU WORK WITH RESISTORS OR RESISTIVE CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM B1-1; IF YES, CONTINUE.	66.7	59.4	9.1	66.7	64.1	60.0	31.3	81.8
A	26	A3-2 DO YOU INSPECT RESISTORS?	64.3	53.2	4.5	100.0	57.7	73.3	22.5	98.2
A	27	A3-3 DO YOU CLEAN RESISTORS?	50.0	43.4	.0	83.3	39.7	40.0	12.5	87.3
A	28	A3-4 DO YOU ADJUST RESISTORS?	71.4	61.3	4.5	83.3	53.8	73.3	13.7	96.4

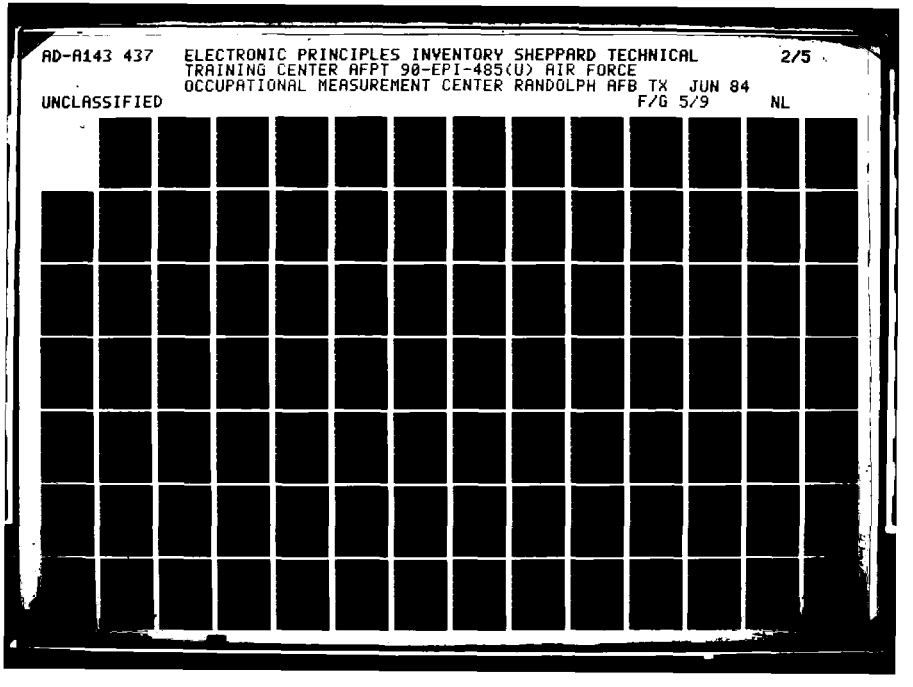
D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A	29	A3-5 DO YOU MEASURE RESISTORS?	69.0	66.0	9.1	100.0	61.5	66.7	25.0	98.2
A	30	A3-6 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASK YOU PERFORM?	28.6	17.0	.0	33.3	16.7	20.0	3.7	61.8
A	31	A3-7 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY CARBON?	54.8	38.7	4.5	66.7	41.0	53.3	11.2	89.1
A	32	A3-8 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED WIRE?	54.8	51.9	9.1	83.3	53.8	73.3	26.2	87.3
A	33	A3-9 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY SLIDE TAP?	38.1	39.6	.0	66.7	30.8	66.7	10.0	90.9
A	34	A3-10 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY RHEOSTAT?	54.8	57.5	9.1	83.3	57.7	73.3	26.2	94.5
A	35	A3-11 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY POTENTIOMETER?	71.4	60.4	9.1	83.3	57.7	80.0	30.0	96.4
A	36	A3-12 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED FILM?	26.2	17.9	4.5	66.7	19.2	40.0	3.7	69.1
A	37	A3-13 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE?	66.7	62.3	9.1	100.0	57.7	66.7	22.5	98.2
A	38	A3-14 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE?	66.7	53.8	9.1	83.3	53.8	46.7	13.7	96.4
A	39	A3-15 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE?	26.2	14.2	4.5	66.7	21.8	6.7	5.0	30.9
A	40	A3-16 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES?	73.8	66.0	13.6	100.0	64.1	80.0	42.5	92.7
A	41	A3-17 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	57.1	49.1	13.6	83.3	56.4	40.0	33.7	90.9
A	42	A3-18 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	57.1	47.2	13.6	83.3	51.3	40.0	31.3	87.3
A	43	A3-19 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	52.4	48.1	13.6	83.3	47.4	46.7	27.5	96.4

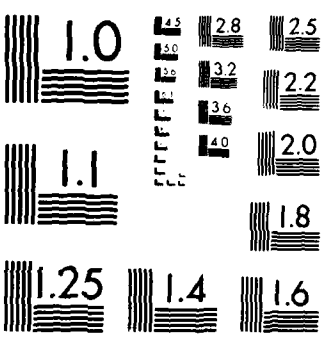
D	TSK	TITLE	304 71 (M)	306 72 (M)	716 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A	44	A3-20 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	50.0	33.0	4.5	66.7	41.0	20.0	16.2	76.4
A	45	A3-21 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	52.4	48.1	13.6	83.3	50.6	46.7	32.5	90.9
A	46	A3-22 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	52.4	47.2	13.6	83.3	46.2	40.0	28.7	89.1
A	47	A3-23 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.9	48.1	13.6	83.3	38.5	46.7	25.0	94.5
A	48	A3-24 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.9	45.3	13.6	83.3	39.7	26.7	22.5	90.9
A	49	A3-25 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.9	30.2	4.5	66.7	30.9	13.3	16.2	76.4
A	50	A3-26 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	50.0	44.3	9.1	83.3	47.4	40.0	31.2	87.3
A	51	A3-27 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	50.0	41.5	13.6	83.3	44.2	33.3	28.7	85.5
A	52	A3-28 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	47.6	41.4	9.1	83.3	43.7	26.7	23.5	94.5
A	53	A3-29 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	47.6	41.5	13.6	83.3	39.7	26.7	21.2	87.3
A	54	A3-30 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	42.9	26.9	4.5	66.7	32.3	6.7	13.2	78.2
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	50.0	37.9	9.1	83.3	44.2	33.3	30.0	83.6
A	56	A3-32 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	47.6	44.0	9.1	83.3	43.6	26.7	21.2	81.8
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.2	35.8	9.1	83.3	38.6	13.3	17.5	90.9

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PAPALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	40.5	32.1	9.1	83.3	35.9	20.0	17.5	83.6
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	38.1	23.6	4.5	66.7	29.5	13.3	11.2	72.7
B		METERS/MULTIMETERS (B1), ALTERNATING CURRENT (AC) (B2), INDUCTORS AND INDUCTIVE REACTANCE (B3)								
B	60	B1-1 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE RESISTANCE?	78.6	73.6	68.2	100.0	82.1	73.3	62.5	98.2
B	61	B1-2 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE VOLTAGE?	78.6	74.5	77.3	100.0	82.1	73.3	70.0	96.4
B	62	B1-3 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE CURRENT?	57.1	67.9	50.0	83.3	70.5	40.0	47.5	92.7
B	63	B1-4 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE POWER?	31.0	27.4	40.9	50.0	41.0	20.0	31.3	70.9
B	64	B1-5 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE FREQUENCY?	69.0	39.6	36.4	83.3	67.9	53.3	16.2	92.7
B	65	B1-6 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE TEMPERATURE?	26.2	3.8	50.0	83.3	30.8	6.7	2.5	81.8
B	66	B1-7 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE PRESSURE?	23.8	5.7	54.5	83.3	23.1	.0	3.7	72.7
B	67	B1-8 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE LIGHT LEVELS?	11.9	.9	4.5	33.3	5.1	.0	1.2	58.2
B	68	B2-1 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM EFFECTIVE VOLTAGE (RMS) IN YOUR PRESENT JOB?	64.3	47.2	9.1	66.7	35.9	66.7	13.7	89.1

								326	362	918
								(M)	(M)	(M)
6	77	B2+2	)	YOU			TASKS CURRENT (AC)	55.0	46.7	92.7
							ENT (AC)	57.1	57.1	91.8
	71	B2+4	)	YOU			TASKS CURRENT (AC)	32.7	46.7	79.2
2	73	B2+5	)	YOU			RATING CURRENT (AC)	64.7	46.7	94.5
3	77	B2+6	)	YOU			ITEMS CURRENT (AC)	19.3	6.7	47.2
4	74	B2+7	)	DO			TESTING CURRENT (AC)	47.6	6.7	58.3
5		B2+1	)	DO			CIRCUITS CONTAINING	47.6	13.3	0.0
								61.0		
								33.3		
								22.6		
								11.9		
								7.1		
								2.3		
								2.3		
								2.3		
								2.3		
								2.3		
6								2.3		
7		B2+13	)	DO				2.3		

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
B	87	B3-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE?	.0	7.5	.0	.0	11.5	.0	3.7	21.8
B	88	B3-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH?	2.4	9.4	.0	.0	9.0	.0	2.5	20.0
B	89	B3-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMABILITY OF THE CORE MATERIAL?	2.4	7.5	.0	.0	11.5	.0	2.5	16.4
B	90	B3-16 DO YOU CALCULATE INDUCTANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	7.1	11.3	.0	33.3	10.3	.0	2.5	27.3
B	91	B3-17 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS?	16.7	15.1	.0	50.0	20.5	.0	3.7	49.1
B	92	B3-18 DO YOU CALCULATE INDUCTIVE REACTANCE?	4.8	10.4	.0	16.7	11.5	.0	2.5	25.5
B	93	B3-19 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTAIONAL TO FREQUENCY?	16.7	11.3	.0	16.7	15.4	.0	2.5	38.2
B	94	B3-20 DO YOU WORK WITH POWER INDUCTORS?	40.5	20.8	.0	33.3	16.7	13.3	3.7	52.7
B	95	B3-21 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS?	28.6	8.5	.0	16.7	20.5	20.0	7.5	49.1
B	96	B3-22 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS?	28.6	9.4	.0	16.7	5.1	6.7	1.2	49.1
C		CAPACITORS AND CAPACITIVE REACTANCE (C1), TRANSFORMERS (C2), MAGNETISM (C3)								
C	97	C1-1 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C2-1; IF YES, CONTINUE.	73.8	60.4	22.7	100.0	65.4	66.7	36.2	94.5
C	98	C1-2 DO YOU INSPECT CAPACITORS?	61.9	53.8	9.1	100.0	56.4	73.3	21.2	96.4
C	99	C1-3 DO YOU CLEAN CAPACITORS?	45.2	39.6	.0	83.3	38.5	46.7	8.7	63.6


AD-A143 437
ELECTRONIC PRINCIPLES INVENTORY SHEPPARD TECHNICAL TRAINING CENTER AFPT 90-EPI-485(U) AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX JUN 84
2/5
UNCLASSIFIED
F/G 5/9
NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
C	100	C1-4 DO YOU ADJUST CAPACITORS?	26.2	18.9	.0	66.7	12.6	13.3	1.2	8[illegible].6
C	101	C1-5 DO YOU TEST CAPACITORS?	54.8	52.8	.0	66.7	55.1	66.7	18.8	8[illegible].1
C	102	C1-6 DO YOU DISCHARGE CAPACITORS?	69.0	52.8	4.5	66.7	50.0	66.7	20.0	94.5
C	103	C1-7 DO YOU MEASURE CAPACITORS?	33.3	48.1	9.1	66.7	38.5	26.7	12.5	74.5
C	104	C1-8 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE?	4.8	8.5	.0	66.7	20.5	.0	1.2	29.1
C	105	C1-9 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC?	2.4	4.7	.0	16.7	9.0	.0	.0	5.5
C	106	C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS?	64.3	52.8	.0	100.0	52.6	40.0	17.5	83.6
C	107	C1-11 DO YOU USE OR REFER TO CAPACITANCE?	64.3	49.1	4.5	100.0	55.1	46.7	27.5	87.3
C	108	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT?	7.1	11.3	.0	33.3	12.8	.0	2.5	23.6
C	109	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS?	57.1	42.5	9.1	83.3	39.7	60.0	16.2	89.1
C	110	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE?	28.6	20.8	.0	83.3	29.5	6.7	6.3	52.7
C	111	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES?	28.6	13.2	.0	66.7	26.9	6.7	6.3	36.4
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	78.6	63.2	9.1	100.0	65.4	73.3	28.7	96.4
C	113	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	78.6	58.5	9.1	100.0	39.7	53.3	28.7	96.4
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	64.3	52.8	13.6	100.0	43.6	60.0	26.2	96.4
C	115	C1-19 DO YOU CALCULATE CAPACITANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	16.7	8.5	.0	33.3	17.9	.0	6.3	30.9
C	116	C1-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT?	7.1	10.4	.0	33.3	14.1	.0	2.5	25.5
C	117	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS?	4.8	6.6	.0	16.7	10.3	.0	1.2	20.0
C	118	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO?	33.3	34.0	9.1	50.0	28.2	26.7	16.2	63.6

O	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
C	141	C2-16 DO YOU WORK WITH SATURABLE CORE TRANSFORMERS?	7.1	1.9	.0	33.3	10.3	.0	.0	40.0
C	142	C2-17 DO YOU WORK WITH SENSING TRANSFORMERS?	4.8	2.8	4.5	33.3	6.4	.0	.0	43.6
C	143	C2-18 DO YOU WORK WITH CONTROL TRANSFORMERS?	11.9	7.5	9.1	50.0	11.5	.0	.0	63.6
C	144	C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE?	59.5	47.2	4.5	100.0	30.8	46.7	10.0	81.8
C	145	C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE?	54.8	45.3	4.5	100.0	28.2	33.3	10.0	76.4
C	146	C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES?	52.4	43.4	13.6	100.0	25.6	46.7	6.3	87.3
C	147	C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	11.9	22.6	.0	33.3	16.7	26.7	2.5	47.3
C	148	C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	21.4	35.8	4.5	50.0	21.8	20.0	3.7	76.4
C	149	C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS?	73.8	50.0	22.7	100.0	35.9	46.7	17.5	89.1
C	150	C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS?	69.0	45.3	9.1	100.0	26.9	46.7	8.7	85.5
C	151	C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	69.0	45.3	9.1	100.0	30.8	33.3	10.0	85.5
C	152	C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	73.8	50.0	4.5	100.0	32.1	46.7	12.5	89.1
C	153	C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	38.1	19.8	4.5	66.7	20.5	20.0	10.0	65.5
C	154	C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	52.4	26.4	4.5	83.3	23.1	33.3	10.0	76.4
C	155	C2-30 DO YOU REFER TO VARIABLE TRANSFORMER SCHEMATIC SYMBOLS?	23.8	28.3	4.5	100.0	23.1	26.7	6.3	78.2
C	156	C2-31 DO YOU REFER TO COMBINATIONS OF SCHEMATIC SYMBOLS FOR TRANSFORMERS?	61.9	34.9	4.5	100.0	26.9	20.0	8.7	76.4

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
C	157	C2-32 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS?	28.6	17.0	9.1	50.0	15.4	6.7	3.7	65.5
C	158	C2-33 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH?	31.0	14.2	.0	66.7	15.4	13.3	6.3	30.9
C	159	C2-34 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO?	14.3	16.0	.0	33.3	14.1	6.7	2.5	54.5
C	160	C2-35 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS?	28.6	30.2	4.5	66.7	24.4	33.3	7.5	74.5
C	161	C2-36 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	9.5	11.3	.0	.0	9.0	13.3	1.2	41.8
C	162	C2-37 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	9.5	8.5	.0	.0	3.8	.0	1.2	29.1
C	163	C2-38 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS?	19.0	7.5	18.2	100.0	14.1	.0	1.2	78.2
C	164	C2-39 DO YOU INSPECT THREE PHASE TRANSFORMERS?	16.7	4.7	13.6	66.7	14.1	.0	.0	72.7
C	165	C2-40 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS?	14.3	4.7	.0	33.3	6.4	.0	.0	43.6
C	166	C2-41 DO YOU ADJUST THREE PHASE TRANSFORMERS?	7.1	3.8	4.5	16.7	7.7	6.7	.0	36.4
C	167	C2-42 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS?	19.0	4.7	18.2	100.0	12.8	6.7	.0	67.3
C	168	C3-1 DO YOU USE OR REFER TO PERMANENT MAGNETS?	31.0	37.7	4.5	50.0	28.2	6.7	27.5	61.8
C	169	C3-2 DO YOU USE OR REFER TO TEMPORARY MAGNETS?	33.3	33.0	4.5	33.3	38.5	6.7	7.5	45.5
C	170	C3-3 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS?	7.1	14.2	.0	.0	20.5	.0	2.5	25.5
C	171	C3-4 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS?	9.5	12.3	.0	.0	19.2	.0	2.5	23.6
C	172	C3-5 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS?	11.9	12.3	.0	16.7	15.4	.0	2.5	29.1
C	173	C3-6 DO YOU USE OR REFER TO RESIDUAL MAGNETISM?	19.0	27.4	.0	.0	61.5	13.3	1.2	29.1
C	174	C3-7 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX?	26.2	24.5	9.1	16.7	28.2	.0	12.5	40.0

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
C	175	C3-8 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM?	7.1	3.8	.0	.0	7.7	.0	1.2	18.2
C	176	C3-9 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM?	7.1	3.8	.0	.0	6.4	.0	1.2	16.4
C	177	C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION?	26.2	20.8	4.5	16.7	32.1	6.7	20.0	40.0
C	178	C3-11 DO YOU USE OR REFER TO FLUX DENSITY?	14.3	7.5	.0	16.7	10.3	.0	.0	27.3
C	179	C3-12 DO YOU USE OR REFER TO SATURABLE REACTANCE?	7.1	2.8	.0	33.3	10.3	.0	.0	20.0
D		RCL CIRCUITS (D1), TIME CONSTANTS (D2), FILTERS (D3)								
D	180	D1-1 DO YOU WORK WITH RC, LR, OR RCL CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM D2-1; IF YES, CONTINUE.	47.6	17.0	4.5	33.3	17.9	6.7	6.3	67.3
D	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	9.5	6.6	.0	.0	2.6	.0	.0	25.5
D	182	D1-3 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	9.5	7.5	.0	.0	2.6	.0	.0	16.4
D	183	D1-4 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS?	9.5	5.7	.0	.0	5.1	13.3	.0	14.5
D	184	D1-5 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS?	11.9	4.7	.0	.0	3.8	13.3	.0	12.7
D	185	D1-6 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS?	11.9	5.7	.0	.0	3.8	6.7	.0	12.7
D	186	D1-7 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	19.0	7.5	.0	.0	16.7	6.7	7.7	56.4
D	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	7.1	8.5	.0	16.7	6.4	6.7	1.2	32.7
D	188	D1-9 DO YOU USE OR REFER TO MAXIMUM POWER (P SUB M) WHEN WORKING WITH RCL CIRCUITS?	9.5	7.5	.0	16.7	5.1	6.7	1.2	32.7
D	189	D1-10 DO YOU USE OR REFER TO AVERAGE POWER (P SUB AVE) WHEN WORKING WITH RCL CIRCUITS?	11.9	6.6	.0	16.7	7.7	.0	1.2	30.9

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D	190	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	4.8	6.6	.0	16.7	3.8	.0	1.2	23.6
D	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	9.5	7.5	.0	16.7	5.1	.0	1.2	27.3
D	192	D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	21.4	7.5	.0	16.7	10.3	6.7	1.2	49.1
D	193	D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS?	21.4	8.5	.0	16.7	7.7	6.7	1.2	47.3
D	194	D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS?	16.7	8.5	.0	16.7	7.7	6.7	.0	38.2
D	195	D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS?	16.7	8.5	.0	16.7	7.7	6.7	.0	54.5
D	196	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS?	4.8	5.7	.0	16.7	2.6	6.7	.0	27.3
D	197	D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS?	21.4	6.6	.0	16.7	6.4	.0	.0	38.2
D	198	D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS?	9.5	5.7	.0	.0	5.1	.0	.0	23.6
D	199	D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	33.3	11.3	.0	16.7	7.7	6.7	1.2	50.9
D	200	D1-21 DO YOU DETERMINE VALUES OR TRIGONOMETRIC FUNCTIONS USING FORMULAS SUCH AS: SINE OF AND ANGLE = OPPOSITE SIDE/ HYPOTENUSE?	9.5	3.8	.0	.0	2.6	.0	1.2	10.9
D	201	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS?	11.9	5.7	.0	.0	5.1	.0	.0	18.2
D	202	D1-23 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS?	16.7	7.5	.0	16.7	9.0	6.7	2.5	21.8
D	203	D1-24 DO YOU USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS?	11.9	5.7	.0	16.7	3.8	.0	2.5	21.8
D	204	D1-25 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS?	14.3	7.5	.0	16.7	7.7	.0	1.2	23.6

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
D	205	D1-26 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS?	7.1	5.7	.0	.0	2.6	.0	.0	14.5
D	206	D1-27 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) FOR SERIES RCL CIRCUITS?	7.1	6.6	.0	.0	3.8	.0	.0	21.8
D	207	D1-28 DO YOU USE OR REFER TO TRUE POWER (P SUB T) FOR SERIES RCL CIRCUITS?	7.1	7.5	.0	.0	5.1	6.7	.0	27.3
D	208	D1-29 DO YOU USE OR REFER TO POWER FACTORS (PF) FOR SERIES RCL CIRCUITS?	7.1	6.6	.0	.0	5.1	.0	1.2	21.8
D	209	D1-30 DO YOU USE OR REFER TO TOTAL CURRENT FOR PARALLEL RCL CIRCUITS?	16.7	8.5	.0	33.3	9.0	6.7	1.2	30.9
D	210	D1-31 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS?	7.1	6.6	.0	16.7	1.3	.0	1.2	12.7
D	211	D1-32 DO YOU USE THE ASSUMED VOLTAGE METHOD FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	14.3	2.8	.0	16.7	.0	6.7	1.2	16.4
D	212	D1-33 DO YOU USE OHM'S LAW FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	16.7	7.5	.0	33.3	14.1	6.7	1.2	32.7
D	213	D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS?	45.2	18.9	.0	50.0	16.7	13.3	5.0	67.3
D	214	D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION?	23.8	6.6	.0	16.7	10.3	6.7	1.2	52.7
D	215	D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS?	40.5	17.9	.0	50.0	15.4	13.3	2.5	58.2
D	216	D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION?	23.8	6.6	.0	16.7	10.3	.0	1.2	43.6
D	217	D1-38 DO YOU CHECK RESISTORS USING OHMMETERS?	42.9	20.8	.0	66.7	16.7	13.3	5.0	69.1
D	218	D1-39 DO YOU CHECK RESISTORS USING SUBSTITUTION?	23.8	7.5	.0	16.7	10.3	6.7	1.2	49.1
D	219	D1-40 DO YOU USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (P SUB A) = TRUE POWER (P SUB T) FOR RESONANT CIRCUITS?	2.4	5.7	.0	.0	1.3	.0	1.2	14.5
D	220	D1-41 DO YOU USE OR REFER TO RESONANT FREQUENCIES FOR RCL CIRCUITS?	14.3	8.5	.0	.0	6.4	20.0	1.2	40.0
D	221	D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS?	14.3	5.7	.0	.0	7.7	.0	1.2	27.3

SHEPPARD ELECTRONIC PRINCIPLES INVENTOPY DATA — FCPT02 PAGE 84 — OCCUPATIONAL ANALYSIS PROGRAM USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
D 222	D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS?	14.3	7.5	.0	.0	6.4	.0	1.2	23.6
D 223	D1-44 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 OF THE PEAK CURRENT VALUE?	7.1	3.8	.0	.0	5.1	.0	1.2	30.9
D 224	D1-45 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE COIL (Q)?	9.5	4.7	.0	.0	3.8	.0	2.5	14.5
D 225	D1-46 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS?	14.3	5.7	.0	.0	2.6	.0	1.2	25.5
D 226	D2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS? IF NO, GO TO ITEM D3-1; IF YES, CONTINUE.	26.2	7.5	4.5	.0	2.6	.0	.0	38.2
D 227	D2-2 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)?	21.4	6.6	.0	16.7	2.6	.0	.0	25.5
D 228	D2-3 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS?	9.5	5.7	.0	.0	2.6	.0	.0	12.7
D 229	D2-4 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS?	9.5	7.5	.0	16.7	1.3	.0	.0	18.2
D 230	D2-5 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS?	7.1	6.6	.0	16.7	2.6	6.7	.0	14.5
D 231	D2-6 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES?	4.8	4.7	.0	16.7	1.3	.0	.0	18.2
D 232	D2-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS?	7.1	5.7	.0	16.7	1.3	.0	.0	16.4

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
D	233	D3-1 DO YOU WOPK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM E1-1; IF YES, CONTINUE.	64.3	27.4	9.1	50.0	17.9	60.0	13.7	65.5
D	234	D3-2 DO YOU INSPECT FILTER CIRCUITS?	52.4	24.5	.0	50.0	11.5	53.3	7.5	63.6
D	235	D3-3 DO YOU CLEAN FILTER CIRCUITS?	47.6	16.0	.0	33.3	10.3	33.3	3.7	36.4
D	236	D3-4 DO YOU ALIGN OR ADJUST FILTER CIRCUITS?	21.4	10.4	.0	33.3	10.3	13.3	2.5	54.5
D	237	D3-5 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL?	47.6	21.7	4.5	50.0	12.8	40.0	6.3	60.0
D	238	D3-6 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF FILTER CIRCUITS?	45..	19.8	.0	50.0	9.0	33.3	3.7	61.8
D	239	D3-7 DO YOU WORK WITH LOW PASS FILTERS?	52.4	15.1	.0	50.0	11.5	46.7	3.7	63.6
D	240	D3-8 DO YOU WORK WITH HIGH PASS FILTERS?	45.2	9.4	.0	50.0	11.5	46.7	1.2	63.6
D	241	D3-9 DO YOU WORK WITH BANDPASS FILTERS?	38.1	9.4	.0	16.7	10.3	13.3	3.7	58.2
D	242	D3-10 DO YOU WORK WITH BAND-REJECT FILTERS?	28.6	4.7	.0	16.7	6.4	.0	1.2	40.0
D	243	D3-11 DO YOU WORK WITH FILTERS BUT DON'T REMEMBER WHICH TYPE?	14.3	6.6	4.5	16.7	3.8	6.7	6.3	20.0
D	244	D3-12 DO YOU WORK WITH L-SECTION FILTER CONFIGURATIONS?	42.9	12.3	4.5	16.7	7.7	.0	2.5	47.3
D	245	D3-13 DO YOU WORK WITH T-SECTION FILTER CONFIGURATIONS?	42.9	10.4	.0	16.7	7.7	13.3	1.2	43.6
D	246	D3-14 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATIONS?	40.5	11.3	.0	16.7	6.4	6.7	2.5	49.1
D	247	D3-15 DO YOU WORK WITH YTTRIUM IRON GARNET (YIG) FILTERS?	7.1	.0	.0	.0	.0	6.7	.0	.0
D	248	D3-16 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS?	7.1	1.9	.0	.0	2.6	.0	1.2	9.1
E		COUPLING (E1), SOLDERING OR SOLDERLESS CONNECTIONS(E2), RELAYS (E3)								
E	249	E1-1 DO YOU WORK WITH COUPLING DEVICES OR CIRCUITRY IN YOUR PRESENT JOB? IF NO, GO TO ITEM E2-1; IF YES, CONTINUE.	52.4	21.7	9.1	16.7	14.1	26.7	7.5	69.1

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
E	250	E1-2 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING?	45.2	17.9	4.5	33.3	11.5	6.7	3.7	78.2
E	251	E1-3 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING (MATCHING)?	38.1	15.1	4.5	16.7	12.8	26.7	7.5	69.1
E	252	E1-4 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH OPTICAL COUPLING?	19.0	11.3	.0	16.7	1.3	.0	.0	60.0
E	253	E1-5 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING?	35.7	16.0	.0	33.3	14.1	13.3	6.3	74.5
E	254	E1-6 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING?	42.9	13.2	4.5	16.7	11.5	13.3	3.7	78.2
E	255	E1-7 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING?	38.1	10.4	4.5	16.7	14.1	33.3	7.5	69.1
E	256	E1-8 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING?	31.0	11.3	.0	33.3	14.1	13.3	7.5	74.5
E	257	E1-9 DO YOU WORK WITH DIRECT COUPLED CIRCUITS?	42.9	19.8	.0	33.3	15.4	13.3	3.7	78.2
E	258	E1-10 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS?	42.9	17.9	4.5	33.3	11.5	6.7	2.5	76.4
E	259	E1-11 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS?	28.6	12.3	4.5	.0	12.8	6.7	2.5	70.9
E	260	E1-12 DO YOU WORK WITH OPTICAL COUPLING?	16.7	9.4	.0	.0	1.3	.0	.0	60.0
E	261	E1-13 DO YOU WORK WITH OPTICAL COUPLING CIRCUITS?	16.7	9.4	.0	.0	1.3	.0	.0	61.8
E	262	E1-14 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS?	31.0	16.0	.0	33.3	14.1	13.3	6.3	74.5
E	263	E2-1 IN YOUR PRESENT JOB, DO YOU CONNECT ELECTRONIC CIRCUITS USING SOLDERLESS CONNECTIONS OR SOLDERING TECHNIQUES? IF NO, GO TO ITEM E3-1; IF YES, CONTINUE.	66.7	58.5	18.2	83.3	74.4	66.7	47.5	90.9
E	264	E2-2 DO YOU SOLDER CONNECTIONS?	66.7	61.3	4.5	83.3	79.5	66.7	56.3	92.7
E	265	E2-3 DO YOU DESOLDER CONNECTIONS?	66.7	60.4	4.5	83.3	79.5	66.7	56.3	92.7

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E	266 E2-4	DO YOU PERFORM HIGH RELIABILITY SOLDERING?	64.3	48.1	.0	66.7	53.8	26.7	22.5	70.9
E	267 E2-5	DO YOU INSPECT SOLDERED CONNECTIONS?	66.7	60.4	4.5	83.3	78.2	66.7	55.0	92.7
E	268 E2-6	DO YOU CLEAN OR TIN CONNECTIONS?	66.7	61.3	4.5	83.3	76.9	66.7	47.5	92.7
E	269 E2-7	DO YOU MAKE HARDWIRE CONNECTIONS?	64.3	59.4	4.5	83.3	75.6	60.0	56.3	90.9
E	270 E2-8	DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS?	64.3	55.7	9.1	83.3	52.6	60.0	17.5	92.7
E	271 E2-9	DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS?	64.3	59.4	4.5	83.3	66.7	66.7	17.5	92.7
E	272 E2-10	DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS?	64.3	58.5	4.5	83.3	55.1	53.3	12.5	92.7
E	273 E2-11	DO YOU SOLDER ACTIVE COMPONENTS, SUCH AS INTEGRATED CIRCUITS?	64.3	41.5	4.5	33.3	32.1	6.7	7.5	89.1
E	274 E2-12	DO YOU PERFORM WIRE WRAPPING IN LIEU OF SOLDERING?	57.1	19.8	4.5	33.3	75.6	33.3	53.7	40.0
E	275 E2-13	DO YOU PERFORM CRIMPING IN LIEU OF SOLDERING?	57.1	39.6	9.1	83.3	38.5	20.0	38.7	74.5
E	276 E2-14	DO YOU PERFORM WIRE CONNECTIONS USING A 714 PUNCH-ON TOOL IN LIEU OF SOLDERING?	16.7	7.5	.0	.0	41.0	6.7	58.7	14.5
E	277 E3-1	DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB? IF NO, GO TO ITEM F1-1; IF YES, CONTINUE.	59.5	38.7	45.5	100.0	78.2	80.0	55.0	92.7
E	278 E3-2	DO YOU ADJUST RELAYS?	26.2	22.6	4.5	66.7	76.9	66.7	47.5	78.2
E	279 E3-3	DO YOU CLEAN RELAYS?	45.2	31.1	4.5	83.3	76.9	73.3	58.7	89.1
E	280 E3-4	DO YOU INSPECT RELAYS?	52.4	34.9	18.2	100.0	75.6	73.3	60.0	96.4
E	281 E3-5	DO YOU TROUBLESHOOT RELAYS?	52.4	33.0	45.5	100.0	76.9	66.7	61.2	94.5
E	282 E3-6	DO YOU MONITOR BIAS OUTPUT ON RELAYS?	14.3	14.2	9.1	50.0	26.9	20.0	12.5	27.3
E	283 E3-7	DO YOU REMOVE OR REPLACE RELAYS?	54.8	37.7	9.1	83.3	71.8	73.3	48.7	94.5
E	284 E3-8	DO YOU PERFORM TASKS ON CONTACTS OF RELAYS?	50.0	28.3	13.6	100.0	76.9	73.3	52.5	92.7
E	285 E3-9	DO YOU PERFORM TASKS ON CORES OF RELAYS?	7.1	16.0	4.5	16.7	56.4	33.3	10.0	52.7
E	286 E3-10	DO YOU PERFORM TASKS ON COILS OF RELAYS?	19.0	17.9	4.5	16.7	65.4	33.3	11.2	72.7
E	287 E3-11	DO YOU PERFORM TASKS ON ARMATURES OF RELAYS?	33.3	31.1	4.5	50.0	75.6	53.3	26.2	63.6
E	288 E3-12	DO YOU PERFORM TASKS ON SPRINGS OF RELAYS?	31.0	28.3	4.5	50.0	78.2	46.7	38.7	83.6
E	289 E3-13	DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS?	54.8	33.0	40.9	100.0	59.0	60.0	48.7	94.5

O	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
E	290	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS?	54.8	33.0	40.9	100.0	59.0	60.0	48.7	94.5
E	291	E3-15 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS?	52.4	28.3	36.4	100.0	55.1	53.3	45.0	94.5
E	292	E3-16 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS?	52.4	26.4	36.4	100.0	53.8	53.3	42.5	94.5
E	293	E3-17 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS?	57.1	28.3	36.4	83.3	67.9	40.0	45.0	94.5
E	294	E3-18 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE?	50.0	37.7	9.1	100.0	70.5	53.3	36.2	87.3
F		MICROPHONES AND SENSING DEVICES (F1), SPEAKERS (F2), OSCILLOSCOPES (F3)								
F	295	F1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES OR OTHER SENSING DEVICES SUCH AS TRANSDUCERS? IF NO, GO TO ITEM F2-1; IF YES, CONTINUE.	7.1	5.7	45.5	33.3	19.2	66.7	11.2	61.8
F	296	F1-2 DO YOU INSPECT MICROPHONES?	2.4	3.8	18.2	.0	12.8	66.7	6.3	38.2
F	297	F1-3 DO YOU CLEAN MICROPHONES?	.0	1.9	13.6	.0	11.5	40.0	3.7	30.9
F	298	F1-4 DO YOU OPERATE MICROPHONES?	4.8	1.9	45.5	.0	14.1	53.3	10.0	32.7
F	299	F1-5 DO YOU TROUBLESHOOT MICROPHONES WIRE CONNECTIONS?	2.4	2.8	4.5	.0	15.4	53.3	7.5	38.2
F	300	F1-6 DO YOU TROUBLESHOOT MICROPHONE COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	.0	2.8	4.5	.0	9.0	26.7	1.2	32.7
F	301	F1-7 DO YOU REMOVE AND REPLACE COMPLETE MICROPHONES?	2.4	1.9	13.6	.0	16.7	53.3	8.7	40.0
F	302	F1-8 DO YOU REMOVE OR REPLACE MICROPHONE COMPONENT PARTS?	.0	2.8	.0	.0	9.0	26.7	2.5	29.1
F	303	F1-9 DO YOU PERFORM TASKS ON CARBON MICROPHONES?	4.8	2.8	18.2	.0	14.1	60.0	10.0	23.6
F	304	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES?	.0	2.8	4.5	.0	5.1	13.3	2.5	16.4
F	305	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES?	2.4	1.9	9.1	.0	5.1	.0	2.5	25.5
F	306	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES?	4.8	1.9	18.2	.0	7.7	20.0	5.0	21.8
F	307	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES?	.0	1.9	4.5	.0	2.6	.0	.0	3.6

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F	308	F1-14 DO YOU PERFORM TASKS ON TRANSDUCERS?	2.4	.0	9.1	33.3	5.1	6.7	2.5	53.6
F	309	F2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS? IF NO, GO TO ITEM F3-1; IF YES, CONTINUE.	21.4	7.5	36.4	16.7	20.5	60.0	33.7	67.8
F	310	F2-2 DO YOU INSPECT SPEAKERS?	21.4	4.7	18.2	16.7	16.7	53.3	32.5	65.5
F	311	F2-3 DO YOU CLEAN SPEAKERS?	16.7	2.8	9.1	16.7	15.4	46.7	21.2	50.9
F	312	F2-4 DO YOU OPERATE SPEAKERS?	21.4	3.8	45.5	16.7	17.9	40.0	28.7	58.2
F	313	F2-5 DO YOU TROUBLESHOOT SPEAKER WIRE CONNECTIONS?	16.7	3.8	13.6	16.7	17.9	53.3	32.5	67.3
F	314	F2-6 DO YOU TROUBLESHOOT SPEAKER COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	4.8	1.9	13.6	.0	11.5	40.0	13.7	50.9
F	315	F2-7 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS?	19.0	3.8	.0	16.7	16.7	46.7	32.5	67.3
F	316	F2-8 DO YOU REMOVE OR REPLACE SPEAKER PARTS?	2.4	.9	.0	.0	7.7	33.3	7.5	27.3
F	317	F2-9 DO YOU PERFORM ANY TASKS ON CONE SPEAKER PARTS?	.0	.9	.0	.0	2.6	.0	2.5	5.5
F	318	F2-10 DO YOU PERFORM ANY TASKS ON SPIDER SPEAKER PARTS?	.0	.0	.0	.0	2.6	.0	1.2	3.6
F	319	F2-11 DO YOU PERFORM ANY TASKS ON FIELD COIL SPEAKER PARTS?	.0	.9	.0	.0	3.8	6.7	2.5	14.5
F	320	F2-12 DO YOU PERFORM ANY TASKS ON VOICE COIL SPEAKER PARTS?	.0	.9	.0	.0	3.8	6.7	2.5	10.9
F	321	F2-13 DO YOU PERFORM ANY TASKS ON PERMANENT MAGNET SPEAKER PARTS?	.0	1.9	.0	.0	3.8	13.3	2.5	12.7
F	322	F2-14 DO YOU PERFORM ANY TASKS ON ELECTROMAGNET SPEAKER PARTS?	.0	1.9	.0	.0	3.8	13.3	2.5	10.9
F	323	F2-15 DO YOU PERFORM ANY TASKS ON SOFT IRON CORE SPEAKER PARTS?	.0	.9	.0	.0	2.6	.0	2.5	7.3
F	324	F3-1 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G1-1; IF YES, CONTINUE.	21.0	69.2	.0	100.0	41.0	66.7	6.3	94.5
F	325	F3-2 DO YOU PERFORM OPERATIONAL CHECKS USING OSCILLOSCOPES?	71.4	56.6	.0	100.0	34.6	66.7	3.7	92.7
F	326	F3-3 DO YOU PERFORM ALIGNMENTS OR ADJUSTMENTS USING OSCILLOSCOPES?	64.3	56.6	.0	100.0	33.3	66.7	3.0	92.7
F	327	F3-4 DO YOU TROUBLESHOOT ELECTRONIC CIRCUITS USING OSCILLOSCOPES?	69.0	58.5	.0	66.7	34.6	66.7	3.7	94.5
F	328	F3-5 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCIES?	42.9	35.8	.0	100.0	30.8	60.0	3.7	92.7
F	329	F3-6 DO YOU USE OSCILLOSCOPES TO MEASURE TIME?	52.4	32.1	.0	83.3	29.2	60.0	1.2	90.9

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F	330	F3-7 DO YOU USE OSCILLOSCOPES TO OBSERVE LISSAJOUS PATTERNS?	52.4	10.4	.0	50.0	2.6	.0	.0	32.7
F	331	F3-8 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES.	69.0	34.0	.0	66.7	28.2	13.3	1.2	90.9
F	332	F3-9 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS?	23.8	17.9	.0	66.7	12.8	6.7	.0	58.2
F	333	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGES?	69.0	54.7	.0	100.0	29.5	60.0	3.7	94.5
F	334	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGES?	71.4	60.4	.0	100.0	32.1	53.3	3.7	94.5
F	335	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS?	42.9	38.7	.0	100.0	17.9	40.0	2.5	87.3
F	336	F3-13 DO YOU USE OSCILLOSCOPES TO OBSERVE DATA PATTERNS?	73.8	55.7	.0	66.7	24.4	13.3	1.2	60.0
F	337	F3-14 DO YOU USE OSCILLOSCOPES TO MEASURE RIPPLE VOLTAGES?	73.8	37.7	.0	100.0	20.5	46.7	1.2	80.0
F	338	F3-15 DO YOU USE OSCILLOSCOPES TO MEASURE PHASE JITTERS?	14.3	9.4	.0	50.0	14.1	.0	1.2	38.2
F	339	F3-16 DO YOU USE OSCILLOSCOPES TO DISPLAY SWEEP GENERATOR PATTERNS?	26.2	33.0	.0	50.0	11.5	26.7	.0	70.9
F	340	F3-17 DO YOU USE OSCILLOSCOPES TO OBSERVE PHASE RELATIONSHIPS?	50.0	29.2	.0	66.7	17.9	26.7	1.2	83.6
F	341	F3-18 DO YOU USE OSCILLOSCOPES TO OBSERVE SAMPLING DISPLAYS?	35.7	28.3	.0	66.7	17.9	20.0	.0	67.3
G		SEMICONDUCTOR DIODES (G1), TRANSISTORS (G2), TRANSISTOR AMPLIFIERS (G3)								
G	342	G1-1 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G2-1; IF YES, CONTINUE.	73.8	54.7	9.1	100.0	52.6	66.7	10.0	96.4
G	343	G1-2 DO YOU INSPECT DIODES?	64.3	49.1	4.5	100.0	46.2	66.7	7.5	96.4
G	344	G1-3 DO YOU CHECK DIODES?	64.3	50.9	4.5	100.0	46.2	66.7	8.7	89.1

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
G	345	G1-4 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES?	4.8	4.7	4.5	16.7	2.6	6.7	1.2	21.8
G	346	G1-5 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE?	9.5	12.3	.0	.0	7.7	6.7	3.7	34.5
G	347	G1-6 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES?	9.5	10.4	.0	33.3	7.7	6.7	3.7	34.5
G	348	G1-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES?	52.4	29.2	.0	33.3	28.2	13.3	5.0	76.4
G	349	G1-8 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE?	69.0	47.2	.0	50.0	43.6	53.3	10.0	94.5
G	350	G1-9 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW?	4.8	8.5	.0	16.7	5.1	.0	1.2	25.5
G	351	G1-10 DO YOU MEASURE FORWARD BIAS RESISTANCE?	52.4	32.1	.0	100.0	16.7	33.3	2.5	76.4
G	352	G1-11 DO YOU MEASURE REVERSE BIAS RESISTANCE?	50.0	31.1	.0	100.0	15.4	33.3	2.5	76.4
G	353	G1-12 DO YOU READ DIODE COLOR CODING?	33.3	19.8	.0	33.3	14.1	13.3	3.7	29.1
G	354	G1-13 DO YOU READ DIODE NUMBERING SYSTEM, SUCH AS IN 538?	59.5	40.6	.0	66.7	28.2	46.7	7.5	94.5
G	355	G1-14 DO YOU USE THE SYMBOL ON DIODE WHICH INDICATES THE CATHODE END?	73.8	50.9	4.5	83.3	42.3	53.3	7.5	96.4
G	356	G1-15 DO YOU DETERMINE DIRECTION OF CURRENT THROUGH A DIODE?	69.0	51.9	4.5	83.3	44.9	60.0	10.0	90.9
G	357	G1-16 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON?	14.3	10.4	.0	50.0	5.1	.0	2.5	58.2
G	358	G1-17 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OR RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)?	28.6	17.0	.0	16.7	11.5	.0	.0	61.8
G	359	G1-18 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)?	16.7	16.0	.0	16.7	6.4	.0	1.2	45.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
G	360	G1-19 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS?	64.3	38.7	4.5	50.0	24.4	20.0	10.0	90.9
G	361	G1-20 DO YOU NEED AN UNDERSTANDING OF VALENCE BAND IN SEMICONDUCTOR MATERIALS?	7.1	13.2	.0	.0	7.7	6.7	.0	32.7
G	362	G1-21 DO YOU NEED AN UNDERSTANDING OF FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS?	4.8	9.4	.0	.0	5.1	6.7	.0	25.5
G	363	G1-22 DO YOU NEED AN UNDERSTANDING OF CONDUCTION BAND IN SEMICONDUCTOR MATERIALS?	14.3	11.3	.0	.0	6.4	6.7	.0	34.5
G	364	G1-23 DO YOU NEED AN UNDERSTANDING OF CONVALENT BONDING IN SEMICONDUCTOR MATERIALS?	7.1	10.4	.0	.0	7.7	6.7	.0	27.3
G	365	G1-24 DO YOU NEED AN UNDERSTANDING OF ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS?	11.9	12.3	.0	.0	10.3	6.7	.0	30.9
G	366	G1-25 DO YOU NEED AN UNDERSTANDING OF ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS?	31.0	20.8	.0	16.7	15.4	6.7	1.2	54.5
G	367	G1-26 DO YOU NEED AN UNDERSTANDING OF DONOR IMPURITY IN SEMICONDUCTORS?	9.5	10.4	.0	16.7	9.0	6.7	.0	30.9
G	368	G1-27 DO YOU NEED AN UNDERSTANDING OF ACCEPTOR IMPURITY IN SEMICONDUCTORS?	9.5	10.4	.0	16.7	7.7	6.7	.0	29.1
G	369	G1-28 DO YOU NEED AN UNDERSTANDING OF P-TYPE SEMICONDUCTOR MATERIAL?	38.1	23.6	.0	50.0	17.9	13.3	3.7	70.9
G	370	G1-29 DO YOU NEED AN UNDERSTANDING OF N-TYPE SEMICONDUCTOR MATERIAL?	38.1	23.6	.0	50.0	17.9	13.3	3.7	72.7
G	371	G1-30 DO YOU NEED AN UNDERSTANDING OF MAJORITY CARRIERS IN SEMICONDUCTORS?	9.5	11.3	.0	16.7	10.3	6.7	.0	38.2
G	372	G1-31 DO YOU NEED AN UNDERSTANDING OF MINORITY CARRIERS IN SEMICONDUCTORS?	9.5	11.3	.0	16.7	10.3	6.7	.0	36.4
G	373	G1-32 DO YOU NEED AN UNDERSTANDING OF JUNCTION RECOMBINATION IN SEMICONDUCTORS?	9.5	12.3	.0	16.7	9.0	6.7	1.2	36.4
G	374	G1-33 DO YOU NEED AN UNDERSTANDING OF DEPLETION REGION IN SEMICONDUCTORS?	14.3	12.3	.0	16.7	7.7	6.7	2.5	47.3

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
G	375	G1-34 DO YOU NEED AN UNDERSTANDING OF RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL?	14.3	10.4	.0	.0	6.4	6.7	.0	36.4
G	376	G1-35 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES?	54.8	17.9	.0	33.3	11.5	26.7	2.5	67.3
G	377	G1-36 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS?	11.9	6.6	.0	16.7	3.8	.0	.0	20.0
G	378	G1-37 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION?	38.1	25.5	.0	16.7	15.4	20.0	1.2	85.5
G	379	G1-38 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS?	11.9	12.3	.0	16.7	3.8	13.3	.0	70.9
G	380	G1-39 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS?	4.8	10.4	.0	16.7	3.8	13.3	.0	56.4
G	381	G1-40 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS?	14.3	12.3	.0	16.7	5.1	13.3	.0	70.9
G	382	G1-41 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS?	23.8	12.3	.0	33.3	6.4	20.0	1.2	83.6
G	383	G2-1 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM G3-1; IF YES, CONTINUE.	73.8	60.4	9.1	83.3	42.3	66.7	18.8	96.4
G	384	G2-2 DO YOU INSPECT TRANSISTORS?	66.7	55.7	4.5	100.0	33.3	66.7	15.0	96.4
G	385	G2-3 DO YOU CHECK TRANSISTORS?	66.7	56.6	4.5	100.0	38.5	60.0	12.5	89.1
G	386	G2-4 DO YOU NEED AN UNDERSTANDING OF EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS?	64.3	54.7	.0	66.7	33.3	40.0	11.2	92.7
G	387	G2-5 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND RESISTANCE MEASUREMENTS?	64.3	54.7	.0	100.0	29.5	33.3	10.0	87.3
G	388	G2-6 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS?	64.3	53.8	.0	100.0	29.5	33.3	10.0	87.3
G	389	G2-7 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION?	23.8	33.0	.0	50.0	16.7	13.3	5.0	63.6
G	390	G2-8 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION?	23.8	31.1	.0	50.0	14.1	6.7	6.3	63.6

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G	391	G2-9 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE, AND EMITTER)?	42.9	30.2	.0	83.3	20.5	40.0	7.5	61.8
G	392	G2-10 DO YOU USE OR REFER TO LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR?	14.3	20.8	.0	33.3	9.0	6.7	3.7	50.9
G	393	G2-11 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS?	73.8	58.5	9.1	100.0	35.9	60.0	16.2	94.5
G	394	G2-12 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, A2, A3, ETC.?	76.2	54.7	4.5	100.0	32.1	60.0	16.2	92.7
G	395	G2-13 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION?	50.0	44.3	.0	50.0	17.9	33.3	7.5	94.5
G	396	G2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT I(SUB B) IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT I(SUB E) USUALLY I(SUB B) BEING 2 TO 8 PERCENT OF I(SUB E)?	33.3	27.4	.0	50.0	10.3	6.7	7.5	70.9
G	397	G2-15 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS?	61.9	37.7	.0	66.7	16.7	33.3	10.0	83.6
G	398	G2-16 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES?	19.0	15.1	.0	50.0	10.3	.0	3.7	38.2
G	399	G2-17 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES?	9.5	11.3	.0	16.7	5.1	.0	1.2	29.1
G	400	G2-18 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS?	9.5	9.4	.0	.0	5.1	.0	1.2	21.8
G	401	G2-19 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS?	7.1	7.5	.0	.0	5.1	.0	1.2	20.0
G	402	G2-20 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS?	7.1	6.6	.0	.0	5.1	.0	1.2	20.0
G	403	G2-21 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCB/VBE)?	2.4	6.6	.0	16.7	3.8	.0	2.5	21.8
G	404	G2-22 DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)?	4.8	5.7	.0	16.7	2.6	.0	2.5	20.0

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G	405	G2-23 DO YOU USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRNSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI X AV)?	2.4	5.7	.0	16.7	1.3	.0	3.7	25.5
G	406	G2-24 DO YOU PERFORM TRANSISTOR MATCHING THROUGH THE USE OF CURVE TRACING?	4.8	2.8	.0	.0	1.3	.0	.0	12.7
G	407	G3-1 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM H1-1; IF YES, CONTINUE.	47.6	23.6	4.5	66.7	29.5	53.3	11.2	87.3
G	408	G3-2 DO YOU INSPECT TRANSISTOR AMPLIFIERS?	47.6	17.9	4.5	66.7	20.5	60.0	8.7	85.5
G	409	G3-3 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS?	31.0	8.5	.0	50.0	21.8	53.3	6.3	81.8
G	410	G3-4 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL?	50.0	17.9	4.5	66.7	16.7	60.0	3.7	87.3
G	411	G3-5 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS?	50.0	17.0	4.5	66.7	14.1	46.7	2.5	85.5
G	412	G3-6 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER?	38.1	13.2	.0	50.0	23.1	60.0	10.0	81.8
G	413	G3-7 DO YOU REMOVE OR REPLACE AMPLIFIER CIRCUIT COMPONENTS?	45.2	18.9	.0	33.3	10.3	40.0	6.3	83.6
G	414	G3-8 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR CURRENT RESULTS FROM A CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	40.5	13.2	.0	33.3	5.1	6.7	5.0	58.2
G	415	G3-9 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO SPECIFIC CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	4.8	4.7	.0	16.7	1.3	6.7	2.5	29.1
G	416	G3-10 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE RESULTS FROM A CHANGE IN BASE CURRENT?	38.1	14.2	.0	50.0	3.8	6.7	3.7	60.0
G	417	G3-11 DO YOU USE OR REFER TO THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	35.7	14.2	.0	50.0	6.4	13.3	3.7	60.0
G	418	G3-12 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE; THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	9.5	7.5	.0	16.7	2.6	6.7	2.5	32.7
G	419	G3-13 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)?	2.4	6.6	.0	16.7	1.3	6.7	.0	9.1

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G	420	G3-14 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR?	26.2	8.5	4.5	16.7	2.6	.0	1.2	38.2
G	421	G3-15 DO YOU MEASURE VOLTAGE GAIN CONCERNING TRANSISTOR AMPLIFIERS?	38.1	15.1	.0	33.3	15.4	60.0	3.7	69.1
G	422	G3-16 DO YOU MEASURE CURRENT GAIN CONCERNING TRANSISTOR AMPLIFIERS?	28.6	13.2	.0	.0	12.8	20.0	3.7	60.0
G	423	G3-17 DO YOU MEASURE POWER GAIN CONCERNING TRANSISTOR AMPLIFIERS?	23.8	10.4	.0	.0	12.8	26.7	5.0	50.9
G	424	G3-18 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE CHANGE OF THE BASE COLLECTOR VOLTAGE?	7.1	7.5	.0	.0	6.4	.0	.0	32.7
G	425	G3-19 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION?	28.6	12.3	.0	16.7	7.7	6.7	.0	36.4
G	426	G3-20 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION?	26.2	11.3	.0	16.7	6.4	.0	.0	38.2
G	427	G3-21 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION?	26.2	9.4	.0	16.7	5.1	.0	.0	32.7
G	428	G3-22 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION?	26.2	12.3	.0	16.7	6.4	.0	1.2	40.0
G	429	G3-23 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TRUBLESHOOTING THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION?	23.8	13.2	.0	16.7	6.4	.0	1.2	40.0
G	430	G3-24 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION?	11.9	11.3	.0	16.7	3.8	.0	.0	34.5
G	431	G3-25 DO YOU IDENTIFY OR TROUBLESHOOT AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS?	26.2	7.5	.0	16.7	9.0	46.7	1.2	56.4

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 7C (M)
G	432	G3-26 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS?	16.7	6.6	.0	16.7	7.7	40.0	1.2	52.7
G	433	G3-27 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS?	14.3	7.5	.0	16.7	9.0	1[illegible].3	.0	49.1
G	434	G3-28 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS?	14.3	5.7	.0	16.7	5.1	6.7	.0	30.9
G	435	G3-29 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	9.5	11.3	.0	33.3	10.3	13.3	.0	34.5
G	436	G3-30 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	11.9	6.6	.0	.0	2.6	.0	.0	41.8
G	437	G3-31 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	35.7	12.3	.0	50.0	11.5	26.7	1.2	76.4
G	438	G3-32 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS?	19.0	6.6	4.5	16.7	3.8	.0	.0	41.8
G	439	G3-33 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	16.7	3.8	4.5	16.7	3.8	6.7	.0	50.9
G	440	G3-34 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	26.2	9.4	.0	16.7	5.1	6.7	.0	60.0
G	441	G3-35 DO YOU TROUBLESHOOT OR REPAIR VOLTAGE MULTIPLIERS (DOUBLERS/TRIPLERS)?	26.2	12.3	.0	66.7	7.7	20.0	1.2	74.5
G	442	G3-36 DO YOU TROUBLESHOOT OR REPAIR RF AMPLIFIERS?	14.3	4.7	4.5	33.3	6.4	6.7	.0	60.0
G	443	G3-37 DO YOU TROUBLESHOOT OR REPAIR WIDEBAND AMPLIFIERS (VIDEO AMPS)?	9.5	4.7	4.5	.0	.0	.0	.0	50.9
G	444	G3-38 DO YOU TROUBLESHOOT OR REPAIR AUDIO AMPLIFIERS?	16.7	6.6	4.5	33.3	16.7	60.0	5.0	67.3
G	445	G3-39 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER AMPLIFIERS?	38.1	11.3	4.5	50.0	11.5	33.3	.0	76.4
G	446	G3-40 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	11.9	4.7	.0	.0	1.3	.0	.0	38.2
G	447	G3-41 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY AMPLIFIERS?	16.7	3.8	.0	.0	1.3	.0	.0	41.8
G	448	G3-42 DO YOU TROUBLESHOOT OR REPAIR IF AMPLIFIERS?	11.9	2.8	.0	16.7	3.8	.0	.0	56.4
G	449	G3-43 DO YOU TROUBLESHOOT OR REPAIR DIFFERENTIATING AMPLIFIERS (DIFF AMPS)?	28.6	3.8	.0	16.7	1.3	6.7	.0	78.2

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
G	450	G3-44 DO YOU TROUBLESHOOT OR REPAIR OPERATIONAL AMPLIFIERS (OP AMPS)?	28.6	6.6	4.5	16.7	2.6	13.3	.0	83.6
G	451	G3-45 DO YOU TROUBLESHOOT OR REPAIR INTEGRATING AMPLIFIERS?	19.0	7.5	4.5	33.3	3.8	6.7	1.2	69.1
G	452	G3-46 DO YOU TROUBLESHOOT OR REPAIR SUMMING AMPLIFIERS?	7.1	3.8	.0	.0	.0	.0	.0	49.1
H		SOLID-STATE SPECIAL PURPOSE DEVICES (H1), POWER SUPPLIES (H2), OSCILLATORS (H3)								
H	453	H1-1 DO YOU USE OR REFER TO VARACTORS/VARICAP COMPONENTS?	19.0	14.2	.0	16.7	7.7	13.3	.0	60.0
H	454	H1-2 DO YOU USE OR REFER TO TUNNEL DIODE COMPONENTS?	40.5	15.1	.0	16.7	7.7	13.3	.0	72.7
H	455	H1-3 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTOR COMPONENTS?	42.9	29.2	.0	33.3	14.1	6.7	.0	92.7
H	456	H1-4 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTOR COMPONENTS?	50.0	35.8	.0	33.3	9.0	6.7	.0	96.4
H	457	H1-5 DO YOU USE OR REFER TO ZENER DIODE COMPONENTS?	73.8	65.1	9.1	100.0	26.9	60.0	18.8	98.2
H	458	H1-6 DO YOU USE OR REFER TO INTEGRATED CIRCUIT COMPONENTS?	71.4	63.2	9.1	100.0	26.9	40.0	25.0	94.5
H	459	H1-7 DO YOU USE OR REFER TO PIN DIODE COMPONENTS?	14.3	14.2	9.1	.0	11.5	.0	1.2	41.8
H	460	H1-8 DO YOU USE OR REFER TO LED'S/LCD'S COMPONENTS?	71.4	53.8	27.3	100.0	30.8	6.7	17.5	96.4
H	461	H1-9 DO YOU USE OR REFER TO FANTAIL TRANSISTOR COMPONENTS?	11.9	7.5	4.5	.0	1.3	6.7	.0	36.4
H	462	H1-10 DO YOU USE OR REFER TO SILICON CONTROL RECTIFIER (SCR) COMPONENTS?	76.2	32.1	9.1	100.0	17.9	13.3	3.7	98.2
H	463	H1-11 DO YOU USE OR REFER TO TRIAC COMPONENTS?	28.6	30.2	4.5	33.3	5.1	.0	.0	98.2
H	464	H1-12 DO YOU USE OR REFER TO PROGRAMMABLE UNIJUNCTION TRANSISTOR (PUT) COMPONENTS?	9.5	4.7	.0	.0	2.6	.0	.0	89.1
H	465	H1-13 DO YOU USE OR REFER TO SILICON CONTROLLED SWITCH (SCS) COMPONENTS?	16.7	11.3	.0	33.3	2.6	.0	2.5	80.0
H	466	H1-14 DO YOU USE OR REFER TO SILICON UNILATERAL SWITCH (SUS) COMPONENTS?	4.8	4.7	.0	.0	1.3	.0	.0	81.8

D	TSK	TITLES	306 71 (M)	306 72 (F)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
H	467	H2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES? IF NO, GO TO ITEM H3-1; IF YES, CONTINUE.	76.2	66.0	68.2	100.0	61.5	80.0	63.7	94.5
H	468	H2-2 DO YOU INSPECT POWER SUPPLIES?	66.7	62.3	40.9	100.0	53.8	66.7	62.5	94.5
H	469	H2-3 DO YOU CLEAN POWER SUPPLIES?	61.9	52.8	9.1	83.3	50.0	60.0	47.5	74.5
H	470	H2-4 DO YOU ALIGN OR ADJUST POWER SUPPLIES?	69.0	50.0	50.0	83.3	52.6	66.7	13.7	92.7
H	471	H2-5 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL?	66.7	53.8	40.9	66.7	47.4	53.3	45.0	94.5
H	472	H2-6 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS?	66.7	52.8	40.9	66.7	38.5	53.3	31.3	92.7
H	473	H2-7 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES?	52.4	55.7	.0	66.7	43.6	66.7	60.0	92.7
H	474	H2-8 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS?	64.3	48.1	.0	66.7	37.2	46.7	28.7	92.7
H	475	H2-9 DO YOU INSPECT OR SERVICE COOLANT LEVELS?	4.8	6.6	13.6	16.7	6.4	.0	2.5	34.5
H	476	H2-10 DO YOU WORK WITH HALF-WAVE RECTIFIERS?	59.5	46.2	4.5	83.3	25.6	40.0	7.5	90.9
H	477	H2-11 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS?	66.7	49.1	4.5	100.0	32.1	40.0	10.0	90.9
H	478	H2-12 DO YOU WORK WITH BRIDGE RECTIFIERS?	69.0	52.8	13.6	83.3	34.6	33.3	13.7	92.7
H	479	H2-13 DO YOU WORK WITH THREE-PHASE RECTIFIERS?	23.8	12.3	18.2	66.7	28.2	6.7	5.0	63.6
H	480	H2-14 DO YOU USE OR REFER TO INPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	69.0	59.4	45.5	100.0	53.8	66.7	22.5	94.5
H	481	H2-15 DO YOU USE OR REFER TO INPUT FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	38.1	23.6	13.6	50.0	33.3	33.3	7.5	78.2
H	482	H2-16 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	52.4	46.2	18.2	83.3	39.7	60.0	8.7	83.6
H	483	H2-17 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	61.9	46.2	27.3	83.3	43.6	33.3	17.5	87.3
H	484	H2-18 DO YOU USE OR REFER TO RIPPLE AMPLITUDE IN YOUR WORK WITH RECTIFIERS?	57.1	29.2	.0	50.0	15.4	60.0	2.5	78.2
H	485	H2-19 DO YOU USE OR REFER TO RIPPLE FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	35.7	17.9	.0	50.0	10.3	13.3	2.5	72.7
H	486	H2-20 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGES IN YOUR WORK WITH RECTIFIERS?	21.4	14.2	.0	50.0	10.3	13.3	3.7	63.6
H	487	H2-21 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS IN YOUR WORK WITH RECTIFIERS?	45.2	40.6	.0	50.0	12.8	53.3	2.5	85.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
H	488	H2-22 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	50.0	43.4	4.5	83.3	23.1	46.7	13.7	89.1
H	489	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS?	66.7	46.2	9.1	50.0	26.9	53.3	12.5	90.9
H	490	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS?	45.2	28.3	9.1	50.0	19.2	33.3	13.7	80.0
H	491	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS?	47.6	19.8	4.5	16.7	14.1	13.3	3.7	69.1
H	492	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS?	33.3	17.9	4.5	33.3	12.8	13.3	3.7	67.3
H	493	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS?	33.3	12.3	4.5	.0	6.4	13.3	6.3	67.3
H	494	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS?	45.2	11.3	4.5	.0	7.7	13.3	5.0	72.7
H	495	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER?	4.8	7.5	.0	.0	.0	.0	.0	16.4
H	496	H2-30 DO YOU WORK WITH POWER SUPPLY REGULATOR CIRCUITS OTHER THAN SOLID-STATE?	14.3	12.3	4.5	16.7	19.2	6.7	3.7	45.5
H	497	H2-31 DO YOU WORK WITH SOLID-STATE POWER SUPPLY REGULATOR CIRCUITS?	69.0	46.2	13.6	66.7	29.5	46.7	10.0	89.1
H	498	H3-1 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I1-1; IF YES, CONTINUE.	61.9	19.8	.0	16.7	41.0	66.7	6.3	63.6
H	499	H3-2 DO YOU INSPECT OSCILLATORS?	52.4	13.2	.0	.0	29.5	53.3	3.7	61.8
H	500	H3-3 DO YOU ALIGN OR ADJUST OSCILLATORS?	52.4	9.4	.0	16.7	26.9	46.7	3.7	63.6
H	501	H3-4 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS?	54.8	10.4	.0	.0	24.4	40.0	1.2	58.2
H	502	H3-5 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS?	40.5	10.4	.0	.0	7.7	13.3	.0	58.2
H	503	H3-6 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL?	57.1	11.3	.0	.0	19.2	33.3	1.2	60.0
H	504	H3-7 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS?	40.5	9.4	.0	.0	5.1	13.3	.0	60.0
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	31.0	11.3	.0	.0	3.8	26.7	1.2	60.0

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	35.7	9.4	.0	.0	6.4	13.3	1.2	54.5
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	33.3	9.4	.0	.0	10.3	20.0	1.2	41.8
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	42.9	10.4	.0	16.7	14.1	20.0	1.2	52.7
H	509	H3-12 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT (CRYSTAL OSCILLATIONS)?	35.7	9.4	.0	.0	2.6	.0	1.2	56.4
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	28.6	8.5	.0	16.7	10.3	.0	1.2	49.1
H	511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	35.7	9.4	.0	16.7	5.1	6.7	.0	65.5
H	512	H3-15 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS?	35.7	11.3	.0	16.7	5.1	13.3	1.2	63.6
H	513	H3-16 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN CRYSTALS?	50.0	13.2	.0	16.7	5.1	.0	1.2	61.8
H	514	H3-17 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN PHASE LOCK LOOPS (PLL)?	14.3	6.6	.0	.0	2.6	.0	.0	38.2
H	515	H3-18 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	7.1	3.8	.0	.0	19.2	20.0	1.2	18.2
H	516	H3-19 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS?	16.7	6.6	.0	16.7	1.3	13.3	.0	47.3
H	517	H3-20 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS?	21.4	6.6	.0	16.7	1.3	13.3	.0	45.5
H	518	H3-21 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS?	28.6	4.7	.0	16.7	1.3	.0	.0	34.5
H	519	H3-22 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS?	9.5	3.8	.0	.0	.0	.0	.0	25.5
H	520	H3-23 DO YOU WORK WITH VOLTAGE CONTROL SINUSOIDAL OSCILLATO	26.2	3.8	.0	16.7	1.3	.0	.0	45.5
H	521	H3-24 DO YOU WORK WITH CRYSTAL SINUSOIDAL OSCILLATORS?	50.0	10.4	.0	16.7	2.6	.0	.0	54.5
H	522	H3-25 DO YOU WORK WITH VOLTAGE CONTROL OSCILLATORS (VCO) SINUSOIDAL OSCILLATORS?	26.2	4.7	.0	16.7	2.6	.0	1.2	43.6
H	523	H3-26 DO YOU WORK WITH WIEN BRIDGE OSCILLATORS SINUSOIDAL OSCILLATORS?	7.1	8.5	.0	.0	2.6	6.7	.0	47.3
H	524	H3-27 DO YOU WORK WITH - DON'T KNOW WHICH TYPE OF SINUSOIDAL OSCILLATOR?	16.7	9.4	.0	.0	25.6	20.0	3.7	20.0
H	525	H3-28 DO YOU WORK WITH PULSE GENERATING CIRCUITS?	35.7	8.5	.0	16.7	12.8	13.3	.0	60.0

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H	526	H3-29 DO YOU WORK WITH BLOCKING OSCILLATORS?	16.7	2.8	.0	.0	1.3	.0	.0	47.3
H	527	H3-30 DO YOU WORK WITH BURST GENERATORS?	7.1	.9	.0	.0	.0	.0	.0	36.4
H	528	H3-31 DO YOU WORK WITH GLOCKED OSCILLATORS?	7.1	1.9	.0	.0	.0	6.7	.0	30.9
I		MULTIVIBRATORS (I1), LIMITERS AND CLAMPERS (I2), ELECTRON TUBES (I3)								
I	529	I1-1 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I2-1; IF YES, CONTINUE.	69.0	23.6	.0	.0	2.6	20.0	1.2	69.1
I	530	I1-2 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUIT FREQUENCY DETERMINING DEVICES (FDD)?	23.8	12.3	.0	.0	2.6	20.0	.0	61.8
I	531	I1-3 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORK FREQUENCY DETERMINING DEVICES (FDD)?	42.9	17.0	.0	.0	2.6	20.0	.0	65.5
I	532	I1-4 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTAL FREQUENCY DETERMINING DEVICES (FDD)?	28.6	15.1	.0	.0	2.6	6.7	.0	58.2
I	533	I1-5 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	11.9	6.6	.0	.0	1.3	6.7	1.2	16.8
I	534	I1-6 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS?	61.9	17.9	.0	.0	1.3	20.0	1.2	69.1
I	535	I1-7 DO YOU WORK WITH MONOSTABLE (ONE SHOT) MULTIVIBRATORS?	69.0	19.8	.0	.0	1.3	13.3	1.2	70.9
I	536	I1-8 DO YOU WORK WITH BISTABLE (FLIP FLOP) MULTIVIBRATORS?	71.4	20.8	.0	.0	1.3	20.0	1.2	70.9
I	537	I1-9 DO YOU WORK WITH R-S FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	28.6	8.5	.0	.0	.0	13.3	.0	52.7
I	538	I1-10 DO YOU WORK WITH J-K FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	73.8	19.8	.0	.0	.0	6.7	.0	60.0
I	539	I1-11 DO YOU WORK WITH "D" FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	33.3	5.7	.0	.0	1.3	.0	.0	41.8
I	540	I2-1 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I3-1; IF YES, CONTINUE.	45.2	15.1	.0	.0	2.6	6.7	.0	61.8

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I	541	I2-2 DO YOU WORK WITH SERIES DIODE LIMITERS?	31.0	11.3	.0	.0	1.3	6.7	.0	54.5
I	542	I2-3 DO YOU WORK WITH SHUNT DIODE LIMITERS?	31.0	10.4	.0	.0	.0	6.7	.0	54.5
I	543	I2-4 DO YOU WORK WITH LIMITERS WITH BIAS?	19.0	4.7	.0	.0	.0	6.7	.0	41.8
I	544	I2-5 DO YOU WORK WITH ZENER DIODE LIMITERS?	40.5	13.2	.0	.0	1.3	6.7	.0	61.8
I	545	I2-6 DO YOU WORK WITH TRANSISTOR LIMITERS?	38.1	11.3	.0	.0	2.6	6.7	.0	54.5
I	546	I2-7 DO YOU WORK WITH TRIODE LIMITERS?	11.9	1.9	.0	.0	.0	.0	.0	34.5
I	547	I2-8 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS?	33.3	7.5	.0	.0	.0	.0	.0	60.0
I	548	I2-9 DO YOU WORK WITH BIAS DIODE CLAMPING CIRCUITS?	26.2	4.7	.0	.0	1.3	.0	.0	40.0
I	549	I2-10 DO YOU WORK WITH DC RESTORERS?	16.7	.9	.0	.0	.0	.0	.0	25.5
I	550	I3-1 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS BASIC ELECTRON TUBES (FOR PURPOSES OF THIS QUESTION DO NOT CONSIDER HIGH-FREQUENCY DEVICES SUCH AS KLYSTRONS, TRAVELING WAVE TUBES, BACKWARD WAVE OSCILLATORS, OR MAGNETRONS AS ELECTRON TUBES)? IF NO, GO TO ITEM J1-1; IF YES, CONTINUE.	7.1	13.2	4.5	66.7	16.7	13.3	.0	47.3
I	551	I3-2 DO YOU CHECK THE CONDITION OF ELECTRON TUBES?	7.1	11.3	.0	66.7	15.4	.0	.0	45.5
I	552	I3-3 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES?	7.1	6.6	.0	33.3	11.5	.0	.0	32.7
I	553	I3-4 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES?	7.1	8.5	.0	66.7	7.7	6.7	.0	43.6
I	554	I3-5 DO YOU USE SCOPES TO CHECK ELECTRON TUBES?	7.1	8.5	.0	16.7	1.3	6.7	.0	41.8
I	555	I3-6 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES?	7.1	10.4	.0	50.0	9.0	.0	.0	40.0
I	556	I3-7 DO YOU USE OR REFER TO CUTOFF?	7.1	7.5	.0	33.3	1.3	.0	.0	32.7
I	557	I3-8 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING?	7.1	1.9	.0	.0	.0	.0	.0	18.2
I	558	I3-9 DO YOU USE OR REFER TO PEAK CURRENT RATING?	7.1	3.8	.0	.0	.0	.0	.0	21.8
I	559	I3-10 DO YOU USE OR REFER TO TRANSIT TIME?	2.4	4.7	.0	.0	.0	.0	.0	14.5
I	560	I3-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING?	2.4	3.8	.0	.0	.0	.0	.0	18.2
I	561	I3-12 DO YOU USE OR REFER TO SATURATION?	7.1	8.5	.0	16.7	1.3	6.7	.0	36.4
I	562	I3-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE?	4.8	4.7	.0	.0	2.6	.0	.0	29.1
I	563	I3-14 DO YOU USE OR REFER TO PLATE VOLTAGE?	7.1	11.3	4.5	33.3	5.1	.0	.0	45.5
I	564	I3-15 DO YOU USE OR REFER TO PLATE CURRENT?	7.1	8.5	.0	16.7	3.8	.0	.0	38.2
I	565	I3-16 DO YOU USE OR REFER TO GRID VOLTAGE?	7.1	10.4	.0	66.7	5.1	.0	.0	43.6
I	566	I3-17 DO YOU USE OR REFER TO GRID CURRENT?	7.1	9.4	.0	33.3	3.8	.0	.0	36.4

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I	567	I3-18 DO YOU USE OR REFER TO CATHODE VOLTAGE?	7.1	10.4	.0	66.7	5.1	.0	.0	45.5
I	569	I3-19 DO YOU USE OR REFER TO CATHODE CURRENT?	7.1	8.5	.0	33.3	3.8	.0	.0	34.5
I	569	I3-20 DO YOU USE OR REFER TO FILAMENT VOLTAGE?	7.1	11.3	.0	50.0	5.1	.0	.0	47.3
I	570	I3-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODE IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)?	4.8	5.7	.0	.0	.0	.0	.0	18.2
I	571	I3-22 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC.) AMPLIFICATION FACTORS?	9.5	7.5	.0	16.7	3.8	.0	.0	20.0
I	572	I3-23 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)?	9.5	1.9	.0	.0	2.6	.0	1.2	12.7
I	573	I3-24 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE?	11.9	.9	.0	.0	2.6	.0	.0	20.0
I	574	I3-25 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE?	11.9	1.9	.0	.0	3.8	.0	.0	16.4
I	575	I3-26 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES?	11.9	.9	.0	.0	2.6	.0	.0	9.1
I	576	I3-27 DO YOU USE OR REFER TO PLATE VOLTAGE FOR A SPECIFIED BIAS?	2.4	3.8	.0	33.3	1.3	.0	.0	25.5
I	577	I3-28 DO YOU USE OR REFER TO PLATE CURRENT FOR A SPECIFIED BIAS?	4.8	3.8	.0	16.7	1.3	.0	.0	23.6
I	578	I3-29 DO YOU USE OR REFER TO BIAS REQUIRED FOR CUTOFF?	4.8	4.7	.0	33.3	2.6	.0	.0	34.5
I	579	I3-30 DO YOU USE OR REFER TO BIAS REQUIRED FOR SATURATION?	2.4	3.8	.0	33.3	2.6	.0	.0	34.5
I	580	I3-31 DO YOU USE OR REFER TO GAIN?	4.8	5.7	.0	50.0	1.3	.0	.0	34.5
I	581	I3-32 DO YOU USE OR REFER TO EFFICIENCY?	2.4	3.8	.0	16.7	2.6	.0	.0	16.4
I	582	I3-33 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	4.8	3.8	.0	50.0	3.8	.0	.0	36.4
I	583	I3-34 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	4.8	2.8	.0	33.3	1.3	.0	.0	40.0
I	584	I3-35 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	4.8	.9	.0	.0	.0	.0	.0	5.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
I	585	I3-36 DO YOU USE OR REFER TO TUBE SOCKET NOTATION?	7.1	9.4	.0	66.7	9.0	.0	.0	49.1
I	586	I3-37 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS?	7.1	10.4	.0	66.7	10.3	.0	.0	49.1
I	587	I3-38 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS?	7.1	7.5	.0	16.7	9.0	.0	.0	45.5
I	588	I3-39 DO YOU USE OR REFER TO ELECTRON TUBE DIODES?	4.8	6.6	.0	16.7	2.6	.0	.0	43.6
J		ELECTRON TUBE AMPLIFIERS AND CIRCUITS (J1), SPECIAL PURPOSE ELECTRON TUBES (J2), HETERODYNING AND MODULATION - DEMODULATION (MODEMS) (J3)								
J	589	J1-1 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM J2-1; IF YES, CONTINUE.	9.5	6.6	.0	16.7	7.7	.0	.0	40.0
J	590	J1-2 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	7.1	.9	.0	.0	1.3	.0	.0	16.4
J	591	J1-3 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	2.4	.9	.0	.0	1.3	.0	.0	12.7
J	592	J1-4 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	4.8	3.8	.0	.0	1.3	.0	.0	25.5
J	593	J1-5 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	4.8	.9	.0	.0	1.3	.0	.0	16.4
J	594	J1-6 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	4.8	.0	.0	.0	1.3	.0	.0	16.4
J	595	J1-7 DO YOU TROUBLESHOOT OR REPAIR - DON'T KNOW WHICH TYPE OF AMPLIFIER?	.0	1.9	.0	16.7	3.8	.0	.0	10.9
J	596	J2-1 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)?	2.4	7.5	.0	50.0	2.6	.0	.0	52.7
J	597	J2-2 DO YOU WORK WITH CATHODE-RAY TUBES (CRT)?	19.0	26.4	.0	16.7	11.5	13.3	2.5	87.3
J	598	J2-3 DO YOU WORK WITH BEAM POWER TUBES?	2.4	.9	.0	.0	1.3	.0	.0	36.4
J	599	J2-4 DO YOU WORK WITH THYRATRONS?	4.8	1.9	.0	.0	.0	.0	1.2	41.8

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J	600	J2-5 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)?	14.3	18.9	.0	16.7	3.8	.0	.0	72.7
J	601	J2-6 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	16.7	15.1	.0	16.7	3.8	.0	1.2	76.4
J	602	J2-7 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	16.7	14.2	.0	.0	3.8	.0	1.2	69.1
J	603	J2-8 DO YOU USE OR REFER TO PHOSPHOR SCREENS CONCERNING CRT'S?	16.7	17.0	.0	.0	2.6	.0	.0	72.7
J	604	J2-9 DO YOU USE OR REFER TO AQUADAG COATINGS CONCERNING CRT'S?	7.1	3.8	.0	.0	2.6	.0	.0	32.7
J	605	J2-10 DO YOU USE OR REFER TO ELECTRON OPTICS CONCERNING CRT'S?	7.1	1.9	.0	.0	1.3	.0	.0	43.6
J	606	J2-11 DO YOU USE OR REFER TO PERSISTENCE CONCERNING CRT'S?	9.5	3.8	.0	.0	2.6	.0	.0	36.4
J	607	J2-12 DO YOU USE OR REFER TO DECAY TIMES CONCERNING CRT'S?	11.9	2.8	.0	.0	2.6	.0	.0	38.2
J	608	J2-13 DO YOU USE OR REFER TO FLOURESCENCE CONCERNING CRT'S?	9.5	5.7	.0	.0	2.6	.0	.0	60.0
J	609	J2-14 DO YOU USE OR REFER TO PHOSPHORESCENCE CONCERNING CRT'S?	7.1	8.5	.0	.0	3.8	.0	.0	56.4
J	610	J2-15 DO YOU USE OR REFER TO SHADOW MASK CONCERNING CRT'S?	7.1	1.9	.0	.0	1.3	.0	.0	27.3
J	611	J3-1 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K1-1; IF YES, CONTINUE.	61.9	25.5	9.1	.0	17.9	13.3	12.5	18.2
J	612	J3-2 DO YOU PERFORM TASKS ON FREQUENCY CONVERTER SYSTEMS STAGES?	23.8	8.5	9.1	.0	5.1	.0	.0	12.7
J	613	J3-3 DO YOU PERFORM TASKS ON FREQUENCY MIXER SYSTEMS STAGES?	14.3	5.7	9.1	.0	3.8	.0	.0	12.7
J	614	J3-4 DO YOU PERFORM TASKS ON MODEM SYSTEMS STAGES?	59.5	15.1	4.5	.0	16.7	.0	7.5	7.3
J	615	J3-5 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS?	14.3	1.9	.0	.0	1.3	.0	1.2	7.3
J	616	J3-6 DO YOU PERFORM TASKS ON REACTANCE MODULATOR SYSTEM STAGES?	9.5	1.9	.0	.0	1.3	.0	1.2	7.3

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J	617	J3-7 DO YOU PERFORM TASKS ON MODULATED OSCILLATOR SYSTEM STAGES?	35.7	3.8	.0	.0	3.8	.0	1.2	10.9
K		AM SYSTEMS (K1), FM SYSTEMS (K2), NUMBERING SYSTEMS (K3)								
K	618	K1-1 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K2-1; IF YES, CONTINUE.	7.1	2.8	9.1	.0	2.6	6.7	1.2	9.1
K	619	K1-2 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	9.1	.0	2.6	6.7	.0	5.5
K	620	K1-3 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	4.5	.0	1.3	6.7	.0	5.5
K	621	K1-4 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	4.5	.0	2.6	6.7	.0	5.5
K	622	K1-5 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	4.5	.0	3.8	6.7	.0	5.5
K	623	K1-6 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS?	2.4	.0	4.5	.0	2.6	.0	.0	5.5
K	624	K1-7 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	.0	.0	2.6	6.7	.0	5.5
K	625	K1-8 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS?	2.4	.9	.0	.0	2.6	.0	.0	5.5
K	626	K1-9 DO YOU PERFORM TASKS ON RF OSCILLATORS/SYNTHESIZERS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K	627	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K	628	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	2.4	.9	.0	.0	1.3	6.7	.0	5.5
K	629	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	2.4	.0	.0	.0	1.3	6.7	.0	5.5
K	630	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K	631	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K	632	K1-15 DO YOU PERFORM TASKS ON DETECTORS?	2.4	.0	.0	.0	1.3	6.7	.0	5.5
K	633	K1-16 DO YOU PERFORM TASKS ON MIXER AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K	634	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS?	2.4	.9	.0	.0	2.6	.0	.0	5.5
K	635	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS?	2.4	1.9	.0	.0	3.8	.0	1.2	5.5

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K	636	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS?	2.4	1.9	.0	.0	2.6	.0	1.2	5.5
K	637	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS?	2.4	.9	4.5	.0	3.8	.0	1.2	5.5
K	638	K2-1 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K3-1; IF YES, CONTINUE.	14.3	3.8	13.6	.0	6.4	6.7	3.7	10.9
K	639	K2-2 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS?	7.1	1.9	13.6	.0	2.6	.0	.0	5.5
K	640	K2-3 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS?	7.1	.9	4.5	.0	.0	.0	.0	5.5
K	641	K2-4 DO YOU ALIGN TRANSMIT OR RECEIVE SYSTEMS?	9.5	.9	4.5	.0	1.3	.0	.0	5.5
K	642	K2-5 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS?	9.5	.9	9.1	.0	3.8	.0	.0	3.6
K	643	K2-6 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS?	9.5	.0	9.1	.0	1.3	.0	.0	3.6
K	644	K2-7 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS?	4.8	.9	.0	.0	1.3	.0	.0	3.6
K	645	K2-8 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS?	4.8	.0	.0	.0	1.3	.0	.0	5.5
K	646	K2-9 DO YOU PERFORM LINK PERFORMANCE ASSESSMENTS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
K	647	K2-10 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	9.5	.0	4.5	.0	1.3	.0	.0	3.6
K	648	K2-11 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K	649	K2-12 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K	650	K2-13 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K	651	K2-14 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K	652	K2-15 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K	653	K2-16 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
K	654	K2-17 DO YOU PERFORM TASKS ON LIMITERS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
K	655	K2-18 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS?	9.5	.0	.0	.0	1.3	.0	.0	3.6
K	656	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS?	4.8	.9	.0	.0	1.3	.0	.0	3.6
K	657	K2-20 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS?	4.8	.9	.0	.0	1.3	.0	.0	3.6

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K	658	K2-21 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSCEIVERS?	7.1	.0	.0	.0	1.3	.0	.0	3.6
K	659	K2-22 DO YOU PLOT RECEIVE SIGNAL LEVEL CURVES (RSL)?	.0	.0	.0	.0	1.3	.0	.0	3.6
K	660	K3-1 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS?	38.1	10.4	27.3	33.3	9.0	.0	1.2	40.0
K	661	K3-2 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS?	45.2	16.0	22.7	33.3	14.1	.0	2.5	49.1
K	662	K3-3 DO YOU CONVERT DECIMAL NUMBERS TO HEXADECIMAL (BASE 16) NUMBERS?	14.3	3.8	.0	50.0	15.4	.0	2.5	30.9
K	663	K3-4 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS?	35.7	8.5	36.4	33.3	10.3	.0	2.5	41.8
K	664	K3-5 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS?	40.5	8.5	13.6	33.3	10.3	.0	2.5	41.8
K	665	K3-6 DO YOU CONVERT OCTAL NUMBERS TO HEXADECIMAL NUMBERS?	11.9	4.7	.0	33.3	6.4	.0	1.2	30.9
K	666	K3-7 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS?	45.2	17.0	18.2	33.3	11.5	.0	1.2	49.1
K	667	K3-8 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS?	38.1	7.5	4.5	33.3	6.4	.0	1.2	38.2
K	668	K3-9 DO YOU CONVERT BINARY NUMBERS TO HEXADECIMAL NUMBERS?	11.9	5.7	4.5	33.3	10.3	.0	1.2	30.9
K	669	K3-10 DO YOU CONVERT HEXADECIMAL NUMBERS TO DECIMAL NUMBERS?	11.9	5.7	4.5	50.0	11.5	.0	1.2	30.9
K	670	K3-11 DO YOU CONVERT HEXADECIMAL NUMBERS TO OCTAL NUMBERS?	11.9	3.8	4.5	33.3	6.4	.0	1.2	30.9
K	671	K3-12 DO YOU CONVERT HEXADECIMAL NUMBERS TO BINARY NUMBERS?	11.9	5.7	.0	33.3	10.3	.0	1.2	30.9
K	672	K3-13 DO YOU ADD BINARY NUMBERS?	47.6	19.8	9.1	33.3	9.0	.0	5.0	47.3
K	673	K3-14 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD?	31.0	9.4	.0	16.7	5.1	.0	1.2	38.2
K	674	K3-15 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD?	35.7	12.3	.0	33.3	7.7	.0	5.0	38.2
K	675	K3-16 DO YOU ADD OCTAL NUMBERS?	28.6	5.7	.0	16.7	5.1	.0	1.2	34.5
K	676	K3-17 DO YOU SUBTRACT OCTAL NUMBERS?	28.6	5.7	4.5	16.7	5.1	.0	1.2	34.5
K	677	K3-18 DO YOU ADD HEXADECIMAL NUMBERS?	11.9	4.7	.0	33.3	7.7	.0	1.2	29.1
K	678	K3-19 DO YOU SUBTRACT HEXADECIMAL NUMBERS?	11.9	3.8	.0	33.3	7.7	.0	1.2	29.1
K	679	K3-20 DO YOU DIVIDE BINARY NUMBERS?	31.0	7.5	.0	16.7	2.6	.0	5.0	34.5
K	680	K3-21 DO YOU MULTIPLY BINARY NUMBERS?	31.0	7.5	.0	16.7	2.6	.0	5.0	34.5
K	681	K3-22 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	23.8	8.5	9.1	16.7	7.7	.0	1.2	50.9

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K 682	K3-23 DO YOU USE OR REFER TO GRAY CODE?	11.9	2.8	4.5	.0	3.8	.0	2.5	20.0
K 683	K3-24 DO YOU USE OR REFER TO ICAO CODE?	9.5	.9	.0	.0	2.6	.0	2.5	7.3
K 684	K3-25 DO YOU USE OR REFER TO EXCESS-3 CODE?	9.5	1.9	.0	.0	3.8	.0	2.5	14.5
L	LOGIC FUNCTIONS (L1), BOOLEAN EQUATIONS (L2), COUNTERS (L3)								
L 685	L1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS? IF NO, GO TO ITEM L2-1; IF YES, CONTINUE.	71.4	29.2	31.8	50.0	7.7	20.0	.0	76.4
L 686	L1-2 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	50.0	17.0	9.1	.0	3.8	6.7	.0	56.4
L 687	L1-3 DO YOU CONSTRUCT TRUTH TABLES FOR 'OR' LOGIC SYSMBOLS OR GATES?	50.0	17.0	9.1	.0	3.8	6.7	.0	54.5
L 688	L1-4 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	50.0	16.0	9.1	.0	3.8	.0	.0	54.5
L 689	L1-5 DO YOU CONSTRUCT TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS OR GATES?	52.4	16.0	9.1	.0	2.6	.0	.0	52.7
L 690	L1-6 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	66.7	28.3	18.2	.0	6.4	.0	.0	74.5
L 691	L1-7 DO YOU USE OR REFER TO TRUTH TABLES FOR 'OR' LOGIC SYMBOLS OR GATES?	66.7	28.3	18.2	.0	6.4	.0	.0	74.5
L 692	L1-8 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	66.7	24.5	13.6	.0	5.1	.0	.0	72.7
L 693	L1-9 DO YOU USE OR REFER TO TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS?	66.7	25.5	13.6	.0	5.1	.0	.0	70.9
L 694	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'AND' GATES?	73.8	29.2	27.3	50.0	7.7	13.3	.0	81.8
L 695	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'OR' GATES?	73.8	30.2	27.3	50.0	7.7	13.3	.0	81.8
L 696	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'NAND' OR 'NOR' GATES?	73.8	29.2	22.7	50.0	6.4	13.3	.0	81.8

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
L	697	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'EXCLUSIVE OR' GATES?	73.8	27.4	18.2	33.3	5.1	6.7	.0	80.0
L	698	L1-14 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR INHIBITED 'AND' GATES?	66.7	26.4	18.2	50.0	3.8	6.7	.0	81.8
L	699	L1-15 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "B" BARS?	47.6	3.8	.0	.0	.0	.0	.0	14.5
L	700	L1-16 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "H" BARS?	47.6	3.8	.0	.0	.0	.0	.0	14.5
L	701	L1-17 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR COMBINERS?	50.0	9.4	4.5	16.7	.0	.0	.0	20.0
L	702	L1-18 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS?	73.8	22.6	.0	33.3	3.8	20.0	.0	67.3
L	703	L1-19 DO YOU USE OR REFER TO ONE-SHOT MULTIVIBRATOR SYMBOLS?	71.4	19.8	.0	33.3	1.3	13.3	.0	63.6
L	704	L1-20 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT OR SCHEMATIC DIAGRAMS?	73.8	24.5	18.2	33.3	5.1	20.0	.0	67.3
L	705	L1-21 DO YOU USE OR REFER TO ONE-SHOT CIRCUIT OR SCHEMATIC DIAGRAMS?	66.7	21.7	18.2	16.7	2.6	6.7	.0	61.8
L	706	L1-22 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES?	59.5	19.8	.0	.0	2.6	.0	.0	54.5
L	707	L1-23 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	40.5	12.3	.0	16.7	3.8	.0	.0	47.3
L	708	L1-24 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS?	40.5	11.3	.0	16.7	3.8	.0	.0	47.3
L	709	L1-25 DO YOU USE OR REFER TO NONCOMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	40.5	6.6	.0	16.7	2.6	.0	.0	41.8
L	710	L1-26 DO YOU CONSTRUCT TRUTH TABLES FOR "B" BARS?	26.2	1.9	.0	.0	.0	.0	.0	9.1
L	711	L1-27 DO YOU CONSTURCT TRUTH TABLES FOR "H" BARS?	26.2	1.9	.0	.0	.0	.0	.0	9.1
L	712	L1-28 DO YOU CONSTRUCT TRUTH TABLES FOR COMBINERS?	31.0	2.8	.0	.0	.0	.0	.0	12.7
L	713	L1-29 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS?	61.9	15.1	.0	16.7	1.3	6.7	.0	60.0
L	714	L1-30 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS?	47.6	12.3	4.5	16.7	1.3	6.7	.0	56.4
L	715	L1-31 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	47.6	12.3	.0	16.7	1.3	6.7	.0	54.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
L	716	L1-32 DO YOU TRACE DATA FLOW THROUGH NONCOMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	40.5	9.4	4.5	16.7	1.3	6.7	.0	54.5
L	717	L1-33 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS?	45.2	13.2	.0	.0	1.3	.0	.0	45.5
L	718	L2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS? IF NO, GO TO ITEM L3-1; IF YES, CONTINUE.	52.4	16.0	.0	.0	9.0	.0	1.2	43.6
L	719	L2-2 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS?	23.8	5.7	.0	.0	.0	.0	.0	21.8
L	720	L2-3 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	11.9	4.7	.0	.0	.0	.0	.0	12.7
L	721	L2-4 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS?	19.0	8.5	.0	.0	.0	.0	.0	18.5
L	722	L2-5 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES?	47.6	12.3	.0	.0	1.3	.0	.0	49.1
L	723	L2-6 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS?	23.8	5.7	.0	.0	1.3	.0	.0	18.2
L	724	L2-7 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA?	26.2	6.6	.0	.0	.0	.0	.0	18.2
L	725	L2-8 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES?	28.6	8.5	.0	.0	.0	.0	.0	36.4
L	726	L2-9 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	9.5	5.7	.0	.0	.0	.0	.0	16.4
L	727	L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE?	47.6	15.1	.0	.0	2.6	.0	.0	45.5
L	728	L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS?	26.2	4.7	.0	.0	.0	.0	.0	16.4
L	729	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS?	35.7	6.6	.0	.0	.0	.0	.0	20.0
L	730	L3-1 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M1-1; IF YES, CONTINUE.	61.9	15.1	9.1	50.0	3.8	13.3	.0	50.9
L	731	L3-2 DO YOU USE OR REFER TO UP-COUNTERS?	57.1	15.1	9.1	33.3	1.3	.0	.0	49.1

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
L	732	L3-3 DO YOU USE OR REFER TO DOWN-COUNTERS?	50.0	15.1	4.5	33.3	1.3	.0	.0	47.3
L	733	L3-4 DO YOU USE OR REFER TO SERIAL COUNTERS?	64.3	15.1	.0	33.3	1.3	.0	.0	41.8
L	734	L3-5 DO YOU USE OR REFER TO PARALLEL COUNTERS?	64.3	14.2	.0	16.7	.0	.0	.0	32.7
L	735	L3-6 DO YOU USE OR REFER TO RING COUNTERS?	35.7	7.5	4.5	16.7	.0	.0	.0	32.7
L	736	L3-7 DO YOU USE OR REFER TO DECADE (MOD 10) COUNTERS?	28.6	8.5	.0	.0	.0	6.7	.0	41.8
L	737	L3-8 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS?	50.0	10.4	4.5	16.7	.0	.0	.0	36.4
L	738	L3-9 DO YOU USE OR REFER TO DOWN CLOCKS?	47.6	12.3	4.5	16.7	1.3	.0	.0	45.5
L	739	L3-10 DO YOU USE OR REFER TO UP CLOCKS?	50.0	13.2	4.5	16.7	1.3	.0	.0	45.5
L	740	L3-11 DO YOU USE OR REFER TO OTHER MODULOUS COUNTERS?	28.2	6.6	4.5	16.7	1.3	6.7	.0	38.2
L	741	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS?	50.0	15.1	4.5	.0	2.6	.0	.0	41.8
L	742	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS?	45.2	15.1	4.5	.0	2.6	.0	.0	41.8
L	743	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-DOWN COUNTERS?	40.5	13.2	.0	.0	1.3	.0	.0	32.7
L	744	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS?	40.5	8.5	.0	.0	1.3	.0	.0	32.7
L	745	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS?	33.3	7.5	.0	.0	1.3	.0	.0	25.5
L	746	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF COUNTERS FEEDING STORAGE REGISTERS?	59.5	12.3	.0	.0	2.6	.0	.0	36.4
L	747	L3-18 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS?	64.3	15.1	.0	.0	2.6	.0	.0	34.5
L	748	L3-19 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS?	50.0	7.5	.0	.0	2.6	.0	.0	27.3
L	749	L3-20 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS?	23.8	5.7	.0	.0	2.6	.0	.0	20.0
L	750	L3-21 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES?	33.3	8.5	.0	.0	1.3	.0	.0	25.5
L	751	L3-22 DO YOU DETERMINE THE APPROPRIATE 'AND' GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT?	50.0	10.4	.0	16.7	1.3	.0	.0	29.1

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
M		TIMING CIRCUITS (M1), USE OF SIGNAL GENERATORS (M2), MOTORS AND GENERATORS (M3)								
M	752	M1-1 DO YOU WORK WITH SAWTOOTH WAVE GENERATOR TIMING CIRCUITS?	35.7	13.2	.0	33.3	3.8	6.7	1.2	80.0
M	753	M1-2 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATOR TIMING CIRCUITS?	7.1	3.8	.0	.0	.0	.0	.0	60.0
M	754	M1-3 DO YOU WORK WITH PULSED OSCILLATOR TIMING CIRCUITS?	28.6	9.4	.0	33.3	5.1	20.0	.0	63.6
M	755	M1-4 DO YOU WORK WITH BLOCKING OSCILLATOR TIMING CIRCUITS?	14.3	2.8	.0	.0	1.3	.0	.0	54.5
M	756	M1-5 DO YOU WORK WITH MASTER STATION TIMING CIRCUITS?	42.9	4.7	.0	.0	6.4	6.7	2.5	34.5
M	757	M1-6 DO YOU USE OR REFER TO RISE TIME?	45.2	12.3	.0	50.0	2.6	6.7	.0	78.2
M	758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	42.9	8.5	.0	50.0	2.6	.0	.0	63.6
M	759	M1-8 DO YOU USE OR REFER TO SWEEP TIME?	45.2	12.3	.0	83.3	3.8	13.3	.0	83.6
M	760	M1-9 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS?	21.4	8.5	.0	33.3	2.6	6.7	.0	67.3
M	761	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS?	21.4	9.4	.0	33.3	2.6	6.7	.0	58.2
M	762	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS?	19.0	5.7	.0	16.7	2.6	6.7	.0	49.1
M	763	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS?	21.4	5.7	.0	.0	.0	.0	.0	56.4
M	764	M2-1 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M3-1; IF YES, CONTINUE.	35.7	47.2	13.6	83.3	39.7	80.0	16.2	74.5
M	765	M2-2 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS?	28.6	45.3	9.1	83.3	37.2	73.3	12.5	74.5
M	766	M2-3 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS?	16.7	37.7	4.5	66.7	33.3	33.3	7.5	72.7
M	767	M2-4 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS?	19.0	36.8	9.1	33.3	24.4	33.3	7.5	67.3
M	768	M2-5 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS?	16.7	31.1	.0	.0	11.5	20.0	1.2	61.8
M	769	M2-6 DO YOU USE AUDIO SINE-WAVE GENERATORS?	26.2	11.3	.0	66.7	19.2	73.3	6.3	52.7
M	770	M2-7 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE?	23.8	13.2	.0	66.7	1.3	6.7	2.5	52.7
M	771	M2-8 DO YOU USE RF GENERATORS LESS THAN 1,000 MH?	9.5	6.6	.0	16.7	2.6	6.7	1.2	29.1
M	772	M2-9 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH?	2.4	2.8	.0	16.7	1.3	.0	1.2	25.5
M	773	M2-10 DO YOU USE WHITE NOISE GENERATORS?	2.4	1.9	.0	.0	1.3	.0	.0	27.3
M	774	M2-11 DO YOU USE PATTERN GENERATORS?	14.3	37.7	4.5	16.7	2.6	.0	.0	40.0
M	775	M2-12 DO YOU USE PSEUDO-RANDOM GENERATORS?	4.8	7.5	.0	.0	1.3	.0	.0	7.3
M	776	M2-13 DO YOU USE TIME MARK GENERATORS?	7.1	17.0	4.5	16.7	.0	.0	.0	50.9
M	777	M2-14 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS?	4.8	17.0	4.5	16.7	10.3	.0	1.2	38.2
M	778	M3-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS, GENERATORS (SERVO), OR ALTERNATORS? IF NO, GO TO ITEM M1-1; IF YES, CONTINUE.	64.3	59.4	59.1	66.7	24.4	13.3	6.3	83.6
M	779	M3-2 DO YOU INSPECT MOTORS?	50.0	57.5	45.5	66.7	23.1	13.3	5.0	87.3
M	780	M3-3 DO YOU CLEAN OR LUBRICATE MOTORS?	52.4	53.8	9.1	33.3	23.1	13.3	.0	85.5
M	781	M3-4 DO YOU OPERATE MOTORS?	54.8	51.9	50.0	50.0	19.2	13.3	2.5	85.5
M	782	M3-5 DO YOU REMOVE OR REPLACE COMPLETE MOTORS?	54.8	55.7	.0	50.0	20.5	13.3	6.3	85.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
M	787	M3-6 DO YOU REMOVE OR REPLACE MOTOR PARTS?	42.9	50.9	.0	50.0	9.0	.0	.0	85.5
M	788	M3-7 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS?	54.8	50.9	40.9	66.7	23.1	13.3	3.7	87.3
M	789	M3-8 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS?	31.0	51.9	4.5	33.3	9.0	.0	1.2	83.6
M	790	M3-9 DO YOU PERFORM TASKS ON MOTOR FIELD COILS?	16.7	40.6	.0	16.7	6.4	.0	.0	58.2
M	791	M3-10 DO YOU PERFORM ANY TASKS ON MOTOR ARMATURES?	28.6	47.2	.0	16.7	9.0	.0	.0	67.3
M	792	M3-11 DO YOU PERFORM ANY TASKS ON MOTOR ROTORS?	21.4	34.9	.0	16.7	9.0	.0	.0	69.1
M	793	M3-12 DO YOU PERFORM ANY TASKS ON MOTOR BRUSHES?	26.2	47.2	.0	16.7	12.8	.0	.0	85.5
M	794	M3-13 DO YOU PERFORM ANY TASKS ON MOTOR SLIP RINGS?	19.0	43.4	.0	16.7	6.4	.0	.0	61.8
M	795	M3-14 DO YOU PERFORM ANY TASKS ON MOTOR COMMUTATORS?	19.0	43.4	.0	16.7	7.7	.0	.0	61.8
M	796	M3-15 DO YOU PERFORM ANY TASKS ON MOTOR POLE PIECES?	14.3	30.2	.0	16.7	5.1	.0	.0	40.0
M	797	M3-16 DO YOU DETERMINE OR MEASURE FORCE OR TORQUE CREATED BY A MOTOR?	2.4	11.3	.0	16.7	.0	.0	.0	16.4
M	798	M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR?	9.5	17.9	4.5	16.7	.0	.0	.0	32.7
M	799	M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS?	2.4	3.8	.0	16.7	.0	.0	.0	21.8
M	800	M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS?	28.6	54.7	9.1	50.0	10.3	6.7	.0	78.2
M	801	M3-20 DO YOU WORK WITH INDUCTION MOTORS?	23.8	13.2	13.6	50.0	10.3	6.7	.0	80.0
M	802	M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS?	9.5	3.8	18.2	16.7	7.7	6.7	.0	50.9
M	803	M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS?	19.0	15.1	13.6	.0	10.3	.0	1.2	78.2
M	804	M3-23 DO YOU WORK WITH SERVOS OR SYNCHROS MOTORS?	11.9	17.9	9.1	16.7	5.1	13.3	.0	65.5
M	805	M3-24 DO YOU WORK WITH SHADED-POLE MOTORS?	4.8	1.9	.0	.0	3.8	.0	1.2	30.9
M	806	M3-25 DO YOU INSPECT GENERATORS OR ALTERNATORS?	47.6	4.7	36.4	16.7	6.4	.0	.0	43.6
M	807	M3-26 DO YOU CLEAN OR LUBRICATE GENERATORS OR ALTERNATORS?	45.2	3.8	9.1	.0	6.4	.0	.0	41.8
M	808	M3-27 DO YOU OPERATE GENERATORS OR ALTERNATORS?	45.2	3.8	50.0	16.7	7.7	.0	.0	43.6
M	809	M3-28 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS OR ALTERNATORS?	47.6	3.8	.0	.0	5.1	.0	.0	32.7
M	810	M3-29 DO YOU REMOVE OR REPLACE GENERATOR, ALTERNATOR, OR PARTS?	40.5	3.8	.0	.0	2.6	.0	.0	32.7
M	811	M3-30 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS OR ALTERNATORS?	45.2	3.8	27.3	16.7	7.7	.0	.0	40.0
M	812	M3-31 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS OR ALTERNATORS?	31.0	3.8	13.6	16.7	3.8	.0	.0	32.7
		M METER MOVEMENTS (N1), SATURABLE REACTORS AND MAGNETIC AMPLIFIERS (N2), WAVESHAPING CIRCUITS (N3)								
M	813	N1-1 DO YOU WORK WITH METERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N2-1; IF YES, CONTINUE.	57.1	58.5	63.6	100.0	73.1	73.3	41.2	87.3
M	814	N1-2 DO YOU CONSIDER THE FUNCTIONS OF PERMANENT MAGNET INTERNAL METER PARTS?	16.7	27.4	9.1	16.7	14.1	6.7	5.0	45.5
M	815	N1-3 DO YOU CONSIDER THE FUNCTIONS OF MOVING COIL INTERNAL METER PARTS?	16.7	29.2	9.1	.0	14.1	20.0	6.3	49.1
M	816	N1-4 DO YOU CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS INTERNAL METER PARTS?	11.9	13.2	9.1	.0	14.1	.0	5.0	41.8

D TSK	TITLES	306 71 (M)	306 72 (M)	316 72F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	418 70 (M)
N 813	N1-5 DO YOU READ METER SCALES?	57.1	59.4	63.6	100.0	70.5	66.7	43.8	89.1
N 814	N1-6 DO YOU EXTEND THE RANGE OF AMMETERS?	21.4	17.0	31.8	33.3	26.9	6.7	12.5	51.8
N 815	N1-7 DO YOU EXTEND THE RANGE OF VOLTMETERS?	23.8	22.6	31.8	50.0	35.9	6.7	17.5	65.5
N 816	N1-8 DO YOU ZERO OHMMETERS?	59.5	57.5	59.1	100.0	69.2	73.3	43.8	87.3
N 817	N1-9 DO YOU ZERO AMMETERS?	23.8	21.7	22.7	50.0	29.5	13.3	10.0	69.1
N 818	N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)?	40.5	32.1	18.2	66.7	26.9	40.0	21.2	65.5
N 819	N1-11 DO YOU CONSIDER BALLASTIC RESPONSE OF METER MOVEMENTS?	7.1	3.8	.0	16.7	2.6	.0	1.2	18.2
N 820	N1-12 DO YOU CONSIDER OTHER METER MOVEMENTS?	14.3	18.9	4.5	33.3	21.8	20.0	11.2	54.2
N 821	N2-1 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N3-1; IF YES, CONTINUE.	7.1	1.9	4.5	.0	1.3	.0	.0	12.7
N 822	N2-2 DO YOU INSPECT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	2.4	.0	.0	.0	.0	.0	.0	9.1
N 823	N2-3 DO YOU CLEAN SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	9.1
N 824	N2-4 DO YOU ADJUST SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	7.3
N 825	N2-5 DO YOU TROUBLESHOOT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	2.4	.0	.0	.0	.0	.0	.0	9.1
N 826	N2-6 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS?	2.4	.0	.0	.0	.0	.0	.0	9.1
N 827	N2-7 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS?	.0	.9	.0	.0	.0	.0	.0	9.1
N 828	N2-8 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS?	4.8	.9	.0	.0	.0	.0	.0	7.3
N 829	N2-9 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	2.4	1.9	.0	.0	.0	.0	.0	10.9
N 830	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	2.4	.9	.0	.0	.0	.0	.0	10.9
N 831	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS?	.0	.9	.0	.0	.0	.0	.0	7.3
N 832	N2-12 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS?	2.4	.0	.0	.0	.0	.0	.0	12.7
N 833	N3-1 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM G1-1; IF YES, CONTINUE.	35.7	17.9	4.5	.0	6.4	13.3	1.2	67.3
N 834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	21.0	12.7	.0	.0	1.3	6.7	.0	63.6
N 835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	26.2	11.3	.0	.0	1.3	6.7	.0	47.3
N 836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	27.8	8.5	.0	.0	1.3	6.7	.0	40.0
N 837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	19.0	6.6	.0	.0	1.3	6.7	.0	40.0
N 838	N3-6 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS?	21.0	6.6	.0	.0	.0	.0	.0	43.6
N 839	N3-7 DO YOU USE OR REFER TO INTEGRATING CIRCUITS?	27.8	12.3	.0	.0	.0	.0	.0	50.3
N 840	N3-8 DO YOU REFER TO THE CLASSIFICATION OF TIME PULSES AS LONG, FLAT, OR SHORT?	27.8	8.5	.0	.0	1.3	.0	.0	29.2

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
N	841	N3-9 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION?	11.9	7.5	.0	.0	.0	.0	.0	21.8
N	842	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATOR SOLID STATE CIRCUITS?	28.6	13.2	.0	.0	1.3	6.7	.0	69.1
N	843	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATOR SOLID STATE CIRCUITS?	14.3	8.5	.0	.0	.0	.0	.0	60.0
N	844	N3-12 DO YOU WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATOR SOLID STATE CIRCUITS?	16.7	5.7	.0	.0	1.3	6.7	.0	69.1
N	845	N3-13 DO YOU WORK WITH RAMP (TRAPEZOIDAL) GENERATOR SOLID STATE CIRCUITS?	9.5	6.6	.0	.0	1.3	.0	.0	63.6
N	846	N3-14 DO YOU WORK WITH FUNCTION GENERATOR SOLID STATE CIRCUITS?	11.9	5.7	.0	.0	.0	.0	.0	67.3
N	847	N3-15 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS?	21.4	8.5	.0	.0	.0	.0	.0	60.0
N	848	N3-16 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS?	14.3	9.4	.0	.0	1.3	.0	.0	60.0
N	849	N3-17 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS?	14.3	7.5	.0	.0	1.3	.0	.0	60.0
N	850	N3-18 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS?	28.6	10.4	.0	.0	.0	.0	.0	61.8
N	851	N3-19 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS?	28.2	10.4	.0	.0	1.3	.0	.0	60.0
N	852	N3-20 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS?	26.2	8.5	.0	.0	3.8	.0	.0	50.9
N	853	N3-21 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS?	23.8	7.5	.0	.0	1.3	.0	.0	58.2
0		SINGLE OR INDEPENDENT SIDEBAND SYSTEMS (01), PULSE MODULATION SYSTEMS (02), ANTENNAS (03)								
O	854	01-1 DO YOU WORK ON SINGLE OR INDEPENDENT SIDEBAND SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 02-1; IF YES, CONTINUE.	.0	1.9	18.2	.0	.0	.0	.0	3.6
O	855	01-2 DO YOU INSPECT SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	1.9	18.2	.0	.0	.0	.0	1.8
O	856	01-3 DO YOU CLEAN SINGLE SIDE BAND (SSB) OR INDEPENENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	.9	.0	.0	1.3	.0	1.2	1.8
O	857	01-4 DO YOU ALIGN SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	1.9	.0	.0	1.3	.0	1.2	1.8
O	858	01-5 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	1.9	18.2	.0	1.3	.0	1.2	1.8
O	859	01-6 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	.0	1.9	17.6	.0	.0	.0	1.2	1.8
O	860	01-7 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	1.9	4.5	.0	1.3	.0	1.2	1.8
O	861	01-8 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	.0	1.9	4.5	.0	1.3	.0	1.2	1.8

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0	862	01-9 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM AUDIO AMPLIFIER STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
0	863	01-10 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM BALANCED MODULATOR STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
0	864	01-11 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CARRIER OSCILLATOR STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
0	865	01-12 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM LC FILTER STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
0	866	01-13 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CRYSTAL FILTER STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
0	867	01-14 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MECHANICAL FILTER STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
0	868	01-15 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM OSCILLATOR STAGE?	.0	.0	.0	.0	1.3	.0	.0	1.8
0	869	01-16 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MIXER STAGE?	.0	.0	.0	.0	1.3	.0	.0	1.8
0	870	01-17 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DRIVER STAGE?	.0	.0	.0	.0	1.3	.0	.0	1.8
0	871	01-18 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM POWER AMPLIFIER STAGES?	.0	.9	.0	.0	1.3	.0	.0	1.8
0	872	01-19 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM RF AMPLIFIER STAGE?	.0	.0	4.5	.0	.0	.0	.0	1.9
0	873	01-20 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM FREQUENCY CONVERTER STAGES?	.0	.0	4.5	.0	1.3	.0	.0	1.8
0	874	01-21 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM IF AMPLIFIER STAGE?	.0	.0	.0	.0	.0	.0	.0	1.8
0	875	01-22 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DEMODULATOR STAGE?	.0	.0	4.5	.0	.0	.0	.0	1.8
0	876	01-23 DO YOU USE OR REFER TO SELECTIVE FADING WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	1.8
0	877	01-24 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	6.7	.0	1.8
0	878	01-25 DO YOU USE OR REFER TO FREQUENCY STABILITY WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	1.8
0	879	01-26 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	1.8
0	880	01-27 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB OR ISB TRANSMITTERS?	.0	.0	.0	.0	.0	.0	.0	1.8
0	881	01-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB TRANSMITTER SCHEMATIC DIAGRAMS?	.0	.0	.0	.0	.0	.0	.0	1.8
0	882	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB RECEIVER SCHEMATIC DIAGRAMS?	.0	.0	.0	.0	.0	.0	.0	1.8
0	883	01-30 DO YOU PERFORM AERONAUTIC STATION ASSESSMENT PROGRAMS (ASAP)?	.0	.0	.0	.0	.0	.0	.0	1.8
0	884	02-1 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 03-1; IF YES, CONTINUE.	9.5	4.7	.0	.0	3.8	.0	1.2	12.7
0	885	02-2 DO YOU INSPECT PULSE MODULATION SYSTEMS?	4.8	1.9	.0	.0	2.6	.0	.0	12.7
0	886	02-3 DO YOU CLEAN PULSE MODULATION SYSTEMS?	2.4	.9	.0	.0	2.6	.0	.0	10.9
0	887	02-4 DO YOU ALIGN PULSE MODULATION SYSTEMS?	2.4	.9	.0	.0	1.3	.0	.0	12.7

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0	888	02-5 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS?	4.8	.9	.0	.0	2.6	.0	.0	12.7
0	889	02-6 DO YOU TROUPLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS?	4.8	.0	.0	.0	.0	.0	.0	12.7
0	890	02-7 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS?	2.4	.9	.0	.0	1.3	.0	.0	12.7
0	891	02-8 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS?	2.4	.0	.0	.0	1.3	.0	.0	12.7
0	892	02-9 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	1.3	.0	.0	10.9
0	893	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) PULSE MODULATION SYSTEMS?	4.8	.9	.0	.0	.0	.0	.0	10.9
0	894	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	.0	.0	.0	9.1
0	895	02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) PULSE MODULATION SYSTEMS?	4.8	.9	.0	.0	1.3	.0	.0	7.3
0	896	02-13 DO YOU WORK ON LINE PULSING MODULATION PULSE MODULATION SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	10.9
0	897	02-14 DO YOU WORK ON TIME DIVISION MULTIPLEXING (TDM) PULSE MODULATION SYSTEMS?	7.1	.0	.0	.0	2.6	.0	.0	5.5
0	898	02-15 DO YOU WORK ON - DON'T KNOW WHICH TYPE OF MODULATION SYSTEM?	.0	.0	.0	.0	.0	.0	.0	3.6
0	899	02-16 DO YOU PEPFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLY STAGE?	4.8	.9	.0	.0	.0	.0	.0	12.7
0	900	02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODE STAGE?	.0	.0	.0	.0	1.3	.0	.0	9.1
0	901	02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORK STAGE?	7.1	.9	.0	.0	1.3	.0	.0	12.7
0	902	02-19 DO YOU PERFORM T/ KS ON PULSE MODULATIN SYSTEM TIMER STAGE?	7.1	.0	.0	.0	.0	.0	.0	12.7
0	903	02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRON STAGE?	4.8	.0	.0	.0	.0	.0	.0	7.3
0	904	02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TPANSFORMER STAGE?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	905	02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBE STAGE?	4.8	.0	.0	.0	.0	.0	.0	5.5
0	906	02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIER STAGE?	7.1	.0	.0	.0	.0	.0	.0	7.3
0	907	02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTER STAGE?	7.1	.0	.0	.0	.0	.0	.0	10.9
0	908	02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIER STAGE?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	909	02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTOR STAGE?	7.1	.0	.0	.0	.0	.0	.0	10.9
0	910	02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIER STAGE?	4.8	.0	.0	.0	.0	.0	.0	9.1
0	911	02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIER STAGE?	4.8	.0	.0	.0	.0	.0	.0	9.1
0	912	02-29 DO YOU USE OR REFER TO PULSE RECURRANCE FREQUENCY (PRF) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	1.3	.0	.0	10.9

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0	913	02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	1.3	.0	.0	10.9
0	914	02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	7.1	.9	.0	.0	2.6	.0	.0	12.7
0	915	02-32 DO YOU USE OR REFER TO PULSE SHAPE WHEN WORKING WITH PULSE MODULATION SYSTEMS?	7.1	.9	.0	.0	.0	.0	.0	12.7
0	916	02-33 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	917	02-34 DO YOU USE OR REFER TO AVERAGE POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	.0	.0	.0	12.7
0	918	02-35 DO YOU USE OR REFER TO DUTY CYCLE (DC) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.9	.0	.0	1.3	.0	.0	12.7
0	919	02-36 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	4.8	.0	.0	.0	.0	.0	.0	7.3
0	920	02-37 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	4.8	.0	.0	.0	.0	.0	.0	9.1
0	921	02-38 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS?	4.8	.0	.0	.0	.0	.0	.0	3.6
0	922	02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	923	02-40 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	924	03-1 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P1-1; IF YES, CONTINUE.	4.8	3.8	22.7	16.7	.0	.0	1.2	3.6
0	925	03-2 DO YOU INSPECT ANTENNAS?	4.8	2.8	18.2	16.7	.0	.0	1.2	1.8
0	926	03-3 DO YOU CLEAN ANTENNAS?	2.4	.9	.0	.0	.0	.0	.0	1.8
0	927	03-4 DO YOU PHYSICALLY ALIGN ANTENNAS?	2.4	.9	4.5	.0	.0	.0	.0	1.8
0	928	03-5 DO YOU ELECTRICALLY ALIGN ANTENNAS?	.0	.9	9.1	.0	.0	.0	.0	1.8
0	929	03-6 DO YOU TROUBLESHOOT TO ANTENNAS?	4.8	.9	18.2	16.7	.0	.0	.0	1.8
0	930	03-7 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS?	2.4	.9	13.6	.0	.0	.0	.0	1.8
0	931	03-8 DO YOU REMOVE OR INSTALL ANTENNAS?	2.4	1.9	.0	.0	.0	.0	.0	1.8
0	932	03-9 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS?	.0	.9	.0	.0	.0	.0	.0	1.8
0	933	03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES?	2.4	.0	.0	.0	.0	.0	.0	1.8
0	934	03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES?	2.4	.0	.0	.0	.0	.0	.0	1.8
0	935	03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	1.8
0	936	03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS RESISTIVE LOADS TO THE GENERATOR?	2.4	.0	.0	.0	.0	.0	.0	1.8
0	937	03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR?	9.5	1.9	.0	.0	3.8	6.7	.0	1.8
0	938	03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR?	4.8	.9	.0	.0	.0	.0	.0	1.8
0	939	03-16 DO YOU WORK WITH HERTZ BASIC ANTENNAS?	.0	.9	18.2	.0	.0	.0	1.2	.0
0	940	03-17 DO YOU WORK WITH MARCONI BASIC ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0

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0	941	03-18 DO YOU WORK WITH RHOMBIC BASIC ANTENNAS?	2.4	.9	.0	.0	.0	.0	.0	.0
0	942	03-19 DO YOU WORK WITH DIPOLE BASIC ANTENNAS?	2.4	.9	18.2	.0	.0	.0	1.2	.0
0	943	03-20 DO YOU WORK WITH SCIMITAR BASIC ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0
0	944	03-21 DO YOU WORK WITH PARABOLIC BASIC ANTENNAS?	2.4	.9	4.5	.0	.0	.0	.0	.0
0	945	03-22 DO YOU WORK WITH GROUND PLANE BASIC ANTENNAS?	4.8	.9	9.1	.0	.0	.0	1.2	.0
0	946	03-23 DO YOU WORK WITH FOLDED DIPOLE BASIC ANTENNAS?	2.4	.9	9.1	.0	.0	.0	.0	.0
0	947	03-24 DO YOU WORK WITH BROADSIDE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0
0	948	03-25 DO YOU WORK WITH END-FIRE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0
0	949	03-26 DO YOU WORK WITH CARDIOID ARRAYS?	.0	.0	4.5	.0	.0	.0	.0	.0
0	950	03-27 DO YOU WORK WITH COLLINEAR ARRAYS?	.0	.0	4.5	.0	.0	.0	.0	.0
0	951	03-28 DO YOU WORK WITH PHASE ARRAYS?	2.4	.0	.0	.0	.0	.0	.0	.0
0	952	03-29 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS?	2.4	.0	.0	16.7	.0	.0	.0	.0
0	953	03-30 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS?	2.4	.0	.0	.0	.0	.0	.0	.0
0	954	03-31 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS?	2.4	.0	.0	16.7	.0	.0	.0	.0
0	955	03-32 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS?	2.4	.0	.0	.0	.0	.0	.0	.0
0	956	03-33 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION?	2.4	.0	.0	.0	.0	.0	.0	.0
0	957	03-34 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD?	2.4	.0	.0	.0	.0	.0	.0	.0
0	958	03-35 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED?	2.4	.0	4.5	16.7	.0	.0	.0	.0
0	959	03-36 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED?	2.4	.0	9.1	.0	.0	.0	.0	.0
0	960	03-37 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON?	2.4	.0	.0	.0	.0	.0	.0	.0
0	961	03-38 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS?	.0	.9	4.5	.0	.0	.0	.0	.0
0	962	03-39 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS?	.0	.0	4.5	.0	.0	.0	.0	.0
0	963	03-40 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS?	2.4	.0	4.5	.0	1.3	.0	.0	.0
0	964	03-41 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN - DON'T KNOW WHAT KIND OF ELEMENT?	7.1	.9	9.1	16.7	1.3	.0	.0	.0
0	965	03-42 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS?	2.4	.9	4.5	16.7	.0	.0	.0	.0
0	966	03-43 DO YOU WORK ON BIDIRECTIONAL ANTENNAS?	.0	.9	9.1	.0	.0	.0	.0	.0
0	967	03-44 DO YOU WORK ON OMNIDIRECTIONAL ANTENNAS?	4.8	.9	18.2	16.7	.0	.0	1.2	.0
0	968	03-45 DO YOU WORK WITH ROTARY ANTENNA ARRAYS?	2.4	.0	.0	.0	.0	.0	1.2	.0

P TRANSMISSION LINES (P1), WAVEGUIDES AND CAVITY RESONATORS (P2), MICROWAVE AMPLIFIERS AND OSCILLATORS (P3)

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P	969	P1-1 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES? (DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES.) IF NO, GO TO ITEM P2-1; IF YES, CONTINUE.	14.3	11.3	.0	.0	42.3	20.0	30.0	3.6
P	970	P1-2 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE COPPER LOSS OR 'I SUB 2 R' LOSS IN TRANSMISSION LINES?	2.4	.9	.0	.0	11.5	.0	3.7	.0
P	971	P1-3 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES?	2.4	.9	.0	.0	6.4	.0	.0	.0
P	972	P1-4 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE RADIATION LOSS?	2.4	.9	.0	.0	5.1	.0	1.2	.0
P	973	P1-5 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE DIELECTRIC LOSS?	2.4	.9	.0	.0	7.7	.0	5.0	.0
P	974	P1-6 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE LEAKAGE LOSSES?	4.8	.9	.0	.0	15.4	.0	5.0	.0
P	975	P1-7 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE FARADAY SHIELD?	2.4	.9	.0	.0	2.6	.0	1.2	.0
P	976	P1-8 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES?	14.3	11.3	.0	.0	38.5	20.0	26.2	.0
P	977	P1-9 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES?	9.5	6.6	.0	.0	25.6	20.0	12.5	.0
P	978	P1-10 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES?	7.1	4.7	.0	.0	24.4	13.3	10.0	.0
P	979	P1-11 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES?	9.5	4.7	.0	.0	11.5	6.7	8.7	1.8
P	980	P1-12 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES?	7.1	.0	.0	.0	6.4	.0	3.7	.0
P	981	P1-13 DO YOU TROUBLESHOOT TRANSMISSION LINES?	11.9	8.5	.0	.0	38.5	20.0	23.7	.0
P	982	P1-14 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)?	4.8	7.5	.0	.0	17.9	13.3	13.7	1.8
P	983	P1-15 DO YOU SELECT APPROPRIATE TRANSMISSION LINE TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS?	7.1	1.9	.0	.0	10.3	.0	5.0	.0
P	984	P1-16 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS?	9.5	4.7	.0	.0	20.5	13.3	11.2	.0
P	985	P1-17 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	2.4	.0	.0	.0	.0	.0	1.2	.0
P	986	P1-18 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	2.4	.0	.0	.0	.0	.0	1.2	.0
P	987	P1-19 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS?	2.4	.0	.0	.0	1.3	6.7	1.2	.0
P	988	P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS?	7.1	2.8	.0	.0	19.2	6.7	10.0	.0
P	989	P1-21 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING?	.0	.0	.0	.0	2.6	.0	3.7	.0
P	990	P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES?	4.8	.0	.0	.0	11.5	.0	5.0	.0
P	991	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES?	.0	.0	.0	.0	5.1	.0	1.2	.0

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P	992	P1-24 DO YOU USE OR REFER TO THE TERM CUT OFF FREQUENCY OF TRANSMISSION LINES?	2.4	1.9	.0	.0	6.4	.0	1.2	.0
P	993	P2-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES?	2.4	.0	.0	.0	.0	.0	1.2	.0
P	994	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES?	2.4	.9	.0	.0	2.6	.0	.0	.0
P	995	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTHS FOR GIVEN FREQUENCIES?	2.4	.0	.0	.0	1.3	.0	2.5	.0
P	996	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES?	4.8	.0	.0	.0	7.7	6.7	2.5	.0
P	997	P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES?	4.8	1.9	.0	.0	16.7	6.7	5.0	.0
P	998	P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES?	4.8	2.8	.0	.0	12.8	6.7	2.5	.0
P	999	P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING?	2.4	1.9	.0	.0	7.7	6.7	6.3	.0
P	1000	P2-1 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P3-1; IF YES, CONTINUE.	2.4	.0	.0	.0	1.3	.0	2.5	1.8
P	1001	P2-2 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	1.2	1.8
P	1002	P2-3 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	1.2	1.8
P	1003	P2-4 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	.0	.0
P	1004	P2-5 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	.0	.0
P	1005	P2-6 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P	1006	P2-7 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	1.8
P	1007	P2-8 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS?	.0	.0	.0	.0	.0	.0	.0	1.8
P	1008	P2-9 DO YOU REMOVE OR INSTALL DUMMY LOADS?	.0	.0	.0	.0	.0	.0	.0	1.8
P	1009	P2-10 DO YOU REMOVE OR INSTALL E BENDS?	.0	.9	.0	.0	.0	.0	.0	.0
P	1010	P2-11 DO YOU REMOVE OR INSTALL H BENDS?	.0	.0	.0	.0	.0	.0	.0	.0
P	1011	P2-12 DO YOU REMOVE OR INSTALL OTHER BENDS?	.0	.0	.0	.0	.0	.0	.0	.0
P	1012	P2-13 DO YOU REMOVE OR INSTALL CHOKE JOINTS?	.0	.9	.0	.0	.0	.0	.0	1.8
P	1013	P2-14 DO YOU REMOVE OR INSTALL ROTATING JOINTS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P	1014	P2-15 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS?	.0	.0	.0	.0	.0	.0	1.2	1.8
P	1015	P2-16 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS?	.0	.0	.0	.0	.0	.0	1.2	1.8
P	1016	P2-17 DO YOU REMOVE OR INSTALL DUPLEXERS OR MIXERS?	.0	.0	.0	.0	1.3	.0	1.2	1.8
P	1017	P2-18 DO YOU REMOVE OR INSTALL WAVEGUIDE SHUTTERS?	.0	.9	.0	.0	1.3	.0	.0	1.8
P	1018	P2-19 DO YOU REMOVE OR INSTALL TRANSMIT (TR) OR ANTITRANSMIT (ATR) TUBES?	.0	.0	.0	.0	1.3	.0	.0	.0
P	1019	P2-20 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES?	2.4	.0	.0	.0	1.3	6.7	.0	.0
P	1020	P2-21 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES?	2.4	.0	.0	.0	1.3	6.7	1.2	.0
P	1021	P2-22 DO YOU USE OR REFER TO CUT OFF FREQUENCY OF WAVEGUIDES?	4.8	.0	.0	.0	.0	6.7	1.2	1.8
P	1022	P2-23 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	1.8
P	1023	P2-24 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P	1024	P2-25 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS?	2.4	.0	.0	.0	.0	.0	.0	.0

D TSK	TITLES	306 71 (F)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P1025	P2-26 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1026	P2-27 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1027	P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OR .7 WAVELENGTHS OF THE OPERATING FREQUENCY?	.0	.0	.0	.0	.0	.0	.0	.0
P1028	P2-29 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 AS AN AVERAGE?	.0	.0	.0	.0	.0	.0	.0	.0
P1029	P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION?	.0	.0	.0	.0	.0	.0	.0	.0
P1030	P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1031	P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1032	P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1033	P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1034	P2-35 DO YOU WORK WITH HIGH POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	1.3	.0	.0	1.8
P1035	P2-36 DO YOU WORK WITH LOW POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	1.3	.0	.0	1.8
P1036	P2-37 DO YOU WORK WITH LOOP ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	1.3	.0	.0	1.8
P1037	P2-38 DO YOU WORK WITH APERTURES (WINDOWS OR IRISES) ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	1.8
P1038	P2-39 DO YOU WORK WITH CHOKE JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	1.3	.0	.0	.0
P1039	P2-40 DO YOU WORK WITH ROTATING JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1040	P2-41 DO YOU WORK WITH JOINTS IN WAVEGUIDES OR CAVITY RESONATORS BUT DON'T KNOW WHICH KIND?	.0	.0	.0	.0	1.3	.0	.0	1.8
P1041	P2-42 DO YOU TUNE CAVITY RESONATORS USING ELECTRICAL METHODS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P1042	P2-43 DO YOU TUNE CAVITY RESONATORS USING MECHANICAL METHODS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P1043	P2-44 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	1.2	1.8
P1044	P3-1 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS? IF NO, GO TO ITEM Q1-1; IF YES, CONTINUE.	2.4	.0	.0	.0	.0	.0	2.5	1.8
P1045	P3-2 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.9	.0	.0	.0	6.7	.0	1.8

SHEPPARD ELECTRONIC PRINCIPLES INVENTORY DATA — FCPTC2 PAGE 125 — OCCUPATIONAL ANALYSIS PROGRAM USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P1046	P3-3 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.9	.0	.0	.0	6.7	1.2	1.8
P1047	P3-4 DO YOU USE OR REFER TO LEAD INDUCTANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTINAL ELECTRON TUBES AT HIGH FREQUENCIES?	2.4	.9	.0	.0	.0	6.7	.0	1.8
P1048	P3-5 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	2.4	.9	.0	.0	.0	6.7	1.2	1.8
P1049	P3-6 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION?	2.4	1.9	.0	.0	1.3	.0	.0	1.8
P1050	P3-7 DO YOU USE OR REFER TO ELECTRON BUNCHING?	7.1	1.9	.0	.0	1.3	.0	1.2	.0
P1051	P3-8 DO YOU WORK WITH TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	6.7	.0	.0
P1052	P3-9 DO YOU WORK WITH THREE-CAVITY KLYSTRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1053	P3-10 DO YOU WORK WITH REFLEX KLYSTRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1054	P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)?	2.4	.0	.0	.0	.0	.0	.0	.0
P1055	P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1056	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1057	P3-14 DO YOU WORK WITH MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P1058	P3-15 DO YOU WORK WITH BACKWARD WAVE OSCILLATORS (BWO)?	.0	.0	.0	.0	.0	.0	.0	.0
P1059	P3-16 DO YOU INSPECT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	2.4	.0	.0	.0	.0	.0	.0	.0
P1060	P3-17 DO YOU CLEAN KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0
P1061	P3-18 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1062	P3-19 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1063	P3-20 DO YOU PERFORM OPERATIONAL CHECKS ON KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	2.4	.0	.0	.0	.0	.0	.0	.0
P1064	P3-21 DO YOU TROUBLESHOOT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	4.8	.0	.0	.0	.0	.0	.0	.0
P1065	P3-22 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRONS OR TWT'S?	.0	.0	.0	.0	.0	.0	.0	.0
P1066	P3-23 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1067	P3-24 DO YOU INSPECT PARAMETRIC AMPLIFIERS?	7.1	.9	.0	.0	.0	.0	.0	.0
P1068	P3-25 DO YOU CLEAN PARAMETRIC AMPLIFIERS?	7.1	.9	.0	.0	1.3	.0	2.5	.0
P1069	P3-26 DO YOU ADJUST PARAMETRIC AMPLIFIERS?	7.1	.9	.0	.0	1.3	.0	2.5	.0
P1070	P3-27 DO YOU TUNE PARAMETRIC AMPLIFIERS?	7.1	.9	.0	.0	1.3	.0	2.5	.0
P1071	P3-28 DO YOU PERFORM OPERATIONAL CHECKS ON PARAMETRIC AMPLIFIERS?	2.4	.9	.0	.0	2.6	.0	1.2	.0
P1072	P3-29 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	2.5	.0
P1073	P3-30 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	2.6	.0	1.2	.0
P1074	P3-31 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS?	.0	.0	.0	.0	2.6	.0	1.2	.0
P1075	P3-32 DO YOU INSPECT MAGNETRONS?	2.4	.9	.0	.0	.0	.0	.0	1.8
P1076	P3-33 DO YOU CLEAN MAGNETRONS?	2.4	1.9	.0	.0	.0	.0	.0	.0
P1077	P3-34 DO YOU ADJUST MAGNETRONS?	2.4	1.9	.0	.0	.0	.0	1.2	.0
P1078	P3-35 DO YOU TUNE MAGNETRONS?	2.4	1.9	.0	.0	.0	.0	.0	.0
P1079	P3-36 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS?	4.8	1.9	.0	.0	.0	.0	.0	1.8
P1080	P3-37 DO YOU TROUBLESHOOT MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	1.8

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P1081	P3-38 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	1.8
P1082	P3-39 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	1.8
P1083	P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR PLATE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1084	P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1085	P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1086	P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FEEDBACK LOOP COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	.0	.0
P1087	P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF DRIFT SPACE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	1.2	.0
P1088	P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	2.4	.0	.0	.0	1.3	.0	1.2	.0
P1089	P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	1.2	.0
P1090	P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CONTROL GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	1.2	.0
P1091	P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	1.2	.0
P1092	P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REPELLER (REFLECTOR) PLATE COMPONENTS OF REFLEX KLYSTRONS?	2.4	.0	.0	.0	1.3	6.7	.0	.0
P1093	P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID COMPONENTS OF REFLEX KLYSTRONS?	4.8	.0	.0	.0	1.3	6.7	.0	.0
P1094	P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID CAVITY GAP COMPONENTS OF REFLEX KLYSTRONS?	4.8	.0	.0	.0	1.3	6.7	.0	.0
P1095	P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF RESONANT CAVITY COMPONENTS OF REFLEX KLYSTRONS?	4.8	.0	.0	.0	1.3	.0	.0	.0
P1096	P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETIC COUPLING LOOP COMPONENTS OF REFLEX KLYSTRONS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1097	P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF REFLEX KLYSTRONS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1098	P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF REFLEX KLYSTRONS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1099	P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF OUTPUT LEAD COMPONENTS OF REFLEX KLYSTRONS?	2.4	.9	.0	.0	1.3	.0	.0	.0
P1100	P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF TRAVELING-WAVE TUBES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1101	P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TRAVELING-WAVE TUBES?	4.8	.0	.0	.0	.0	.0	.0	.0
P1102	P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MODULATOR GRID COMPONENTS OF TRAVELING-WAVE TUBES?	4.8	.0	.0	.0	.0	.0	.0	.0
P1103	P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ANODE COMPONENTS OF TRAVELING-WAVE TUBES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1104	P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF HELIX COMPONENTS OF TRAVELING-WAVE TUBES?	4.8	.0	.0	.0	.0	.0	.0	.0
P1105	P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR COMPONENTS OF TRAVELING-WAVE TUBES?	4.8	.0	.0	.0	.0	.0	.0	.0

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P1106	P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNET COMPONENTS OF TRAVELING-WAVE TUBES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1107	P3-64 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ATTENUATOR COMPONENTS OF TRAVELING-WAVE TUBES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1108	P3-65 DO YOU PERFORM TASKS ON FERRITE CIRCULATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1109	P3-66 DO YOU PERFORM TASKS ON SIGNAL CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1110	P3-67 DO YOU PERFORM TASKS ON IDLER CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	7.1	.0	.0	.0	1.3	.0	.0	.0
P1111	P3-68 DO YOU PERFORM TASKS ON VARACTOR DIODE COMPONENTS OF PARAMETRIC AMPLIFIERS?	4.8	.0	.0	.0	1.3	.0	.0	.0
P1112	P3-69 DO YOU PERFORM TASKS ON FERRITE ISOLATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1113	P3-70 DO YOU PERFORM TASKS ON REVERSE-BIAS BATTERY COMPONENTS OF PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	1.2	.0
P1114	P3-71 DO YOU PERFORM TASKS ON ANODE COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1115	P3-72 DO YOU PERFORM TASKS ON ANODE COOLING PIN COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1116	P3-73 DO YOU PERFORM TASKS ON COUPLING LOOP COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1117	P3-74 DO YOU PERFORM TASKS ON HEATER LEAD COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1118	P3-75 DO YOU PERFORM TASKS ON RESONANT CAVITY COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1119	P3-76 DO YOU PERFORM TASKS ON CATHRODE COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1120	P3-77 DO YOU PERFORM TASKS ON MAGNET COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
Q	REGISTERS (Q1), STORAGE DEVICES (Q2), DIGITAL-TO-ANALOG AND DIGITAL-TO-DIGITAL CONVERTERS (Q3)								
Q1121	Q1-1 DO YOU USE OR REFER TO STORAGE RESISTERS?	69.0	32.1	9.1	33.3	9.0	.0	1.2	50.9
Q1122	Q1-2 DO YOU USE OR REFER TO SHIFT REGISTERS?	69.0	34.9	.0	33.3	3.8	.0	.0	52.7
Q1123	Q1-3 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS?	66.7	34.0	.0	33.3	3.8	.0	.0	58.2
Q1124	Q1-4 DO YOU USE OR REFER TO LOGIC SYMBOLS OR STORAGE REGISTERS?	66.7	31.1	.0	33.3	3.8	.0	.0	58.2
Q1125	Q1-5 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTER CIRCUITS?	66.7	29.2	.0	33.3	2.6	.0	1.2	52.7
Q1126	Q1-6 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPES OF REGISTER CIRCUITS?	61.9	25.5	.0	33.3	2.6	6.7	1.2	50.9
Q1127	Q1-7 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED?	59.5	28.3	.0	33.3	2.6	6.7	1.2	49.1

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
Q1128	Q2-1 DO YOU WORK WITH STORAGE DEVICES IN YOUR PRESENT JOB? IF NO, GO TO ITEM Q3-1; IF YES, CONTINUE.	64.3	27.4	22.7	66.7	19.2	6.7	3.7	23.6
Q1129	Q2-2 DO YOU USE OR REFER TO DELAY LINES?	16.7	7.5	.0	.0	1.3	.0	.0	5.5
Q1130	Q2-3 DO YOU USE OR REFER TO MAGNETIC CORES OR BIMAGS?	57.1	6.6	4.5	16.7	1.3	.0	.0	1.8
Q1131	Q2-4 DO YOU USE OR REFER TO MAGNETIC DRUMS?	7.1	5.7	4.5	33.3	5.1	.0	.0	3.6
Q1132	Q2-5 DO YOU USE OR REFER TO MAGNETIC TAPES?	9.5	17.9	13.6	16.7	15.4	.0	1.2	9.1
Q1133	Q2-6 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OF MEMORY SYSTEMS?	33.3	9.4	4.5	33.3	9.0	.0	1.2	10.9
Q1134	Q2-7 DO YOU USE OR REFER TO STORAGE CAPACITY OF MEMORY SYSTEMS?	45.2	18.9	9.1	33.3	14.1	.0	.0	12.7
Q1135	Q2-8 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS?	28.6	10.4	4.5	16.7	7.7	.0	.0	7.3
Q1136	Q2-9 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES?	14.3	8.5	.0	16.7	1.3	.0	.0	9.1
Q1137	Q2-10 DO YOU USE OR REFER TO MAGNETIC DISKS?	9.5	8.5	4.5	66.7	3.8	.0	.0	9.1
Q1138	Q2-11 DO YOU USE OR REFER TO THIN FILMS?	.0	.0	.0	.0	.0	.0	.0	3.6
Q1139	Q2-12 DO YOU USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED) CIRCUITS?	31.0	17.0	9.1	33.3	7.7	.0	.0	18.2
Q1140	Q2-13 DO YOU USE OR REFER TO BUBBLE MEMORIES?	.0	.9	4.5	16.7	1.3	.0	.0	1.8
Q1141	Q2-14 DO YOU USE OR REFER TO PUNCH CARDS?	47.6	11.3	.0	16.7	1.3	.0	1.2	14.5
Q1142	Q2-15 DO YOU USE OR REFER TO PAPER TAPES?	50.0	19.8	9.1	66.7	3.8	.0	1.2	10.9
Q1143	Q2-16 DO YOU USE OR REFER TO RANDOM ACCESS MEMORIES (RAM)?	35.7	24.5	9.1	33.3	14.1	.0	.0	18.2
Q1144	Q2-17 DO YOU USE OR REFER TO READ ONLY MEMORIES (ROM)?	19.0	23.6	9.1	16.7	14.1	.0	.0	16.4
Q1145	Q2-18 DO YOU USE OR REFER TO PROGRAMMALBE READ ONLY MEMORIES (PROM)?	16.7	15.1	4.5	.0	11.5	.0	.0	16.4
Q1146	Q2-19 DO YOU USE OR REFER TO TRANSFORMER READ ONLY STORAGES (TROS)?	.0	1.9	.0	.0	.0	.0	.0	5.5
Q1147	Q2-20 DO YOU USE OR REFER TO CAPACITY READ ONLY STORAGES (CROS)?	.0	1.9	.0	.0	1.3	.0	.0	5.5
Q1148	Q2-21 DO YOU INSPECT STORAGE DEVICES?	50.0	16.0	9.1	33.3	11.5	.0	.0	18.2
Q1149	Q2-22 DO YOU CLEAN STORAGE DEVICES?	42.9	14.2	4.5	16.7	11.5	.0	1.2	14.5
Q1150	Q2-23 DO YOU ALIGN STORAGE DEVICES?	11.9	7.5	4.5	16.7	1.3	.0	1.2	10.9
Q1151	Q2-24 DO YOU ADJUST STORAGE DEVICES?	11.9	6.6	.0	16.7	2.6	.0	1.2	12.7
Q1152	Q2-25 DO YOU TROUBLESHOOT MEMORY SYSTEM STORAGE DEVICES?	54.8	14.2	4.5	16.7	11.5	.0	1.2	20.0
Q1153	Q2-26 DO YOU REMOVE OR REPLACE SUBASSEMBLIES OR COMPONENTS OF STORAGE DEVICES?	38.1	15.1	.0	33.3	12.8	.0	1.2	18.2
Q1154	Q2-27 DO YOU TRACE SIGNAL FLOW IN STORAGE DEVICES USING LOGIC DIAGRAMS OR SCHMATICS?	47.6	15.1	.0	33.3	2.6	.0	.0	18.2
Q1155	Q3-1 IN YOU PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS OR ANALOG-TO-DIGITAL (A/D) CONVERTERS? IF NO, GO TO ITEM P1-1; IF YES, CONTINUE.	26.2	4.7	.0	.0	14.1	.0	3.7	49.1
Q1156	Q3-2 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES?	4.8	1.9	.0	.0	1.3	.0	.0	18.2
Q1157	Q3-3 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IS DETERMINED BY ADDING THE DENOMINATORS OF THE RESISTORS?	2.4	.9	.0	.0	2.6	.0	.0	16.4
Q1158	Q3-4 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS?	7.1	.9	.0	.0	1.3	.0	.0	12.7
Q1159	Q3-5 DO YOU PERFORM TASKS ON SAMPLE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	7.1	.9	.0	.0	5.1	.0	.0	25.5

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Q1160	Q3-6 DO YOU PERFORM TASKS ON HOLD FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	7.1	.9	.0	.0	2.6	.0	.0	25.5
Q1161	Q3-7 DO YOU PERFORM TASKS ON COMPARE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	11.9	.9	.0	.0	3.8	.0	.0	23.6
Q1162	Q3-8 DO YOU PERFORM TASKS ON DIGITIZE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	14.3	.9	.0	.0	3.8	.0	.0	21.8
Q1163	Q3-9 DO YOU PERFORM TASKS ON PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS BUT DON'T KNOW WHICH FUNCTION?	2.4	.0	.0	.0	5.1	.0	1.2	10.9
Q1164	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS?	7.1	1.9	.0	.0	1.3	.0	.0	27.3
Q1165	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS?	9.5	.9	.0	.0	1.3	.0	.0	27.3
Q1166	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS?	14.3	.9	.0	.0	1.3	.0	.0	25.5
Q1167	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS?	16.7	1.9	.0	.0	2.6	.0	.0	29.1
Q1168	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS?	.0	.9	.0	.0	.0	.0	.0	21.8
Q1169	Q3-15 DO YOU PERFORM ANY TASKS ON ELECTRONIC A/D CONVERTERS?	19.0	2.8	.0	.0	5.1	.0	1.2	30.9
Q1170	Q3-16 DO YOU PERFORM ANY TASKS ON DIGITAL-TO-ANALOG (D/A) CONVERTERS?	19.0	3.8	.0	.0	6.4	.0	1.2	29.1
Q1171	Q3-17 DO YOU OPERATE COMPUTER KEYBOARDS?	11.9	1.9	.0	.0	12.8	.0	.0	21.8
Q1172	Q3-18 DO YOU WORK AT OR WITH COMPUTER TERMINALS?	14.3	1.9	.0	.0	11.5	.0	1.2	14.5
Q1173	Q3-19 HAVE YOU BEEN SENT TO FACTORY TRAINING OR TO ANY OTHER SCHOOL FOR THE SPECIFIC PURPOSE OF RECEIVING COMPUTER OR LOGIC CIRCUIT RELATED TRAINING?	11.9	3.8	.0	.0	10.3	.0	1.2	20.0
Q1174	Q3-20 DO YOU HAVE MICROPROCESSORS OR COMPUTER EQUIPMENT LOCATED AT YOUR WORK STATION WHICH IS OPERATED OR MAINTAINED BY CONTRACTOR PERSONNEL?	16.7	4.7	.0	.0	7.7	6.7	2.5	27.3
Q1175	Q3-21 WAS THE COMPUTER OR LOGIC CIRCUIT TRAINING YOU RECEIVED IN YOUR 3-LEVEL AWARDING COURSE ADEQUATE IN TERMS OF YOUR PRESENT DUTIES?	11.9	.9	.0	.0	1.3	.0	1.2	7.3
Q1176	Q3-22 ARE YOU ASSIGNED AGAINST A POSITION WHICH REQUIRES A "D" PREFIX?	.0	.0	.0	.0	.0	.0	.0	1.8
P	PHANTASTRONS (P1), SCHMITT TRIGGERS (P2), CABLE FABRICATION (P3)								
Q1177	P1-1 DO YOU WORK WITH PHANTASTRON CIRCUITRY? IF NO, GO TO ITEM P2-1. IF YES, CONTIN	2.4	.0	.0	.0	.0	6.7	.0	9.1
Q1178	P1-2 PHANTASTRON CIRCUITR S VARIABLE-DELAY APPLICATIONS IN MY JOB.	2.4	.0	.0	.0	.0	6.7	.0	5.5
Q1179	P1-3 PHANTASTRON CIRCUI S SEARCH-LOCK AUTOMATIC FREQUENCY CONTROLS (AF LICATIONS IN MY JOB.	.0	.0	.0	.0	.0	.0	.0	5.5
Q1180	P1-4 PHANTASTRON CIRCUI HAS MONOSTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	2.4	.0	.0	.0	.0	6.7	.0	7.3

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R1181	R1-5 PHANTASTRON CIRCUITRY HAS BISTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	4.8	.0	.0	.0	.0	6.7	.0	7.3
R1182	R1-6 PHANTASTRON CIRCUITRY HAS FREE-RUNNING MULTIVIBRATORS APPLICATIONS IN MY JOB.	4.8	.0	.0	.0	.0	6.7	.0	7.3
R1183	R2-1 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS? IF NO, GO TO ITEM R3-1; IF YES, CONTINUE.	59.5	26.4	.0	16.7	1.3	13.3	.0	49.1
R1184	R2-2 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS?	57.1	21.7	.0	16.7	1.3	6.7	.0	45.5
R1185	R2-3 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS?	57.1	23.6	.0	16.7	1.3	6.7	.0	49.1
R1186	R3-1 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES?	19.0	22.6	.0	33.3	25.6	13.3	25.0	49.1
R1187	R3-2 DO YOU FABRICATE COAXIAL CABLES?	19.0	10.4	.0	16.7	10.3	.0	5.0	50.9
S	INPUT/OUTPUT (PERIPHERAL) DEVICES (S1), PHOTO SENSITIVE DEVICES (S2), SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) (S3)								
S1188	S1-1 DO YOU WORK WITH INPUT OR OUTPUT DEVICES ON YOUR PRESENT JOB? IF NO, GO TO ITEM S2-1; IF YES, CONTINUE.	73.8	60.4	54.5	66.7	30.8	6.7	7.5	38.2
S1189	S1-2 DO YOU USE OR REFER TO KEYBOARDS OR TELETYPEWRITERS?	66.7	62.3	27.3	83.3	25.6	6.7	5.0	32.7
S1190	S1-3 DO YOU USE OR REFER TO PRINTERS?	73.8	61.3	31.8	83.3	25.6	6.7	3.7	40.0
S1191	S1-4 DO YOU USE OR REFER TO TAPE DRIVES (UNITS)?	40.5	27.4	31.8	83.3	19.2	.0	.0	20.0
S1192	S1-5 DO YOU USE OR REFER TO CARD READERS/CARD PUNCHES?	66.7	12.3	9.1	.0	3.8	6.7	1.2	16.4
S1193	S1-6 DO YOU USE OR REFER TO VIDEO DISPLAYS (CRT'S)?	21.4	34.9	9.1	33.3	20.5	6.7	5.0	45.5
S1194	S1-7 DO YOU USE OR REFER TO NIXIE LIGHTS (TUBES)?	7.1	17.0	4.5	.0	.0	.0	.0	36.4
S1195	S1-8 DO YOU USE OR REFER TO LED'S?	59.5	37.7	40.9	66.7	21.8	.0	1.2	50.9
S1196	S1-9 DO YOU USE OR REFER TO LCD'S?	19.0	14.2	4.5	33.3	7.7	.0	.0	43.6
S1197	S1-10 DO YOU USE OR REFER TO INCANDESENT DISPLAYS?	33.3	13.2	13.6	33.3	3.8	.0	.0	34.5
S1198	S1-11 DO YOU USE OR REFER TO TOGGLE OR PUSH BUTTON SWITCH INPUTS?	71.4	42.5	31.8	50.0	19.2	.0	2.5	45.5
S1199	S1-12 DO YOU USE OR REFER TO INTERFACE ADAPTER UNITS?	42.9	35.8	4.5	66.7	14.1	.0	1.2	30.9
S1200	S1-13 DO YOU USE OR REFER TO TAPE READERS?	71.4	53.8	50.0	83.3	6.4	.0	1.2	12.7
S1201	S1-14 DO YOU USE OR REFER TO TAPE PUNCHES?	71.4	53.8	40.9	50.0	6.4	.0	1.2	9.1
S1202	S2-1 DO YOU WORK WITH PHOTODIODE PHOTO SENSITIVE DEVICES?	59.5	13.2	.0	16.7	1.3	.0	.0	85.5
S1203	S2-2 DO YOU WORK WITH PHOTOTRANSISTOR PHOTO SENSITIVE DEVICES?	31.0	13.2	.0	16.7	1.3	.0	3.7	72.7
S1204	S2-3 DO YOU WORK WITH PHOTOTUBE PHOTO SENSITIVE DEVICES?	2.4	2.8	.0	.0	1.3	.0	2.5	78.2
S1205	S2-4 DO YOU WORK WITH PHOTO-SCR PHOTO SENSITIVE DEVICES?	2.4	2.8	.0	.0	1.3	.0	2.5	38.2
S1206	S2-5 DO YOU WORK WITH PHOTOCELL (PHOTOCONDUCTIVE OR PHOTOVOLTAIC) PHOTO SENSITIVE DEVICES?	57.1	9.4	.0	16.7	2.6	.0	2.5	80.0
S1207	S3-1 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS? IF NO, GO TO ITEM T1-1; IF YES, CONTINUE.	9.5	.9	.0	.0	3.8	13.3	1.2	14.2
S1208	S3-2 DO YOU USE OR REFER TO EXCITATION FREQUENCY CHOPPER COIL ITEMS?	2.4	.0	.0	.0	.0	.0	.0	9.1
S1209	S3-3 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	4.8	.0	.0	.0	1.3	6.7	.0	12.7

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
S1210	S3-4 DO YOU MEASURE EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	7.3
S1211	S3-5 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	2.4	.0	.0	.0	.0	6.7	.0	7.3
S1212	S3-6 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	4.8	.0	.0	.0	.0	6.7	.0	9.1
S1213	S3-7 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	2.4	.0	.0	.0	.0	6.7	.0	12.7
S1214	S3-8 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	4.8	.0	.0	.0	.0	.0	.0	12.7
S1215	S3-9 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	4.8	.0	.0	.0	.0	.0	.0	10.9
T	INFRARED (T1), LASERS (T2), DISPLAY TUBES (T3), TELEVISION (T4)								
T1216	T1-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS? IF NO, GO TO ITEM T2-1; IF YES, CONTINUE.	7.1	.0	.0	16.7	1.3	.0	.0	12.7
T1217	T1-2 DO YOU INSPECT INFRARED SYSTEMS?	4.8	.0	.0	16.7	.0	.0	.0	12.7
T1218	T1-3 DO YOU CLEAN INFRARED SYSTEMS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1219	T1-4 DO YOU SERVICE INFRARED SYSTEMS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1220	T1-5 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1221	T1-6 DO YOU OPERATE INFRARED SYSTEMS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1222	T1-7 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS?	4.8	.0	.0	16.7	.0	.0	.0	12.7
T1223	T1-8 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	4.8	.0	.0	16.7	.0	.0	.0	12.7
T1224	T1-9 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1225	T1-10 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	4.8	.0	.0	16.7	.0	.0	.0	12.7
T1226	T1-11 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1227	T1-12 DO YOU USE OR REFER TO FAR REGIONS?	2.4	.0	.0	.0	.0	.0	.0	5.5
T1228	T1-13 DO YOU USE OR REFER TO INTERMEDIATE REGIONS?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1229	T1-14 DO YOU USE OR REFER TO NEAR REGIONS?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1230	T1-15 DO YOU USE OR REFER TO MICRONS (M)?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1231	T1-16 DO YOU USE OR REFER TO GRAY BODIES?	.0	.0	.0	.0	.0	.0	.0	5.5
T1232	T1-17 DO YOU USE OR REFER TO BLACK BODIES?	2.4	.0	.0	.0	.0	.0	.0	5.5
T1233	T1-18 DO YOU USE OR REFER TO ABSORPTION?	2.4	.0	.0	.0	.0	.0	.0	9.1
T1234	T1-19 DO YOU USE OR REFER TO SCATTERING?	2.4	.0	.0	.0	.0	.0	.0	9.1
T1235	T1-20 DO YOU USE OR REFER TO ABSOLUTE ZERO?	2.4	.0	.0	.0	.0	.0	.0	9.1
T1236	T1-21 DO YOU PERFORM TASKS ON BLITZ?	2.4	.0	.0	.0	1.3	.0	.0	1.8
T1237	T1-22 DO YOU PERFORM TASKS ON TARGET BUTTONS?	4.8	.0	.0	.0	1.3	.0	.0	3.6
T1238	T1-23 DO YOU PERFORM TASKS ON ERECTOR LENSES?	2.4	.0	.0	.0	1.3	.0	.0	5.5
T1239	T1-24 DO YOU PERFORM TASKS ON OCULAR LENSES?	2.4	.0	.0	.0	.0	6.7	.0	9.1

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
T1240	T1-25 DO YOU PERFORM TASKS ON CORRECTION LENSES?	2.4	.0	.0	.0	.0	6.7	1.2	7.3
T1241	T1-26 DO YOU PERFORM TASKS ON FILTERS?	2.4	.0	.0	.0	.0	6.7	1.2	9.1
T1242	T1-27 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS?	2.4	.0	.0	.0	.0	.0	1.2	9.1
T1243	T1-28 DO YOU PERFORM TASKS ON PLANE MIRRORS?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1244	T2-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS? IF NO, GO TO ITEM T3-1; IF YES, CONTINUE.	7.1	.0	.0	.0	2.6	.0	.0	10.9
T1245	T2-2 DO YOU INSPECT LASER SYSTEMS?	2.4	.9	.0	.0	.0	.0	.0	5.5
T1246	T2-3 DO YOU CLEAN LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	3.6
T1247	T2-4 DO YOU SERVICE LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1248	T2-5 DO YOU OPERATE LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1249	T2-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1250	T2-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1251	T2-8 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	5.5
T1252	T2-9 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	5.5
T1253	T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	5.5
T1254	T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)?	2.4	.0	.0	.0	.0	.0	.0	3.6
T1255	T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS?	4.8	.0	.0	.0	1.3	.0	.0	3.6
T1256	T2-13 DO YOU USE OR REFER TO GROUND STATE?	2.4	.0	.0	.0	1.3	.0	.0	3.6
T1257	T2-14 DO YOU USE OR REFER TO EXCITED STATE?	2.4	.0	.0	.0	1.3	.0	.0	3.6
T1258	T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION?	2.4	.0	.0	.0	1.3	.0	.0	3.6
T1259	T2-16 DO YOU USE OR REFER TO PHOTONS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
T1260	T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSIONS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
T1261	T2-18 DO YOU USE OR REFER TO STIMULATED EMISSIONS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
T1262	T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE?	2.4	.0	.0	.0	1.3	.0	.0	3.6
T1263	T2-20 DO YOU USE OR REFER TO INVERSION LEVELS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
T1264	T2-21 DO YOU USE OR REFER TO MONOCHROMATIC?	2.4	.0	.0	.0	1.3	.0	.0	5.5
T1265	T2-22 DO YOU WORK WITH ACTIVE MATERIALS?	2.4	.0	.0	.0	.0	.0	.0	3.6
T1266	T2-23 DO YOU WORK WITH PUMPING SOURCES?	2.4	.0	.0	.0	.0	.0	.0	3.6
T1267	T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS?	4.8	.0	.0	.0	.0	.0	.0	3.6
T1268	T2-25 DO YOU WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS?	2.4	.0	.0	.0	.0	.0	.0	5.5
T1269	T2-26 DO YOU WORK WITH HELICAL FLASHTUBES?	2.4	.0	.0	.0	.0	.0	.0	5.5
T1270	T2-27 DO YOU WORK WITH RUBY MATERIALS?	.0	.0	.0	.0	.0	.0	2.5	5.5
T1271	T2-28 DO YOU WORK WITH HELIUM-NEON MATERIALS?	.0	.9	.0	.0	.0	.0	2.5	5.5
T1272	T2-29 DO YOU WORK WITH HELIUM-XENON MATERIALS?	.0	.9	.0	.0	.0	.0	2.5	3.6
T1273	T2-30 DO YOU WORK WITH XENON MATERIALS?	.0	.9	.0	.0	.0	.0	2.5	3.6
T1274	T2-31 DO YOU WORK WITH CESIUM-HELIUM MATERIALS?	.0	.0	.0	.0	.0	.0	1.2	3.6
T1275	T2-32 DO YOU WORK WITH ARGON MATERIALS?	2.4	.0	.0	.0	.0	.0	1.2	5.5
T1276	T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS MATERIALS?	.0	.0	.0	.0	.0	.0	1.2	3.6
T1277	T2-34 DO YOU WORK WITH GALLIUM ARSENIDE MATERIALS?	.0	.0	.0	.0	.0	.0	2.5	3.6
T1278	T3-1 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE TUBES (DVST), MULTIPLE MODE STORAGE TUBES (MMST), OR SCAN CONVERTER TUBES (SCT)? IF NO, GO TO ITEM T4-1; IF YES, CONTINUE.	2.4	3.8	4.5	.0	3.8	.0	2.5	5.5
T1279	T3-2 DO YOU INSPECT DVST OR MMST?	.0	.9	.0	.0	.0	.0	.0	3.6

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
T1280	T3-3 DO YOU CLEAN DVST OR MMST?	.0	.9	.0	.0	.0	.0	.0	3.6
T1281	T3-4 DO YOU ADJUST OR CALIBRATE DVST OR MMST?	.0	.9	.0	.0	.0	.0	.0	3.6
T1282	T3-5 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST?	.0	.9	.0	.0	1.3	.0	.0	3.6
T1283	T3-6 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS?	.0	.9	.0	.0	1.3	.0	.0	3.6
T1284	T3-7 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS?	.0	.9	.0	.0	1.3	.0	.0	3.6
T1285	T3-8 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF DVST?	2.4	.0	.0	.0	.0	.0	1.2	3.6
T1286	T3-9 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF MMST?	2.4	.0	.0	.0	.0	.0	1.2	3.6
T1287	T3-10 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF SCT?	4.8	.0	.0	.0	.0	.0	1.2	3.6
T1288	T3-11 DO YOU PERFORM TASKS ON FLOOD GUNS?	.0	.0	.0	.0	.0	.0	.0	1.8
T1289	T3-12 DO YOU PERFORM TASKS ON WRITE GUNS?	.0	.0	.0	.0	1.3	.0	1.2	1.8
T1290	T3-13 DO YOU PERFORM TASKS ON READ GUNS?	.0	.0	.0	.0	1.3	.0	1.2	1.8
T1291	T3-14 DO YOU PERFORM TASKS ON ATTACK GUNS?	.0	.0	.0	.0	1.3	.0	.0	1.8
T1292	T3-15 DO YOU PERFORM TASKS ON ERASE GUNS?	.0	.0	.0	.0	.0	.0	.0	1.8
T1293	T3-16 DO YOU PERFORM TASKS ON STORAGE GRIDS?	.0	.0	.0	.0	.0	.0	.0	1.8
T1294	T4-1 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS DEALING WITH TELEVISION SYSTEMS INCLUDING LOW LIGHT TELEVISION? IF NO, GO TO ITEM U1-1; IF YES, CONTINUE.	2.4	1.9	31.8	.0	.0	.0	.0	47.3
T1295	T4-2 DO YOU INSPECT TELEVISION SYSTEMS?	2.4	.9	13.6	.0	.0	.0	.0	45.5
T1296	T4-3 DO YOU CLEAN TELEVISION SYSTEMS?	.0	1.9	.0	.0	.0	.0	.0	41.8
T1297	T4-4 DO YOU ADJUST OR CALIBRATE TELEVISION SYSTEMS?	.0	1.9	22.7	.0	.0	.0	.0	41.8
T1298	T4-5 DO YOU OPERATE TELEVISION SYSTEMS?	.0	2.8	31.8	.0	1.3	.0	.0	41.8
T1299	T4-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF TV SYSTEMS?	2.4	1.9	18.2	.0	1.3	.0	.0	43.6
T1300	T4-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF TV SYSTEMS?	2.4	1.9	13.6	.0	1.3	.0	.0	43.6
T1301	T4-8 DO YOU TROUBLESHOOT DOWN TO TV SYSTEM COMPONENT PARTS?	.0	.9	.0	.0	1.3	.0	.0	40.0
T1302	T4-9 DO YOU REMOVE OR REPLACE TV SYSTEM MAJOR ASSEMBLIES?	2.4	1.9	4.5	.0	.0	.0	1.2	40.0
T1303	T4-10 DO YOU REMOVE OR REPLACE TV SYSTEM COMPONENT PARTS?	.0	.0	.0	.0	.0	.0	1.2	40.0
	U COMPUTERS, MICROPROCESSORS, AND PROGRAMMING (U1), DB AND POWER RATIOS (U2)								
U1304	U1-1 IN YOUR PRESENT JOB, DO YOU PERFORM MAINTENANCE ROUTINES OR PROGRAMMING TASKS? IF NO, GO TO ITEM U2-1; IF YES, CONTINUE.	31.0	10.4	22.7	33.3	15.4	6.7	3.7	16.4
U1305	U1-2 DO YOU USE OR REFER TO DECIMAL SYSTEMS?	19.0	6.6	4.5	.0	9.0	6.7	1.2	16.4
U1306	U1-3 DO YOU USE OR REFER TO OCTAL SYSTEMS?	19.0	5.7	9.1	.0	3.8	6.7	1.2	12.7
U1307	U1-4 DO YOU USE OR REFER TO PARITY DETECTORS/GENERATORS?	19.0	4.7	.0	.0	6.4	.0	1.2	10.9
U1308	U1-5 DO YOU USE OR REFER TO HEXADECIMAL SYSTEMS?	11.9	1.9	.0	33.3	9.0	6.7	1.2	14.5
U1309	U1-6 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS?	7.1	2.8	.0	.0	6.4	.0	1.2	7.3
U1310	U1-7 DO YOU USE OR REFER TO FOUR SYSTEMS?	4.8	.0	.0	.0	2.6	.0	.0	3.6
U1311	U1-8 DO YOU USE OR REFER TO BINARY SYSTEMS?	23.8	7.5	18.2	.0	7.7	6.7	.0	16.4
U1312	U1-9 DO YOU USE OR REFER TO TIME-SHARING (MULTI-SEQUENCING)?	14.3	.0	.0	.0	6.4	6.7	.0	7.3
U1313	U1-10 DO YOU USE OR REFER TO DATA WORDS?	21.4	3.8	.0	16.7	7.7	6.7	.0	12.7

P TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
U1314	U1-11 DO YOU USE OR REFER TO ADDRESS WORDS?	23.8	4.7	.0	16.7	6.4	6.7	.0	12.7
U1315	U1-12 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS?	16.7	.9	.0	.0	6.4	6.7	.0	5.5
U1316	U1-13 DO YOU USE OR REFER TO STEERING/INFORMATION?	9.5	.9	4.5	.0	2.6	.0	.0	5.5
U1317	U1-14 DO YOU USE OR REFER TO INSTRUCTION WORDS?	14.3	1.9	.0	16.7	9.0	6.7	.0	12.7
U1318	U1-15 DO YOU USE OR REFER TO DAP-16?	2.4	.0	.0	.0	.0	.0	.0	1.8
U1319	U1-16 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	14.3	3.8	.0	16.7	5.1	.0	.0	16.4
U1320	U1-17 DO YOU USE OR REFER TO CONTROL WORDS?	16.7	1.9	.0	16.7	10.3	6.7	.0	10.9
U1321	U1-18 DO YOU USE OR REFER TO RESPONSE WORDS?	14.3	.9	.0	33.3	10.3	6.7	.0	7.3
U1322	U1-19 DO YOU USE OR REFER TO WRAPAROUND WORDS?	7.1	.0	.0	.0	1.3	.0	.0	3.6
U1323	U1-20 DO YOU USE OR REFER TO TEST OR DIAGNOSTIC PROGRAMS?	21.4	1.9	9.1	16.7	12.8	.0	.0	12.7
U1324	U1-21 DO YOU USE OR REFER TO RELIABILITY PROGRAMS?	14.3	.0	4.5	16.7	3.8	.0	.0	10.9
U1325	U1-22 DO YOU USE OR REFER TO COMPILERS?	9.5	.0	4.5	.0	.0	.0	.0	9.1
U1326	U1-23 DO YOU USE OR REFER TO ASSEMBLERS?	9.5	.0	.0	.0	.0	6.7	.0	9.1
U1327	U1-24 DO YOU USE OR REFER TO MACHINE LANGUAGE?	16.7	2.8	.0	.0	7.7	.0	.0	12.7
U1328	U1-25 DO YOU USE OR REFER TO MNEMONICS?	21.4	.9	.0	.0	3.8	6.7	.0	5.5
U1329	U1-26 DO YOU USE OR REFER TO ROUTINES OR SUBROUTINES?	19.0	2.8	9.1	.0	7.7	6.7	.0	9.1
U1330	U1-27 DO YOU USE OR REFER TO FLOW CHARTS OR DIAGRAMS?	23.8	2.8	13.6	.0	10.3	6.7	.0	14.5
U1331	U1-28 DO YOU USE OR REFER TO 'ATLAS'?	2.4	.0	.0	.0	.0	.0	.0	.0
U1332	U1-29 DO YOU USE OR REFER TO 'ELAN'?	4.8	.0	.0	.0	.0	.0	.0	.0
U1333	U1-30 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING SYSTEMS?	7.1	.0	.0	.0	6.4	6.7	.0	3.6
U1334	U1-31 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING SYSTEMS?	2.4	.0	.0	.0	2.6	.0	.0	3.6
U1335	U1-32 DO YOU WRITE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	4.8	.0	.0	.0	2.6	.0	.0	.0
U1336	U1-33 DO YOU USE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	11.9	.9	.0	16.7	12.8	.0	.0	7.3
U1337	U1-34 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER CONTROL SECTIONS?	21.4	4.7	13.6	.0	9.0	.0	.0	12.7
U1338	U1-35 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT SECTIONS?	23.8	4.7	13.6	.0	9.0	6.7	.0	12.7
U1339	U1-36 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT SECTIONS?	23.8	4.7	13.6	.0	9.0	6.7	.0	12.7
U1340	U1-37 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR SECTIONS?	21.4	4.7	13.6	.0	10.3	.0	.0	12.7
U1341	U1-38 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER TRANSMIT SECTIONS?	23.8	4.7	.0	.0	9.0	.0	.0	9.1
U1342	U1-39 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER RECEIVE SECTIONS?	23.8	4.7	.0	.0	7.7	.0	.0	9.1
U1343	U1-40 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT DEVICES?	23.8	3.8	18.2	16.7	11.5	13.3	.0	12.7
U1344	U1-41 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER STORAGE DEVICES?	19.0	2.8	4.5	.0	12.8	13.3	.0	12.7
U1345	U1-42 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT DEVICES?	23.8	3.8	13.6	.0	14.1	13.3	.0	12.7
U1346	U1-43 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER POWER DEVICES?	19.0	2.8	13.6	.0	11.5	6.7	.0	12.7
U1347	U1-44 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR DEVICES?	21.4	3.8	18.2	.0	12.8	6.7	.0	12.7

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
U1348	U1-45 DO YOU USE FORTRAN PROGRAMMING LANGUAGE?	4.8	.0	.0	.0	.0	.0	.0	1.8
U1349	U1-46 DO YOU USE COBOL PROGRAMMING LANGUAGE?	4.8	1.9	.0	.0	.0	6.7	.0	1.8
U1350	U1-47 DO YOU USE RPG PROGRAMMING LANGUAGE?	4.8	1.9	.0	.0	.0	.0	.0	1.8
U1351	U1-48 DO YOU USE OR PERFORM TASKS ON MICROPROCESSOR BASED EQUIPMENT?	16.7	6.6	.0	.0	5.1	.0	.0	7.3
U1352	U1-49 DO YOU USE INPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.1	1.9	.0	.0	3.8	.0	.0	9.1
U1353	U1-50 DO YOU USE OUTPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.1	1.9	.0	.0	3.8	.0	.0	9.1
U1354	U1-51 DO YOU USE RAM MEMORY CIRCUITS (STATIC OR DYNAMIC) IN CONJUNCTION WITH THE MICROPROCESSOR?	11.9	4.7	.0	.0	6.4	.0	.0	14.5
U1355	U1-52 DO YOU USE ROM MEMORY CIRCUITS (INCLUDES PROM, EPROM, ETC.) IN CONJUNCTION WITH THE MICROPROCESSOR?	14.3	5.7	.0	.0	6.4	.0	.0	14.5
U1356	U1-53 DO YOU USE TRI-STATE CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	2.4	.0	.0	.0	1.3	.0	.0	10.9
U1357	U1-54 DO YOU USE CLOCK GENERATOR CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	11.9	3.8	4.5	.0	3.8	.0	.0	12.7
U1358	U1-55 DO YOU USE STATUS LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.1	1.9	.0	.0	2.6	.0	.0	7.3
U1359	U1-56 DO YOU USE BIDIRECTIONAL BUFFER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	11.9	2.8	.0	.0	3.8	.0	.0	9.1
U1360	U1-57 DO YOU USE ENCODER/DECODER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	14.3	4.7	.0	.0	3.8	.0	.0	12.7
U1361	U2-1 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION?	40.5	14.2	9.1	.0	57.7	73.3	18.8	38.2
U1362	U2-2 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS?	7.1	1.9	.0	.0	1.3	6.7	.0	9.1
U1363	U2-3 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS?	8.8	1.9	.0	.0	2.6	6.7	.0	7.3
U1364	U2-4 DO YOU USE VTVM (DB METERS) TO CHECK FOR NOISE OR SIGNAL LEVEL?	47.6	10.4	.0	16.7	57.7	66.7	22.5	38.2
U1365	U2-5 DO YOU USE VTVM (DB METERS) TO CHECK OR ADJUST AUDIO AMPLIFIERS?	33.3	6.6	.0	.0	50.0	73.3	16.2	30.9
U1366	U2-6 DO YOU USE A HP3550 OR 344A TEST SET TO ALIGN AUDIO EQUIPMENT?	26.2	4.7	.0	.0	53.8	26.7	10.0	3.6

MINIMUM PERCENT MEMBERS PERFORMING ACCPOSS AFSC'S

VECTOR TYPE CODES:

(T) = % TIME SPENT BY ALL MEMBERS
(M) = % MEMBERS PERFORMING
(F) = TASK FACTOR
(D) = DICHOTOMOUS SET
(B) = % TIME SPENT BY MEMBERS PERFORMING
(-) = PROGRAM GENERATED VECTOR

NO	TYPE	VECTOR	/MEMBERS/ MEAN - SD	DESCRIPTION	FACTOR #
1	M	306 X1	71	306X1 AIRMEN 1-48 MONTHS TAFMS	40
2	M	306 X2	44	306X2 AIRMEN 1-48 MONTHS TAFMS	41
3	M	316X0F	28	306X0F AIRMEN 1-48 MONTHS TAFMS	42
4	M	316X2F	8	316X2F AIRMEN 1-48 MONTHS TAFMS	43
5	M	362 X1	47	362X1 AIRMEN 1-48 MONTHS TAFMS	44
6	M	362 X3	33	362X3 AIRMEN 1-48 MONTHS TAFMS	45
7	M	362 X4	27	362X4 AIRMEN 1-48 MONTHS TAFMS	46
8	M	918 X0	9	918X0 AIRMEN 1-48 MONTHS TAFMS	47
9	-	MINIMA		MINIMUM VALUE OF THE FIRST 8 INPUT VECTORS	

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

OCCUPATIONAL ANALYSIS PROGRAM
FCPT03 PAGE 137
USAFOMC (ATC) RANDOLPH AFB TX

MINIMUM PERCENT MEMBERS PERFORMING ACCROSS AFSC'S

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
A	12	A2-1 DO YOU USE (PERHAPS IN TECHNICAL ORDERS) THE TERM VOLTAGE OR VOLT (V)?	97.2	100.0	100.0	100.0	89.4	93.9	92.6	100.0	89.4
A	22	A2-11 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM CURRENT?	94.4	95.5	96.4	100.0	78.7	78.8	77.8	100.0	77.8
H	467	H2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES? IF NO, GO TO ITEM H3-1; IF YES, CONTINUE.	84.5	79.5	85.7	87.5	74.5	93.9	96.3	100.0	74.5
A	14	A2-3 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM OHM?	91.5	93.2	89.3	100.0	76.6	75.8	74.1	100.0	74.1
B	61	B1-2 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE VOLTAGE?	93.0	93.2	89.3	87.5	76.6	75.8	70.4	100.0	70.4
A	17	A2-6 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM AMPERE?	93.0	95.5	85.7	100.0	72.3	69.7	70.4	100.0	69.7
E	277	E3-1 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB? IF NO, GO TO ITEM F1-1; IF YES, CONTINUE.	73.2	68.2	78.6	87.5	72.3	78.8	77.8	100.0	68.2
H	468	H2-2 DO YOU INSPECT POWER SUPPLIES?	84.5	79.5	75.0	87.5	61.7	75.8	74.1	100.0	61.7
E	281	E3-5 DO YOU TROUBLESHOOT RELAYS?	66.2	61.4	78.6	87.5	72.3	75.8	74.1	100.0	61.4
H	471	H2-5 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL?	84.5	79.5	60.7	75.0	59.6	72.7	70.4	100.0	59.6
B	60	B1-1 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE RESISTANCE?	90.1	90.9	82.1	87.5	70.2	66.7	59.3	100.0	59.3
N	309	N1-1 DO YOU WORK WITH METERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N2-1; IF YES, CONTINUE.	80.3	84.1	85.7	87.5	57.4	60.6	63.0	88.9	57.4
N	313	N1-5 DO YOU READ METER SCALES?	81.7	86.4	85.7	87.5	57.4	57.6	59.3	88.9	57.4
N	316	N1-8 DO YOU ZERO OHMMETERS?	81.7	86.4	78.6	87.5	57.4	57.6	59.3	88.9	57.4
A	1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	85.9	81.8	71.4	87.5	61.7	57.6	51.9	100.0	51.9
B	62	B1-3 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE CURRENT?	80.3	86.4	60.7	87.5	59.6	54.5	51.9	100.0	51.9
A	23	A2-12 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	63.4	65.9	89.3	87.5	51.1	51.5	51.9	100.0	51.1
E	280	E3-4 DO YOU INSPECT RELAYS?	64.8	54.5	46.4	87.5	72.3	75.8	74.1	100.0	46.4
E	283	E3-7 DO YOU REMOVE OR REPLACE RELAYS?	69.0	61.4	46.4	87.5	59.6	57.6	51.9	100.0	46.4
A	40	A3-16 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES?	85.9	84.1	39.3	75.0	70.2	66.7	59.3	100.0	39.3
H	472	H2-6 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS?	78.9	70.5	71.4	87.5	36.2	48.5	40.7	100.0	36.2
E	284	E3-8 DO YOU PERFORM TASKS ON CONTACTS OF RELAYS?	56.3	47.7	35.7	87.5	74.5	78.8	77.8	100.0	35.7
E	269	E3-13 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS?	50.7	40.9	64.3	87.5	38.3	33.3	33.3	100.0	33.3
A	29	A3-5 DO YOU MEASURE RESISTORS?	83.1	79.5	32.1	87.5	46.8	45.5	33.3	100.0	32.1
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	88.7	84.1	32.1	87.5	55.3	45.5	37.0	100.0	32.1
C	113	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	87.3	81.8	32.1	87.5	46.8	42.4	33.3	100.0	32.1
E	263	E2-1 IN YOUR PRESENT JOB, DO YOU CONNECT ELECTRONIC CIRCUITS USING SOLDERLESS CONNECTIONS OR SOLDERING TECHNIQUES? IF NO, GO TO ITEM E3-1; IF YES, CONTINUE.	91.5	90.9	32.1	87.5	72.3	81.8	81.5	100.0	32.1
E	290	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS?	45.1	31.8	64.3	87.5	38.3	33.3	33.3	100.0	31.8

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
B	70	B2-3 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM AVERAGE VOLTAGE (DC) IN YOUR PRESENT JOB?	63.4	65.9	50.0	75.0	34.0	36.4	29.6	100.0	29.6
C	97	C1-1 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C2-1; IF YES, CONTINUE.	81.7	77.3	32.1	75.0	40.4	36.4	29.6	88.9	29.6
C	126	C2-1 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C3-1; IF YES, CONTINUE.	80.3	75.0	39.3	75.0	29.8	33.3	29.6	100.0	29.6
A	24	A2-13 DO YOU DETERMINE IF TWO OR MORE BATTERIES MUST BE CONNECTED IN SERIES OR PARALLEL TO ACHIEVE A SPECIFIC VOLTAGE AND/OR CURRENT?	35.2	36.4	28.6	50.0	40.4	36.4	29.6	100.0	28.6
A	26	A3-2 DO YOU INSPECT RESISTORS?	88.7	86.4	28.6	87.5	44.7	48.5	37.0	100.0	28.6
A	34	A3-10 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY RHEOSTAT?	60.6	56.8	28.6	75.0	36.2	39.4	33.3	100.0	28.6
A	35	A3-11 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY POTENTIOMETER?	83.1	77.3	28.6	75.0	42.6	45.5	40.7	100.0	28.6
B	63	B1-4 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE POWER?	46.5	45.5	28.6	37.5	42.6	39.4	37.0	55.6	28.6
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	81.7	79.5	28.6	75.0	48.9	42.4	33.3	100.0	28.6
H	469	H2-3 DO YOU CLEAN POWER SUPPLIES?	78.9	70.5	28.6	87.5	57.4	69.7	66.7	88.9	28.6
H	474	H2-8 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS?	80.3	72.7	28.6	87.5	29.8	36.4	29.6	100.0	28.6
E	293	E3-17 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS?	39.4	27.3	50.0	87.5	40.4	39.4	40.7	88.9	27.3
A	2	A1-2 DO YOU USE PUBLICATIONS, SUCH AS TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB?	39.4	34.1	35.7	62.5	34.0	33.3	25.9	88.9	25.9
A	28	A3-4 DO YOU ADJUST RESISTORS?	77.5	72.7	28.6	75.0	31.9	33.3	25.9	100.0	25.9
B	72	B2-5 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM FREQUENCY IN YOUR PRESENT JOB?	69.0	70.5	57.1	75.0	46.8	39.4	25.9	100.0	25.9
H	480	H2-14 DO YOU USE OR REFER TO INPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	67.6	61.4	53.6	87.5	29.8	33.3	25.9	100.0	25.9
N	820	N1-12 DO YOU CONSIDER OTHER METER MOVEMENTS?	29.6	29.5	28.6	37.5	25.5	27.3	29.6	44.4	25.5
A	25	A3-1 DO YOU WORK WITH RESISTORS OR RESISTIVE CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM B1-1; IF YES, CONTINUE.	84.5	84.1	25.0	50.0	59.6	54.5	48.1	77.8	25.0
A	31	A3-7 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY CARBON?	28.2	27.3	25.0	62.5	34.0	33.3	29.6	77.8	25.0
A	41	A3-17 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	59.2	61.4	25.0	50.0	40.4	36.4	25.9	100.0	25.0
C	107	C1-11 DO YOU USE OR REFER TO CAPACITANCE?	69.0	68.2	25.0	75.0	44.7	39.4	33.3	100.0	25.0
E	264	E2-2 DO YOU SOLDER CONNECTIONS?	93.0	93.2	25.0	87.5	80.9	84.8	85.2	100.0	25.0
E	265	E2-3 DO YOU DESOLDER CONNECTIONS?	93.0	93.2	25.0	87.5	78.7	84.8	85.2	100.0	25.0
E	267	E2-5 DO YOU INSPECT SOLDERED CONNECTIONS?	91.5	90.9	25.0	87.5	76.6	78.8	77.8	100.0	25.0
E	268	E2-6 DO YOU CLEAN OR TIN CONNECTIONS?	91.5	90.9	25.0	87.5	76.6	78.8	77.8	100.0	25.0
E	269	E2-7 DO YOU MAKE HARDWIRE CONNECTIONS?	88.7	86.4	25.0	87.5	72.3	72.7	77.8	100.0	25.0
E	275	E2-13 DO YOU PERFORM CRIMPING IN LIEU OF SOLDERING?	66.2	61.4	25.0	87.5	44.7	45.5	48.1	88.9	25.0
E	287	E3-11 DO YOU PERFORM TASKS ON ARMATURES OF RELAYS?	47.9	38.6	25.0	75.0	51.1	42.4	37.0	77.8	25.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
E	268	E3-12 DO YOU PERFORM TASKS ON SPRINGS OF RELAYS?	50.7	40.9	25.0	75.0	55.3	48.5	48.1	77.8	25.0
N	815	N1-7 DO YOU EXTEND THE RANGE OF VOLTMETERS?	52.1	54.5	39.3	25.0	27.7	27.3	29.6	55.6	25.0
E	291	E3-15 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS?	33.8	22.7	60.7	87.5	34.0	30.3	33.3	100.0	22.7
E	292	E3-16 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS?	35.2	22.7	60.7	87.5	31.9	27.3	29.6	100.0	22.7
A	27	A3-3 DO YOU CLEAN RESISTORS?	70.4	65.9	25.0	75.0	31.9	30.3	22.2	88.9	22.2
C	98	C1-2 DO YOU INSPECT CAPACITORS?	85.9	84.1	25.0	87.5	36.2	33.3	22.2	100.0	22.2
C	101	C1-5 DO YOU TEST CAPACITORS?	80.3	75.0	25.0	75.0	29.8	27.3	22.2	100.0	22.2
C	124	C1-28 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS?	78.9	72.7	25.0	75.0	36.2	33.3	22.2	100.0	22.2
C	125	C1-29 DO YOU WORK WITH OTHER FIXED CAPACITORS?	71.8	68.2	25.0	87.5	25.5	27.3	22.2	100.0	22.2
H	470	H2-4 DO YOU ALIGN OR ADJUST POWER SUPPLIES?	76.1	65.9	75.0	87.5	36.2	33.3	22.2	100.0	22.2
A	32	A3-8 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED WIRE?	60.6	59.1	21.4	62.5	44.7	42.4	37.0	100.0	21.4
A	38	A3-14 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE?	67.6	63.6	21.4	62.5	31.9	33.3	22.2	100.0	21.4
A	42	A3-18 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	57.7	59.1	21.4	50.0	36.2	30.3	25.9	100.0	21.4
A	43	A3-19 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	59.2	61.4	21.4	37.5	31.9	30.3	22.2	100.0	21.4
A	45	A3-21 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	57.7	61.4	21.4	37.5	36.2	33.3	22.2	100.0	21.4
A	46	A3-22 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	54.9	59.1	21.4	50.0	34.0	30.3	25.9	100.0	21.4
E	266	E2-4 DO YOU PERFORM HIGH RELIABILITY SOLDERING?	70.4	56.8	21.4	75.0	59.6	57.6	55.6	88.9	21.4
E	272	E2-10 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS?	81.7	72.7	21.4	75.0	31.9	30.3	22.2	100.0	21.4
E	278	E3-2 DO YOU ADJUST RELAYS?	36.6	27.3	21.4	75.0	61.7	60.6	55.6	88.9	21.4
E	279	E3-3 DO YOU CLEAN RELAYS?	63.4	50.0	21.4	75.0	72.3	75.8	74.1	100.0	21.4
H	473	H2-7 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES?	81.7	77.3	21.4	75.0	63.8	84.8	85.2	100.0	21.4
M	764	M2-1 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M3-1; IF YES, CONTINUE.	57.7	70.5	21.4	75.0	34.0	36.4	25.9	77.8	21.4
C	138	C2-13 DO YOU WORK WITH POWER TRANSFORMERS?	74.6	68.2	35.7	75.0	21.3	27.3	22.2	100.0	21.3
N	818	N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)?	36.6	36.4	25.0	37.5	21.3	21.2	22.2	55.6	21.2
A	37	A3-13 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE?	76.1	72.7	25.0	75.0	38.3	33.3	18.5	100.0	18.5
A	47	A3-27 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	56.3	63.6	21.4	37.5	29.8	27.3	18.5	100.0	18.5
A	50	A3-26 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	56.3	59.1	21.4	37.5	34.0	30.3	18.5	100.0	18.5
A	52	A3-28 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	53.5	59.1	21.4	37.5	29.8	24.2	18.5	100.0	18.5
E	64	E1-5 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE FREQUENCY?	63.4	54.5	42.9	75.0	40.4	33.3	18.5	100.0	18.5
R	68	R2-1 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM EFFECTIVE VOLTAGE (RMS) IN YOUR PRESENT JOB?	43.7	38.6	21.4	75.0	29.8	30.3	18.5	100.0	18.5

TASKS WITH 50 PERCENT MP ACCROSS AFSC'S BY TAFMS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
C	106	C1-13 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS?	67.6	63.6	21.4	75.0	25.5	21.2	18.5	100.0	18.5
C	149	C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS?	78.9	75.0	35.7	75.0	27.7	27.3	18.5	100.0	18.5
E	271	E2-9 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS?	91.5	88.6	25.0	87.5	38.3	30.3	18.5	100.0	18.5
E	294	E3-18 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE?	40.8	36.4	28.6	75.0	27.7	21.2	18.5	100.0	18.5
G	383	G2-1 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM G3-1; IF YES, CONTINUE.	85.9	84.1	25.0	87.5	25.5	24.2	18.5	100.0	18.5
G	384	G2-2 DO YOU INSPECT TRANSISTORS?	83.1	77.3	25.0	87.5	21.3	24.2	18.5	100.0	18.5
A	51	A3-27 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	54.9	59.1	17.9	37.5	34.0	30.3	25.9	100.0	17.9
A	56	A3-32 DO YOU CALCULATE TOTAL CURPENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.1	50.0	17.9	37.5	27.7	21.2	18.5	100.0	17.9
C	127	C2-2 DO YOU INSPECT TRANSFORMERS?	78.9	75.0	17.9	62.5	25.5	30.3	22.2	100.0	17.9
C	128	C2-3 DO YOU CLEAN TRANSFORMERS?	70.4	68.2	17.9	62.5	19.1	21.2	18.5	77.8	17.9
G	385	G2-3 DO YOU CHECK TRANSISTORS?	87.3	81.8	17.9	62.5	21.3	27.3	22.2	100.0	17.9
H	463	H2-17 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	56.3	45.5	17.9	25.0	23.4	24.2	22.2	66.7	17.9
P	1136	P3-1 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES?	18.3	25.0	17.9	62.5	25.5	36.4	44.4	44.4	17.9
N	817	N1-9 DO YOU ZERO AMMETERS?	35.2	38.6	46.4	62.5	19.1	15.2	18.5	66.7	15.2
A	39	A3-15 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE?	40.8	38.6	21.4	62.5	19.1	18.2	14.8	44.4	14.8
A	44	A3-22 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	45.1	40.9	25.0	50.0	25.5	21.2	14.8	100.0	14.8
A	48	A3-24 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.9	45.5	17.9	37.5	25.5	21.2	14.8	100.0	14.8
A	49	A3-25 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	39.4	38.6	21.4	37.5	23.4	21.2	14.8	100.0	14.8
A	53	A3-29 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	45.1	45.5	17.9	37.5	25.5	21.2	14.8	100.0	14.8
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	49.3	54.5	17.9	37.5	29.8	24.2	14.8	100.0	14.8
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	46.5	54.5	17.9	37.5	23.4	18.2	14.8	100.0	14.8
C	99	C1-3 DO YOU CLEAN CAPACITORS?	73.2	70.5	17.9	62.5	25.5	24.2	14.8	77.8	14.8
C	102	C1-6 DO YOU DISCHARGE CAPACITORS?	81.7	75.0	17.9	62.5	25.5	24.2	14.8	100.0	14.8
C	109	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS?	45.1	31.8	25.0	87.5	27.7	24.2	14.8	77.8	14.8
E	271	E2-3 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS?	83.1	75.0	28.6	87.5	19.1	18.2	14.8	100.0	14.8
G	342	G1-1 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G2-1; IF YES, CONTINUE.	74.6	63.6	21.4	75.0	23.4	21.2	14.8	100.0	14.8
G	343	G1-2 DO YOU INSPECT DIODES?	69.0	59.1	21.4	75.0	19.1	21.2	14.8	100.0	14.8
G	344	G1-3 DO YOU CHECK DIODES?	73.2	63.6	17.9	62.5	21.3	21.2	14.8	100.0	14.8

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
G	393	G2-11 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS?	84.5	79.5	25.0	87.5	14.9	18.2	14.8	100.0	14.8
H	488	H2-22 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	50.7	40.9	25.0	62.5	17.0	18.2	14.8	77.8	14.8
M	765	M2-2 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS?	53.5	68.2	21.4	75.0	23.4	24.2	14.8	77.8	14.8
B	75	B3-1 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C1-1; IF YES, CONTINUE.	40.8	34.1	14.3	25.0	21.3	21.2	22.2	100.0	14.3
D	233	D3-1 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM E1-1; IF YES, CONTINUE.	54.9	40.9	14.3	25.0	19.1	24.2	14.8	100.0	14.3
H	482	H2-16 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	53.5	43.2	14.3	25.0	21.3	21.2	18.5	88.9	14.3
H	489	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS?	62.0	47.7	14.3	25.0	23.4	27.3	22.2	100.0	14.3
A	13	A2-2 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTROMOTIVE FORCE (EMF)?	46.5	40.9	17.9	12.5	29.8	30.3	22.2	88.9	12.5
M	778	M3-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS, GENERATORS (SERVO), OR ALTERNATORS? IF NO, GO TO ITEM N1-1; IF YES, CONTINUE.	83.1	79.5	39.3	12.5	12.8	15.2	14.8	100.0	12.5
N	814	N1-6 DO YOU EXTEND THE RANGE OF AMMETERS?	39.4	43.2	28.6	12.5	21.3	18.2	18.5	44.4	12.5
S	1188	S1-1 DO YOU WORK WITH INPUT OR OUTPUT DEVICES ON YOUR PRESENT JOB? IF NO, GO TO ITEM S2-1; IF YES, CONTINUE.	74.6	72.7	53.6	37.5	19.1	12.1	14.8	77.8	12.1
A	33	A3-9 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY SLIDE TAP?	23.9	25.0	17.9	62.5	14.9	12.1	11.1	88.9	11.1
A	54	A3-30 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	38.0	36.4	21.4	37.5	23.4	18.2	11.1	100.0	11.1
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	36.6	38.6	17.9	37.5	21.3	15.2	11.1	100.0	11.1
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	31.0	31.8	17.9	37.5	19.1	15.2	11.1	100.0	11.1
B	69	B3-2 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PEAK TO PEAK VOLTAGE IN YOUR PRESENT JOB?	74.6	72.7	35.7	87.5	25.5	27.3	11.1	100.0	11.1
C	103	C1-7 DO YOU MEASURE CAPACITORS?	54.9	47.7	21.4	75.0	19.1	15.2	11.1	88.9	11.1
C	144	C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE?	59.2	54.5	21.4	62.5	14.9	15.2	11.1	100.0	11.1
C	145	C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE?	53.5	50.0	21.4	62.5	12.8	12.1	11.1	88.9	11.1
C	150	C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS?	50.7	36.4	21.4	62.5	14.9	15.2	11.1	100.0	11.1
C	151	C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	57.7	47.7	28.6	62.5	12.8	12.1	11.1	100.0	11.1
C	152	C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	67.6	56.8	28.6	62.5	14.9	12.1	11.1	100.0	11.1
E	273	E2-11 DO YOU SOLDER ACTIVE COMPONENTS, SUCH AS INTEGRATED CIRCUITS?	59.2	40.9	14.3	50.0	14.9	12.1	11.1	100.0	11.1

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 142

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
G	394	G2-12 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, A2, A3, ETC.?	83.1	77.3	25.0	87.5	14.9	18.2	11.1	100.0	11.1
H	457	H1-5 DO YOU USE OR REFER TO ZENER DIODE COMPONENTS?	77.5	68.2	46.4	100.0	14.9	18.2	11.1	100.0	11.1
H	478	H2-12 DO YOU WORK WITH BRIDGE RECTIFIERS?	63.4	54.5	28.6	87.5	14.9	18.2	11.1	100.0	11.1
H	481	H2-15 DO YOU USE OR REFER TO INPUT FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	35.2	25.0	21.4	25.0	17.0	18.2	11.1	77.8	11.1
C	118	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO?	42.3	40.9	10.7	37.5	21.3	24.2	25.9	100.0	10.7
C	168	C3-1 DO YOU USE OR REFER TO PERMANENT MAGNETS?	46.5	45.5	10.7	12.5	19.1	15.2	11.1	66.7	10.7
G	386	G2-4 DO YOU NEED AN UNDERSTANDING OF EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS?	69.0	61.4	10.7	37.5	12.8	15.2	11.1	100.0	10.7
H	458	H1-6 DO YOU USE OR REFER TO INTEGRATED CIRCUIT COMPONENTS?	69.0	56.8	39.3	100.0	10.6	15.2	18.5	100.0	10.6
B	94	B3-20 DO YOU WORK WITH POWER INDUCTORS?	32.4	27.3	14.3	25.0	12.8	9.1	11.1	77.8	9.1
M	769	M2-6 DO YOU USE AUDIO SINE-WAVE GENERATORS?	15.5	9.1	17.9	62.5	19.1	21.2	11.1	55.6	9.1
D	243	D3-11 DO YOU WORK WITH FILTERS BUT DON'T REMEMBER WHICH TYPE?	35.2	22.7	10.7	12.5	8.5	9.1	11.1	44.4	8.5
M	784	M3-7 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS?	71.8	77.3	21.4	12.5	8.5	9.1	11.1	100.0	8.5
A	21	A2-10 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTRON?	40.8	29.5	28.6	37.5	21.3	18.2	7.4	88.9	7.4
B	65	B1-6 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE TEMPERATURE?	16.9	9.1	46.4	75.0	17.0	12.1	7.4	100.0	7.4
B	71	B2-4 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM WAVE LENGTH IN YOUR PRESENT JOB?	60.6	59.1	35.7	87.5	23.4	18.2	7.4	100.0	7.4
B	76	B3-2 DO YOU INSPECT INDUCTORS?	40.8	31.8	17.9	62.5	8.5	9.1	7.4	100.0	7.4
C	110	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE?	35.2	36.4	14.3	50.0	17.0	9.1	7.4	100.0	7.4
C	130	C2-5 DO YOU TROUBLESHOOT TRANSFORMERS?	60.6	50.0	21.4	37.5	12.8	12.1	7.4	100.0	7.4
C	146	C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES?	59.2	52.3	17.9	50.0	12.8	12.1	7.4	100.0	7.4
C	156	C2-31 DO YOU REFER TO COMBINATIONS OF SCHEMATIC SYMBOLS FOR TRANSFORMERS?	46.5	36.4	25.0	62.5	10.6	9.1	7.4	100.0	7.4
E	286	E3-10 DO YOU PERFORM TASKS ON COILS OF RELAYS?	29.6	22.7	14.3	37.5	25.5	15.2	7.4	77.8	7.4
G	355	G1-14 DO YOU USE THE SYMBOL ON DIODE WHICH INDICATES THE CATHODE END?	66.2	50.0	21.4	75.0	14.9	15.2	7.4	100.0	7.4
G	387	G2-5 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND RESISTANCE MEASUREMENTS?	67.6	61.4	21.4	75.0	8.5	9.1	7.4	100.0	7.4
G	388	G2-6 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS?	69.0	63.6	21.4	75.0	8.5	9.1	7.4	100.0	7.4
H	460	H1-8 DO YOU USE OR REFER TO LED'S/LCD'S COMPONENTS?	57.5	43.2	35.7	75.0	8.5	9.1	7.4	100.0	7.4
H	476	H2-10 DO YOU WORK WITH HALF-WAVE RECTIFIERS?	59.2	50.0	25.0	75.0	14.9	9.1	7.4	100.0	7.4
M	779	M3-2 DO YOU INSPECT MOTORS?	83.1	79.5	35.7	12.5	10.6	9.1	7.4	100.0	7.4
C	122	C1-26 DO YOU WORK WITH VARIABLE CAPACITORS?	26.8	25.0	7.1	25.0	10.6	9.1	7.4	100.0	7.1
C	139	C2-14 DO YOU WORK WITH AUDIO TRANSFORMERS?	22.5	18.2	7.1	12.5	12.8	15.2	11.1	77.8	7.1
D	237	D3-5 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL?	42.3	25.0	7.1	25.0	17.0	21.2	11.1	100.0	7.1
E	274	E2-12 DO YOU PERFORM WIRE WRAPPING IN LIEU OF SOLDERING?	56.3	45.5	7.1	25.0	72.3	72.7	74.1	44.4	7.1
E	280	E3-6 DO YOU MONITOR BIAS OUTPUT ON RELAYS?	23.9	15.9	7.1	12.5	25.5	15.2	11.1	44.4	7.1

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
F	295	F1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES OR OTHER SENSING DEVICES SUCH AS TRANSDUCERS? IF NO, GO TO ITEM F2-1; IF YES, CONTINUE.	8.5	9.1	7.1	12.5	23.4	30.3	22.2	66.7	7.1
G	349	G1-8 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE?	57.7	45.5	7.1	25.0	17.0	15.2	11.1	88.9	7.1
G	356	G1-15 DO YOU DETERMINE DIRECTION OF CURRENT THROUGH A DIODE?	67.6	52.3	7.1	25.0	17.0	15.2	7.4	100.0	7.1
H	496	H2-30 DO YOU WORK WITH POWER SUPPLY REGULATOR CIRCUITS OTHER THAN SOLID-STATE?	31.0	31.8	7.1	25.0	12.8	9.1	7.4	55.6	7.1
H	497	H2-31 DO YOU WORK WITH SOLID-STATE POWER SUPPLY REGULATOR CIRCUITS?	60.6	52.3	7.1	12.5	19.1	24.2	18.5	100.0	7.1
M	767	M2-4 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS?	39.4	50.0	7.1	25.0	12.8	15.2	18.5	44.4	7.1
A	3	A1-3 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS?	16.9	9.1	32.1	75.0	8.5	6.1	7.4	100.0	6.1
C	155	C2-30 DO YOU REFER TO VARIABLE TRANSFORMER SCHEMATIC SYMBOLS?	29.6	22.7	21.4	62.5	8.5	6.1	7.4	100.0	6.1
M	766	M2-3 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS?	45.1	56.8	17.9	62.5	6.4	6.1	7.4	55.6	6.1
M	781	M3-4 DO YOU OPERATE MOTORS?	77.5	79.5	39.3	12.5	8.5	6.1	7.4	100.0	6.1
S	1198	S1-11 DO YOU USE OR REFER TO TOGGLE OR PUSH BUTTON SWITCH INPUTS?	57.7	47.7	42.9	25.0	10.6	6.1	7.4	66.7	6.1
A	15	A2-4 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ION?	5.6	6.8	32.1	75.0	6.4	6.1	7.4	88.9	5.6
A	5	A1-5 DO YOU SOLVE FOR UNKNOWN QUANTITIES SUCH AS SOLVING FOR X IN THE EQUATION X + 6 = 8?	8.5	4.5	25.0	62.5	12.8	6.1	7.4	77.8	4.5
R	1187	P3-2 DO YOU FABRICATE COAXIAL CABLES?	16.9	22.7	10.7	37.5	4.3	6.1	7.4	22.2	4.3
A	36	A3-12 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED FILM?	15.5	11.4	17.9	50.0	6.4	6.1	3.7	55.6	3.7
B	66	B1-7 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE PRESSURE?	23.9	6.8	46.4	50.0	10.6	6.1	3.7	100.0	3.7
B	74	B2-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	56.3	52.3	28.6	25.0	10.6	12.1	3.7	100.0	3.7
B	77	B3-3 DO YOU CLEAN INDUCTORS?	33.8	25.0	17.9	62.5	4.3	6.1	3.7	77.8	3.7
C	104	C1-8 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE?	15.5	18.2	10.7	37.5	8.5	6.1	3.7	33.3	3.7
C	160	C2-35 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS?	42.3	38.6	7.1	25.0	6.4	9.1	3.7	100.0	3.7
C	169	C3-2 DO YOU USE OR REFER TO TEMPORARY MAGNETS?	43.7	40.9	14.3	37.5	14.9	9.1	3.7	66.7	3.7
C	174	C3-7 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX?	22.5	22.7	10.7	12.5	8.5	6.1	3.7	77.8	3.7
C	180	C1-1 DO YOU WORK WITH RC, LR, OR RCL CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM D2-1; IF YES, CONTINUE.	32.4	27.3	7.1	12.5	6.4	6.1	3.7	100.0	3.7
D	234	D3-2 DO YOU INSPECT FILTER CIRCUITS?	45.1	34.1	7.1	25.0	12.8	15.2	3.7	100.0	3.7
D	236	D3-6 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF FILTER CIRCUITS?	39.4	22.7	14.3	25.0	6.4	9.1	3.7	100.0	3.7
E	285	E3-9 DO YOU PERFORM TASKS ON CORES OF RELAYS?	25.4	22.7	7.1	12.5	23.4	12.1	3.7	44.4	3.7
F	294	F3-1 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G1-1; IF YES, CONTINUE.	81.7	75.0	25.0	87.5	19.1	18.2	3.7	100.0	3.7

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 144

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *(*
G	354	G1-13 DO YOU READ DIODE NUMBERING SYSTEM, SUCH AS IN 538?	40.8	29.5	17.9	62.5	10.6	12.1	3.7	77.8	3.7
G	389	G2-7 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION?	46.5	34.1	7.1	25.0	4.3	6.1	3.7	100.0	3.7
G	390	G2-8 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION?	46.5	34.1	7.1	25.0	4.3	6.1	3.7	88.9	3.7
G	391	G2-9 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE, AND EMITTER)?	50.7	36.4	17.9	62.5	8.5	9.1	3.7	100.0	3.7
H	475	H2-9 DO YOU INSPECT OR SERVICE COOLANT LEVELS?	9.9	9.1	7.1	12.5	12.8	6.1	3.7	55.6	3.7
H	484	H2-18 DO YOU USE OR REFER TO RIPPLE AMPLITUDE IN YOUR WORK WITH RECTIFIERS?	43.7	22.7	14.3	50.0	4.3	6.1	3.7	77.8	3.7
H	498	H3-1 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I1-1; IF YES, CONTINUE.	29.6	13.6	7.1	12.5	21.3	18.2	3.7	100.0	3.7
I	582	I3-33 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	4.2	6.8	17.9	62.5	6.4	6.1	3.7	55.6	3.7
I	583	I3-34 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	4.2	6.8	14.3	50.0	4.3	6.1	3.7	55.6	3.7
J	597	J2-2 DO YOU WORK WITH CATHODE-RAY TUBES (CRT)?	15.5	22.7	10.7	25.0	4.3	6.1	3.7	100.0	3.7
K	661	K3-2 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS?	22.5	9.1	28.6	62.5	4.3	6.1	3.7	66.7	3.7
K	672	K3-13 DO YOU ADD BINARY NUMBERS?	26.8	13.6	21.4	62.5	6.4	6.1	3.7	77.8	3.7
K	679	K3-20 DO YOU DIVIDE BINARY NUMBERS?	16.9	4.5	7.1	25.0	6.4	6.1	3.7	33.3	3.7
K	680	K3-21 DO YOU MULTIPLY BINARY NUMBERS?	16.9	4.5	7.1	25.0	6.4	6.1	3.7	44.4	3.7
M	780	M3-3 DO YOU CLEAN OR LUBRICATE MOTORS?	81.7	77.3	14.3	12.5	8.5	6.1	3.7	100.0	3.7
C	119	C1-23 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS?	23.9	25.0	3.6	12.5	14.9	15.2	14.8	66.7	3.6
C	137	C2-12 DO YOU WORK WITH AUTOTRANSFORMERS?	8.5	4.5	3.6	12.5	4.3	6.1	3.7	100.0	3.6
D	235	D3-3 DO YOU CLEAN FILTER CIRCUITS?	45.1	31.8	3.6	12.5	12.8	15.2	7.4	77.8	3.6
D	236	D3-4 DO YOU ALIGN OR ADJUST FILTER CIRCUITS?	23.9	13.6	3.6	12.5	6.4	6.1	3.7	88.9	3.6
D	244	D3-12 DO YOU WORK WITH L-SECTION FILTER CONFIGURATIONS?	11.3	4.5	3.6	12.5	4.3	6.1	7.4	33.3	3.6
E	249	E1-1 DO YOU WORK WITH COUPLING DEVICES OR CIRCUITRY IN YOUR PRESENT JOB? IF NO, GO TO ITEM E2-1; IF YES, CONTINUE.	35.2	20.5	3.6	12.5	6.4	9.1	7.4	88.9	3.6
E	253	E1-5 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING?	23.9	15.9	3.6	12.5	4.3	6.1	3.7	66.7	3.6
E	255	E1-7 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING?	25.4	11.4	3.6	12.5	4.3	6.1	3.7	88.9	3.6
E	256	E1-8 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING?	23.9	13.6	3.6	12.5	6.4	6.1	3.7	77.8	3.6
E	262	E1-14 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS?	21.1	13.6	3.6	12.5	6.4	6.1	3.7	77.8	3.6
E	276	E2-14 DO YOU PERFORM WIRE CONNECTIONS USING A 714 PUNCH-ON TOOL IN LIEU OF SOLDERING?	16.9	13.6	3.6	12.5	53.2	57.6	70.4	11.1	3.6
G	359	G1-18 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)?	19.7	9.1	3.6	12.5	6.4	9.1	7.4	66.7	3.6
G	360	G1-19 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS?	47.9	40.9	3.6	12.5	8.5	12.1	7.4	88.9	3.6

D	TSK	TITLES	306 X1 (M)	306 X2 XOF (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
G	379	G1-37 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION?	14.1	6.8	3.6	12.5	4.3	6.1	3.7	88.9	3.6
G	396	G2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT I(SUB B) IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT I(SUB E) USUALLY I(SUB B) BEING 2 TO 8 PERCENT OF I(SUB E)?	36.6	31.8	3.6	12.5	6.4	6.1	3.7	77.8	3.6
G	397	G2-15 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS?	53.5	52.3	3.6	12.5	4.3	6.1	3.7	100.0	3.6
G	407	G3-1 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM H1-1; IF YES, CONTINUE.	29.6	20.5	3.6	12.5	10.6	12.1	7.4	100.0	3.6
G	409	G3-3 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS?	14.1	4.5	3.6	12.5	4.3	6.1	3.7	66.7	3.6
G	410	G3-4 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL?	28.2	15.9	3.6	12.5	8.5	12.1	7.4	100.0	3.6
G	412	G3-6 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER?	26.8	13.6	3.6	12.5	10.6	12.1	7.4	88.9	3.6
G	421	G3-15 DO YOU MEASURE VOLTAGE GAIN CONCERNING TRANSISTOR AMPLIFIERS?	18.3	9.1	3.6	12.5	6.4	6.1	3.7	77.8	3.6
G	422	G3-16 DO YOU MEASURE CURRENT GAIN CONCERNING TRANSISTOR AMPLIFIERS?	15.5	9.1	3.6	12.5	6.4	6.1	3.7	66.7	3.6
G	423	G3-17 DO YOU MEASURE POWER GAIN CONCERNING TRANSISTOR AMPLIFIERS?	15.5	9.1	3.6	12.5	6.4	6.1	3.7	44.4	3.6
G	435	G3-29 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	9.9	4.5	3.6	12.5	4.3	6.1	3.7	22.2	3.6
H	459	H1-7 DO YOU USE OR REFER TO PIN DIODE COMPONENTS?	11.3	13.6	3.6	12.5	6.4	6.1	7.4	22.2	3.6
H	465	H2-19 DO YOU USE OR REFER TO RIPPLE FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	33.8	20.5	3.6	12.5	4.3	6.1	3.7	66.7	3.6
H	486	H2-20 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGES IN YOUR WORK WITH RECTIFIERS?	26.8	20.5	3.6	12.5	4.3	6.1	3.7	88.9	3.6
H	487	H2-21 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS IN YOUR WORK WITH RECTIFIERS?	52.1	43.2	3.6	12.5	10.6	15.2	3.7	100.0	3.6
H	495	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER?	11.3	6.8	3.6	12.5	4.3	6.1	7.4	44.4	3.6
I	531	I1-3 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORK FREQUENCY DETERMINING DEVICES (FDD)?	28.2	13.6	3.6	12.5	4.3	6.1	3.7	77.8	3.6
I	534	I1-6 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS?	35.2	18.2	3.6	12.5	4.3	6.1	3.7	100.0	3.6
I	535	I1-7 DO YOU WORK WITH MONOSTABLE (ONE SHOT) MULTIVIBRATORS?	32.8	15.9	3.6	12.5	4.3	6.1	3.7	100.0	3.6
M	780	M3-5 DO YOU REMOVE OR REPLACE COMPLETE MOTORS?	81.7	79.5	3.6	12.5	8.5	9.1	7.4	100.0	3.6
U	1364	U2-4 DO YOU USE VTVM (OB METERS) TO CHECK FOR NOISE OR SIGNAL LEVEL?	11.3	9.1	3.6	12.5	31.9	30.3	16.5	44.4	3.6
R	[illegible]	R3-6 DO YOU USE OR REFER TO INDUCTANCE?	33.8	27.3	17.9	62.5	6.4	3.0	3.7	100.0	3.0
R	89	R3-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMABILITY OF THE CORE MATERIAL?	11.3	9.1	3.6	12.5	6.4	3.0	3.7	22.2	3.0
R	90	R3-16 DO YOU CALCULATE INDUCTANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	8.5	6.8	10.7	37.5	6.4	3.0	3.7	44.4	3.0
R	91	R3-17 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS?	19.7	18.2	3.6	12.5	8.5	3.0	3.7	77.8	3.0
C	127	C1-27 DO YOU WORK WITH TRIMMER CAPACITORS?	8.5	6.8	3.6	12.5	4.3	3.0	3.7	77.8	3.0

TASKS WITH 30 PERCENT MF ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 146

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
G	353	G1-12 DO YOU READ DIODE COLOR CODING?	26.8	18.2	14.3	50.0	4.3	3.0	3.7	22.2	3.0
K	674	K3-15 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD?	23.9	11.4	14.3	50.0	4.3	3.0	3.7	44.4	3.0
N	810	N1-2 DO YOU CONSIDER THE FUNCTIONS OF PERMANENT MAGNET INTERNAL METER PARTS?	29.6	36.4	14.3	37.5	6.4	3.0	3.7	44.4	3.0
S1189		S1-2 DO YOU USE OR REFER TO KEYBOARDS OR TELETYPEWRITERS?	77.5	77.3	14.3	37.5	12.8	3.0	3.7	55.6	3.0
S1190		S1-3 DO YOU USE OR REFER TO PRINTERS?	78.9	77.3	17.9	37.5	12.8	3.0	3.7	77.8	3.0
S1193		S1-6 DO YOU USE OR REFER TO VIDEO DISPLAYS (CRT'S)?	25.4	34.1	7.1	25.0	10.6	3.0	3.7	77.8	3.0
S1199		S1-12 DO YOU USE OR REFER TO INTERFACE ADAPTER UNITS?	36.6	31.8	14.3	25.0	4.3	3.0	3.7	55.6	3.0
K	681	K3-22 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	12.7	2.3	17.9	50.0	4.3	3.0	3.7	44.4	2.3
U1304		U1-1 IN YOUR PRESENT JOB, DO YOU PERFORM MAINTENANCE ROUTINES OR PROGRAMMING TASKS? IF NO, GO TO ITEM U2-1; IF YES, CONTINUE.	21.1	2.3	28.6	37.5	4.3	3.0	3.7	33.3	2.3
U1365		U2-5 DO YOU USE VTVM (DB METERS) TO CHECK OR ADJUST AUDIO AMPLIFIERS?	7.0	2.3	3.6	12.5	19.1	21.2	7.4	33.3	2.3
C	143	C2-18 DO YOU WORK WITH CONTROL TRANSFORMERS?	14.1	6.8	7.1	12.5	2.1	3.0	3.7	66.7	2.1
D	214	D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION?	22.5	18.2	3.6	12.5	2.1	3.0	3.7	88.9	2.1
D	216	D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION?	16.9	13.6	3.6	12.5	2.1	3.0	3.7	55.6	2.1
D	218	D1-39 DO YOU CHECK RESISTORS USING SUBSTITUTION?	18.3	13.6	3.6	12.5	2.1	3.0	3.7	66.7	2.1
D	246	D3-14 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATIONS?	8.5	2.3	3.6	12.5	2.1	3.0	3.7	22.2	2.1
G	348	G1-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES?	50.7	36.4	7.1	25.0	2.1	3.0	3.7	77.8	2.1
G	376	G1-35 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES?	16.9	6.8	3.6	12.5	2.1	3.0	3.7	55.6	2.1
G	392	G2-10 DO YOU USE OR REFER TO LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR?	23.9	25.0	7.1	25.0	2.1	3.0	3.7	77.8	2.1
K	660	K3-1 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS?	18.3	6.8	57.1	62.5	2.1	3.0	3.7	55.6	2.1
K	675	K3-16 DO YOU ADD OCTAL NUMBERS?	16.9	6.8	21.4	25.0	2.1	3.0	3.7	44.4	2.1
K	676	K3-17 DO YOU SUBTRACT OCTAL NUMBERS?	16.9	6.8	17.9	25.0	2.1	3.0	3.7	44.4	2.1
K	677	K3-18 DO YOU ADD HEXADECIMAL NUMBERS?	11.3	6.8	17.9	62.5	2.1	3.0	3.7	44.4	2.1
L	718	L2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS? IF NO, GO TO ITEM L3-1; IF YES, CONTINUE.	31.0	18.2	3.6	12.5	2.1	3.0	3.7	66.7	2.1
M	754	M1-3 DO YOU WORK WITH PULSED OSCILLATOR TIMING CIRCUITS?	23.9	11.4	3.6	12.5	2.1	3.0	3.7	88.9	2.1
M	768	M2-5 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS?	32.4	38.6	7.1	25.0	2.1	3.0	3.7	44.4	2.1
Q1125		Q1-5 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTER CIRCUITS?	42.3	22.7	3.6	12.5	2.1	3.0	3.7	77.8	2.1
S1197		S1-10 DO YOU USE OR REFER TO INCANDESENT DISPLAYS?	18.3	11.4	17.9	25.0	2.1	3.0	3.7	55.6	2.1
I	575	I3-26 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES?	1.4	2.3	7.6	12.5	2.1	3.0	3.7	11.1	1.4
I	584	I3-35 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	1.4	2.3	3.6	12.5	2.1	3.0	3.7	11.1	1.4
A	4	A1-4 DO YOU CALCULATE THE SQUARE ROOT OF A QUANITITY?	7.0	4.5	.0	.0	4.3	3.0	3.7	66.7	.0
A	5	A1-5 DO YOU USE LOGARITHM TABLES?	2.8	2.3	.0	.0	4.3	6.1	3.7	11.1	.0
A	7	A1-7 DO YOU SOLVE QUADRATIC EQUATIONS SUCH AS SOLVING FOR X IN THE EQUATION X**2 + 4X + 4 =0?	1.4	.0	.0	.0	4.3	3.0	3.7	33.3	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 147

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	2.8	2.3	.0	.0	2.1	3.0	.0	33.3	.0
A	9	A1-9 DO YOU USE TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT?	7.0	2.3	.0	.0	2.1	3.0	.0	33.3	.0
A	10	A1-10 DO YOU SOLVE OR USE PROPORTIONS? AN EXAMPLE OF A PROPORTION IS 2 : 5 :: 4 : 10. ANOTHER WAY TO EXPRESS THE SAME RELATIONSHIP IS 2/5 = 4/10. SOMETIMES, ONE OF THE QUANTITIES IS UNKNOWN AND HAS TO BE SOLVED FOR, SUCH AS 2 : X :: 4 : 10 (X IN THIS CASE IS UNKNOWN).	12.7	6.8	21.4	50.0	6.4	6.1	.0	44.4	.0
A	11	A1-11 DO YOU USE MATHEMATICAL EXPONENTS OR SUBSCRIPTS IN OTHER THAN POWERS OF 10?	21.1	13.6	14.3	25.0	4.3	6.1	.0	66.7	.0
A	16	A2-5 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM DYNE?	2.8	4.5	7.1	.0	4.3	6.1	7.4	44.4	.0
A	18	A2-7 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM NEUTRON?	21.1	13.6	10.7	12.5	4.3	.0	.0	77.8	.0
A	19	A2-8 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM COULOMB?	4.2	4.5	7.1	.0	4.3	6.1	.0	77.8	.0
A	20	A2-9 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM PROTON?	18.3	9.1	7.1	12.5	4.3	.0	.0	77.8	.0
A	30	A3-6 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASK YOU PERFORM?	19.7	11.4	7.1	25.0	.0	.0	.0	66.7	.0
B	67	B1-8 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE LIGHT LEVELS?	21.1	.0	3.6	.0	6.4	9.1	11.1	33.3	.0
B	73	B2-6 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM INSTANTANEOUS VALUE IN YOUR PRESENT JOB?	15.5	13.6	10.7	25.0	.0	.0	.0	66.7	.0
B	78	B3-4 DO YOU ADJUST INDUCTORS?	18.3	13.6	17.9	50.0	.0	.0	.0	77.8	.0
B	79	B3-5 DO YOU MEASURE INDUCTORS?	23.9	15.9	14.3	50.0	2.1	.0	.0	77.8	.0
B	81	B3-7 DO YOU USE OR REFER TO HENRIES?	18.3	11.4	3.6	12.5	4.3	.0	.0	77.8	.0
B	82	B3-8 DO YOU USE OR REFER TO INDUCTIVE REACTANCE?	18.3	11.4	3.6	12.5	2.1	.0	.0	77.8	.0
B	83	B3-9 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS?	8.5	4.5	.0	.0	2.1	.0	.0	44.4	.0
B	84	B3-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS?	8.5	4.5	.0	.0	2.1	.0	.0	33.3	.0
B	85	B3-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS?	8.5	6.8	.0	.0	2.1	.0	.0	44.4	.0
B	86	B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL?	15.5	11.4	.0	.0	4.3	.0	.0	44.4	.0
B	87	B3-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE?	9.9	9.1	.0	.0	4.3	.0	.0	22.2	.0
B	88	B3-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH?	9.9	9.1	3.6	12.5	4.3	.0	.0	22.2	.0
B	92	B3-18 DO YOU CALCULATE INDUCTIVE REACTANCE?	9.9	6.8	.0	.0	4.3	.0	.0	55.6	.0
B	93	B3-19 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY?	9.9	9.1	.0	.0	6.4	.0	.0	55.6	.0
B	95	B3-21 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS?	16.9	13.6	3.6	.0	6.4	3.0	3.7	77.8	.0
B	96	B3-22 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS?	11.3	4.5	3.6	.0	2.1	.0	.0	55.6	.0
C	100	C1-4 DO YOU ADJUST CAPACITORS?	31.0	31.8	14.3	50.0	4.3	.0	.0	88.9	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
C	105	C1-9 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC?	5.6	4.5	.0	.0	.0	.0	.0	22.2	.0
C	108	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT?	14.1	15.9	.0	.0	2.1	.0	.0	22.2	.0
C	111	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES?	23.9	22.7	14.3	50.0	10.6	3.0	.0	44.4	.0
C	115	C1-19 DO YOU CALCULATE CAPACITANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	23.9	15.9	.0	.0	17.0	9.1	7.4	66.7	.0
C	116	C1-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT?	16.9	13.6	.0	.0	4.3	.0	.0	22.2	.0
C	117	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS?	16.9	15.9	3.6	12.5	2.1	.0	.0	33.3	.0
C	120	C1-24 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY?	15.5	13.6	.0	.0	4.3	3.0	3.7	44.4	.0
C	121	C1-25 DO YOU CALCULATE CAPACITIVE REACTANCE?	14.1	9.1	.0	.0	2.1	.0	.0	44.4	.0
C	129	C2-4 DO YOU ADJUST TRANSFORMERS?	29.6	27.3	14.3	50.0	2.1	.0	.0	66.7	.0
C	131	C2-6 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)?	4.2	2.3	.0	.0	2.1	.0	.0	33.3	.0
C	132	C2-7 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M?	5.6	2.3	3.6	12.5	.0	.0	.0	22.2	.0
C	133	C2-8 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS?	8.5	6.8	.0	.0	.0	.0	.0	55.6	.0
C	134	C2-9 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS?	16.9	11.4	.0	.0	4.3	6.1	3.7	77.8	.0
C	135	C2-10 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS?	12.7	6.8	.0	.0	2.1	3.0	3.7	22.2	.0
C	136	C2-11 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS?	8.5	4.5	.0	.0	.0	.0	.0	22.2	.0
C	140	C2-15 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS?	9.9	2.3	7.1	12.5	.0	.0	.0	66.7	.0
C	141	C2-16 DO YOU WORK WITH SATURABLE CORE TRANSFORMERS?	7.0	6.8	3.6	12.5	.0	.0	.0	55.6	.0
C	142	C2-17 DO YOU WORK WITH SENSING TRANSFORMERS?	2.8	.0	7.1	12.5	.0	.0	.0	33.3	.0
C	147	C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	29.6	27.3	.0	.0	2.1	.0	.0	66.7	.0
C	148	C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	38.0	36.4	.0	.0	4.3	3.0	.0	100.0	.0
C	153	C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	25.4	11.4	3.6	.0	6.4	6.1	7.4	55.6	.0
C	154	C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	36.6	22.7	.0	.0	8.5	9.1	7.4	66.7	.0
C	157	C2-32 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS?	31.0	18.2	.0	.0	8.5	9.1	3.7	77.8	.0
C	158	C2-33 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH?	18.3	6.8	.0	.0	6.4	6.1	3.7	55.6	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPTOR PAGE 149

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
C	159	C2-34 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO?	15.5	11.4	7.6	12.5	2.1	3.0	.0	77.8	.0
C	161	C2-36 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	12.7	6.8	.0	.0	2.1	3.0	.0	66.7	.0
C	162	C2-37 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	11.3	6.8	.0	.0	4.3	3.0	.0	44.4	.0
C	163	C2-38 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS?	9.9	2.3	28.6	50.0	.0	.0	.0	77.8	.0
C	164	C2-39 DO YOU INSPECT THREE PHASE TRANSFORMERS?	9.9	4.5	10.7	25.0	.0	.0	.0	77.8	.0
C	165	C2-40 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS?	7.0	4.5	.0	.0	.0	.0	.0	77.8	.0
C	166	C2-41 DO YOU ADJUST THREE PHASE TRANSFORMERS?	.0	.0	.0	.0	.0	.0	.0	77.8	.0
C	167	C2-42 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS?	7.0	2.3	10.7	37.5	.0	.0	.0	77.8	.0
C	170	C3-3 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS?	16.9	11.4	.0	.0	12.8	3.0	3.7	44.4	.0
C	171	C3-4 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS?	15.5	9.1	.0	.0	10.6	3.0	3.7	44.4	.0
C	172	C3-5 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS?	15.5	11.4	.0	.0	8.5	3.0	3.7	44.4	.0
C	173	C3-6 DO YOU USE OR REFER TO RESIDUAL MAGNETISM?	18.3	13.6	.0	.0	19.1	9.1	3.7	44.4	.0
C	175	C3-8 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM?	7.0	2.3	.0	.0	2.1	3.0	3.7	33.3	.0
C	176	C3-9 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM?	5.6	4.5	.0	.0	4.3	3.0	3.7	33.3	.0
C	177	C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION?	21.1	18.2	3.6	.0	12.8	6.1	3.7	44.4	.0
C	178	C3-11 DO YOU USE OR REFER TO FLUX DENSITY?	12.7	9.1	.0	.0	4.3	3.0	3.7	33.3	.0
C	179	C3-12 DO YOU USE OR REFER TO SATURABLE REACTANCE?	7.0	4.5	.0	.0	4.3	3.0	3.7	22.2	.0
D	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	5.6	2.3	.0	.0	2.1	3.0	.0	44.4	.0
D	182	D1-3 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	8.5	4.5	.0	.0	2.1	3.0	.0	22.2	.0
D	183	D1-4 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS?	5.6	2.3	3.6	12.5	.0	.0	.0	55.6	.0
D	184	D1-5 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS?	4.2	2.3	3.6	12.5	.0	.0	.0	44.4	.0
D	185	D1-6 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS?	5.6	4.5	.0	.0	.0	.0	.0	55.6	.0
D	186	D1-7 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	21.1	18.2	7.1	12.5	2.1	.0	.0	77.8	.0
D	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	7.0	4.5	.0	.0	.0	.0	.0	33.3	.0
D	188	D1-9 DO YOU USE OR REFER TO MAXIMUM POWER (P SUB M) WHEN WORKING WITH RCL CIRCUITS?	7.0	4.5	.0	.0	2.1	.0	.0	33.3	.0
D	189	D1-10 DO YOU USE OR REFER TO AVERAGE POWER (P SUB AVE) WHEN WORKING WITH RCL CIRCUITS?	8.5	4.5	.0	.0	.0	.0	.0	44.4	.0
D	190	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	7.0	6.8	.0	.0	.0	.0	.0	22.2	.0
D	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	7.0	6.8	.0	.0	.0	.0	.0	33.3	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPTC3 PAGE 150

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
D	192	D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	11.3	6.8	3.6	12.5	4.3	3.0	.0	77.8	.0
D	193	D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS?	8.5	6.8	3.6	12.5	2.1	3.0	.0	55.6	.0
D	194	D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS?	8.5	4.5	3.6	12.5	4.3	3.0	.0	33.3	.0
D	195	D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS?	8.5	4.5	3.6	12.5	4.3	3.0	.0	66.7	.0
D	196	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS?	8.5	6.8	3.6	12.5	.0	.0	.0	33.3	.0
D	197	D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS?	5.6	4.5	.0	.0	.0	.0	.0	55.6	.0
D	198	D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS?	5.6	2.3	.0	.0	.0	.0	.0	22.2	.0
D	199	D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	16.9	11.4	.0	.0	.0	.0	.0	66.7	.0
D	200	D1-21 DO YOU DETERMINE VALUES OR TRIGONOMETRIC FUNCTIONS USING FORMULAS SUCH AS: SINE OF AND ANGLE = OPPOSITE SIDE/ HYPOTENUSE?	2.8	2.3	.0	.0	.0	.0	.0	11.1	.0
D	201	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS?	4.2	2.3	.0	.0	4.3	3.0	.0	22.2	.0
D	202	D1-23 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS?	14.1	11.4	.0	.0	4.3	3.0	.0	44.4	.0
D	203	D1-24 DO YOU USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS?	7.0	4.5	.0	.0	2.1	.0	.0	33.3	.0
D	204	D1-25 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS?	11.3	6.8	.0	.0	4.3	3.0	.0	55.6	.0
D	205	D1-26 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS?	8.5	6.8	.0	.0	4.3	3.0	.0	22.2	.0
D	206	D1-27 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) FOR SERIES RCL CIRCUITS?	4.2	2.3	.0	.0	.0	.0	.0	22.2	.0
D	207	D1-28 DO YOU USE OR REFER TO TRUE POWER (P SUB T) FOR SERIES RCL CIRCUITS?	5.6	4.5	.0	.0	.0	.0	.0	33.3	.0
D	208	D1-29 DO YOU USE OR REFER TO POWER FACTORS (PF) FOR SERIES RCL CIRCUITS?	7.0	6.8	.0	.0	.0	.0	.0	33.3	.0
D	209	D1-30 DO YOU USE OR REFER TO TOTAL CURRENT FOR PARALLEL RCL CIRCUITS?	14.1	6.8	.0	.0	2.1	3.0	.0	66.7	.0
D	210	D1-31 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS?	4.2	2.3	.0	.0	.0	.0	.0	11.1	.0
D	211	D1-32 DO YOU USE THE ASSUMED VOLTAGE METHOD FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	7.0	4.5	.0	.0	.0	.0	.0	33.3	.0
D	212	D1-33 DO YOU USE OHM'S LAW FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	18.3	6.8	3.6	12.5	2.1	3.0	.0	66.7	.0
D	213	D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS?	33.8	29.5	3.6	12.5	4.3	3.0	.0	88.9	.0
D	215	D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS?	26.8	25.0	3.6	12.5	4.3	3.0	.0	88.9	.0
D	217	D1-38 DO YOU CHECK RESISTORS USING OHMMETERS?	35.2	27.3	3.6	12.5	6.4	3.0	.0	100.0	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *C*
D	219	D1-40 DO YOU USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (P SUB A) = TRUE POWER (P SUB T) FOR RESONANT CIRCUITS?	5.6	4.5	.0	.0	.0	.0	.0	22.2	.0
D	220	D1-41 DO YOU USE OR REFER TO RESONANT FREQUENCIES FOR RCL CIRCUITS?	7.0	4.5	3.6	12.5	.0	.0	.0	55.6	.0
D	221	D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS?	7.0	4.5	3.6	12.5	.0	.0	.0	55.6	.0
D	222	D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS?	7.0	4.5	.0	.0	.0	.0	.0	55.6	.0
D	223	D1-44 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 OF THE PEAK CURRENT VALUE?	8.5	4.5	.0	.0	.0	.0	.0	44.4	.0
D	224	D1-45 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE COIL (Q)?	8.2	4.5	.0	.0	.0	.0	.0	44.4	.0
D	225	D1-46 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS?	8.5	6.8	.0	.0	4.3	3.0	.0	44.4	.0
D	226	D2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS? IF NO, GO TO ITEM D3-1; IF YES, CONTINUE.	8.5	6.8	.0	.0	2.1	.0	.0	55.6	.0
D	227	D2-2 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)?	8.5	4.5	.0	.0	4.3	3.0	3.7	55.6	.0
D	228	D2-3 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS?	4.2	2.3	3.6	.0	2.1	3.0	3.7	33.3	.0
D	229	D2-4 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS?	4.2	2.3	.0	.0	2.1	3.0	3.7	22.2	.0
D	230	D2-5 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS?	7.0	4.5	.0	.0	.0	.0	.0	33.3	.0
D	231	D2-6 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES?	5.6	4.5	.0	.0	.0	.0	.0	22.2	.0
D	232	D2-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS?	4.2	2.3	.0	.0	2.1	.0	.0	44.4	.0
D	239	D3-7 DO YOU WORK WITH LOW PASS FILTERS?	22.5	11.4	3.6	12.5	10.6	15.2	.0	66.7	.0
D	240	D3-8 DO YOU WORK WITH HIGH PASS FILTERS?	16.9	6.8	3.6	12.5	6.4	9.1	.0	66.7	.0
D	241	D3-9 DO YOU WORK WITH BANDPASS FILTERS?	7.0	.0	3.6	12.5	.0	.0	.0	55.6	.0
D	242	D3-10 DO YOU WORK WITH BAND-REJECT FILTERS?	5.6	.0	3.6	12.5	.0	.0	.0	44.4	.0
D	245	D3-13 DO YOU WORK WITH T-SECTION FILTER CONFIGURATIONS?	7.0	.0	3.6	12.5	4.3	6.1	7.4	33.3	.0
D	247	D3-15 DO YOU WORK WITH YTTRIUM IRON GARNET (YIG) FILTERS?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
D	248	D3-16 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS?	7.0	.0	.0	.0	.0	.0	.0	33.3	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
E	250	E1-2 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING?	36.6	18.2	7.1	25.0	2.1	3.0	.0	77.8	.0
E	251	E1-3 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING (MATCHING)?	28.2	13.6	3.6	12.5	2.1	3.0	.0	77.8	.0
E	252	E1-4 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH OPTICAL COUPLING?	5.6	4.5	3.6	12.5	.0	.0	.0	33.3	.0
E	254	E1-6 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING?	35.2	18.2	3.6	12.5	2.1	3.0	.0	100.0	.0
E	257	E1-9 DO YOU WORK WITH DIRECT COUPLED CIRCUITS?	32.4	20.5	7.1	25.0	4.3	3.0	.0	100.0	.0
E	258	E1-10 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS?	32.4	15.9	3.6	12.5	4.3	3.0	.0	88.9	.0
E	259	E1-11 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS?	21.1	13.6	3.6	12.5	4.3	3.0	.0	88.9	.0
E	260	E1-12 DO YOU WORK WITH OPTICAL COUPLING?	5.6	4.5	.0	.0	2.1	.0	.0	33.3	.0
E	261	E1-13 DO YOU WORK WITH OPTICAL COUPLING CIRCUITS?	5.6	4.5	.0	.0	2.1	.0	.0	33.3	.0
F	296	F1-2 DO YOU INSPECT MICROPHONES?	2.8	4.5	.0	.0	14.9	18.2	7.4	66.7	.0
F	297	F1-3 DO YOU CLEAN MICROPHONES?	2.8	4.5	.0	.0	12.8	15.2	7.4	44.4	.0
F	298	F1-4 DO YOU OPERATE MICROPHONES?	2.8	4.5	3.6	.0	12.8	15.2	7.4	66.7	.0
F	299	F1-5 DO YOU TROUBLESHOOT MICROPHONES WIRE CONNECTIONS?	2.8	4.5	.0	.0	14.9	18.2	7.4	66.7	.0
F	300	F1-6 DO YOU TROUBLESHOOT MICROPHONE COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	1.4	2.3	.0	.0	6.4	6.1	3.7	44.4	.0
F	301	F1-7 DO YOU REMOVE AND REPLACE COMPLETE MICROPHONES?	2.8	4.5	.0	.0	19.1	24.2	14.8	66.7	.0
F	302	F1-8 DO YOU REMOVE OR REPLACE MICROPHONE COMPONENT PARTS?	2.8	4.5	.0	.0	8.5	3.0	3.7	55.6	.0
F	303	F1-9 DO YOU PERFORM TASKS ON CARBON MICROPHONES?	2.8	4.5	.0	.0	19.1	24.2	14.8	22.2	.0
F	304	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES?	1.4	2.3	.0	.0	6.4	6.1	.0	22.2	.0
F	305	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES?	1.4	2.3	.0	.0	.0	.0	.0	33.3	.0
F	306	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES?	1.4	2.3	.0	.0	.0	.0	.0	33.3	.0
F	307	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
F	308	F1-14 DO YOU PERFORM TASKS ON TRANSDUCERS?	1.4	2.3	.0	.0	8.5	9.1	7.4	77.8	.0
F	309	F2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS? IF NO, GO TO ITEM F3-1; IF YES, CONTINUE.	18.3	6.8	3.6	.0	48.9	63.6	59.3	77.8	.0
F	310	F2-2 DO YOU INSPECT SPEAKERS?	16.9	4.5	.0	.0	44.7	57.6	51.9	77.8	.0
F	311	F2-3 DO YOU CLEAN SPEAKERS?	15.5	4.5	.0	.0	29.8	39.4	33.3	55.6	.0
F	312	F2-4 DO YOU OPERATE SPEAKERS?	12.7	4.5	3.6	.0	42.6	54.5	51.9	66.7	.0
F	313	F2-5 DO YOU TROUBLESHOOT SPEAKER WIRE CONNECTIONS?	16.9	4.5	.0	.0	38.7	51.5	48.1	77.8	.0
F	314	F2-6 DO YOU TROUBLESHOOT SPEAKER COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	11.7	2.3	.0	.0	14.9	18.2	7.4	33.3	.0
F	315	F2-7 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS?	16.9	4.5	.0	.0	48.9	63.6	59.3	66.7	.0
F	316	F2-8 DO YOU REMOVE OR REPLACE SPEAKER PARTS?	12.7	4.5	.0	.0	10.6	12.1	7.4	11.1	.0
F	317	F2-9 DO YOU PERFORM ANY TASKS ON CONE SPEAKER PARTS?	4.2	2.3	.0	.0	2.1	.0	.0	22.2	.0
F	318	F2-10 DO YOU PERFORM ANY TASKS ON SPICER SPEAKER PARTS?	1.4	2.3	.0	.0	2.1	.0	.0	11.1	.0
F	319	F2-11 DO YOU PERFORM ANY TASKS ON FIELD COIL SPEAKER PARTS?	1.4	2.3	.0	.0	2.1	.0	.0	11.1	.0
F	320	F2-12 DO YOU PERFORM ANY TASKS ON VOICE COIL SPEAKER PARTS?	1.4	2.3	.0	.0	4.3	3.0	3.7	11.1	.0
F	321	F2-13 DO YOU PERFORM ANY TASKS ON PERMANENT MAGNET SPEAKER PARTS?	4.2	2.3	.0	.0	2.1	.0	.0	11.1	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
F	322	F2-14 DO YOU PERFORM ANY TASKS ON ELECTROMAGNET SPEAKER PARTS?	1.4	2.3	.0	.0	2.1	.0	.0	11.1	.0
F	323	F2-15 DO YOU PERFORM ANY TASKS ON SOFT IRON CORE SPEAKER PARTS?	1.4	2.3	.0	.0	2.1	.0	.0	11.1	.0
F	325	F3-2 DO YOU PERFORM OPERATIONAL CHECKS USING OSCILLOSCOPES?	76.1	68.2	25.0	87.5	12.8	12.1	.0	100.0	.0
F	326	F3-3 DO YOU PERFORM ALIGNMENTS OR ADJUSTMENTS USING OSCILLOSCOPES?	69.0	56.8	21.4	75.0	8.5	6.1	.0	100.0	.0
F	327	F3-4 DO YOU TROUBLESHOOT ELECTRONIC CIRCUITS USING OSCILLOSCOPES?	73.2	68.2	25.0	87.5	12.8	12.1	.0	100.0	.0
F	328	F3-5 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCIES?	59.2	52.3	21.4	75.0	14.9	15.2	.0	100.0	.0
F	329	F3-6 DO YOU USE OSCILLOSCOPES TO MEASURE TIME?	52.1	45.5	25.0	87.5	8.5	9.1	.0	100.0	.0
F	330	F3-7 DO YOU USE OSCILLOSCOPES TO OBSERVE LISSAJOUS PATTERNS?	32.4	11.4	3.6	12.5	2.1	3.0	.0	33.3	.0
F	331	F3-8 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES.	52.1	47.7	3.6	12.5	6.4	9.1	.0	88.9	.0
F	332	F3-9 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS?	38.0	29.5	3.6	12.5	2.1	3.0	.0	55.6	.0
F	333	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGES?	77.5	70.5	25.0	87.5	12.8	15.2	.0	100.0	.0
F	334	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGES?	78.9	72.7	21.4	75.0	14.9	15.2	.0	100.0	.0
F	335	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS?	36.6	34.1	14.3	50.0	8.5	9.1	.0	77.8	.0
F	336	F3-13 DO YOU USE OSCILLOSCOPES TO OBSERVE DATA PATTERNS?	66.2	54.5	21.4	75.0	.0	.0	.0	66.7	.0
F	337	F3-14 DO YOU USE OSCILLOSCOPES TO MEASURE RIPPLE VOLTAGES?	59.2	38.6	25.0	87.5	6.4	9.1	.0	88.9	.0
F	338	F3-15 DO YOU USE OSCILLOSCOPES TO MEASURE PHASE JITTERS?	19.7	15.9	3.6	12.5	4.3	6.1	.0	44.4	.0
F	339	F3-16 DO YOU USE OSCILLOSCOPES TO DISPLAY SWEEP GENERATOR PATTERNS?	36.6	27.3	7.1	25.0	4.3	6.1	.0	88.9	.0
F	340	F3-17 DO YOU USE OSCILLOSCOPES TO OBSERVE PHASE RELATIONSHIPS?	50.7	38.6	7.1	25.0	6.4	9.1	.0	100.0	.0
F	341	F3-18 DO YOU USE OSCILLOSCOPES TO OBSERVE SAMPLING DISPLAYS?	23.9	13.6	3.6	12.5	8.5	12.1	.0	77.8	.0
G	345	G1-4 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES?	12.7	6.8	3.6	12.5	.0	.0	.0	22.2	.0
G	346	G1-5 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE?	26.8	13.6	3.6	12.5	6.4	6.1	.0	44.4	.0
G	347	G1-6 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES?	31.0	20.5	3.6	12.5	.0	.0	.0	44.4	.0
G	350	G1-9 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW?	16.9	6.8	3.6	12.5	4.3	6.1	.0	44.4	.0
G	351	G1-10 DO YOU MEASURE FORWARD BIAS RESISTANCE?	43.7	34.1	14.3	50.0	6.4	6.1	.0	88.9	.0
G	352	G1-11 DO YOU MEASURE REVERSE BIAS RESISTANCE?	43.7	34.1	14.3	50.0	6.4	6.1	.0	88.9	.0
G	357	G1-16 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON?	14.1	9.1	10.7	37.5	2.1	3.0	.0	77.8	.0
G	358	G1-17 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OR RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)?	33.8	15.9	3.6	12.5	.0	.0	.0	77.8	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 154

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
G	361	G1-20 DO YOU NEED AN UNDERSTANDING OF VALENCE BAND IN SEMICONDUCTOR MATERIALS?	14.1	15.9	3.6	12.5	.0	.0	.0	44.4	.0
G	362	G1-21 DO YOU NEED AN UNDERSTANDING OF FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS?	11.3	13.6	3.6	12.5	.0	.0	.0	44.4	.0
G	363	G1-22 DO YOU NEED AN UNDERSTANDING OF CONDUCTION BAND IN SEMICONDUCTOR MATERIALS?	12.7	13.6	3.6	12.5	.0	.0	.0	66.7	.0
G	364	G1-23 DO YOU NEED AN UNDERSTANDING OF CONVALENT BONDING IN SEMICONDUCTOR MATERIALS?	11.3	11.4	3.6	12.5	.0	.0	.0	44.4	.0
G	365	G1-24 DO YOU NEED AN UNDERSTANDING OF ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS?	11.3	11.4	7.1	25.0	.0	.0	.0	66.7	.0
G	366	G1-25 DO YOU NEED AN UNDERSTANDING OF ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS?	15.5	13.6	3.6	12.5	2.1	3.0	.0	88.9	.0
G	367	G1-26 DO YOU NEED AN UNDERSTANDING OF DONOR IMPURITY IN SEMICONDUCTORS?	12.7	11.4	3.6	12.5	.0	.0	.0	33.3	.0
G	368	G1-27 DO YOU NEED AN UNDERSTANDING OF ACCEPTOR IMPURITY IN SEMICONDUCTORS?	9.9	9.1	7.1	25.0	.0	.0	.0	33.3	.0
G	369	G1-28 DO YOU NEED AN UNDERSTANDING OF P-TYPE SEMICONDUCTOR MATERIAL?	35.2	22.7	7.1	25.0	4.3	6.1	.0	100.0	.0
G	370	G1-29 DO YOU NEED AN UNDERSTANDING OF N-TYPE SEMICONDUCTOR MATERIAL?	36.6	22.7	3.6	12.5	4.3	6.1	.0	100.0	.0
G	371	G1-30 DO YOU NEED AN UNDERSTANDING OF MAJORITY CARRIERS IN SEMICONDUCTORS?	19.7	15.9	3.6	12.5	.0	.0	.0	55.6	.0
G	372	G1-31 DO YOU NEED AN UNDERSTANDING OF MINORITY CARRIERS IN SEMICONDUCTORS?	21.1	18.2	3.6	12.5	.0	.0	.0	55.6	.0
G	373	G1-32 DO YOU NEED AN UNDERSTANDING OF JUNCTION RECOMBINATION IN SEMICONDUCTORS?	11.3	9.1	7.1	25.0	.0	.0	.0	55.6	.0
G	374	G1-33 DO YOU NEED AN UNDERSTANDING OF DEPLETION REGION IN SEMICONDUCTORS?	11.3	11.4	3.6	12.5	.0	.0	.0	66.7	.0
G	375	G1-34 DO YOU NEED AN UNDERSTANDING OF RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL?	12.7	13.6	3.6	12.5	.0	.0	.0	55.6	.0
G	377	G1-36 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS?	8.5	4.5	.0	.0	2.1	3.0	3.7	22.2	.0
G	378	G1-38 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS?	15.5	11.4	.0	.0	2.1	.0	.0	66.7	.0
G	379	G1-39 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS?	14.1	11.4	.0	.0	2.1	.0	.0	33.3	.0
G	381	G1-40 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS?	18.3	11.4	.0	.0	2.1	.0	.0	66.7	.0
G	382	G1-41 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS?	18.3	13.6	3.6	12.5	2.1	.0	.0	77.8	.0
G	383	G1-42 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION?	43.7	34.1	.0	.0	6.4	6.1	3.7	100.0	.0
G	384	G1-43 DO YOU KNOW THE GENERAL RULE THAT LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES?	21.1	20.5	3.6	12.5	2.1	3.0	.0	55.6	.0
G	385	G1-44 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES?	9.9	9.1	3.6	12.5	2.1	3.0	.0	66.7	.0
G	386	G1-45 DO YOU USE OR REFER TO BETA TRANSISTOR RATINGS?	8.5	11.4	.0	.0	.0	.0	.0	11.1	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
G	401	G2-19 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS?	7.0	11.4	.0	.0	.0	.0	.0	11.1	.0
G	402	G2-20 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS?	5.6	9.1	.0	.0	.0	.0	.0	11.1	.0
G	403	G2-21 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCB/VBE)?	4.2	4.5	.0	.0	2.1	3.0	.0	22.2	.0
G	404	G2-22 DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)?	5.6	6.8	.0	.0	2.1	3.0	.0	22.2	.0
G	405	G2-23 DO YOU USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRNSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI X AV)?	2.8	2.3	.0	.0	2.1	3.0	.0	44.4	.0
G	406	G2-24 DO YOU PERFORM TRANSISTOR MATCHING THROUGH THE USE OF CURVE TRACING?	1.4	2.3	.0	.0	.0	.0	.0	33.3	.0
G	408	G3-2 DO YOU INSPECT TRANSISTOR AMPLIFIERS?	29.6	18.2	3.6	12.5	6.4	6.1	.0	100.0	.0
G	411	G3-5 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS?	28.2	15.9	3.6	12.5	2.1	3.0	.0	100.0	.0
G	413	G3-7 DO YOU REMOVE OR REPLACE AMPLIFIER CIRCUIT COMPONENTS?	26.8	15.9	3.6	12.5	.0	.0	.0	100.0	.0
G	414	G3-8 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR CURRENT RESULTS FROM A CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	8.5	9.1	.0	.0	.0	.0	.0	66.7	.0
G	415	G3-9 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO SPECIFIC CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	4.2	4.5	.0	.0	.0	.0	.0	44.4	.0
G	416	G3-10 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE RESULTS FROM A CHANGE IN BASE CURRENT?	9.9	6.8	.0	.0	.0	.0	.0	88.9	.0
	417	G3-11 DO YOU USE OR REFER TO THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	14.1	9.1	.0	.0	.0	.0	.0	88.9	.0
G	418	G3-12 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE; THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	9.9	6.8	.0	.0	.0	.0	.0	55.6	.0
G	419	G3-13 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)?	5.6	2.3	.0	.0	2.1	3.0	3.7	11.1	.0
G	423	G3-14 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR?	8.5	4.5	.0	.0	.0	.0	.0	33.3	.0
G	424	G3-18 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE CHANGE OF THE BASE COLLECTOR VOLTAGE?	8.5	4.5	3.6	12.5	2.1	.0	.0	44.4	.0
G	425	G3-19 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION?	11.3	4.5	7.6	12.5	.0	.0	.0	55.6	.0
G	426	G3-20 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION?	9.9	4.5	3.6	12.5	.0	.0	.0	55.6	.0
G	427	G3-21 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION?	14.1	6.8	3.6	12.5	.0	.0	.0	44.4	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XUF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
G	428	G3-22 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION?	15.9	6.8	3.6	12.5	.0	.0	.0	33.3	.0
G	429	G3-23 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TRUBLESHOOTING THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION?	16.9	9.1	3.6	12.5	.0	.0	.0	33.3	.0
G	430	G3-24 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION?	9.9	6.8	3.6	12.5	.0	.0	.0	33.3	.0
G	431	G3-25 DO YOU IDENTIFY OR TROUBLESHOOT AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS?	14.1	11.4	3.6	12.5	2.1	3.0	.0	66.7	.0
G	432	G3-26 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS?	7.0	6.8	3.6	12.5	2.1	3.0	.0	66.7	.0
G	433	G3-27 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS?	5.6	4.5	3.6	12.5	2.1	3.0	.0	55.6	.0
G	434	G3-28 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS?	5.6	4.5	3.6	12.5	.0	.0	.0	44.4	.0
G	436	G3-30 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	4.2	4.5	3.6	12.5	.0	.0	.0	44.4	.0
G	437	G3-31 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	9.9	4.5	3.6	12.5	2.1	3.0	.0	100.0	.0
G	438	G3-32 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS?	1.4	.0	3.6	12.5	.0	.0	.0	22.2	.0
G	439	G3-33 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	4.2	.0	3.6	12.5	.0	.0	.0	44.4	.0
G	440	G3-34 DO YOU TROUBLESHOOT OR REPAIR CASCADE[illegible] AMPLIFIERS?	5.6	2.3	3.6	12.5	.0	.0	.0	66.7	.0
G	441	G3-35 DO YOU TROUBLESHOOT OR REPAIR VOLTAGE MULTIPLIERS (DOUBLERS/TRIPLERS)?	5.6	2.3	3.6	12.5	.0	.0	.0	100.0	.0
G	442	G3-36 DO YOU TROUBLESHOOT OR REPAIR RF AMPLIFIERS?	15.5	4.5	3.6	12.5	2.1	.0	.0	88.9	.0
G	443	G3-37 DO YOU TROUBLESHOOT OR REPAIR WIDEBAND AMPLIFIERS (VIDEO AMPS)?	1.4	.0	.0	.0	.0	.0	.0	44.4	.0
G	444	G3-38 DO YOU TROUBLESHOOT OR REPAIR AUDIO AMPLIFIERS?	9.9	4.5	3.6	12.5	6.4	6.1	.0	77.8	.0
G	445	G3-39 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER AMPLIFIERS?	14.1	9.1	3.6	12.5	2.1	3.0	.0	100.0	.0
G	446	G3-40 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	4.2	4.5	.0	.0	.0	.0	.0	33.3	.0
G	447	G3-41 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY AMPLIFIERS?	2.8	2.3	.0	.0	.0	.0	.0	33.3	.0
G	448	G3-42 DO YOU TROUBLESHOOT OR REPAIR IF AMPLIFIERS?	2.8	2.3	3.6	12.5	2.1	.0	.0	22.2	.0
G	449	G3-43 DO YOU TROUBLESHOOT OR REPAIR DIFFERENTIATING AMPLIFIERS (DIFF AMPS)?	11.3	2.3	3.6	12.5	.0	.0	.0	100.0	.0
G	450	G3-44 DO YOU TROUBLESHOOT OR REPAIR OPERATIONAL AMPLIFIERS (OP AMPS)?	5.6	4.5	3.6	12.5	.0	.0	.0	100.0	.0
G	451	G3-45 DO YOU TROUBLESHOOT OR REPAIR INTEGRATING AMPLIFIERS?	11.3	4.5	3.6	12.5	.0	.0	.0	100.0	.0
G	452	G3-46 DO YOU TROUBLESHOOT OR REPAIR SUMMING AMPLIFIERS?	2.8	2.3	.0	.0	.0	.0	.0	44.4	.0
G	453	G3-47 DO YOU TROUBLESHOOT OR REPAIR VARACTORS/VARICAP COMPONENTS?	4.2	4.5	.0	.0	.0	.0	.0	44.4	.0
G	454	G3-48 DO YOU TROUBLESHOOT OR REPAIR TUNNEL DIODE COMPONENTS?	15.7	6.8	3.6	12.5	.0	.0	.0	77.8	.0
G	455	G3-49 DO YOU TROUBLESHOOT OR REPAIR FIELD EFFECT TRANSISTOR [illegible]?	9.9	6.8	.0	.0	.0	.0	.0	100.0	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *C*
H	456	H1-4 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTOR COMPONENTS?	39.4	15.9	7.1	25.0	.0	.0	.0	100.0	.0
H	461	H1-9 DO YOU USE OR REFER TO FANTAIL TRANSISTOR COMPONENTS?	5.6	2.3	.0	.0	.0	.0	.0	11.1	.0
H	462	H1-10 DO YOU USE OR REFER TO SILICON CONTROL RECTIFIER (SCR) COMPONENTS?	33.8	6.8	25.0	75.0	2.1	3.0	.0	100.0	.0
H	463	H1-11 DO YOU USE OR REFER TO TRIAC COMPONENTS?	21.1	20.5	3.6	12.5	.0	.0	.0	100.0	.0
H	464	H1-12 DO YOU USE OR REFER TO PROGRAMMABLE UNIJUNCTION TRANSISTOR (PUT) COMPONENTS?	4.2	.0	.0	.0	.0	.0	.0	100.0	.0
H	465	H1-13 DO YOU USE OR REFER TO SILICON CONTROLLED SWITCH (SCS) COMPONENTS?	7.0	2.3	3.6	12.5	.0	.0	.0	77.8	.0
H	466	H1-14 DO YOU USE OR REFER TO SILICON UNILATERAL SWITCH (SUS) COMPONENTS?	1.4	.0	.0	.0	.0	.0	.0	88.9	.0
H	477	H2-11 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS?	66.2	54.5	25.0	75.0	12.8	9.1	.0	88.9	.0
H	479	H2-13 DO YOU WORK WITH THREE-PHASE RECTIFIERS?	25.4	20.5	17.9	62.5	4.3	.0	.0	55.6	.0
H	490	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS?	39.4	27.3	.0	.0	14.9	15.2	14.8	100.0	.0
H	491	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS?	26.8	15.9	.0	.0	4.3	6.1	7.4	55.6	.0
H	492	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS?	23.9	13.6	.0	.0	2.1	3.0	3.7	55.6	.0
H	493	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS?	15.5	4.5	.0	.0	2.1	3.0	3.7	33.3	.0
H	494	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS?	16.9	4.5	.0	.0	2.1	3.0	3.7	33.3	.0
H	499	H3-2 DO YOU INSPECT OSCILLATORS?	25.4	11.4	7.1	12.5	14.9	15.2	.0	100.0	.0
H	500	H3-3 DO YOU ALIGN OR ADJUST OSCILLATORS?	19.7	4.5	3.6	12.5	17.0	15.2	.0	88.9	.0
H	501	H3-4 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS?	16.9	4.5	3.6	12.5	10.6	12.1	.0	88.9	.0
H	502	H3-5 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS?	14.1	4.5	3.6	12.5	2.1	3.0	.0	100.0	.0
H	503	H3-6 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL?	19.7	6.8	3.6	12.5	8.5	12.1	.0	100.0	.0
H	504	H3-7 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS?	16.9	6.8	.0	.0	.0	.0	.0	100.0	.0
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	16.9	4.5	.0	.0	6.4	6.1	3.7	88.9	.0
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	16.9	6.8	.0	.0	6.4	6.1	.0	88.9	.0
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	14.1	4.5	.0	.0	4.3	6.1	.0	55.6	.0
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	15.5	6.8	3.6	12.5	8.5	9.1	.0	44.4	.0
H	509	H3-12 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT (CRYSTAL OSCILLATIONS)?	14.1	9.1	.0	.0	.0	.0	.0	66.7	.0
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	9.9	4.5	.0	.0	.0	.0	.0	66.7	.0
H	511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	15.5	6.8	3.6	12.5	.0	.0	.0	66.7	.0
H	512	H3-15 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS?	22.5	6.8	3.6	12.5	2.1	3.0	.0	88.9	.0
H	513	H3-16 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN CRYSTALS?	22.5	9.1	.0	.0	.0	.0	.0	77.8	.0
H	514	H3-17 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN PHASE LOCK LOOPS (PLL)?	7.0	2.3	.0	.0	.0	.0	.0	33.3	.0

TASKS WITH 20 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 158

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
H	515	H3-18 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	9.9	4.5	3.6	.0	8.5	6.1	.0	33.3	.0
H	516	H3-19 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS?	9.9	2.3	.0	.0	.0	.0	.0	44.4	.0
H	517	H3-20 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS?	14.1	2.3	3.6	12.5	.0	.0	.0	44.4	.0
H	518	H3-21 DO YOU WORK WITH COLPITTS SINUDOIDAL OSCILLATORS?	4.2	2.3	.0	.0	.0	.0	.0	11.1	.0
H	519	H3-22 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS?	4.2	2.3	.0	.0	.0	.0	.0	22.2	.0
H	520	H3-23 DO YOU WORK WITH VOLTAGE CONTROL SINUSOIDAL OSCILLATO	8.5	.0	3.6	12.5	2.1	3.0	.0	33.3	.0
H	521	H3-24 DO YOU WORK WITH CRYSTAL SINUSOIDAL OSCILLATORS?	18.3	4.5	3.6	12.5	.0	.0	.0	66.7	.0
H	522	H3-25 DO YOU WORK WITH VOLTAGE CONTROL OSCILLATORS (VCO) SINUSOIDAL OSCILLATORS?	5.6	2.3	3.6	12.5	.0	.0	.0	33.3	.0
H	523	H3-26 DO YOU WORK WITH WIEN BRIDGE OSCILLATORS SINUSOIDAL OSCILLATORS?	8.5	4.5	7.6	12.5	.0	.0	.0	44.4	.0
H	524	H3-27 DO YOU WORK WITH - DON'T KNOW WHICH TYPE OF SINUSOIDAL OSCILLATOR?	9.9	6.8	3.6	.0	12.8	9.1	.0	55.6	.0
H	525	H3-28 DO YOU WORK WITH PULSE GENERATING CIRCUITS?	18.3	9.1	.0	.0	2.1	.0	.0	66.7	.0
H	526	H3-29 DO YOU WORK WITH BLOCKING OSCILLATORS?	5.6	4.5	3.6	12.5	.0	.0	.0	44.4	.0
H	527	H3-30 DO YOU WORK WITH BURST GENERATORS?	1.4	.0	3.6	12.5	.0	.0	.0	33.3	.0
H	528	H3-31 DO YOU WORK WITH ELOCKED OSCILLATORS?	2.8	2.3	3.6	12.5	.0	.0	.0	22.2	.0
I	529	I1-1 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I2-1; IF YES, CONTINUE.	35.2	18.2	3.6	12.5	2.1	3.0	.0	100.0	.0
I	530	I1-2 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUIT FREQUENCY DETERMINING DEVICES (FDD)?	15.5	9.1	.0	.0	.0	.0	.0	66.7	.0
I	532	I1-4 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTAL FREQUENCY DETERMINING DEVICES (FDD)?	22.5	9.1	.0	.0	.0	.0	.0	77.8	.0
I	533	I1-5 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	7.0	4.5	.0	.0	.0	.0	.0	33.3	.0
I	536	I1-8 DO YOU WORK WITH BISTABLE (FLIP FLOP) MULTIVIBRATORS?	36.6	18.2	3.6	12.5	2.1	3.0	.0	100.0	.0
I	537	I1-9 DO YOU WORK WITH R-S FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	12.7	9.1	3.6	12.5	.0	.0	.0	77.8	.0
I	538	I1-10 DO YOU WORK WITH J-K FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	35.2	18.2	3.6	12.5	.0	.0	.0	100.0	.0
I	539	I1-11 DO YOU WORK WITH "D" FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	9.9	4.5	3.6	12.5	.0	.0	.0	66.7	.0
I	540	I2-1 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I3-1; IF YES, CONTINUE.	14.1	11.4	.0	.0	2.1	3.0	.0	88.9	.0
I	541	I2-2 DO YOU WORK WITH SERIES DIODE LIMITERS?	8.5	9.1	.0	.0	.0	.0	.0	88.9	.0
I	542	I2-3 DO YOU WORK WITH SHUNT DIODE LIMITERS?	9.9	9.1	.0	.0	.0	.0	.0	88.9	.0
I	543	I2-4 DO YOU WORK WITH LIMITERS WITH BIAS?	7.0	6.8	.0	.0	.0	.0	.0	66.7	.0
I	544	I2-5 DO YOU WORK WITH ZENER DIODE LIMITERS?	11.3	9.1	.0	.0	2.1	3.0	.0	77.8	.0
I	545	I2-6 DO YOU WORK WITH TRANSISTOR LIMITERS?	11.3	9.1	.0	.0	2.1	3.0	.0	66.7	.0
I	546	I2-7 DO YOU WORK WITH TRIODE LIMITERS?	4.2	2.3	.0	.0	.0	.0	.0	33.3	.0
I	547	I2-8 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS?	11.3	9.1	.0	.0	.0	.0	.0	66.7	.0
I	548	I2-9 DO YOU WORK WITH BIAS DIODE CLAMPING CIRCUITS?	9.9	6.8	.0	.0	.0	.0	.0	44.4	.0
I	549	I2-10 DO YOU WORK WITH CLAMPERS?	5.6	4.5	.0	.0	.0	.0	.0	22.2	.0

C	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
I	550	I3-1 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS BASIC ELECTRON TUBES (FOR PURPOSES OF THIS QUESTION DO NOT CONSIDER HIGH-FREQUENCY DEVICES SUCH AS KLYSTRONS, TRAVELING WAVE TUBES, BACKWARD WAVE OSCILLATORS, OR MAGNETRONS AS ELECTRON TUBES)? IF NO, GO TO ITEM J1-1; IF YES, CONTINUE.	15.5	22.7	25.0	87.5	2.1	3.0	.0	55.6	.0
I	551	I3-2 DO YOU CHECK THE CONDITION OF ELECTRON TUBES?	11.3	18.2	25.0	87.5	.0	.0	.0	55.6	.0
I	552	I3-3 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES?	2.8	4.5	10.7	37.5	.0	.0	.0	44.4	.0
I	553	I3-4 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES?	7.0	9.1	25.0	87.5	2.1	3.0	.0	55.6	.0
I	554	I3-5 DO YOU USE SCOPES TO CHECK ELECTRON TUBES?	5.6	6.8	3.6	12.5	2.1	3.0	.0	55.6	.0
I	555	I3-6 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES?	15.5	20.5	17.9	62.5	.0	.0	.0	55.6	.0
I	556	I3-7 DO YOU USE OR REFER TO CUTOFF?	5.6	9.1	7.1	25.0	.0	.0	.0	44.4	.0
I	557	I3-8 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING?	4.2	4.5	3.6	12.5	.0	.0	.0	44.4	.0
I	558	I3-9 DO YOU USE OR REFER TO PEAK CURRENT RATING?	4.2	4.5	3.6	12.5	2.1	3.0	.0	44.4	.0
I	559	I3-10 DO YOU USE OR REFER TO TRANSIT TIME?	1.4	2.3	7.1	25.0	.0	.0	.0	22.2	.0
I	560	I3-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING?	1.4	2.3	.0	.0	.0	.0	.0	11.1	.0
I	561	I3-12 DO YOU USE OR REFER TO SATURATION?	5.6	6.8	7.1	25.0	2.1	.0	.0	44.4	.0
I	562	I3-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE?	2.8	4.5	.0	.0	.0	.0	.0	11.1	.0
I	563	I3-14 DO YOU USE OR REFER TO PLATE VOLTAGE?	4.2	6.8	17.9	62.5	.0	.0	.0	55.6	.0
I	564	I3-15 DO YOU USE OR REFER TO PLATE CURRENT?	4.2	6.8	7.1	25.0	.0	.0	.0	44.4	.0
I	565	I3-16 DO YOU USE OR REFER TO GRID VOLTAGE?	5.6	9.1	17.9	62.5	.0	.0	.0	55.6	.0
I	566	I3-17 DO YOU USE OR REFER TO GRID CURRENT?	5.6	9.1	7.1	25.0	.0	.0	.0	44.4	.0
I	567	I3-18 DO YOU USE OR REFER TO CATHODE VOLTAGE?	4.2	6.8	21.4	75.0	.0	.0	.0	55.6	.0
I	568	I3-19 DO YOU USE OR REFER TO CATHODE CURRENT?	4.2	6.8	7.1	25.0	.0	.0	.0	44.4	.0
I	569	I3-20 DO YOU USE OR REER TO FILAMENT VOLTAGE?	4.2	6.8	17.9	62.5	.0	.0	.0	55.6	.0
I	570	I3-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODE IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
I	571	I3-22 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC.) AMPLIFICATION FACTORS?	.0	.0	.0	.0	2.1	3.0	3.7	33.3	.0
I	572	I3-23 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
I	573	I3-24 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE?	1.4	2.3	.0	.0	2.1	3.0	3.7	.0	.0
I	574	I3-25 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE?	1.4	2.3	.0	.0	2.1	3.0	3.7	22.2	.0
I	576	I3-27 DO YOU USE OR REFER TO PLATE VOLTAGE FOR A SPECIFIED BIAS?	2.8	4.5	14.3	50.0	.0	.0	.0	55.6	.0
I	577	I3-28 DO YOU USE OR REFER TO PLATE CURRENT FOR A SPECIFIED BIAS?	2.8	4.5	3.6	12.5	.0	.0	.0	44.4	.0
I	578	I3-29 DO YOU USE OR REFER TO BIAS REQUIRED FOR CUTOFF?	5.6	6.8	3.6	12.5	2.1	3.0	.0	44.4	.0
I	579	I3-30 DO YOU USE OR REFER TO BIAS REQUIRED FOR SATURATION?	5.6	6.8	3.6	12.5	2.1	3.0	.0	44.4	.0
I	580	I3-31 DO YOU USE OR REFER TO GAIN?	2.8	4.5	17.9	62.5	2.1	3.0	.0	44.4	.0
I	581	I3-32 DO YOU USE OR REFER TO EFFICIENCY?	2.8	4.5	3.6	12.5	2.1	3.0	.0	44.4	.0
I	585	I3-36 DO YOU USE OR REFER TO TUBE SOCKET NOTATION?	4.2	6.8	21.4	75.0	.0	.0	.0	55.6	.0
I	586	I3-37 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS?	9.9	13.6	21.4	75.0	2.1	.0	.0	55.6	.0

Q	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 XI (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
I	587	I3-38 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS?	4.2	6.8	.0	.0	.0	.0	.0	55.6	.0
I	588	I3-39 DO YOU USE OR REFER TO ELECTRON TUBE DIODES?	1.4	2.3	3.6	12.5	.0	.0	.0	44.4	.0
J	589	J1-1 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM J2-1; IF YES, CONTINUE.	.0	.0	.0	.0	.0	.0	.0	33.3	.0
J	590	J1-2 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
J	591	J1-3 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
J	592	J1-4 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	33.3	.0
J	593	J1-5 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
J	594	J1-6 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	33.3	.0
J	595	J1-7 DO YOU TROUBLESHOOT OR REPAIR - DON'T KNOW WHICH TYPE OF AMPLIFIER?	.0	.0	.0	.0	.0	.0	.0	.0	.0
J	596	J2-1 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)?	1.4	2.3	7.1	25.0	.0	.0	.0	55.6	.0
J	598	J2-3 DO YOU WORK WITH BEAM POWER TUBES?	1.4	2.3	.0	.0	2.1	.0	.0	66.7	.0
J	599	J2-4 DO YOU WORK WITH THYRATRONS?	.0	.0	3.6	12.5	.0	.0	.0	44.4	.0
J	600	J2-5 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)?	9.9	13.6	3.6	12.5	.0	.0	.0	55.6	.0
J	601	J2-6 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	7.0	9.1	.0	.0	2.1	3.0	3.7	66.7	.0
J	602	J2-7 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	5.6	6.8	.0	.0	2.1	3.0	3.7	55.6	.0
J	603	J2-8 DO YOU USE OR REFER TO PHOSPHOR SCREENS CONCERNING CRT'S?	7.0	9.1	3.6	12.5	.0	.0	.0	100.0	.0
J	604	J2-9 DO YOU USE OR REFER TO AQUADAG COATINGS CONCERNING CRT'S?	.0	.0	.0	.0	.0	.0	.0	33.3	.0
J	605	J2-10 DO YOU USE OR REFER TO ELECTRON OPTICS CONCERNING CRT'S?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
J	606	J2-11 DO YOU USE OR REFER TO PERSISTENCE CONCERNING CRT'S?	1.4	2.3	.0	.0	.0	.0	.0	33.3	.0
J	607	J2-12 DO YOU USE OR REFER TO DECAY TIMES CONCERNING CRT'S?	.0	.0	.0	.0	.0	.0	.0	44.4	.0
J	608	J2-13 DO YOU USE OR REFER TO FLOURESCENCE CONCERNING CRT'S?	1.4	2.3	7.1	12.5	.0	.0	.0	66.7	.0
J	609	J2-14 DO YOU USE OR REFER TO PHOSPHORESCENCE CONCERNING CRT'S?	2.8	2.3	.0	.0	.0	.0	.0	55.6	.0
J	610	J2-15 DO YOU USE OR REFER TO SHADOW MASK CONCERNING CRT'S?	1.4	2.3	.0	.0	.0	.0	.0	33.3	.0
J	611	J3-1 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K1-1; IF YES, CONTINUE.	52.5	38.6	7.6	.0	31.0	33.3	37.0	22.2	.0
J	612	J3-2 DO YOU PERFORM TASKS ON FREQUENCY CONVERTER SYSTEMS STAGES?	14.1	9.1	.0	.0	.0	.0	.0	11.1	.0
J	613	J3-3 DO YOU PERFORM TASKS ON FREQUENCY MIXER SYSTEMS STAGES?	12.7	6.8	.0	.0	2.1	3.0	3.7	11.1	.0
J	614	J3-4 DO YOU PERFORM TASKS ON MODEM SYSTEMS ESS?	26.0	15.9	.0	.0	14.9	12.1	14.8	11.1	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 161

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
J	615	J3-5 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS?	4.2	.0	.0	.0	.0	.0	.0	.0	.0
J	616	J3-6 DO YOU PERFORM TASKS ON REACTANCE MODULATOR SYSTEM STAGES?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
J	617	J3-7 DO YOU PERFORM TASKS ON MODULATED OSCILLATOR SYSTEM STAGES?	9.9	.0	.0	.0	.0	.0	.0	11.1	.0
K	618	K1-1 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K2-1; IF YES, CONTINUE.	5.6	2.3	.0	.0	4.3	6.1	7.4	.0	.0
K	619	K1-2 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
K	620	K1-3 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
K	621	K1-4 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
K	622	K1-5 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
K	623	K1-6 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	624	K1-7 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
K	625	K1-8 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	626	K1-9 DO YOU PERFORM TASKS ON RF OSCILLATORS/SYNTHESIZERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	627	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
K	628	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
K	629	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
K	630	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	631	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
K	632	K1-15 DO YOU PERFORM TASKS ON DETECTORS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	633	K1-16 DO YOU PERFORM TASKS ON MIXER AMPLIFIERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	634	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS?	1.4	2.3	.0	.0	.0	.0	.0	.0	.0
K	635	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
K	636	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
K	637	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS?	2.8	2.3	.0	.0	.0	.0	.0	.0	.0
K	638	K2-1 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K3-1; IF YES, CONTINUE.	5.6	2.3	3.6	.0	4.3	6.1	7.4	.0	.0
K	639	K2-2 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	3.6	.0	2.1	3.0	3.7	.0	.0
K	640	K2-3 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
K	641	K2-4 DO YOU ALIGN TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
K	642	K2-5 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	3.6	.0	2.1	3.0	3.7	.0	.0
K	643	K2-6 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS?	2.8	2.3	3.6	.0	.0	.0	.0	.0	.0
K	644	K2-7 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS?	2.8	2.3	.0	.0	2.1	3.0	3.7	.0	.0
K	645	K2-8 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS?	2.8	.0	.0	.0	.0	.0	.0	.0	.0
K	646	K2-9 DO YOU PERFORM LINK PERFORMANCE ASSESSMENTS?	2.8	.0	.0	.0	.0	.0	.0	.0	.0
K	647	K2-10 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	4.2	.0	.0	.0	.0	.0	.0	11.1	.0
K	648	K2-11 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS?	4.2	.0	.0	.0	.0	.0	.0	11.1	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 160

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
K	649	K2-12 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	650	K2-13 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	4.2	.0	.0	.0	.0	.0	.0	11.1	.0
K	651	K2-14 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
K	652	K2-15 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	653	K2-16 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	654	K2-17 DO YOU PERFORM TASKS ON LIMITERS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
K	655	K2-18 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	656	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS?	2.8	.0	.0	.0	2.1	3.0	3.7	.0	.0
K	657	K2-20 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS?	2.8	.0	.0	.0	2.1	3.0	3.7	.0	.0
K	658	K2-21 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSCEIVERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	659	K2-22 DO YOU PLOT RECEIVE SIGNAL LEVEL CURVES (RSL)?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
K	662	K3-3 DO YOU CONVERT DECIMAL NUMBERS TO HEXADECIMAL (BASE 16) NUMBERS?	19.1	6.8	17.9	50.0	.0	.0	.0	44.4	.0
K	663	K3-4 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS?	18.3	6.8	57.1	62.5	2.1	3.0	.0	55.6	.0
K	664	K3-5 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS?	18.3	6.8	21.4	62.5	.0	.0	.0	55.6	.0
K	665	K3-6 DO YOU CONVERT OCTAL NUMBERS TO HEXADECIMAL NUMBERS?	11.3	6.8	17.9	62.5	.0	.0	.0	44.4	.0
K	666	K3-7 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS?	25.4	9.1	21.4	62.5	2.1	.0	.0	66.7	.0
K	667	K3-8 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS?	18.3	6.8	25.0	50.0	.0	.0	.0	55.6	.0
K	668	K3-9 DO YOU CONVERT BINARY NUMBERS TO HEXADECIMAL NUMBERS?	11.7	6.8	17.9	62.5	.0	.0	.0	55.6	.0
K	669	K3-10 DO YOU CONVERT HEXADECIMAL NUMBERS TO DECIMAL NUMBERS?	11.3	6.8	21.4	62.5	.0	.0	.0	55.6	.0
K	670	K3-11 DO YOU CONVERT HEXADECIMAL NUMBERS TO OCTAL NUMBERS?	11.3	6.8	21.4	62.5	.0	.0	.0	44.4	.0
K	671	K3-12 DO YOU CONVERT HEXADECIMAL NUMBERS TO BINARY NUMBERS?	11.3	6.8	17.9	62.5	.0	.0	.0	55.6	.0
K	673	K3-14 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD?	19.7	6.8	7.6	12.5	2.1	.0	.0	44.4	.0
K	675	K3-16 DO YOU SUBTRACT HEXADECIMAL NUMBERS?	11.3	6.8	17.9	62.5	.0	.0	.0	44.4	.0
K	682	K3-23 DO YOU USE OR REFER TO GRAY CODE?	2.8	2.3	.0	.0	2.1	3.0	3.7	44.4	.0
K	683	K3-24 DO YOU USE OR REFER TO 1CAC CODE?	1.4	.0	7.6	12.5	2.1	3.0	3.7	22.2	.0
K	684	K3-25 DO YOU USE OR REFER TO EXCESS-3 CODE?	2.8	2.3	.0	.0	2.1	3.0	3.7	33.3	.0
L	685	L1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS? IF NO, GO TO ITEM L2-1; IF YES, CONTINUE.	50.1	31.8	25.0	12.5	.0	.0	.0	88.9	.0
L	686	L1-2 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	37.4	18.2	7.1	12.5	.0	.0	.0	88.9	.0
L	687	L1-3 DO YOU CONSTRUCT TRUTH TABLES FOR 'OR' LOGIC SYMBOLS OR GATES?	30.4	15.9	7.1	12.5	.0	.0	.0	88.9	.
L	688	L1-4 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE IN LOGIC?	31.7	13.6	7.1	12.5	.0	.0	.0	88.9	.0
L	689	L1-5 DO YOU CONSTRUCT TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS OR GATES?	31.7	13.6	7.1	12.5	.0	.0	.0	88.9	.
L	690	L1-6 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	47.1	29.5	14.3	12.5	.0	.0	.0	88.9	.0
L	691	L1-7 DO YOU USE OR REFER TO TRUTH TABLES FOR 'OR' LOGIC SYMBOLS OR GATES?	47.1	29.5	14.3	12.5	.0	.0	.0	88.9	.

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
L	692	L1-6 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	40.8	25.0	14.3	12.5	.0	.0	.0	88.9	.0
L	693	L1-9 DO YOU USE OR REFER TO TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS?	40.8	25.0	7.1	12.5	.0	.0	.0	88.9	.0
L	694	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'AND' GATES?	52.1	34.1	25.0	12.5	.0	.0	.0	88.9	.0
L	695	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'OR' GATES?	52.1	34.1	25.0	12.5	.0	.0	.0	88.9	.0
L	696	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'NAND' OR 'NOR' GATES?	52.1	34.1	25.0	12.5	.0	.0	.0	88.9	.0
L	697	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'EXCLUSIVE OR' GATES?	49.3	29.5	17.9	12.5	.0	.0	.0	88.9	.0
L	698	L1-14 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR INHIBITED 'AND' GATES?	50.7	31.8	17.9	12.5	.0	.0	.0	88.9	.0
L	699	L1-15 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "B" BARS?	31.0	2.3	.0	.0	.0	.0	.0	22.2	.0
L	700	L1-16 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "M" BARS?	31.0	2.3	.0	.0	.0	.0	.0	22.2	.0
L	701	L1-17 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR COMBINERS?	33.8	4.5	3.6	12.5	.0	.0	.0	33.3	.0
L	702	L1-18 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS?	47.9	29.5	3.6	12.5	.0	.0	.0	88.9	.0
L	703	L1-19 DO YOU USE OR REFER TO ONE-SHOT MULTIVIBRATOR SYMBOLS?	39.4	20.5	3.6	12.5	.0	.0	.0	88.9	.0
L	704	L1-20 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT OR SCHEMATIC DIAGRAMS?	49.3	31.8	10.7	12.5	.0	.0	.0	88.9	.0
L	705	L1-21 DO YOU USE OR REFER TO ONE-SHOT CIRCUIT OR SCHEMATIC DIAGRAMS?	36.6	18.2	10.7	12.5	.0	.0	.0	88.9	.0
L	706	L1-22 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES?	39.4	25.0	3.6	12.5	.0	.0	.0	88.9	.0
L	707	L1-23 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	31.0	15.9	3.6	12.5	.0	.0	.0	44.4	.0
L	708	L1-24 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS?	31.0	15.9	3.6	12.5	.0	.0	.0	44.4	.0
L	709	L1-25 DO YOU USE OR REFER TO NONCOMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	28.2	13.6	3.6	12.5	.0	.0	.0	44.4	.0
L	710	L1-26 DO YOU CONSTRUCT TRUTH TABLES FOR "B" BARS?	19.7	2.3	3.6	12.5	.0	.0	.0	11.1	.0
L	711	L1-27 DO YOU CONSTRUCT TRUTH TABLES FOR "M" BARS?	19.7	2.3	3.6	12.5	.0	.0	.0	11.1	.0
L	712	L1-28 DO YOU CONSTRUCT TRUTH TABLES FOR COMBINERS?	21.1	2.3	3.6	12.5	.0	.0	.0	11.1	.0
L	713	L1-29 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS?	39.4	22.7	3.6	12.5	.0	.0	.0	77.8	.0
L	714	L1-30 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS?	36.6	15.9	3.6	12.5	.0	.0	.0	66.7	.0
L	715	L1-31 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	33.8	11.4	3.6	12.5	.0	.0	.0	55.6	.0
L	716	L1-32 DO YOU TRACE DATA FLOW THROUGH NONCOMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	29.6	9.1	3.6	12.5	.0	.0	.0	55.6	.0
L	717	L1-33 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS?	32.4	13.6	3.6	12.5	.0	.0	.0	77.8	.0
L	719	L2-2 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS?	11.3	9.1	.0	.0	.0	.0	.0	44.4	.0
L	720	L2-3 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	9.9	6.8	3.6	12.5	.0	.0	.0	11.1	.0
L	721	L2-4 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS?	15.5	9.1	.0	.0	.0	.0	.0	44.4	.0

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L	722	L2-5 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES?	26.8	15.9	3.6	12.5	.0	.0	.0	66.7	.0
L	723	L2-6 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS?	11.3	4.5	.0	.0	.0	.0	.0	44.4	.0
L	724	L2-7 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA?	11.3	6.8	.0	.0	.0	.0	.0	44.4	.0
L	725	L2-8 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES?	14.1	9.1	.0	.0	.0	.0	.0	44.4	.0
L	726	L2-9 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	8.5	4.5	3.6	12.5	.0	.0	.0	22.2	.0
L	727	L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE?	28.2	18.2	3.6	12.5	.0	.0	.0	66.7	.0
L	728	L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS?	15.5	6.8	.0	.0	.0	.0	.0	33.3	.0
L	729	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS?	21.1	11.4	.0	.0	.0	.0	.0	44.4	.0
L	730	L3-1 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M1-1; IF YES, CONTINUE.	43.7	20.5	7.1	25.0	2.1	.0	.0	77.8	.0
L	731	L3-2 DO YOU USE OR REFER TO UP-COUNTERS?	40.8	18.2	7.1	25.0	2.1	3.0	.0	66.7	.0
L	732	L3-3 DO YOU USE OR REFER TO DOWN-COUNTERS?	36.6	15.9	7.1	25.0	.0	.0	.0	66.7	.0
L	733	L3-4 DO YOU USE OR REFER TO SERIAL COUNTERS?	40.8	18.2	3.6	12.5	.0	.0	.0	44.4	.0
L	734	L3-5 DO YOU USE OR REFER TO PARALLEL COUNTERS?	38.0	18.2	3.6	12.5	.0	.0	.0	44.4	.0
L	735	L3-6 DO YOU USE OR REFER TO RING COUNTERS?	25.4	11.4	3.6	12.5	.0	.0	.0	44.4	.0
L	736	L3-7 DO YOU USE OR REFER TO DECADE (MOD 10) COUNTERS?	18.9	11.4	7.1	25.0	.0	.0	.0	55.6	.0
L	737	L3-8 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS?	26.8	15.9	7.1	25.0	.0	.0	.0	33.3	.0
L	738	L3-9 DO YOU USE OR REFER TO DOWN CLOCKS?	33.8	15.9	3.6	12.5	.0	.0	.0	66.7	.0
L	739	L3-10 DO YOU USE OR REFER TO UP CLOCKS?	35.2	15.9	3.6	12.5	.0	.0	.0	66.7	.0
L	740	L3-11 DO YOU USE OR REFER TO OTHER MODULOUS COUNTERS?	18.3	9.1	3.6	12.5	.0	.0	.0	22.2	.0
L	741	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS?	32.4	13.6	7.1	25.0	.0	.0	.0	66.7	.0
L	742	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS?	31.0	11.4	7.1	25.0	.0	.0	.0	66.7	.0
L	743	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-DOWN COUNTERS?	26.8	11.4	7.1	25.0	.0	.0	.0	55.6	.0
L	744	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS?	21.1	9.1	3.6	12.5	.0	.0	.0	44.4	.0
L	745	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS?	21.1	9.1	3.6	12.5	.0	.0	.0	44.4	.0
L	746	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF COUNTERS FEEDING STORAGE REGISTERS?	25.4	11.4	7.1	12.5	.0	.0	.0	44.4	.0
L	747	L3-18 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS?	32.4	11.4	7.1	12.5	.0	.0	.0	44.4	.0
L	748	L3-19 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS?	23.9	9.1	.0	.0	.0	.0	.0	22.2	.0
L	749	L3-20 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS?	15.5	9.1	3.6	12.5	.0	.0	.0	33.3	.0
L	750	L3-21 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES?	25.4	11.4	7.6	12.5	.0	.0	.0	44.4	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
L	751	L3-22 DO YOU DETERMINE THE APPROPRIATE 'AND' GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT?	26.8	13.6	3.6	12.5	.0	.0	.0	55.6	.0
M	752	M1-1 DO YOU WORK WITH SAWTOOTH WAVE GENERATOR TIMING CIRCUITS?	25.4	9.1	3.6	12.5	.0	.0	.0	100.0	.0
M	753	M1-2 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATOR TIMING CIRCUITS?	11.3	4.5	3.6	12.5	.0	.0	.0	77.8	.0
M	755	M1-4 DO YOU WORK WITH BLOCKING OSCILLATOR TIMING CIRCUITS?	11.3	6.8	3.6	12.5	.0	.0	.0	66.7	.0
M	756	M1-5 DO YOU WORK WITH MASTER STATION TIMING CIRCUITS?	15.5	4.5	3.6	12.5	.0	.0	.0	11.1	.0
M	757	M1-6 DO YOU USE OR REFER TO RISE TIME?	28.2	18.2	21.4	75.0	.0	.0	.0	88.9	.0
M	758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	19.7	15.9	21.4	75.0	.0	.0	.0	88.9	.0
M	759	M1-8 DO YOU USE OR REFER TO SWEEP TIME?	28.2	18.2	17.9	62.5	.0	.0	.0	100.0	.0
M	760	M1-9 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS?	14.1	9.1	3.6	12.5	.0	.0	.0	66.7	.0
M	761	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS?	18.3	11.4	3.6	12.5	.0	.0	.0	77.8	.0
M	762	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS?	12.7	4.5	3.6	12.5	.0	.0	.0	44.4	.0
M	763	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS?	11.3	4.5	3.6	12.5	.0	.0	.0	44.4	.0
M	770	M2-7 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE?	14.1	13.6	14.3	50.0	.0	.0	.0	44.4	.0
M	771	M2-8 DO YOU USE RF GENERATORS LESS THAN 1,000 MH?	5.6	6.8	3.6	12.5	2.1	.0	.0	33.3	.0
M	772	M2-9 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH?	2.8	2.3	3.6	12.5	.0	.0	.0	33.3	.0
M	773	M2-10 DO YOU USE WHITE NOISE GENERATORS?	.0	.0	.0	.0	.0	.0	.0	33.3	.0
M	774	M2-11 DO YOU USE PATTERN GENERATORS?	23.9	36.4	.0	.0	2.1	3.0	.0	33.3	.0
M	775	M2-12 DO YOU USE PSEUDO-RANDOM GENERATORS?	2.8	4.5	.0	.0	.0	.0	.0	.0	.0
M	776	M2-13 DO YOU USE TIME MARK GENERATORS?	14.1	22.7	3.6	12.5	.0	.0	.0	77.8	.0
M	777	M2-14 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS?	18.3	22.7	10.7	37.5	8.5	3.0	.0	44.4	.0
M	783	M3-6 DO YOU REMOVE OR REPLACE MOTOR PARTS?	69.0	75.0	.0	.0	.0	.0	.0	100.0	.0
M	785	M3-8 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS?	60.6	68.2	10.7	.0	.0	.0	.0	100.0	.0
M	786	M3-9 DO YOU PERFORM TASKS ON MOTOR FIELD COILS?	43.7	56.8	.0	.0	.0	.0	.0	77.8	.0
M	787	M3-10 DO YOU PERFORM ANY TASKS ON MOTOR ARMATURES?	56.3	65.9	.0	.0	.0	.0	.0	100.0	.0
M	788	M3-11 DO YOU PERFORM ANY TASKS ON MOTOR ROTORS?	46.5	56.8	.0	.0	.0	.0	.0	88.9	.0
M	789	M3-12 DO YOU PERFORM ANY TASKS ON MOTOR BRUSHES?	59.2	72.7	.0	.0	.0	.0	.0	100.0	.0
M	790	M3-13 DO YOU PERFORM ANY TASKS ON MOTOR SLIP RINGS?	40.8	52.3	.0	.0	.0	.0	.0	44.4	.0
M	791	M3-14 DO YOU PERFORM ANY TASKS ON MOTOR COMMUTATORS?	33.8	43.2	.0	.0	.0	.0	.0	55.6	.0
M	792	M3-15 DO YOU PERFORM ANY TASKS ON MOTOR POLE PIECES?	35.2	45.5	.0	.0	.0	.0	.0	44.4	.0
M	793	M3-16 DO YOU DETERMINE OR MEASURE FORCE OR TORQUE CREATED BY A MOTOR?	23.9	31.8	.0	.0	.0	.0	.0	11.1	.0
M	794	M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR?	32.4	40.9	.0	.0	.0	.0	.0	33.3	.0
M	795	M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS?	21.1	27.3	.0	.0	.0	.0	.0	33.3	.0
M	796	M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS?	59.2	79.5	.0	.0	.0	.0	.0	100.0	.0
M	797	M3-20 DO YOU WORK WITH INDUCTION MOTORS?	14.1	6.8	.0	.0	.0	.0	.0	100.0	.0
M	798	M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS?	8.5	2.3	.0	.0	.0	.0	.0	77.8	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
M	799	M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS?	16.9	11.4	10.7	.0	.0	.0	.0	88.9	.0
M	800	M3-23 DO YOU WORK WITH SERVOS OR SYNCHROS MOTORS?	12.7	13.6	.0	.0	.0	.0	.0	66.7	.0
M	801	M3-24 DO YOU WORK WITH SHADED-POLE MOTORS?	4.2	2.3	.0	.0	.0	.0	.0	33.3	.0
M	802	M3-25 DO YOU INSPECT GENERATORS OR ALTERNATORS?	35.2	9.1	28.6	.0	2.1	.0	.0	33.3	.0
M	803	M3-26 DO YOU CLEAN OR LUBRICATE GENERATORS OR ALTERNATORS?	35.2	9.1	7.6	.0	2.1	.0	.0	33.3	.0
M	804	M3-27 DO YOU OPERATE GENERATORS OR ALTERNATORS?	35.2	11.4	32.1	.0	4.7	.0	.0	33.3	.0
M	805	M3-28 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS OR ALTERNATORS?	33.8	6.8	.0	.0	.0	.0	.0	33.3	.0
M	806	M3-29 DO YOU REMOVE OR REPLACE GENERATOR, ALTERNATOR, OR PARTS?	26.8	9.1	.0	.0	2.1	3.0	3.7	33.3	.0
M	807	M3-30 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS OR ALTERNATORS?	26.8	6.8	17.9	.0	2.1	3.0	3.7	33.3	.0
M	808	M3-31 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS OR ALTERNATORS?	15.5	4.5	14.3	.0	.0	.0	.0	33.3	.0
N	811	N1-3 DO YOU CONSIDER THE FUNCTIONS OF MOVING COIL INTERNAL METER PARTS?	29.6	31.8	7.6	.0	2.1	.0	.0	44.4	.0
N	812	N1-4 DO YOU CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS INTERNAL METER PARTS?	16.9	13.6	3.6	.0	2.1	.0	.0	55.6	.0
N	819	N1-11 DO YOU CONSIDER BALLASTIC RESPONSE OF METER MOVEMENTS?	5.6	2.3	3.6	.0	6.4	3.0	3.7	33.3	.0
N	821	N2-1 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N3-1; IF YES, CONTINUE.	1.4	.0	7.1	25.0	.0	.0	.0	.0	.0
N	822	N2-2 DO YOU INSPECT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.0	3.6	12.5	.0	.0	.0	.0	.0
N	823	N2-3 DO YOU CLEAN SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.0	3.6	12.5	.0	.0	.0	.0	.0
N	824	N2-4 DO YOU ADJUST SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
N	825	N2-5 DO YOU TROUBLESHOOT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.0	7.1	25.0	.0	.0	.0	.0	.0
N	826	N2-6 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS?	.0	.0	7.1	25.0	.0	.0	.0	.0	.0
N	827	N2-7 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS?	.0	.0	7.1	25.0	.0	.0	.0	.0	.0
N	828	N2-8 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
N	829	N2-9 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	.0	.0	7.6	12.5	.0	.0	.0	.0	.0
N	830	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	1.4	.0	7.6	12.5	.0	.0	.0	.0	.0
N	831	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS?	1.4	.0	7.6	12.5	.0	.0	.0	.0	.0
N	832	N2-12 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS?	1.4	.0	7.1	25.0	.0	.0	.0	.0	.0
N	833	N3-1 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM O1-1; IF YES, CO...	35.2	25.0	.0	.0	2.1	3.0	3.7	88.9	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	31.0	22.7	.0	.0	.0	.0	.0	77.8	.0
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	32.4	22.7	.0	.0	.0	.0	.0	88.9	.0
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	21.1	15.9	.0	.0	.0	.0	.0	55.6	.0
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	15.5	11.4	.0	.0	.0	.0	.0	55.6	.0
N	838	N3-6 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS?	19.7	9.1	.0	.0	.0	.0	.0	55.6	.0
N	839	N3-7 DO YOU USE OR REFER TO INTEGRATING CIRCUITS?	25.4	11.4	.0	.0	.0	.0	.0	66.7	.0
N	840	N3-8 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT?	15.5	13.6	.0	.0	.0	.0	.0	44.4	.0
N	841	N3-9 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION?	11.3	6.8	.0	.0	.0	.0	.0	33.3	.0
N	842	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATOR SOLID STATE CIRCUITS?	26.8	18.2	.0	.0	.0	.0	.0	88.9	.0
N	843	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATOR SOLID STATE CIRCUITS?	8.5	6.8	.0	.0	.0	.0	.0	44.4	.0
N	844	N3-12 DO YOU WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATOR SOLID STATE CIRCUITS?	15.5	6.8	.0	.0	.0	.0	.0	88.9	.0
N	845	N3-13 DO YOU WORK WITH RAMP (TRAPEZOIDAL) GENERATOR SOLID STATE CIRCUITS?	7.0	2.3	.0	.0	.0	.0	.0	77.8	.0
N	846	N3-14 DO YOU WORK WITH FUNCTION GENERATOR SOLID STATE CIRCUITS?	9.9	6.8	.0	.0	.0	.0	.0	88.9	.0
N	847	N3-15 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS?	28.2	18.2	.0	.0	.0	.0	.0	77.8	.0
N	848	N3-16 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS?	21.1	13.6	.0	.0	.0	.0	.0	77.8	.0
N	849	N3-17 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS?	15.5	9.1	.0	.0	.0	.0	.0	77.8	.0
N	850	N3-18 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS?	26.8	18.2	.0	.0	.0	.0	.0	66.7	.0
N	851	N3-19 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS?	25.4	15.9	.0	.0	.0	.0	.0	66.7	.0
N	852	N3-20 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS?	23.9	13.6	.0	.0	2.1	3.0	3.7	66.7	.0
N	853	N3-21 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS?	25.4	15.9	.0	.0	2.1	3.0	3.7	77.8	.0
O	854	01-1 DO YOU WORK ON SINGLE OR INDEPENDENT SIDEBAND SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 02-1; IF YES, CONTINUE.	1.4	.0	14.3	.0	.0	.0	.0	.0	.0
O	855	01-2 DO YOU INSPECT SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	7.1	.0	.0	.0	.0	.0	.0
O	856	01-3 DO YOU CLEAN SINGLE SIDE BAND (SSB) OR INDEPENENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
O	857	01-4 DO YOU ALIGN SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	3.6	.0	.0	.0	.0	.0	.0
O	858	01-5 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.4	.0	10.7	.0	.0	.0	.0	.0	.0
O	859	01-6 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	1.4	.0	3.6	.0	.0	.0	.0	.0	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
0	860	01-7 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	2.8	.0	3.6	.0	.0	.0	.0	.0	.0
0	861	01-8 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	2.8	.0	.0	.0	.0	.0	.0	.0	.0
0	862	01-9 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM AUDIO AMPLIFIER STAGE?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
0	863	01-10 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM BALANCED MODULATOR STAGE?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	864	01-11 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CARRIER OSCILLATOR STAGE?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	865	01-12 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM LC FILTER STAGE?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
0	866	01-13 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CRYSTAL FILTER STAGE?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	867	01-14 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MECHANICAL FILTER STAGE?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	868	01-15 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM OSCILLATOR STAGE?	1.4	.0	3.6	.0	.0	.0	.0	.0	.0
0	869	01-16 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MIXER STAGE?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	870	01-17 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DRIVER STAGE?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
0	871	01-18 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM POWER AMPLIFIER STAGES?	1.4	.0	7.1	.0	.0	.0	.0	.0	.0
0	872	01-19 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM RF AMPLIFIER STAGE?	1.4	.0	3.6	.0	.0	.0	.0	.0	.0
0	873	01-20 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM FREQUENCY CONVERTER STAGES?	.0	.0	3.6	.0	.0	.0	.0	.0	.0
0	874	01-21 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM IF AMPLIFIER STAGE?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	875	01-22 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DEMODULATOR STAGE?	.0	.0	7.1	.0	.0	.0	.0	.0	.0
0	876	01-27 DO YOU USE OR REFER TO SELECTIVE FADING WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	3.6	.0	.0	.0	.0	.0	.0
0	877	01-24 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	3.6	.0	.0	.0	.0	.0	.0
0	878	01-25 DO YOU USE OR REFER TO FREQUENCY STABILITY WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	879	01-26 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	880	01-27 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB OR ISB TRANSMITTERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	881	01-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB TRANSMITTER SCHEMATIC DIAGRAMS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	882	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB RECEIVER SCHEMATIC DIAGRAMS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	883	01-30 DO YOU REFER TO SCHEMATIC STATION ASSESSMENT PROGRAMS (SSB)?	.0	.0	.0	.0	.0	.0	.0	.0	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 169

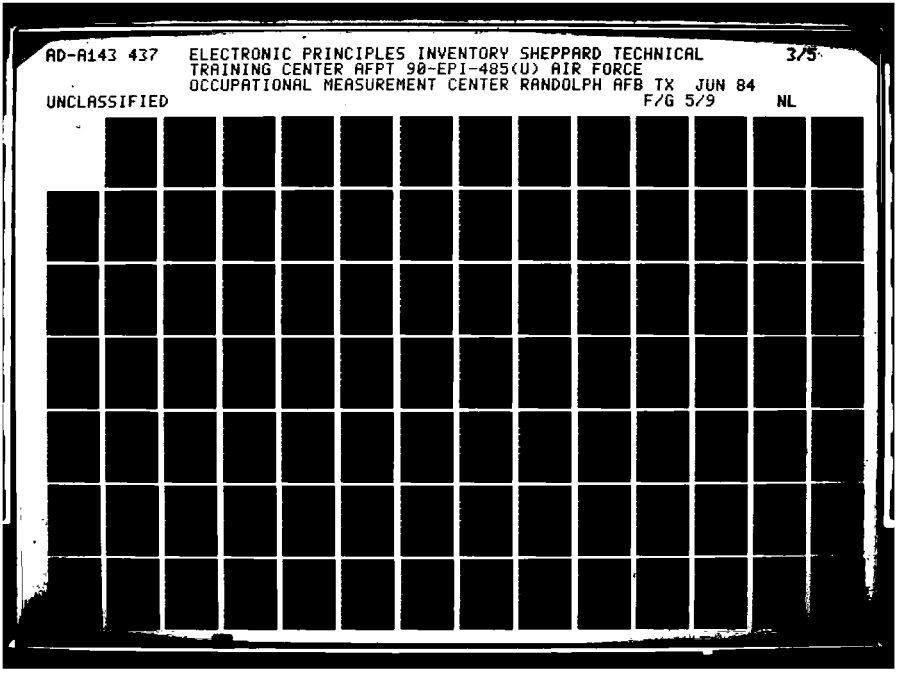
OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

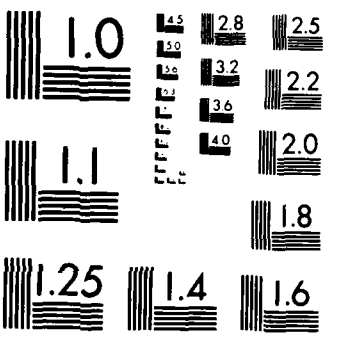
C	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
0	884	02-1 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 03-1; IF YES, CONTINUE.	2.8	2.3	.0	.0	6.4	9.1	11.1	11.1	.0
0	885	02-2 DO YOU INSPECT PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	4.3	6.1	7.4	11.1	.0
0	886	02-3 DO YOU CLEAN PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	4.3	6.1	7.4	11.1	.0
0	887	02-4 DO YOU ALIGN PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	2.1	3.0	3.7	11.1	.0
0	888	02-5 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	6.4	9.1	11.1	11.1	.0
0	889	02-6 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS?	1.4	.0	.0	.0	4.3	6.1	7.4	11.1	.0
0	890	02-7 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	6.4	9.1	11.1	11.1	.0
0	891	02-8 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS?	1.4	.0	.0	.0	4.3	6.1	7.4	11.1	.0
0	892	02-9 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) PULSE MODULATION SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
0	893	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) PULSE MODULATION SYSTEMS?	4.2	2.3	.0	.0	4.3	6.1	7.4	11.1	.0
0	894	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) PULSE MODULATION SYSTEMS?	1.4	.0	.0	.0	2.1	3.0	3.7	11.1	.0
0	895	02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) PULSE MODULATION SYSTEMS?	4.2	.0	.0	.0	2.1	3.0	3.7	11.1	.0
0	896	02-13 DO YOU WORK ON LINE PULSING MODULATION PULSE MODULATION SYSTEMS?	2.8	.0	.0	.0	4.3	6.1	7.4	11.1	.0
0	897	02-14 DO YOU WORK ON TIME DIVISION MULTIPLEXING (TDM) PULSE MODULATION SYSTEMS?	4.2	.0	.0	.0	.0	.0	.0	11.1	.0
0	898	02-15 DO YOU WORK ON - DON'T KNOW WHICH TYPE OF MODULATION SYSTEM?	2.8	.0	.0	.0	6.4	9.1	11.1	11.1	.0
0	899	02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLY STAGE?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
0	900	02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODE STAGE?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
0	901	02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORK STAGE?	1.4	.0	.0	.0	2.1	3.0	3.7	11.1	.0
0	902	02-19 DO YOU PERFORM TASKS ON PULSE MODULATIN SYSTEM TIMER STAGE?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
0	903	02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRON STAGE?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
0	904	02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMER STAGE?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
0	905	02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBE STAGE?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
0	906	02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIER STAGE?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
0	907	02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTER STAGE?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
0	908	02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIER STAGE?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
0	909	02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTOR STAGE?	1.4	.0	.0	.0	2.1	3.0	3.7	11.1	.0

D	TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
0	910	02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIER STAGE?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
0	911	02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIER STAGE?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
0	912	02-29 DO YOU USE OR REFER TO PULSE RECURRANCE FREQUENCY (PRF) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	.0	.0	.0	11.1	.0
0	913	02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	.0	.0	.0	11.1	.0
0	914	02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	.0	.0	.0	11.1	.0
0	915	02-32 DO YOU USE OR REFER TO PULSE SHAPE WHEN WORKING WITH PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	.0	.0	.0	11.1	.0
0	916	02-33 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.4	2.3	.0	.0	.0	.0	.0	11.1	.0
0	917	02-34 DO YOU USE OR REFER TO AVERAGE POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.4	2.3	.0	.0	.0	.0	.0	11.1	.0
0	918	02-35 DO YOU USE OR REFER TO DUTY CYCLE (DC) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	2.8	2.3	.0	.0	.0	.0	.0	11.1	.0
0	919	02-36 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	2.8	2.3	.0	.0	.0	.0	.0	11.1	.0
0	920	02-37 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	2.8	2.3	.0	.0	.0	.0	.0	11.1	.0
0	921	02-38 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
0	922	02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS?	2.8	2.3	.0	.0	4.3	6.1	7.4	11.1	.0
0	923	02-40 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS?	2.8	2.3	.0	.0	2.1	3.0	3.7	11.1	.0
0	924	03-1 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P1-1; IF YES, CONTINUE.	2.8	9.5	17.9	.0	2.1	3.0	3.7	.0	.0
0	925	03-2 DO YOU INSPECT ANTENNAS?	1.4	2.3	14.3	.0	.0	.0	.0	.0	.0
0	926	03-3 DO YOU CLEAN ANTENNAS?	1.4	2.3	.0	.0	.0	.0	.0	.0	.0
0	927	03-4 DO YOU PHYSICALLY ALIGN ANTENNAS?	.0	.0	7.1	.0	.0	.0	.0	.0	.0
0	928	03-5 DO YOU ELECTRICALLY ALIGN ANTENNAS?	.0	.0	5.6	.0	.0	.0	.0	.0	.0
0	929	03-6 DO YOU TROUBLESHOOT TO ANTENNAS?	1.4	2.3	21.4	.0	.0	.0	.0	.0	.0
0	930	03-7 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS?	.0	.0	3.6	.0	.0	.0	.0	.0	.0
0	931	03-8 DO YOU REMOVE OR INSTALL ANTENNAS?	1.4	2.3	.0	.0	.0	.0	.0	.0	.0
0	932	03-9 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	933	03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES?	1.4	2.3	.0	.0	.0	.0	.0	.0	.0
0	934	03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES?	1.4	2.3	.0	.0	.0	.0	.0	.0	.0
0	935	03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES OF FORCE IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS?	1.4	2.3	.0	.0	.0	.0	.0	.0	.0
0	936	03-13 DO YOU [illegible] GENERAL RULE THAT ANTENNAS [illegible]	.0	.0	.0	.0	.0	.0	.0	.0	.0

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0	937	03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
0	938	03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
0	939	03-16 DO YOU WORK WITH HERTZ BASIC ANTENNAS?	.0	.0	14.3	.0	.0	.0	.0	.0	.0
0	940	03-17 DO YOU WORK WITH MARCONI BASIC ANTENNAS?	.0	.0	3.6	.0	.0	.0	.0	.0	.0
0	941	03-18 DO YOU WORK WITH RHOMBIC BASIC ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	942	03-19 DO YOU WORK WITH DIPOLE BASIC ANTENNAS?	1.4	2.3	3.6	.0	.0	.0	.0	.0	.0
0	943	03-20 DO YOU WORK WITH SCIMITAR BASIC ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	944	03-21 DO YOU WORK WITH PARABOLIC BASIC ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	945	03-22 DO YOU WORK WITH GROUND PLANE BASIC ANTENNAS?	1.4	2.3	3.6	.0	.0	.0	.0	.0	.0
0	946	03-23 DO YOU WORK WITH FOLDED DIPOLE BASIC ANTENNAS?	1.4	2.3	7.1	.0	.0	.0	.0	.0	.0
0	947	03-24 DO YOU WORK WITH BROADSIDE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	948	03-25 DO YOU WORK WITH END-FIRE ARRAYS?	1.4	.0	3.6	.0	.0	.0	.0	.0	.0
0	949	03-26 DO YOU WORK WITH CARDIOID ARRAYS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
0	950	03-27 DO YOU WORK WITH COLLINEAR ARRAYS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
0	951	03-28 DO YOU WORK WITH PHASE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	952	03-29 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	953	03-30 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	954	03-31 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	955	03-32 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	956	03-33 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	957	03-34 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	958	03-35 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED?	1.4	2.3	.0	.0	.0	.0	.0	.0	.0
0	959	03-36 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	960	03-37 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	961	03-38 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	962	03-39 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	963	03-40 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	964	03-41 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN - DON'T KNOW WHAT KIND OF ELEMENT?	.0	.0	17.9	.0	.0	.0	.0	.0	.0
0	965	03-42 DO YOU WORK ON OMNIDIRECTIONAL ANTENNAS?	1.4	2.3	7.1	.0	.0	.0	.0	.0	.0
0	966	03-43 DO YOU WORK ON BIDIRECTIONAL ANTENNAS?	1.4	2.3	7.6	.0	.0	.0	.0	.0	.0

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P	967	03-44 DO YOU WORK ON OMNIDIRECTIONAL ANTENNAS?	1.4	2.3	17.9	.0	.0	.0	.0	.0	.0
P	968	03-45 DO YOU WORK WITH ROTARY ANTENNA ARRAYS?	.0	.0	3.6	.0	.0	.0	.0	.0	.0
P	969	P1-1 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES? (DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES.) IF NO, GO TO ITEM P2-1; IF YES, CONTINUE.	12.7	12.6	.0	.0	44.7	42.4	48.1	.0	.0
P	970	P1-2 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE COPPER LOSS OR "I SUB 2 R" LOSS IN TRANSMISSION LINES?	.0	.0	.0	.0	6.4	6.1	7.4	.0	.0
P	971	P1-3 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES?	.0	.0	.0	.0	4.7	3.0	3.7	.0	.0
P	972	P1-4 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE RADIATION LOSS?	2.8	2.3	.0	.0	2.1	.0	.0	.0	.0
P	973	P1-5 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE DIELECTRIC LOSS?	2.8	2.3	.0	.0	6.4	.0	.0	.0	.0
P	974	P1-6 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE LEAKAGE LOSSES?	4.2	2.3	.0	.0	14.9	9.1	11.1	.0	.0
P	975	P1-7 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE FARADAY SHIELD?	1.4	.0	.0	.0	2.1	.0	.0	.0	.0
P	976	P1-8 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES?	7.0	11.4	.0	.0	40.4	36.4	40.7	.0	.0
P	977	P1-9 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES?	7.0	9.1	.0	.0	14.9	15.2	18.5	.0	.0
P	978	P1-10 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES?	7.0	9.1	.0	.0	23.4	24.2	29.6	.0	.0
P	979	P1-11 DO YOU WORK WITH FLEXIPLE COAXIAL CABLE TRANSMISSION LINES?	12.7	11.6	.0	.0	8.5	9.1	11.1	.0	.0
P	980	P1-12 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES?	7.0	9.1	.0	.0	6.4	6.1	7.4	.0	.0
P	981	P1-13 DO YOU TROUBLESHOOT TRANSMISSION LINES?	9.9	11.4	.0	.0	36.2	45.5	51.9	.0	.0
P	982	P1-14 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)?	9.5	11.4	.0	.0	12.8	.0	.0	.0	.0
P	983	P1-15 DO YOU SELECT APPROPRIATE TRANSMISSION LINE TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS?	2.8	2.3	.0	.0	6.4	.0	.0	.0	.0
P	984	P1-16 DO YOU REFER OR REFER TO SCHEMATIC SYMBOLS FOR LINE [illegible] IN TERMS OF CIRCUIT TERMINATIONS?	2.8	4.6	.0	.0	14.9	12.1	11.1	.0	.0
P	985	P1-17 DO YOU MEASURE STANDING WAVE RATIO (SWR) OF [illegible] LINES?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
P	986	P1-18 DO YOU CALCULATE STANDING WAVE RATIO (SWR) OF [illegible] LINES?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
P	987	P1-19 DO YOU PERFORM CALCULATIONS NECESSARY TO [illegible] TYPE OF TERMINATION - WAVELENGTH [illegible] TO MATCH TRANSMISSION LINES TO [illegible]	.0	.0	.0	.0	2.1	.0	.0	.0	.0
P	988	P1-20 DO YOU [illegible] TRANSMISSION LINES WHICH ARE MATCHED [illegible] TRANSFORMERS?	.0	.0	.0	.0	4.2	3.0	.0	.0	.0
P	989	P1-21 DO YOU [illegible] TRANSMISSION LINES WHICH ARE MATCHED [illegible]	.0	.0	.0	.0	4.2	3.0	.0	.0	.0
P	990	P1-22 DO YOU [illegible]	.0	.0	.0	.0	4.2	3.0	.0	.0	.0


AD-A143 437 ELECTRONIC PRINCIPLES INVENTORY SHEPPARD TECHNICAL 3/5
TRAINING CENTER AFPT 90-EPI-485(U) AIR FORCE
OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX JUN 84
UNCLASSIFIED F/G 5/9 NL


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TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 173

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X_2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
P 991	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES?	.0	.0	.0	.0	4.3	3.0	3.7	.0	.0
P 992	P1-24 DO YOU USE OR REFER TO THE TERM CUT OFF FREQUENCY OF TRANSMISSION LINES?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
P 993	P2-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
P 994	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES?	.0	.0	.0	.0	4.3	3.0	3.7	.0	.0
P 995	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTHS FOR GIVEN FREQUENCIES?	.0	.0	.0	.0	4.3	3.0	3.7	.0	.0
P 996	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES?	.0	.0	.0	.0	6.4	3.0	3.7	.0	.0
P 997	P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES?	1.4	.0	.0	.0	8.5	6.1	7.4	.0	.0
P 998	P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES?	1.4	.0	.0	.0	10.6	9.1	11.1	.0	.0
P 999	P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING?	1.4	.0	.0	.0	2.1	.0	.0	.0	.0
P1000	P2-1 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P3-1; IF YES, CONTINUE.	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1001	P2-2 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1002	P2-3 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1003	P2-4 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1004	P2-5 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1005	P2-6 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1006	P2-7 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1007	P2-8 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1008	P2-9 DO YOU REMOVE OR INSTALL DUMMY LOADS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1009	P2-10 DO YOU REMOVE OR INSTALL E BENDS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1010	P2-11 DO YOU REMOVE OR INSTALL H BENDS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1011	P2-12 DO YOU REMOVE OR INSTALL OTHER BENDS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1012	P2-13 DO YOU REMOVE OR INSTALL CHOKE JOINTS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1013	P2-14 DO YOU REMOVE OR INSTALL ROTATING JOINTS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1014	P2-15 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1015	P2-16 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1016	P2-17 DO YOU REMOVE OR INSTALL DUPLEXERS OR MIXERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1017	P2-18 DO YOU REMOVE OR INSTALL WAVEGUIDE SHUTTERS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1018	P2-19 DO YOU REMOVE OR INSTALL TRANSMIT (TR) OR ANTITRANSMIT (ATR) TUBES?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1019	P2-20 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1020	P2-21 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1021	P2-22 DO YOU USE OR REFER TO CUT OFF FREQUENCY OF WAVEGUIDES?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1022	P2-23 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
P1023	P2-24 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1024	P2-25 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1025	P2-26 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1026	P2-27 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1027	P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OR .7 WAVELENGTHS OF THE OPERATING FREQUENCY?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1028	P2-29 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 AS AN AVERAGE?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1029	P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1030	P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1031	P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1032	P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1033	P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1034	P2-35 DO YOU WORK WITH HIGH POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1035	P2-36 DO YOU WORK WITH LOW POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1036	P2-37 DO YOU WORK WITH LOOP ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1037	P2-38 DO YOU WORK WITH APERTURES (WINDOWS OR IRISES) ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1038	P2-39 DO YOU WORK WITH CHOKE JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1039	P2-40 DO YOU WORK WITH ROTATING JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1040	P2-41 DO YOU WORK WITH JOINTS IN WAVEGUIDES OR CAVITY RESONATORS BUT DON'T KNOW WHICH KIND?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1041	P2-42 DO YOU TUNE CAVITY RESONATORS USING ELECTRICAL METHODS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1042	P2-43 DO YOU TUNE CAVITY RESONATORS USING MECHANICAL METHODS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1043	P2-44 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1044	P3-1 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELLING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS? IF NO, GO TO ITEM Q1-1; IF YES, CONTINUE.	.0	.0	.0	.0	.0	.0	.0	.0	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
P1045	P3-2 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1046	P3-3 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1047	P3-4 DO YOU USE OR REFER TO LEAD INDUCTANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTINAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1048	P3-5 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1049	P3-6 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1050	P3-7 DO YOU USE OR REFER TO ELECTRON BUNCHING?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1051	P3-8 DO YOU WORK WITH TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1052	P3-9 DO YOU WORK WITH THREE-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1053	P3-10 DO YOU WORK WITH REFLEX KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1054	P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1055	P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1056	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1057	P3-14 DO YOU WORK WITH MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1058	P3-15 DO YOU WORK WITH BACKWARD WAVE OSCILLATORS (BWO)?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1059	P3-16 DO YOU INSPECT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1060	P3-17 DO YOU CLEAN KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1061	P3-18 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1062	P3-19 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1063	P3-20 DO YOU PERFORM OPERATIONAL CHECKS ON KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1064	P3-21 DO YOU TROUBLESHOOT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1065	P3-22 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRONS OR TWT'S?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1066	P3-23 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1067	P3-24 DO YOU INSPECT PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1068	P3-25 DO YOU CLEAN PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1069	P3-26 DO YOU ADJUST PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1070	P3-27 DO YOU TUNE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1071	P3-28 DO YOU PERFORM OPERATIONAL CHECKS ON PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1072	P3-29 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1073	P3-30 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1074	P3-31 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1075	P3-32 DO YOU INSPECT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1076	P3-33 DO YOU CLEAN MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 176

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
P1077	P3-34 DO YOU ADJUST MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1078	P3-35 DO YOU TUNE MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1079	P3-36 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1080	P3-37 DO YOU TROUBLESHOOT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1081	P3-38 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1082	P3-39 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1083	P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR PLATE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1084	P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1085	P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1086	P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FEEDBACK LOOP COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1087	P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF DRIFT SPACE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1088	P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1089	P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1090	P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CONTROL GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1091	P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1092	P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REPELLER (REFLECTOR) PLATE COMPONENTS OF REFLEX KLYSTRONS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
P1093	P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID COMPONENTS OF REFLEX KLYSTRONS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1094	P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID CAVITY GAP COMPONENTS OF REFLEX KLYSTRONS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1095	P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF RESONANT CAVITY COMPONENTS OF REFLEX KLYSTRONS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1096	P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETIC COUPLING LOOP COMPONENTS OF REFLEX KLYSTRONS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1097	P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF REFLEX KLYSTRONS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1098	P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF REFLEX KLYSTRONS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1099	P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF OUTPUT LEAD COMPONENTS OF REFLEX KLYSTRONS?	1.4	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1100	P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1101	P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1102	P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MODULATOR GRID COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1103	P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ANODE COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0

D TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
P1104	P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF HELIX COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1105	P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1106	P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNET COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1107	P3-64 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ATTENUATOR COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1108	P3-65 DO YOU PERFORM TASKS ON FERRITE CIRCULATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1109	P3-66 DO YOU PERFORM TASKS ON SIGNAL CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1110	P3-67 DO YOU PERFORM TASKS ON IDLER CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1111	P3-68 DO YOU PERFORM TASKS ON VARACTOR DIODE COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1112	P3-69 DO YOU PERFORM TASKS ON FERRITE ISOLATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1113	P3-70 DO YOU PERFORM TASKS ON REVERSE-BIAS BATTERY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
P1114	P3-71 DO YOU PERFORM TASKS ON ANODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1115	P3-72 DO YOU PERFORM TASKS ON ANODE COOLING PIN COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1116	P3-73 DO YOU PERFORM TASKS ON COUPLING LOOP COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1117	P3-74 DO YOU PERFORM TASKS ON HEATER LEAD COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1118	P3-75 DO YOU PERFORM TASKS ON RESONANT CAVITY COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1119	P3-76 DO YOU PERFORM TASKS ON CATHRODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1120	P3-77 DO YOU PERFORM TASKS ON MAGNET COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
Q1121	Q1-1 DO YOU USE OR REFER TO STORAGE RESISTERS?	42.3	25.0	10.7	12.5	.0	.0	.0	77.8	.0
Q1122	Q1-2 DO YOU USE OR REFER TO SHIFT REGISTERS?	43.7	25.0	3.6	12.5	.0	.0	.0	77.8	.0
Q1123	Q1-3 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS?	39.4	25.0	7.1	12.5	.0	.0	.0	77.8	.0
Q1124	Q1-4 DO YOU USE OR REFER TO LOGIC SYMBOLS OR STORAGE REGISTERS?	39.4	25.0	3.6	12.5	.0	.0	.0	77.8	.0
Q1126	Q1-6 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPES OF REGISTER CIRCUITS?	33.8	20.5	.0	.0	2.1	3.0	3.7	66.7	.0
Q1127	Q1-7 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED?	40.8	22.7	.0	.0	2.1	3.0	3.7	55.6	.0
Q1128	Q2-1 DO YOU WORK WITH STORAGE DEVICES IN YOUR PRESENT JOB? IF NO, GO TO ITEM Q3-1; IF YES, CONTINUE.	42.3	18.2	32.1	25.0	2.1	.0	.0	22.2	.0
Q1129	Q2-2 DO YOU USE OR REFER TO DELAY LINES?	4.2	2.3	.0	.0	.0	.0	.0	11.1	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 178

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
Q1130	Q2-3 DO YOU USE OR REFER TO MAGNETIC CORES OR BIMAGS?	26.8	.0	.0	.0	.0	.0	.0	22.2	.0
Q1131	Q2-4 DO YOU USE OR REFER TO MAGNETIC DRUMS?	4.2	.0	.0	.0	.0	.0	.0	22.2	.0
Q1132	Q2-5 DO YOU USE OR REFER TO MAGNETIC TAPES?	5.6	4.5	3.6	.0	2.1	.0	.0	33.3	.0
Q1133	Q2-6 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OF MEMORY SYSTEMS?	26.8	4.5	.0	.0	.0	.0	.0	33.3	.0
Q1134	Q2-7 DO YOU USE OR REFER TO STORAGE CAPACITY OF MEMORY SYSTEMS?	31.0	6.8	10.7	.0	2.1	.0	.0	33.3	.0
Q1135	Q2-8 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS?	21.1	6.8	3.6	.0	2.1	.0	.0	22.2	.0
Q1136	Q2-9 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES?	11.3	2.3	.0	.0	.0	.0	.0	11.1	.0
Q1137	Q2-10 DO YOU USE OR REFER TO MAGNETIC DISKS?	2.8	.0	3.6	12.5	2.1	.0	.0	33.3	.0
Q1138	Q2-11 DO YOU USE OR REFER TO THIN FILMS?	1.4	.0	.0	.0	.0	.0	.0	22.2	.0
Q1139	Q2-12 DO YOU USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED) CIRCUITS?	16.9	9.1	7.1	.0	.0	.0	.0	33.3	.0
Q1140	Q2-13 DO YOU USE OR REFER TO BUBBLE MEMORIES?	.0	.0	7.1	12.5	.0	.0	.0	11.1	.0
Q1141	Q2-14 DO YOU USE OR REFER TO PUNCH CARDS?	25.4	.0	.0	.0	.0	.0	.0	22.2	.0
Q1142	Q2-15 DO YOU USE OR REFER TO PAPER TAPES?	36.6	18.2	32.1	25.0	.0	.0	.0	22.2	.0
Q1143	Q2-16 DO YOU USE OR REFER TO RANDOM ACCESS MEMORIES (RAM)?	25.4	9.1	14.3	.0	2.1	.0	.0	33.3	.0
Q1144	Q2-17 DO YOU USE OR REFER TO READ ONLY MEMORIES (ROM)?	9.9	11.4	10.7	.0	2.1	.0	.0	33.3	.0
Q1145	Q2-18 DO YOU USE OR REFER TO PROGRAMMALBE READ ONLY MEMORIES (PROM)?	5.6	4.5	7.1	12.5	.0	.0	.0	33.3	.0
Q1146	Q2-19 DO YOU USE OR REFER TO TRANSFORMER READ ONLY STORAGES (TROS)?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
Q1147	Q2-20 DO YOU USE OR REFER TO CAPACITY READ ONLY STORAGES (CROS)?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
Q1148	Q2-21 DO YOU INSPECT STORAGE DEVICES?	32.4	13.6	17.9	12.5	4.3	.0	.0	22.2	.0
Q1149	Q2-22 DO YOU CLEAN STORAGE DEVICES?	35.2	11.4	3.6	12.5	4.3	.0	.0	22.2	.0
Q1150	Q2-23 DO YOU ALIGN STORAGE DEVICES?	16.9	11.4	.0	.0	4.3	.0	.0	11.1	.0
Q1151	Q2-24 DO YOU ADJUST STORAGE DEVICES?	15.5	11.4	3.6	12.5	2.1	.0	.0	22.2	.0
Q1152	Q2-25 DO YOU TROUBLESHOOT MEMORY SYSTEM STORAGE DEVICES?	21.1	2.3	21.4	.0	2.1	.0	.0	22.2	.0
Q1153	Q2-26 DO YOU REMOVE OR REPLACE SUBASSEMBLIES OR COMPONENTS OF STORAGE DEVICES?	29.6	11.4	7.1	12.5	2.1	.0	.0	22.2	.0
Q1154	Q2-27 DO YOU TRACE SIGNAL FLOW IN STORAGE DEVICES USING LOGIC DIAGRAMS OR SCHMATICS?	22.5	4.5	3.6	.0	.0	.0	.0	11.1	.0
Q1155	Q3-1 IN YOU PRESENT JOP, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS OR ANALOG-TO-DIGITAL (A/D) CONVERTERS? IF NO, GO TO ITEM R1-1; IF YES, CONTINUE.	26.8	2.3	.0	.0	2.1	.0	.0	66.7	.0
Q1156	Q3-2 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES?	9.9	.0	.0	.0	.0	.0	.0	44.4	.0
Q1157	Q3-3 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IS DETERMINED BY ADDING THE DENOMINATORS OF THE RESISTORS?	7.0	.0	.0	.0	.0	.0	.0	44.4	.0
Q1158	Q3-4 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS?	8.5	.0	.0	.0	.0	.0	.0	44.4	.0
Q1159	Q3-5 DO YOU PERFORM TASKS ON SAMPLE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	4.2	.0	.0	.0	2.1	.0	.0	55.6	.0
Q1160	Q3-6 DO YOU PERFORM TASKS ON HOLD FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	1.4	.0	.0	.0	2.1	.0	.0	44.4	.0

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Q1161	Q3-7 DO YOU PERFORM TASKS ON COMPARE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	5.6	.0	.0	.0	2.1	.0	.0	44.4	.0
Q1162	Q3-8 DO YOU PERFORM TASKS ON DIGITIZE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	1.4	.0	.0	.0	2.1	.0	.0	44.4	.0
Q1163	Q3-9 DO YOU PERFORM TASKS ON PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS BUT DON'T KNOW WHICH FUNCTION?	5.6	.0	.0	.0	.0	.0	.0	22.2	.0
Q1164	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS?	7.0	.0	.0	.0	.0	.0	.0	44.4	.0
Q1165	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS?	2.8	.0	.0	.0	.0	.0	.0	44.4	.0
Q1166	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS?	7.0	.0	.0	.0	.0	.0	.0	44.4	.0
Q1167	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS?	9.9	.0	.0	.0	.0	.0	.0	44.4	.0
Q1168	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS?	2.8	.0	.0	.0	.0	.0	.0	44.4	.0
Q1169	Q3-15 DO YOU PERFORM ANY TASKS ON ELECTRONIC A/D CONVERTERS?	12.7	.0	.0	.0	2.1	.0	.0	55.6	.0
Q1170	Q3-16 DO YOU PERFORM ANY TASKS ON DIGITAL-TO-ANALOG (D/A) CONVERTERS?	15.5	.0	.0	.0	2.1	.0	.0	55.6	.0
Q1171	Q3-17 DO YOU OPERATE COMPUTER KEYBOARDS?	8.5	.0	.0	.0	2.1	.0	.0	55.6	.0
Q1172	Q3-18 DO YOU WORK AT OR WITH COMPUTER TERMINALS?	9.9	.0	.0	.0	2.1	.0	.0	44.4	.0
Q1173	Q3-19 HAVE YOU BEEN SENT TO FACTORY TRAINING OR TO ANY OTHER SCHOOL FOR THE SPECIFIC PUPPOSE OF RECEIVING COMPUTER OR LOGIC CIRCUIT RELATED TRAINING?	15.5	2.3	.0	.0	.0	.0	.0	33.3	.0
Q1174	Q3-20 DO YOU HAVE MICROPROCESSORS OR COMPUTER EQUIPMENT LOCATED AT YOUR WORK STATION WHICH IS OPERATED OR MAINTAINED BY CONTRACTOR PERSONNEL?	15.5	2.3	.0	.0	2.1	3.0	3.7	66.7	.0
Q1175	Q3-21 WAS THE COMPUTER OR LOGIC CIRCUIT TRAINING YOU RECEIVED IN YOUR 3-LEVEL AWARDING COURSE ADEQUATE IN TERMS OF YOUR PRESENT DUTIES?	19.7	2.3	.0	.0	.0	.0	.0	11.1	.0
Q1176	Q3-22 ARE YOU ASSIGNED AGAINST A POSITION WHICH REQUIRES A "D" PREFIX?	.0	.0	.0	.0	.0	.0	.0	.0	.0
R1177	R1-1 DO YOU WORK WITH PHANTASTRON CIRCUITRY? IF NO, GO TO ITEM R2-1. IF YES, CONTINUE.	1.4	2.3	.0	.0	.0	.0	.0	.0	.0
R1178	R1-2 PHANTASTRON CIRCUITRY HAS VARIABLE-DELAY APPLICATIONS IN MY JOB.	.0	.0	.0	.0	.0	.0	.0	.0	.0
R1179	R1-3 PHANTASTRON CIRCUITRY HAS SEARCH-LOCK AUTOMATIC FREQUENCY CONTROLS (AFC) APPLICATIONS IN MY JOB.	.0	.0	.0	.0	.0	.0	.0	.0	.0
R1180	R1-4 PHANTASTRON CIRCUITRY HAS MONOSTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	2.8	2.3	.0	.0	.0	.0	.0	.0	.0
R1181	R1-5 PHANTASTRON CIRCUITRY HAS BISTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	2.8	2.3	.0	.0	.0	.0	.0	.0	.0
R1182	R1-6 PHANTASTRON CIRCUITRY HAS FREE-RUNNING MULTIVIBRATORS APPLICATIONS IN MY JOB.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
R1183	R2-1 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS? IF NO, GO TO ITEM R3-1; IF YES, CONTINUE.	47.9	36.4	7.1	25.0	.0	.0	.0	44.4	.0

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R1184	R2-2 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS?	43.7	31.8	3.6	12.5	.0	.0	.0	44.4	.0
R1185	R2-3 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS?	43.7	31.8	3.6	12.5	.0	.0	.0	33.3	.0
S1191	S1-4 DO YOU USE OR REFER TO TAPE DRIVES (UNITS)?	36.6	31.8	21.4	25.0	6.4	.0	.0	44.4	.0
S1192	S1-5 DO YOU USE OR REFER TO CARD READERS/CARD PUNCHES?	39.4	13.6	.0	.0	12.8	6.1	7.4	33.3	.0
S1194	S1-7 DO YOU USE OR REFER TO NIXIE LIGHTS (TUBES)?	11.3	15.9	.0	.0	.0	.0	.0	55.6	.0
S1195	S1-8 DO YOU USE OR REFER TO LED'S?	45.1	43.2	32.1	25.0	2.1	.0	.0	77.8	.0
S1196	S1-9 DO YOU USE OR REFER TO LCD'S?	16.9	18.2	14.3	25.0	.0	.0	.0	55.6	.0
S1200	S1-13 DO YOU USE OR REFER TO TAPE READERS?	71.8	65.9	50.0	37.5	2.1	.0	.0	22.2	.0
S1201	S1-14 DO YOU USE OR REFER TO TAPE PUNCHES?	74.6	72.7	53.6	37.5	2.1	.0	.0	.0	.0
S1202	S2-1 DO YOU WORK WITH PHOTODIODE PHOTO SENSITIVE DEVICES?	32.4	11.4	.0	.0	2.1	.0	.0	100.0	.0
S1203	S2-2 DO YOU WORK WITH PHOTOTRANSISTOR PHOTO SENSITIVE DEVICES?	15.5	2.3	.0	.0	2.1	.0	.0	55.6	.0
S1204	S2-3 DO YOU WORK WITH PHOTOTUBE PHOTO SENSITIVE DEVICES?	2.8	.0	.0	.0	2.1	.0	.0	77.8	.0
S1205	S2-4 DO YOU WORK WITH PHOTO-SCR PHOTO SENSITIVE DEVICES?	4.2	.0	.0	.0	2.1	.0	.0	22.2	.0
S1206	S2-5 DO YOU WORK WITH PHOTOCELL (PHOTOCONDUCTIVE OR PHOTOVOLTAIC) PHOTO SENSITIVE DEVICES?	43.7	22.7	.0	.0	2.1	.0	.0	88.9	.0
S1207	S3-1 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS? IF NO, GO TO ITEM T1-1; IF YES, CONTINUE.	2.8	.0	.0	.0	4.3	3.0	3.7	33.3	.0
S1208	S3-2 DO YOU USE OR REFER TO EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.0	.0	.0	2.1	.0	.0	22.2	.0
S1209	S3-3 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	.0	.0	.0	.0	2.1	.0	.0	22.2	.0
S1210	S3-4 DO YOU MEASURE EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
S1211	S3-5 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
S1212	S3-6 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
S1213	S3-7 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
S1214	S3-8 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
S1215	S3-9 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
T1216	T1-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS? IF NO, GO TO ITEM T2-1; IF YES, CONTINUE.	.0	.0	14.3	50.0	.0	.0	.0	11.1	.0
T1217	T1-2 DO YOU INSPECT INFRARED SYSTEMS?	.0	.0	14.3	50.0	.0	.0	.0	11.1	.0
T1218	T1-3 DO YOU CLEAN INFRARED SYSTEMS?	.0	.0	14.3	50.0	2.1	.0	.0	11.1	.0
T1219	T1-4 DO YOU SERVICE INFRARED SYSTEMS?	.0	.0	14.3	50.0	2.1	.0	.0	11.1	.0
T1220	T1-5 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS?	.0	.0	14.3	50.0	.0	.0	.0	11.1	.0
T1221	T1-6 DO YOU CALIBRATE INFRARED SYSTEMS?	.0	.0	14.3	50.0	.0	.0	.0	11.1	.0
T1222	T1-7 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS?	.0	.0	14.3	50.0	.0	.0	.0	11.1	.0
T1223	T1-8 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	.0	.0	14.3	50.0	.0	.0	.0	11.1	.0

TASKS WITH 30 PERCENT MF ACCROSS AFSC'S BY TAFMS

FCPTC3 PAGE 181

OCCUPATIONAL ANALYSIS PROGRAM
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T1224	T1-9 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS?	.0	.0	14.3	50.0	.0	.0	.0	11.1	.0
T1225	T1-10 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	.0	.0	14.3	50.0	.0	.0	.0	11.1	.0
T1226	T1-11 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS?	.0	.0	14.3	50.0	.0	.0	.0	11.1	.0
T1227	T1-12 DO YOU USE OR REFER TO FAR REGIONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1228	T1-13 DO YOU USE OR REFER TO INTERMEDIATE REGIONS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
T1229	T1-14 DO YOU USE OR REFER TO NEAR REGIONS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
T1230	T1-15 DO YOU USE OR REFER TO MICRONS (M)?	1.4	.0	3.6	12.5	.0	.0	.0	.0	.0
T1231	T1-16 DO YOU USE OR REFER TO GRAY BODIES?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
T1232	T1-17 DO YOU USE OR REFER TO BLACK BODIES?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
T1233	T1-18 DO YOU USE OR REFER TO ABSORPTION?	1.4	.0	3.6	12.5	.0	.0	.0	11.1	.0
T1234	T1-19 DO YOU USE OR REFER TO SCATTERING?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1235	T1-20 DO YOU USE OR REFER TO ABSOLUTE ZERO?	1.4	.0	7.1	25.0	.0	.0	.0	11.1	.0
T1236	T1-21 DO YOU PERFORM TASKS ON BLITZ?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
T1237	T1-22 DO YOU PERFORM TASKS ON TARGET BUTTONS?	.0	.0	3.6	.0	2.1	.0	.0	.0	.0
T1238	T1-23 DO YOU PERFORM TASKS ON ERECTOR LENSES?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
T1239	T1-24 DO YOU PERFORM TASKS ON OCULAR LENSES?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
T1240	T1-25 DO YOU PERFORM TASKS ON CORRECTION LENSES?	.0	.0	3.6	12.5	2.1	.0	.0	.0	.0
T1241	T1-26 DO YOU PERFORM TASKS ON FILTERS?	.0	.0	3.6	12.5	2.1	.0	.0	.0	.0
T1242	T1-27 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
T1243	T1-28 DO YOU PERFORM TASKS ON PLANE MIRRORS?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
T1244	T2-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS? IF NO, GO TO ITEM T3-1; IF YES, CONTINUE.	7.8	.0	.0	.0	4.3	3.0	3.7	22.2	.0
T1245	T2-2 DO YOU INSPECT LASER SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	22.2	.0
T1246	T2-3 DO YOU CLEAN LASER SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	22.2	.0
T1247	T2-4 DO YOU SERVICE LASER SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1248	T2-5 DO YOU OPERATE LASER SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	22.2	.0
T1249	T2-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1250	T2-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1251	T2-8 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1252	T2-9 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1253	T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1254	T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)?	.0	.0	.0	.0	2.1	3.0	3.7	11.1	.0
T1255	T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS?	.0	.0	.0	.0	2.1	3.0	3.7	11.1	.0
T1256	T2-13 DO YOU USE OR REFER TO GROUND STATE?	.0	.0	.0	.0	2.1	3.0	3.7	11.1	.0
T1257	T2-14 DO YOU USE OR REFER TO EXCITED STATE?	.0	.0	.0	.0	2.1	3.0	3.7	11.1	.0
T1258	T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION?	.0	.0	.0	.0	2.1	3.0	3.7	11.1	.0
T1259	T2-16 DO YOU USE OR REFER TO PHOTONS?	.0	.0	.0	.0	2.1	3.0	3.7	11.1	.0
T1260	T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSIONS?	.0	.0	.0	.0	2.1	3.0	3.7	11.1	.0
T1261	T2-18 DO YOU USE OR REFER TO STIMULATED EMISSIONS?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1262	T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1263	T2-20 DO YOU USE OR REFER TO INVERSION LEVELS?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1264	T2-21 DO YOU USE OR REFER TO MONOCHROMATIC?	.0	.0	.0	.0	.0	.0	.0	11.1	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 182

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 X1 (M)	306 X2 (M)	316 XOF (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 XO (M)	MIN IMA *<*
T1265	T2-22 DO YOU WORK WITH ACTIVE MATERIALS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1266	T2-23 DO YOU WORK WITH PUMPING SOURCES?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1267	T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1268	T2-25 DO YOU WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1269	T2-26 DO YOU WORK WITH HELICAL FLASHTUBES?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1270	T2-27 DO YOU WORK WITH RUBY MATERIALS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1271	T2-28 DO YOU WORK WITH HELIUM-NEON MATERIALS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1272	T2-29 DO YOU WORK WITH HELIUM-XENON MATERIALS?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1273	T2-30 DO YOU WORK WITH XENON MATERIALS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1274	T2-31 DO YOU WORK WITH CESIUM-HELIUM MATERIALS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1275	T2-32 DO YOU WORK WITH ARGON MATERIALS?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1276	T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS MATERIALS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1277	T2-34 DO YOU WORK WITH GALLIUM ARSENIDE MATERIALS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1278	T3-1 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE TUBES (DVST), MULTIPLE MODE STORAGE TUBES (MMST), OR SCAN CONVERTER TUBES (SCT)? IF NO, GO TO ITEM T4-1; IF YES, CONTINUE.	4.2	2.3	.0	.0	2.1	3.0	3.7	11.1	.0
T1279	T3-2 DO YOU INSPECT DVST OR MMST?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1280	T3-3 DO YOU CLEAN DVST OR MMST?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1281	T3-4 DO YOU ADJUST OR CALIBRATE DVST OR MMST?	1.4	.0	.0	.0	.0	.0	.0	11.1	.0
T1282	T3-5 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
T1283	T3-6 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
T1284	T3-7 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS?	1.4	.0	.0	.0	.0	.0	.0	.0	.0
T1285	T3-8 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF DVST?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1286	T3-9 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF MMST?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1287	T3-10 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF SCT?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1288	T3-11 DO YOU PERFORM TASKS ON FLOOD GUNS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1289	T3-12 DO YOU PERFORM TASKS ON WRITE GUNS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1290	T3-13 DO YOU PERFORM TASKS ON READ GUNS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1291	T3-14 DO YOU PERFORM TASKS ON ATTACK GUNS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1292	T3-15 DO YOU PERFORM TASKS ON ERASE GUNS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
T1293	T3-16 DO YOU PERFORM TASKS ON STORAGE GRIDS?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
T1294	T4-1 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS DEALING WITH TELEVISION SYSTEMS INCLUDING LOW LIGHT TELEVISION? IF NO, GO TO ITEM U1-1; IF YES, CONTINUE.	.0	.0	14.3	.0	.0	.0	.0	22.2	.0
T1295	T4-2 DO YOU INSPECT TELEVISION SYSTEMS?	.0	.0	7.1	.0	.0	.0	.0	33.3	.0
T1296	T4-3 DO YOU CLEAN TELEVISION SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	33.3	.0
T1297	T4-4 DO YOU ADJUST OR CALIBRATE TELEVISION SYSTEMS?	.0	.0	7.1	.0	.0	.0	.0	33.3	.0
T1298	T4-5 DO YOU OPERATE TELEVISION SYSTEMS?	.0	.0	14.3	.0	.0	.0	.0	33.3	.0
T1299	T4-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF TV SYSTEMS?	.0	.0	7.6	.0	.0	.0	.0	33.3	.0
T1300	T4-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF TV SYSTEMS?	.0	.0	7.1	.0	.0	.0	.0	33.3	.0
T1301	T4-8 DO YOU TROUBLESHOOT DOWN TO TV SYSTEM COMPONENT PARTS?	.0	.0	7.6	.0	.0	.0	.0	22.2	.0

TASKS WITH 30 PERCENT MP ACCROSS AFSC'S BY TAFMS

FCPT03 PAGE 183

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
T1302	T4-9 DO YOU REMOVE OR REPLACE TV SYSTEM MAJOR ASSEMBLIES?	.0	.0	.0	.0	.0	.0	.0	33.3	.0
T1303	T4-10 DO YOU REMOVE OR REPLACE TV SYSTEM COMPONENT PARTS?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
U1305	U1-2 DO YOU USE OR REFER TO DECIMAL SYSTEMS?	12.7	.0	7.1	.0	.0	.0	.0	33.3	.0
U1306	U1-3 DO YOU USE OR REFER TO OCTAL SYSTEMS?	12.7	.0	14.3	.0	.0	.0	.0	33.3	.0
U1307	U1-4 DO YOU USE OR REFER TO PARITY DETECTORS/GENERATORS?	16.9	2.3	.0	.0	.0	.0	.0	22.2	.0
U1308	U1-5 DO YOU USE OR REFER TO HEXADECIMAL SYSTEMS?	8.5	.0	10.7	37.5	.0	.0	.0	33.3	.0
U1309	U1-6 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS?	7.0	.0	3.6	.0	.0	.0	.0	22.2	.0
U1310	U1-7 DO YOU USE OR REFER TO FOUR SYSTEMS?	5.6	.0	.0	.0	.0	.0	.0	22.2	.0
U1311	U1-8 DO YOU USE OR REFER TO BINARY SYSTEMS?	18.3	.0	10.7	.0	.0	.0	.0	33.3	.0
U1312	U1-9 DO YOU USE OR REFER TO TIME-SHARING (MULTI-SEQUENCING)?	7.0	.0	.0	.0	.0	.0	.0	22.2	.0
U1313	U1-10 DO YOU USE OR REFER TO DATA WORDS?	14.1	2.3	3.6	.0	2.1	.0	.0	22.2	.0
U1314	U1-11 DO YOU USE OR REFER TO ADDRESS WORDS?	12.7	2.3	3.6	.0	2.1	.0	.0	22.2	.0
U1315	U1-12 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS?	12.7	2.3	3.6	.0	2.1	.0	.0	22.2	.0
U1316	U1-13 DO YOU USE OR REFER TO STEERING/INFORMATION?	9.9	2.3	3.6	.0	2.1	.0	.0	22.2	.0
U1317	U1-14 DO YOU USE OR REFER TO INSTRUCTION WORDS?	9.9	2.3	3.6	.0	2.1	.0	.0	22.2	.0
U1318	U1-15 DO YOU USE OR REFER TO DAP-16?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
U1319	U1-16 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	8.5	.0	7.1	.0	.0	.0	.0	33.3	.0
U1320	U1-17 DO YOU USE OR REFER TO CONTROL WORDS?	5.6	2.3	10.7	37.5	2.1	.0	.0	22.2	.0
U1321	U1-18 DO YOU USE OR REFER TO RESPONSE WORDS?	5.6	2.3	10.7	37.5	2.1	.0	.0	11.1	.0
U1322	U1-19 DO YOU USE OR REFER TO WRAPAROUND WORDS?	.0	.0	.0	.0	2.1	.0	.0	.0	.0
U1323	U1-20 DO YOU USE OR REFER TO TEST OR DIAGNOSTIC PROGRAMS?	8.5	.0	17.9	37.5	4.3	.0	.0	33.3	.0
U1324	U1-21 DO YOU USE OR REFER TO RELIABILITY PROGRAMS?	2.8	.0	14.3	37.5	.0	.0	.0	11.1	.0
U1325	U1-22 DO YOU USE OR REFER TO COMPILERS?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
U1326	U1-23 DO YOU USE OR REFER TO ASSEMBLERS?	.0	.0	.0	.0	.0	.0	.0	22.2	.0
U1327	U1-24 DO YOU USE OR REFER TO MACHINE LANGUAGE?	4.2	2.3	.[illegible]	[illegible]	2.1	.0	.0	33.3	.0
U1328	U1-25 DO YOU USE OR REFER TO MNEMONICS?	11.3	2.3	.[illegible]		.0	.0	.0	22.2	.0
U1329	U1-26 DO YOU USE OR REFER TO ROUTINES OR SUBROUTINES?	5.6	.0	[illegible]	.0	0	.0	.0	22.2	.0
U1330	U1-27 DO YOU USE OR REFER TO FLOW CHARTS OR DIAGRAMS?	5.6	.0	7.[illegible]	.0	.0	.0	.0	22.2	.0
U1331	U1-28 DO YOU USE OR REFER TO 'ATLAS'?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
U1332	U1-29 DO YOU USE OR REFER TO 'ELAN'?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
U1333	U1-30 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING SYSTEMS?	1.4	.0	.0	.0	2.1	3.0	3.7	22.2	.0
U1334	U1-31 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING SYSTEMS?	1.4	2.3	3.6	.0	2.1	3.0	3.7	22.2	.0
U1335	U1-32 DO YOU WRITE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
U1336	U1-33 DO YOU USE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	1.4	.0	17.9	37.5	6.4	3.0	3.7	22.2	.0
U1337	U1-34 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER CONTROL SECTIONS?	14.1	2.3	3.6	.0	2.1	.0	.0	22.2	.0
U1338	U1-35 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT SECTIONS?	16.9	2.3	7.1	.0	4.3	.0	.0	22.2	.0
U1339	U1-36 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT SECTIONS?	16.9	2.3	7.1	.0	4.3	.0	.0	22.2	.0
U1340	U1-37 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR SECTIONS?	14.1	2.3	7.1	.0	4.3	.0	.0	22.2	.0

D TSK	TITLES	306 X1 (M)	306 X2 (M)	316 X0F (M)	316 X2F (M)	362 X1 (M)	362 X3 (M)	362 X4 (M)	918 X0 (M)	MIN IMA *<*
U1341	U1-38 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER TRANSMIT SECTIONS?	16.9	2.3	.0	.0	4.3	.0	.0	11.1	.0
U1342	U1-39 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER RECEIVE SECTIONS?	16.9	2.3	.0	.0	4.3	.0	.0	11.1	.0
U1343	U1-40 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT DEVICES?	18.3	2.3	7.1	.0	4.3	.0	.0	33.3	.0
U1344	U1-41 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER STORAGE DEVICES?	18.3	2.3	7.1	.0	4.3	.0	.0	33.3	.0
U1345	U1-42 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT DEVICES?	18.3	2.3	7.1	.0	4.3	.0	.0	33.3	.0
U1346	U1-43 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER POWER DEVICES?	16.9	2.3	3.6	.0	4.3	.0	.0	33.3	.0
U1347	U1-44 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR DEVICES?	16.9	2.3	7.1	.0	4.3	.0	.0	33.3	.0
U1348	U1-45 DO YOU USE FORTRAN PROGRAMMING LANGUAGE?	.0	.0	.0	.0	2.1	3.0	3.7	.0	.0
U1349	U1-46 DO YOU USE COBOL PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.0	.0	.0	11.1	.0
U1350	U1-47 DO YOU USE RPG PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.0	.0	.0	.0	.0
U1351	U1-48 DO YOU USE OR PERFORM TASKS ON MICROPROCESSOR BASED EQUIPMENT?	2.8	2.3	3.6	.0	4.3	3.0	3.7	11.1	.0
U1352	U1-49 DO YOU USE INPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	1.4	.0	.0	.0	.0	.0	.0	33.3	.0
U1353	U1-50 DO YOU USE OUTPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	1.4	.0	.0	.0	.0	.0	.0	33.3	.0
U1354	U1-51 DO YOU USE RAM MEMORY CIRCUITS (STATIC OR DYNAMIC) IN CONJUNCTION WITH THE MICROPROCESSOR?	1.4	2.3	3.6	.0	2.1	.0	.0	33.3	.0
U1355	U1-52 DO YOU USE ROM MEMORY CIRCUITS (INCLUDES PROM, EPROM, ETC.) IN CONJUNCTION WITH THE MICROPROCESSOR?	1.4	2.3	.0	.0	2.1	.0	.0	33.3	.0
U1356	U1-53 DO YOU USE TRI-STATE CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	.0	.0	.0	.0	.0	.0	.0	33.3	.0
U1357	U1-54 DO YOU USE CLOCK GENERATOR CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	2.8	.0	3.6	.0	2.1	.0	.0	33.3	.0
U1358	U1-55 DO YOU USE STATUS LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	.0	.0	.0	.0	2.1	3.0	3.7	22.2	.0
U1359	U1-56 DO YOU USE BIDIRECTIONAL BUFFER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	1.4	.0	.0	.0	4.3	3.0	3.7	22.2	.0
U1360	U1-57 DO YOU USE ENCODER/DECODER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	4.2	2.3	.0	.0	.0	.0	.0	33.3	.0
U1361	U2-1 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION?	8.5	9.1	.0	.0	25.5	21.2	11.1	44.4	.0
U1362	U2-2 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS?	1.4	.0	.0	.0	2.1	.0	.0	11.1	.0
U1363	U2-3 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS?	1.4	.0	.0	.0	2.1	.0	.0	.0	.0
U1364	U2-6 DO YOU USE A [illegible] OR 3444 TEST SET TO ALIGN AUDIO EQUIPMENT?	4.2	2.3	.0	.0	6.4	3.0	.0	.0	.0

MINIMUM PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

VECTOR TYPE CODES:

(T) = % TIME SPENT BY ALL MEMBERS
(M) = % MEMBERS PERFORMING
(F) = TASK FACTOR
(D) = DICHOTOMOUS SET
(B) = % TIME SPENT BY MEMBERS PERFORMING
(-) = PROGRAM GENERATED VECTOR

NO	TYPE	VECTOR	/MEMBERS/ MEAN - SD	DESCRIPTION	FACTOR #
1	M	306 51	66	DAFSC 30651 AIRMEN	2
2	M	306 52	161	DAFSC 30652 AIRMEN	4
3	M	31650F	29	DAFSC 31650F AIRMEN	6
4	M	31652F	16	DAFSC 31652F AIRMEN	8
5	M	362 51	106	DAFSC 36251 AIRMEN	10
6	M	362 53	21	DAFSC 36253 AIRMEN	12
7	M	362 54	114	DAFSC 36254 AIRMEN	14
8	M	918 50	44	DAFSC 91850 AIRMEN	16
9	-	MINIMA	MINIMUM VALUE OF THE FIRST 8 INPUT VECTORS		

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPT04 PAGE 186

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

MINIMUM PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
A	12	A2-1 DO YOU USE (PERHAPS IN TECHNICAL ORDERS) THE TERM VOLTAGE OR VOLT (V)?	92.4	95.7	100.0	100.0	94.3	100.0	95.6	100.0	92.4
A	14	A2-3 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM OHM?	86.4	91.9	89.7	100.0	91.5	90.5	83.3	100.0	83.3
A	22	A2-11 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM CURRENT?	89.4	92.5	89.7	100.0	88.7	95.2	82.5	100.0	82.5
B	61	B1-2 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE VOLTAGE?	86.4	91.3	93.1	87.5	90.6	85.7	80.7	100.0	80.7
B	60	B1-1 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE RESISTANCE?	81.8	88.2	82.8	87.5	90.6	85.7	74.6	100.0	74.6
A	17	A2-6 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM AMPERE?	83.3	88.8	75.9	87.5	87.7	85.7	73.7	100.0	73.7
E	277	E3-1 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB? IF NO, GO TO ITEM F1-1; IF YES, CONTINUE.	78.8	67.7	69.0	81.3	73.6	81.0	77.2	90.9	67.7
N	809	N1-1 DO YOU WORK WITH METERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N2-1; IF YES, CONTINUE.	68.2	73.3	86.2	75.0	67.0	66.7	62.3	88.6	62.3
E	281	E3-5 DO YOU TROUBLESHOOT RELAYS?	72.7	60.9	65.5	81.3	80.2	81.0	75.4	93.2	60.9
N	816	N1-8 DO YOU ZERO OHMMETERS?	66.7	75.2	72.4	81.3	67.9	66.7	60.5	84.1	60.5
N	813	N1-5 DO YOU READ METER SCALES?	68.2	76.4	86.2	75.0	66.0	66.7	59.6	88.6	59.6
B	62	B1-3 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE CURRENT?	71.2	84.5	51.7	81.3	84.0	66.7	68.4	97.7	51.7
A	1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	69.7	73.9	65.5	81.3	69.8	71.4	48.2	97.7	48.2
H	467	H2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES? IF NO, GO TO ITEM H3-1; IF YES, CONTINUE.	89.4	79.5	86.2	81.3	45.3	81.0	86.8	93.2	45.3
E	289	E3-13 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS?	63.6	45.3	51.7	81.3	57.5	52.4	44.7	90.9	44.7
E	290	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS?	63.6	44.7	51.7	81.3	57.5	52.4	45.6	90.9	44.7
H	468	H2-2 DO YOU INSPECT POWER SUPPLIES?	84.8	79.5	69.0	75.0	44.3	81.0	82.5	90.9	44.3
A	23	A2-12 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	60.6	73.9	89.7	81.3	60.4	66.7	43.9	97.7	43.9
H	471	H2-5 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL?	86.4	75.2	55.2	62.5	35.8	81.0	57.9	90.9	35.8
E	293	E3-17 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS?	51.5	34.8	34.5	81.3	68.9	47.6	48.2	84.1	34.5
E	291	E3-15 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS?	50.0	33.5	48.3	81.3	50.0	42.9	46.5	88.6	33.5
E	292	E3-16 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS?	51.5	33.5	48.3	81.3	48.1	38.1	43.9	88.6	33.5
B	67	B1-4 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE POWER?	36.4	47.2	34.5	31.3	52.8	42.9	37.7	59.1	31.3
H	472	H2-6 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS?	86.4	68.3	69.0	75.0	29.2	81.0	38.6	93.2	29.2
B	70	B2-3 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM AVERAGE VOLTAGE (DC) IN YOUR PRESENT JOB?	51.5	62.1	31.0	75.0	43.4	57.1	28.9	86.4	28.9
A	40	A3-16 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES?	84.8	82.6	27.6	75.0	74.5	76.2	48.2	95.5	27.6

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
E	280	E3-4 DO YOU INSPECT RELAYS?	75.8	61.5	27.6	81.3	81.1	81.0	79.8	93.2	27.6
H	480	H2-14 DO YOU USE OR REFER TO INPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	81.8	68.3	37.9	81.3	34.0	66.7	27.2	93.2	27.2
B	64	B1-5 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE FREQUENCY?	68.2	49.1	34.5	75.0	68.9	71.4	25.4	84.1	25.4
C	126	C2-1 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C3-1; IF YES, CONTINUE.	71.2	67.7	27.6	75.0	28.3	57.1	24.6	93.2	24.6
E	263	E3-7 DO YOU REMOVE OR REPLACE RELAYS?	74.2	64.0	24.1	81.3	76.4	81.0	60.5	90.9	24.1
N	815	N1-7 DO YOU EXTEND THE RANGE OF VOLTMETERS?	37.9	39.8	41.4	25.0	36.8	23.8	24.6	52.3	23.8
A	2	A1-2 DO YOU USE PUBLICATIONS, SUCH AS TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB?	33.3	32.3	27.6	68.8	34.9	47.6	21.1	70.5	21.1
B	72	B2-5 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM FREQUENCY IN YOUR PRESENT JOB?	72.7	59.6	51.7	68.8	63.2	90.5	20.2	93.2	20.2
C	149	C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS?	74.2	69.6	24.1	75.0	29.2	66.7	20.2	95.5	20.2
H	470	H2-4 DO YOU ALIGN OR ADJUST POWER SUPPLIES?	86.4	67.7	62.1	75.0	35.8	76.2	19.3	90.9	19.3
H	460	H1-8 DO YOU USE OR REFER TO LED'S/LCD'S COMPONENTS?	77.3	46.6	20.7	68.8	18.9	19.0	22.8	95.5	18.9
N	818	N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)?	33.3	36.0	24.1	50.0	22.6	23.8	18.4	54.5	18.4
A	24	A2-13 DO YOU DETERMINE IF TWO OR MORE BATTERIES MUST BE CONNECTED IN SERIES OR PARALLEL TO ACHIEVE A SPECIFIC VOLTAGE AND/OR CURRENT?	24.2	34.2	17.2	56.3	48.1	28.6	33.3	79.5	17.2
A	25	A3-1 DO YOU WORK WITH RESISTORS OR RESISTIVE CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM B1-1; IF YES, CONTINUE.	80.3	78.3	17.2	62.5	68.9	71.4	43.0	77.3	17.2
C	97	C1-1 DO YOU WORK WITH CAPACITORS OR CICUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C2-1; IF YES, CONTINUE.	80.3	75.8	17.2	75.0	62.3	57.1	40.4	93.2	17.2
C	138	C2-13 DO YOU WORK WITH POWER TRANSFORMERS?	74.2	68.3	17.2	68.8	27.4	52.4	20.2	93.2	17.2
H	483	H2-17 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	66.7	52.2	17.2	50.0	30.2	23.8	26.3	70.5	17.2
H	457	H1-5 DO YOU USE OR REFER TO ZENER DIODE COMPONENTS?	86.4	75.8	24.1	81.3	17.0	61.9	25.4	93.2	17.0
B	68	B2-1 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM EFFECTIVE VOLTAGE (RMS) IN YOUR PRESENT JOB?	45.5	47.8	20.7	37.5	26.4	52.4	16.7	90.9	16.7
N	814	N1-6 DO YOU EXTEND THE RANGE OF AMMETERS?	25.8	31.1	27.6	18.8	30.2	14.3	15.8	45.5	14.3
N	817	N1-9 DO YOU ZERO AMMETERS?	24.2	29.2	31.0	62.5	32.1	14.3	23.7	56.8	14.3
N	820	N1-12 DO YOU CONSIDER OTHER METER MOVEMENTS?	22.7	28.0	20.7	25.0	24.5	14.3	17.5	43.2	14.3
A	13	A2-2 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTROMOTIVE FORCE (EMF)?	39.4	49.7	13.8	25.0	38.7	38.1	27.2	72.7	13.8
A	29	A3-5 DO YOU MEASURE RESISTORS?	81.8	80.7	13.8	81.3	66.0	85.7	33.3	97.7	13.8
A	35	A3-11 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY POTENTIOMETER?	84.8	77.0	13.8	75.0	63.2	66.7	32.5	97.7	13.8
A	41	A3-17 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	59.1	54.7	13.8	56.3	53.8	61.9	33.3	88.6	13.8
A	43	A3-19 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	56.1	56.5	13.8	50.0	45.3	42.9	27.2	95.5	13.8

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPT04 PAGE 113

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
A	45	A3-21 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	51.5	52.8	13.8	37.5	49.1	61.9	26.3	84.1	13.8
A	47	A3-23 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	56.5	13.8	37.5	41.5	42.9	20.2	95.5	13.8
A	50	A3-26 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	53.0	51.6	13.8	37.5	46.2	57.1	20.2	81.8	13.8
B	69	B2-2 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PEAK TO PEAK VOLTAGE IN YOUR PRESENT JOB?	80.3	68.9	13.8	81.3	30.2	76.2	14.9	93.2	13.8
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	87.9	83.9	13.8	81.3	73.6	76.2	48.2	97.7	13.8
H	458	H1-6 DO YOU USE OR REFER TO INTEGRATED CIRCUIT COMPONENTS?	87.9	62.7	13.8	81.3	19.8	19.0	22.8	93.2	13.8
H	482	H2-16 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	65.2	50.3	13.8	43.8	25.5	38.1	18.4	81.8	13.8
H	488	H2-22 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	56.1	42.9	13.8	50.0	21.7	33.3	13.2	79.5	13.2
H	489	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS?	80.3	51.6	13.8	50.0	14.2	42.9	13.2	84.1	13.2
A	44	A3-20 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	40.9	41.0	13.8	50.0	33.0	23.8	12.3	72.7	12.3
A	21	A2-10 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTRON?	40.9	42.9	24.1	56.3	30.2	33.3	10.5	72.7	10.5
H	481	H2-15 DO YOU USE OR REFER TO INPUT FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	43.9	29.8	24.1	25.0	13.2	33.3	10.5	72.7	10.5
H	778	H3-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS, GENERATORS (SERVO), OR ALTERNATORS? IF NO, GO TO ITEM H1-1; IF YES, CONTINUE.	72.7	77.0	51.7	25.0	19.8	19.0	10.5	88.6	10.5
A	34	A3-10 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY RHEOSTAT?	50.0	57.8	10.3	75.0	63.2	61.9	37.7	97.7	10.3
A	42	A3-18 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	53.0	54.7	10.3	56.3	50.9	42.9	33.3	88.6	10.3
A	46	A3-22 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	54.0	10.3	43.8	48.1	47.6	27.2	86.4	10.3
A	49	A3-25 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	37.9	41.0	10.3	31.3	31.1	23.8	10.5	72.7	10.3
A	51	A3-27 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	48.5	52.8	10.3	37.5	46.2	42.9	21.9	84.1	10.3
A	52	A3-28 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	45.5	52.8	10.3	37.5	39.6	38.1	17.5	88.6	10.3
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.5	44.7	10.3	37.5	42.5	47.6	16.7	79.5	10.3
A	56	A3-32 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	39.4	42.2	10.3	37.5	41.5	23.8	16.7	81.9	10.3
C	113	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	87.3	80.1	10.3	81.3	51.9	71.4	44.7	95.5	10.3
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.9	73.9	10.3	68.8	55.7	71.4	44.7	95.5	10.3
C	130	C2-5 DO YOU TROUBLESHOOT TRANSFORMERS?	60.6	55.3	10.3	50.0	17.0	42.9	12.3	93.2	10.3

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPTO4 PAGE 189

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *C*
C	150	C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS?	62.1	46.0	10.3	68.8	20.8	38.1	11.4	95.5	10.3
C	168	C3-1 DO YOU USE OR REFER TO PERMANENT MAGNETS?	27.3	44.7	10.3	31.3	20.8	23.8	17.5	56.8	10.3
E	284	E3-8 DO YOU PERFORM TASKS ON CONTACTS OF RELAYS?	68.2	51.6	10.3	81.3	81.1	81.0	76.3	93.2	10.3
E	294	E3-18 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE?	50.0	47.2	10.3	68.8	66.0	57.1	31.6	88.6	10.3
H	478	H2-12 DO YOU WORK WITH BRIDGE RECTIFIERS?	81.8	57.8	10.3	75.0	18.9	47.6	12.3	93.2	10.3
A	54	A3-30 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	34.8	37.3	10.3	31.3	32.1	19.0	9.6	70.5	9.6
C	151	C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	54.5	52.2	13.8	62.5	18.9	33.3	8.8	95.5	8.8
C	152	C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	69.7	62.7	13.8	68.8	23.6	38.1	8.8	95.5	8.8
B	71	B2-4 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM WAVE LENGTH IN YOUR PRESENT JOB?	53.0	46.0	13.8	75.0	36.8	47.6	7.9	81.8	7.9
C	156	C2-31 DO YOU REFER TO COMBINATIONS OF SCHEMATIC SYMBOLS FOR TRANSFORMERS?	45.5	36.0	10.3	62.5	16.0	38.1	7.9	90.9	7.9
S	1188	S1-1 DO YOU WORK WITH INPUT OR OUTPUT DEVICES ON YOUR PRESENT JOB? IF NO, GO TO ITEM S2-1; IF YES, CONTINUE.	80.3	76.4	51.7	43.8	23.6	14.3	7.9	47.7	7.9
A	28	A3-4 DO YOU ADJUST RESISTORS?	80.3	77.0	6.9	75.0	47.2	76.2	20.2	97.7	6.9
A	31	A3-7 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY CARBON?	27.3	37.3	6.9	56.3	46.2	42.9	21.9	72.7	6.9
A	32	A3-8 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED WIRE?	62.1	61.5	6.9	62.5	67.0	61.9	36.0	90.9	6.9
A	37	A3-13 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE?	78.8	74.5	6.9	75.0	59.4	76.2	23.7	97.7	6.9
A	48	A3-24 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.4	47.2	6.9	31.3	35.8	33.3	19.3	88.6	6.9
A	53	A3-29 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	39.4	45.3	6.9	31.3	36.8	28.6	15.8	86.4	6.9
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	37.9	42.9	6.9	37.5	38.7	23.8	13.2	88.6	6.9
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	31.8	36.6	6.9	37.5	34.9	19.0	12.3	81.8	6.9
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	25.8	30.4	6.9	31.3	30.2	14.3	7.9	70.5	6.9
B	75	B3-1 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C1-1; IF YES, CONTINUE.	37.9	36.6	6.9	37.5	21.7	14.3	12.3	68.2	6.9
C	118	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO?	36.4	38.5	6.9	43.8	31.1	28.6	17.5	72.7	6.9
C	127	C2-2 DO YOU INSPECT TRANSFORMERS?	69.7	67.7	6.9	68.8	26.4	66.7	21.9	95.5	6.9
C	139	C2-14 DO YOU WORK WITH AUDIO TRANSFORMERS?	18.2	14.3	6.9	12.5	15.1	47.6	10.5	65.9	6.9

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPTO4 PAGE 190

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
D	233	D3-1 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM E1-1; IF YES, CONTINUE.	68.2	42.2	6.9	31.3	11.3	57.1	18.4	75.0	6.9
D	243	D3-11 DO YOU WORK WITH FILTERS BUT DON'T REMEMBER WHICH TYPE?	31.8	22.4	6.9	25.0	7.5	9.5	14.0	29.5	6.9
E	263	E2-1 IN YOUR PRESENT JOB, DO YOU CONNECT ELECTRONIC CIRCUITS USING SOLDERLESS CONNECTIONS OR SOLDERING TECHNIQUES? IF NO, GO TO ITEM E3-1; IF YES, CONTINUE.	86.4	83.9	6.9	75.0	76.4	81.0	78.9	97.7	6.9
G	383	G2-1 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM G3-1; IF YES, CONTINUE.	84.8	80.1	6.9	75.0	30.2	71.4	19.3	95.5	6.9
G	393	G2-11 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS?	86.4	77.0	6.9	81.3	22.6	61.9	13.2	95.5	6.9
H	469	H2-3 DO YOU CLEAN POWER SUPPLIES?	86.4	75.8	6.9	81.3	43.4	76.2	72.8	77.3	6.9
H	490	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS?	43.9	32.9	6.9	25.0	13.2	14.3	12.3	81.8	6.9
H	497	H2-31 DO YOU WORK WITH SOLID-STATE POWER SUPPLY REGULATOR CIRCUITS?	68.2	56.5	6.9	31.3	13.2	38.1	9.6	88.6	6.9
H	498	H3-1 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I1-1; IF YES, CONTINUE.	56.1	17.4	6.9	25.0	30.2	71.4	6.1	72.7	6.1
M	779	M3-2 DO YOU INSPECT MOTORS?	72.7	79.5	44.8	25.0	18.9	9.5	6.1	90.9	6.1
F	295	F1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES OR OTHER SENSING DEVICES SUCH AS TRANSDUCERS? IF NO, GO TO ITEM F2-1; IF YES, CONTINUE.	6.1	6.2	13.8	31.3	7.5	66.7	20.2	75.0	6.1
A	10	A1-10 DO YOU SOLVE OR USE PROPORTIONS? AN EXAMPLE OF A PROPORTION IS 2 : 5 :: 4 : 10. ANOTHER WAY TO EXPRESS THE SAME RELATIONSHIP IS 2/5 = 4/10. SOMETIMES, ONE OF THE QUANTITIES IS UNKNOWN AND HAS TO BE SOLVED FOR, SUCH AS 2 : X :: 4 : 10 (X IN THIS CASE IS UNKNOWN).	15.2	9.9	10.3	37.5	9.4	23.8	5.3	61.4	5.3
B	65	B1-6 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE TEMPERATURE?	24.2	7.5	37.9	81.3	38.7	28.6	5.3	86.4	5.3
B	74	B2-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	54.5	37.3	27.6	50.0	21.7	23.8	5.3	88.6	5.3
S	1198	S1-11 DO YOU USE OR REFER TO TOGGLE OR PUSH BUTTON SWITCH INPUTS?	69.7	44.1	37.9	31.3	9.4	9.5	5.3	38.6	5.3
F	309	F2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS? IF NO, GO TO ITEM F3-1; IF YES, CONTINUE.	27.3	5.0	6.9	18.8	11.3	81.0	57.9	72.7	5.0
A	3	A1-3 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS?	27.3	13.7	13.8	68.8	17.0	4.8	8.8	77.3	4.8
A	5	A1-5 DO YOU SOLVE FOR UNKNOWN QUANTITIES SUCH AS SOLVING FOR X IN THE EQUATION X + 6 = 8?	15.2	11.2	10.3	43.8	17.9	4.8	10.5	68.2	4.8
B	66	B1-7 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE PRESSURE?	36.4	8.7	44.8	56.3	25.5	4.8	6.1	72.7	4.8
C	174	C3-7 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX?	21.2	18.6	6.9	12.5	17.9	4.8	6.1	47.7	4.8
M	781	M3-4 DO YOU OPERATE MOTORS?	66.7	72.0	44.8	25.0	18.9	4.8	5.3	90.9	4.8
M	784	M3-7 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS?	65.2	73.9	24.1	18.8	15.1	4.8	7.9	90.9	4.8
D	238	D3-6 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF FILTER CIRCUITS?	57.6	31.7	6.9	25.0	4.7	14.3	7.0	77.3	4.7
B	94	B3-20 DO YOU WORK WITH POWER INDUCTORS?	25.8	26.1	6.9	31.3	13.2	4.8	4.4	63.6	4.4

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING — FCPT04 PAGE 191 — OCCUPATIONAL ANALYSIS PROGRAM — USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
C	153	C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	27.3	16.1	6.9	25.0	13.2	14.3	4.4	59.1	4.4
K	672	K3-13 DO YOU ADD BINARY NUMBERS?	43.9	17.4	10.3	50.0	6.6	9.5	4.4	61.4	4.4
F	312	F2-4 DO YOU OPERATE SPEAKERS?	21.2	3.7	6.9	12.5	9.4	76.2	51.8	59.1	3.7
A	11	A1-11 DO YOU USE MATHEMATICAL EXPONENTS OR SUBSCRIPTS IN OTHER THAN POWERS OF 10?	31.8	13.0	6.9	37.5	12.3	9.5	3.5	54.5	3.5
H	475	H2-9 DO YOU INSPECT OR SERVICE COOLANT LEVELS?	6.1	4.3	6.9	12.5	9.4	19.0	3.5	40.9	3.5
M	780	M3-3 DO YOU CLEAN OR LUBRICATE MOTORS?	74.2	76.4	13.8	25.0	18.9	9.5	3.5	90.9	3.5
A	26	A3-2 DO YOU INSPECT RESISTORS?	83.3	82.6	3.4	81.3	60.4	85.7	36.0	90.9	3.4
A	27	A3-3 DO YOU CLEAN RESISTORS?	63.6	62.7	3.4	68.8	41.5	66.7	15.8	72.7	3.4
A	38	A3-14 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE?	68.2	64.0	3.4	62.5	48.1	71.4	12.3	93.2	3.4
A	39	A3-15 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE?	30.3	30.4	3.4	50.0	25.5	33.3	6.1	47.7	3.4
C	101	C1-5 DO YOU TEST CAPACITORS?	75.8	75.8	3.4	68.8	54.7	52.4	28.9	93.2	3.4
C	106	C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS?	69.7	68.9	3.4	62.5	47.2	57.1	19.3	93.2	3.4
C	107	C1-11 DO YOU USE OR REFER TO CAPACITANCE?	65.2	72.7	3.4	62.5	62.3	57.1	28.1	88.6	3.4
C	124	C1-28 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS?	84.8	75.8	3.4	68.8	50.9	71.4	31.6	90.9	3.4
C	125	C1-29 DO YOU WORK WITH OTHER FIXED CAPACITORS?	72.7	68.9	3.4	81.3	47.2	57.1	33.3	95.5	3.4
C	144	C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE?	56.1	60.2	3.4	62.5	25.5	47.6	11.4	93.2	3.4
C	145	C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE?	53.0	55.9	3.4	56.3	23.6	47.6	13.2	84.1	3.4
C	146	C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES?	59.1	50.3	3.4	43.8	18.9	38.1	12.3	81.8	3.4
C	154	C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	37.9	24.2	3.4	25.0	17.9	23.8	8.8	70.5	3.4
C	155	C2-30 DO YOU REFER TO VARIABLE TRANSFORMER SCHEMATIC SYMBOLS?	19.7	27.3	3.4	56.3	17.0	23.8	5.3	86.4	3.4
C	157	C2-32 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS?	34.8	23.6	3.4	25.0	11.3	19.0	4.4	81.8	3.4
C	169	C3-2 DO YOU USE OR REFER TO TEMPORARY MAGNETS?	34.8	39.1	3.4	37.5	29.2	28.6	14.0	45.5	3.4
C	173	C3-6 DO YOU USE OR REFER TO RESIDUAL MAGNETISM?	13.6	20.5	3.4	12.5	57.5	14.3	6.1	29.5	3.4
C	177	C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION?	22.7	21.7	3.4	6.3	18.9	9.5	10.5	45.5	3.4
D	180	D1-1 DO YOU WORK WITH RC, LR, OR RCL CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM D2-1; IF YES, CONTINUE.	31.8	25.5	3.4	12.5	9.4	14.3	4.4	77.3	3.4
E	270	E2-8 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS?	87.9	80.7	3.4	81.3	38.7	57.1	21.1	95.5	3.4
E	282	E3-6 DO YOU MONITOR BIAS OUTPUT ON RELAYS?	22.7	15.5	3.4	12.5	29.2	23.8	12.3	29.5	3.4
E	285	E3-9 DO YOU PERFORM TASKS ON CORES OF RELAYS?	21.2	18.6	3.4	31.3	52.8	33.3	8.8	40.9	3.4
E	286	E3-10 DO YOU PERFORM TASKS ON COILS OF RELAYS?	31.8	28.6	3.4	43.8	56.6	38.1	11.4	61.4	3.4
E	287	E3-11 DO YOU PERFORM TASKS ON ARMATURES OF RELAYS?	54.5	46.0	3.4	68.8	78.3	52.4	36.8	72.7	3.4
E	288	E3-12 DO YOU PERFORM TASKS ON SPRINGS OF RELAYS?	57.6	45.3	3.4	68.8	82.1	61.9	54.4	77.3	3.4
G	342	G1-1 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G2-1; IF YES, CONTINUE.	81.8	70.2	3.4	75.0	47.2	66.7	11.4	93.2	3.4
G	348	G1-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES?	53.0	39.8	3.4	43.8	24.5	23.8	3.5	72.7	3.4

PERCENT S-SKILL LEVEL MEMBERS PERFORMING

FCPTO4 PAGE 192

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
G	356	G1-15 DO YOU DETERMINE DIRECTION OF CURRENT THROUGH A DIODE?	81.8	65.2	3.4	50.0	41.5	52.4	9.6	93.2	3.4
G	384	G2-2 DO YOU INSPECT TRANSISTORS?	83.3	76.4	3.4	75.0	26.4	71.4	14.0	93.2	3.4
G	385	G2-3 DO YOU CHECK TRANSISTORS?	83.3	78.9	3.4	62.5	24.5	71.4	16.7	93.2	3.4
G	386	G2-4 DO YOU NEED AN UNDERSTANDING OF EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS?	75.8	65.2	3.4	43.8	23.6	47.6	7.0	90.9	3.4
G	387	G2-5 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND RESISTANCE MEASUREMENTS?	74.2	66.5	3.4	62.5	19.8	47.6	7.9	86.4	3.4
G	388	G2-6 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS?	74.2	67.1	3.4	62.5	20.8	47.6	7.9	86.4	3.4
G	389	G2-7 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION?	51.5	32.3	3.4	31.3	11.3	28.6	3.5	70.5	3.4
G	390	G2-8 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION?	48.5	32.3	3.4	31.3	11.3	23.8	3.5	65.9	3.4
G	391	G2-9 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE, AND EMITTER)?	54.5	39.1	3.4	43.8	13.2	47.6	4.4	81.8	3.4
G	394	G2-12 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, A2, A3, ETC.?	84.8	77.0	3.4	75.0	20.8	61.9	11.4	93.2	3.4
H	474	H2-8 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS?	86.4	68.3	3.4	75.0	25.5	76.2	30.7	93.2	3.4
H	476	H2-10 DO YOU WORK WITH HALF-WAVE RECTIFIERS?	72.7	50.9	3.4	56.3	20.8	19.0	7.0	93.2	3.4
H	477	H2-11 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS?	71.2	57.1	3.4	62.5	26.4	33.3	4.4	88.6	3.4
N	810	N1-2 DO YOU CONSIDER THE FUNCTIONS OF PERMANENT MAGNET INTERNAL METER PARTS?	7.6	32.9	3.4	43.8	13.2	14.3	5.3	43.2	3.4
N	811	N1-3 DO YOU CONSIDER THE FUNCTIONS OF MOVING COIL INTERNAL METER PARTS?	13.6	31.7	3.4	18.8	17.9	9.5	4.4	45.5	3.4
F	298	F1-4 DO YOU OPERATE MICROPHONES?	3.0	4.3	13.8	12.5	7.5	57.1	15.8	63.6	3.0
A	36	A3-12 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED FILM?	16.7	9.3	3.4	31.3	13.2	19.0	2.6	59.1	2.6
D	186	D1-7 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	16.7	16.1	3.4	18.8	6.6	4.8	2.6	54.5	2.6
H	462	H1-10 DO YOU USE OR REFER TO SILICON CONTROL RECTIFIER (SCR) COMPONENTS?	78.8	22.4	6.9	68.8	4.7	14.3	2.6	95.5	2.6
H	479	H2-13 DO YOU WORK WITH THREE-PHASE RECTIFIERS?	30.3	18.0	3.4	50.0	18.9	9.5	2.6	68.2	2.6
H	499	H3-2 DO YOU INSPECT OSCILLATORS?	45.5	16.8	3.4	6.3	17.9	66.7	2.6	75.0	2.6
J	597	J2-2 DO YOU WORK WITH CATHODE-RAY TUBES (CRT)?	10.6	26.1	6.9	18.8	6.6	4.8	2.6	79.5	2.6
K	661	K3-2 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS?	48.5	13.7	13.8	62.5	6.6	9.5	2.6	61.4	2.6
S	1195	S1-8 DO YOU USE OR REFER TO LED'S?	60.6	44.1	31.0	31.3	12.3	4.8	2.6	50.0	2.6
K	666	K3-7 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS?	57.0	13.7	6.9	56.3	7.5	4.8	1.8	59.1	1.8
K	681	K3-22 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	27.3	8.1	6.9	43.8	4.7	4.8	1.8	40.9	1.8
L	685	L1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS? IF NO, GO TO ITEM L2-1; IF YES, CONTINUE.	66.4	34.8	37.9	43.8	2.8	14.3	1.8	77.3	1.8
L	695	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'OR' GATES?	83.3	35.4	37.9	37.5	1.9	14.3	1.8	77.3	1.8
S	1189	S1-2 DO YOU USE OR REFER TO KEYBOARDS OR TELETYPEWRITERS?	68.2	78.9	6.9	43.8	19.8	4.8	1.8	31.8	1.8
S	1190	S1-3 DO YOU USE OR REFER TO PRINTERS?	77.3	78.3	13.8	37.5	17.9	4.8	1.8	45.5	1.8
S	1199	S1-12 DO YOU USE OR REFER TO INTERFACE ADAPTER UNITS?	39.4	30.4	10.3	37.5	6.6	4.8	1.8	29.5	1.8

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
A	19	A2-8 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM COULOMB?	6.1	8.1	6.9	6.3	5.7	9.5	.9	54.5	.9
F	306	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES?	1.5	1.9	3.4	6.3	2.8	28.6	.9	36.4	.9
G	403	G2-21 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCB/VBE)?	3.0	6.2	3.4	6.3	1.9	4.8	.9	22.7	.9
G	404	G2-22 DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)?	3.0	5.0	3.4	6.3	2.8	4.8	.9	18.2	.9
G	405	G2-23 DO YOU USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRNSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI X AV)?	4.5	5.6	3.4	6.3	1.9	4.8	.9	22.7	.9
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2	.9
H	515	H3-18 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	12.1	5.0	3.4	6.3	11.3	33.3	.9	22.7	.9
H	524	H3-27 DO YOU WORK WITH - DON'T KNOW WHICH TYPE OF SINUSOIDAL OSCILLATOR?	16.7	8.7	3.4	6.3	14.2	28.6	.9	29.5	.9
I	540	I2-1 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I3-1; IF YES, CONTINUE.	21.2	16.1	3.4	6.3	1.9	4.8	.9	72.7	.9
K	663	K3-4 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS?	33.3	6.2	51.7	50.0	2.8	4.8	.9	40.9	.9
L	694	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'AND' GATES?	83.3	35.4	37.9	43.8	1.9	14.3	.9	77.3	.9
L	696	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'NAND' OR 'NOR' GATES?	83.3	35.4	34.5	37.5	1.9	14.3	.9	77.3	.9
L	704	L1-20 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT OR SCHEMATIC DIAGRAMS?	81.8	31.7	13.8	18.8	1.9	19.0	.9	72.7	.9
L	737	L3-8 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS?	42.4	13.7	3.4	12.5	.9	9.5	.9	45.5	.9
N	812	N1-4 DO YOU CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS INTERNAL METER PARTS?	10.6	17.4	3.4	18.8	14.2	14.3	.9	43.2	.9
S	1197	S1-10 DO YOU USE OR REFER TO INCANDESENT DISPLAYS?	27.7	11.8	13.8	18.8	3.8	4.8	.9	29.5	.9
A	4	A1-4 DO YOU CALCULATE THE SQUARE ROOT OF A QUANITITY?	7.6	6.2	.0	12.5	7.5	.0	3.5	36.4	.0
A	6	A1-6 DO YOU USE LOGARITHM TABLES?	3.0	3.1	.0	.0	3.8	4.8	1.8	15.9	.0
A	7	A1-7 DO YOU SOLVE QUADRATIC EQUATIONS SUCH AS SOLVING FOR X IN THE EQUATION X**2 + 4X + 4 =0?	3.0	2.5	.0	.0	4.7	.0	2.6	27.3	.0
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	3.0	4.3	.0	6.3	1.9	4.8	.9	18.2	.0
A	9	A1-9 DO YOU USE TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT?	7.6	4.3	.0	6.3	2.8	4.8	1.8	15.9	.0
A	15	A2-4 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ION?	6.1	7.5	10.3	81.3	7.5	.0	3.5	72.7	.0
A	16	A2-5 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM DYNE?	1.5	5.0	6.9	.0	2.8	.0	4.4	29.5	.0
A	19	A2-7 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM NEUTRON?	18.2	14.9	6.9	18.8	13.2	.0	4.4	54.5	.0
A	20	A2-9 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM PROTON?	19.7	16.1	3.4	18.8	16.0	.0	3.5	56.8	.0
A	30	A3-6 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASK YOU PERFORM?	19.7	17.4	.0	25.0	15.1	4.8	2.6	52.3	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPTO& PAGE 194

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
A	33	A3-9 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY SLIDE TAP?	16.7	29.2	.0	56.3	23.6	33.3	7.9	90.9	.0
B	67	B1-8 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE LIGHT LEVELS?	33.3	1.9	6.9	.0	1.9	.0	6.1	47.7	.0
B	73	B2-6 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM INSTANTANEOUS VALUE IN YOUR PRESENT JOP?	12.1	13.7	3.4	18.8	10.4	.0	.9	52.3	.0
B	76	B3-2 DO YOU INSPECT INDUCTORS?	40.9	38.5	.0	56.3	18.9	14.3	7.9	75.0	.0
B	77	B3-3 DO YOU CLEAN INDUCTORS?	31.8	28.6	.0	56.3	14.2	9.5	6.1	59.1	.0
B	78	B3-4 DO YOU ADJUST INDUCTORS?	18.2	19.3	3.4	43.8	13.2	.0	1.8	56.8	.0
B	79	B3-5 DO YOU MEASURE INDUCTORS?	25.8	28.0	.0	43.8	17.0	9.5	3.5	61.4	.0
B	80	B3-6 DO YOU USE OR REFER TO INDUCTANCE?	31.8	31.7	.0	50.0	21.7	14.3	6.1	81.8	.0
B	81	B3-7 DO YOU USE OR REFER TO HENRIES?	21.2	20.5	.0	18.8	13.2	4.8	1.8	68.2	.0
B	82	B3-8 DO YOU USE OR REFER TO INDUCTIVE REACTANCE?	13.6	18.6	.0	18.8	17.0	9.5	1.8	63.6	.0
B	83	B3-9 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS?	6.1	3.7	.0	.0	7.5	.0	.9	36.4	.0
B	84	B3-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS?	6.1	5.0	.0	.0	3.8	.0	.9	34.1	.0
B	85	B3-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS?	4.5	6.2	.0	.0	9.4	.0	.9	38.6	.0
B	86	B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBEP OF TURNS OF THE COIL?	10.6	9.9	.0	.0	12.3	4.8	2.6	36.4	.0
B	87	B3-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE?	6.1	7.5	.0	.0	10.4	4.8	1.8	31.8	.0
B	88	B3-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH?	4.5	6.8	.0	6.3	9.4	4.8	1.8	29.5	.0
B	89	B3-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMABILITY OF THE CORE MATERIAL?	7.6	8.1	.0	6.3	11.3	4.8	2.6	36.4	.0
B	90	B3-16 DO YOU CALCULATE INDUCTANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	4.5	9.3	.0	37.5	10.4	.0	4.4	36.4	.0
B	91	B3-17 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS?	12.1	18.0	.0	12.5	14.2	14.3	4.4	61.4	.0
B	92	B3-18 DO YOU CALCULATE INDUCTIVE REACTANCE?	7.6	9.3	.0	6.3	10.4	.0	3.5	40.9	.0
B	93	B3-19 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTAIONAL TO FREQUENCY?	6.1	9.3	.0	6.3	16.0	9.5	2.6	43.2	.0
B	95	B3-21 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS?	16.7	11.2	3.4	.0	16.0	9.5	6.1	52.3	.0
B	96	B3-22 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS?	13.6	9.3	3.4	.0	7.5	.0	.9	50.0	.0
C	98	C1-2 DO YOU INSPECT CAPACITORS?	83.3	82.0	.0	81.3	56.6	76.2	33.3	93.2	.0
C	99	C1-3 DO YOU CLEAN CAPACITORS?	57.6	64.6	.0	68.8	45.3	47.6	15.8	61.4	.0
C	100	C1-4 DO YOU ADJUST CAPACITORS?	27.3	25.5	.0	43.8	21.7	14.3	3.5	70.5	.0
C	102	C1-6 DO YOU DISCHARGE CAPACITORS?	83.3	71.4	.0	62.5	43.4	66.7	28.1	86.4	.0
C	103	C1-7 DO YOU MEASURE CAPACITORS?	57.0	60.2	.0	62.5	41.5	38.1	20.2	79.5	.0
C	104	C1-8 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE?	9.1	14.9	.0	18.8	11.3	9.5	3.5	22.7	.0
C	105	C1-9 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC?	4.5	3.1	.0	6.3	4.7	4.8	.0	11.4	.0
C	106	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT?	7.6	9.3	.0	.0	12.3	.0	.0	31.8	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
C	109	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS?	54.5	49.1	.0	62.5	35.8	47.6	11.4	81.8	.0
C	110	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE?	28.8	39.8	.0	37.5	29.2	14.3	6.1	65.9	.0
C	111	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES?	19.7	20.5	.0	37.5	14.2	9.5	5.3	43.2	.0
C	115	C1-19 DO YOU CALCULATE CAPACITANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	21.2	16.8	.0	6.3	22.6	14.3	9.6	40.9	.0
C	116	C1-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT?	10.6	7.5	.0	.0	16.0	4.8	3.5	25.0	.0
C	117	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS?	9.1	6.8	.0	6.3	15.1	.0	3.5	27.3	.0
C	119	C1-23 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS?	18.2	24.2	.0	18.8	23.6	23.8	10.5	61.4	.0
C	120	C1-24 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY?	12.1	13.7	.0	.0	18.9	9.5	7.0	43.2	.0
C	121	C1-25 DO YOU CALCULATE CAPACITIVE REACTANCE?	12.1	8.1	.0	6.3	14.2	.0	3.5	40.9	.0
C	122	C1-26 DO YOU WORK WITH VARIABLE CAPACITORS?	27.3	25.5	.0	31.3	17.9	14.3	13.2	77.3	.0
C	123	C1-27 DO YOU WORK WITH TRIMMER CAPACITORS?	12.1	14.3	.0	18.8	8.5	.0	2.6	68.2	.0
C	128	C2-3 DO YOU CLEAN TRANSFORMERS?	51.5	59.0	.0	68.8	20.8	47.6	14.9	72.7	.0
C	129	C2-4 DO YOU ADJUST TRANSFORMERS?	19.7	24.8	.0	43.8	12.3	9.5	3.5	65.9	.0
C	131	C2-6 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)?	3.0	3.1	.0	.0	4.7	.0	.0	18.2	.0
C	132	C2-7 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M?	4.5	3.1	.0	6.3	3.8	.0	1.8	15.9	.0
C	133	C2-8 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS?	6.1	6.2	.0	6.3	4.7	4.8	.0	29.5	.0
C	134	C2-9 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS?	13.6	11.2	.0	18.8	4.7	14.3	2.6	59.1	.0
C	135	C2-10 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS?	13.6	9.3	.0	.0	3.8	4.8	1.8	22.7	.0
C	136	C2-11 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS?	6.1	2.5	.0	6.3	5.7	.0	.0	13.6	.0
C	137	C2-12 DO YOU WORK WITH AUTOTRANSFORMERS?	7.6	6.8	.0	18.8	4.7	9.5	.9	88.6	.0
C	140	C2-15 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS?	12.1	7.5	6.9	6.3	2.8	.0	.9	52.3	.0
C	141	C2-16 DO YOU WORK WITH SATURABLE CORE TRANSFORMERS?	3.0	4.3	.0	25.0	2.8	.0	.0	36.4	.0
C	142	C2-17 DO YOU WORK WITH SENSING TRANSFORMERS?	6.1	3.1	3.4	18.8	4.7	.0	.9	31.8	.0
C	143	C2-18 DO YOU WORK WITH CONTROL TRANSFORMERS?	13.6	9.3	3.4	25.0	8.5	.0	2.6	59.1	.0
C	147	C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	19.7	26.1	.0	6.3	9.4	19.0	2.6	50.0	.0
C	148	C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	27.3	35.4	.0	12.5	13.2	33.3	4.4	86.4	.0
C	154	C2-33 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH?	22.7	8.1	.0	12.5	6.6	4.8	2.6	36.4	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
C	159	C2-34 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO?	16.7	12.4	.0	18.8	4.7	14.3	.9	65.9	.0
C	160	C2-35 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS?	28.8	36.0	.0	31.3	9.4	23.8	6.1	86.4	.0
C	161	C2-36 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	15.2	7.5	.0	6.3	2.8	14.3	.0	52.3	.0
C	162	C2-37 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	10.6	6.2	.0	6.3	2.8	4.8	.0	34.1	.0
C	163	C2-38 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS?	16.7	6.2	13.8	43.8	5.7	.0	.0	81.8	.0
C	164	C2-39 DO YOU INSPECT THREE PHASE TRANSFORMERS?	13.6	5.6	6.9	31.3	7.5	.0	1.8	77.3	.0
C	165	C2-40 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS?	6.1	3.7	.0	6.3	5.7	.0	.9	56.8	.0
C	166	C2-41 DO YOU ADJUST THREE PHASE TRANSFORMERS?	.0	3.1	.0	6.3	5.7	.0	.9	56.8	.0
C	167	C2-42 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS?	7.6	3.7	.0	31.3	5.7	.0	.9	72.7	.0
C	170	C3-3 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS?	10.6	8.7	3.4	6.3	19.8	.0	2.6	20.5	.0
C	171	C3-4 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS?	16.7	11.2	3.4	6.3	13.2	.0	2.6	22.7	.0
C	172	C3-5 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS?	12.1	10.6	3.4	6.3	14.2	.0	3.5	25.0	.0
C	175	C3-8 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM?	6.1	3.7	.0	.0	3.8	.0	3.5	15.9	.0
C	176	C3-9 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM?	3.0	3.7	.0	6.3	4.7	.0	2.6	15.9	.0
C	178	C3-11 DO YOU USE OR REFER TO FLUX DENSITY?	10.6	5.6	.0	6.3	6.6	.0	1.8	15.9	.0
C	179	C3-12 DO YOU USE OR REFER TO SATURABLE REACTANCE?	4.5	3.7	.0	6.3	9.4	.0	1.8	18.2	.0
D	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	4.5	3.1	.0	.0	2.8	4.8	.0	29.5	.0
D	18	D1-3 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	6.1	3.7	.0	.0	4.7	4.8	.0	22.7	.0
D	183	-4 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS?	7.6	1.9	.0	6.3	4.7	.0	.0	25.0	.0
D	184	D1-5 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS?	6.1	1.9	.0	6.3	4.7	.0	.0	22.7	.0
D	185	D1-6 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS?	3.0	1.9	.0	.0	4.7	.0	.0	27.3	.0
D	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.9	29.5	.0
D	188	D1-9 DO YOU USE OR REFER TO MAXIMUM POWER (P SUB M) WHEN WORKING WITH RCL CIRCUITS?	4.5	5.6	.0	.0	5.7	.0	.0	27.3	.0
D	189	D1-10 DO YOU USE OR REFER TO AVERAGE POWER (P SUB AVE) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.0	31.8	.0
D	190	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	3.0	5.0	.0	.0	4.7	.0	.0	29.5	.0
D	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	4.5	6.2	.0	.0	4.7	.0	.0	25.0	.0
D	192	D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	12.1	8.1	.0	6.3	5.7	4.8	1.8	34.5	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
D	193	D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS?	7.6	5.6	.0	12.5	1.9	4.8	.0	40.9	.0
D	194	D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS?	6.1	4.3	.0	6.3	3.8	9.5	.0	29.5	.0
D	195	D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS?	10.6	6.2	.0	12.5	3.8	4.8	.0	52.3	.0
D	196	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS?	4.5	4.3	.0	6.3	1.9	.0	.0	29.5	.0
D	197	D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS?	3.0	4.3	.0	.0	1.9	.0	.0	38.6	.0
D	198	D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS?	6.1	1.9	.0	.0	.9	.0	.0	22.7	.0
D	199	D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	16.7	11.8	.0	6.3	1.9	.0	.0	63.6	.0
D	200	D1-21 DO YOU DETERMINE VALUES OR TRIGONOMETRIC FUNCTIONS USING FORMULAS SUCH AS: SINE OF AND ANGLE = OPPOSITE SIDE/ HYPOTENUSE?	1.5	1.9	.0	.0	2.8	.0	.0	13.6	.0
D	201	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS?	4.5	4.3	.0	6.3	3.8	4.8	.9	25.0	.0
D	202	D1-23 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS?	10.6	10.6	.0	.0	6.6	4.8	.9	29.5	.0
D	203	D1-24 DO YOU USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS?	6.1	3.7	.0	.0	4.7	.0	.0	25.0	.0
D	204	D1-25 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS?	9.1	8.1	.0	.0	7.5	4.8	.9	38.6	.0
D	205	D1-26 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS?	4.5	3.7	.0	.0	4.7	4.8	.0	20.5	.0
D	206	D1-27 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) FOR SERIES RCL CIRCUITS?	3.0	3.1	.0	.0	2.8	.0	.0	15.9	.0
D	207	D1-28 DO YOU USE OR REFER TO TRUE POWER (P SUB T) FOR SERIES RCL CIRCUITS?	4.5	5.6	.0	.0	2.8	.0	.0	25.0	.0
D	208	D1-29 DO YOU USE OR REFER TO POWER FACTORS (PF) FOR SERIES RCL CIRCUITS?	3.0	5.0	.0	.0	2.8	.0	.0	22.7	.0
D	209	D1-30 DO YOU USE OR REFER TO TOTAL CURRENT FOR PARALLEL RCL CIRCUITS?	16.7	10.6	.0	6.3	4.7	4.8	.9	43.2	.0
D	210	D1-31 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS?	4.5	2.5	.0	.0	3.8	.0	.0	18.2	.0
D	211	D1-32 DO YOU USE THE ASSUMED VOLTAGE METHOD FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	6.1	4.3	.0	.0	2.8	.0	.0	20.5	.0
D	212	D1-33 DO YOU USE OHM'S LAW FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	18.2	10.6	.0	12.5	7.5	4.8	1.8	45.5	.0
D	213	D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS?	34.8	27.3	.0	18.8	10.4	28.6	7.9	72.7	.0
D	214	D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION?	21.2	15.5	.0	12.5	3.8	19.0	2.6	61.4	.0
D	215	D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS?	24.2	23.6	.0	18.8	8.5	19.0	4.4	65.9	.0
D	216	D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION?	13.6	13.0	.0	6.3	3.8	14.3	2.5	50.0	.0
D	217	D1-38 DO YOU CHECK RESISTORS USING OHMMETERS?	37.9	27.3	.0	25.0	12.3	28.6	7.9	77.3	.0
D	218	D1-39 DO YOU CHECK RESISTORS USING SUBSTITUTION?	18.2	13.7	.0	6.3	3.8	19.0	3.5	52.3	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
D	219	D1-40 DO YOU USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (P SUB A) = TRUE POWER (P SUB T) FOR RESONANT CIRCUITS?	3.0	3.1	.0	.0	2.8	.0	.9	13.6	.0
D	220	D1-41 DO YOU USE OR REFER TO RESONANT FREQUENCIES FOR RCL CIRCUITS?	6.1	6.2	.0	6.3	4.7	.0	1.8	50.0	.0
D	221	D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS?	6.1	5.6	.0	6.3	3.8	.0	.9	43.2	.0
D	222	D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS?	6.1	5.6	.0	.0	1.9	.0	.0	36.4	.0
D	223	D1-44 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 OF THE PEAK CURRENT VALUE?	6.1	6.2	.0	.0	1.9	.0	.0	38.6	.0
D	224	D1-45 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE COIL (Q)?	1.5	3.7	.0	.0	.9	.0	.0	27.3	.0
D	225	D1-46 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	9.5	.0	31.8	.0
D	226	D2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS? IF NO, GO TO ITEM D3-1; IF YES, CONTINUE.	10.6	5.6	.0	.0	2.8	.0	.0	38.6	.0
D	227	D2-2 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)?	10.6	3.7	.0	.0	3.8	.0	.9	34.1	.0
D	228	D2-3 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS?	4.5	3.7	3.4	.0	.9	.0	.9	22.7	.0
D	229	D2-4 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS?	4.5	3.1	.0	.0	.9	.0	.9	22.7	.0
D	230	D2-5 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS?	6.1	3.7	.0	.0	.9	.0	.0	29.5	.0
D	231	D2-6 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES?	3.0	4.3	.0	.0	.9	.0	.0	22.7	.0
D	232	D2-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS?	4.5	3.1	.0	.0	1.9	.0	.0	29.5	.0
D	234	D3-2 DO YOU INSPECT FILTER CIRCUITS?	54.5	36.8	.0	31.3	1.9	4.8	1.8	70.5	.0
D	235	D3-3 DO YOU CLEAN FILTER CIRCUITS?	47.0	31.1	.0	25.0	4.7	33.3	1.8	52.3	.0
D	236	D3-4 DO YOU ALIGN OR ADJUST FILTER CIRCUITS?	27.3	16.1	.0	15.6	1.9	14.3	.0	9.1	.0
D	237	D3-5 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL?	56.1	9.6	.0	3.1	3.8	14.3	3.6	4.5	.0
D	238	D3-7 DO YOU WORK WITH LOW PASS FILTERS?	30.3	20.5	.0	.0	3.8	19.0	.0	.0	.0
D	239	D3-8 DO YOU WORK WITH HIGH PASS FILTERS?	24.2	14.5	.0	.0	.0	.0	.0	.0	.0
D	240	D3-9 DO YOU WORK WITH BAND PASS FILTERS?	27.3	9.6	.0	.0	.0	.0	.0	.0	.0
D	241	D3-10 DO YOU WORK WITH BAND REJECT FILTERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
D	242	D3-11 DO YOU WORK WITH NOTCH FILTER [illegible] CTIONS?	18.2	14.5	.0	.0	.0	4.8	1.8	.0	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
D	245	D3-13 DO YOU WORK WITH T-SECTION FILTER CONFIGURATIONS?	18.2	8.1	.0	12.5	.9	.0	1.8	36.4	.0
D	246	D3-14 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATIONS?	18.2	8.7	.0	6.3	1.9	.0	1.8	34.1	.0
D	247	D3-15 DO YOU WORK WITH YTTRIUM IRON GARNET (YIG) FILTERS?	.0	.0	.0	6.3	.9	.0	.0	9.1	.0
D	248	D3-16 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS?	9.1	1.9	.0	6.3	1.9	.0	.9	18.2	.0
E	249	E1-1 DO YOU WORK WITH COUPLING DEVICES OR CIRCUITRY IN YOUR PRESENT JOB? IF NO, GO TO ITEM E2-1; IF YES, CONTINUE.	45.5	24.2	.0	18.8	7.5	14.3	7.9	79.5	.0
E	250	E1-2 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING?	47.0	19.9	.0	25.0	4.7	9.5	.9	77.3	.0
E	251	E1-3 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING (MATCHING)?	37.9	14.9	.0	6.3	4.7	14.3	5.3	68.2	.0
E	252	E1-4 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH OPTICAL COUPLING?	4.5	7.5	.0	6.3	2.8	.0	.0	45.5	.0
E	253	E1-5 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING?	24.2	19.3	.0	18.8	5.7	14.3	4.4	68.2	.0
E	254	E1-6 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING?	47.0	19.9	.0	18.8	5.7	9.5	.9	81.8	.0
E	255	E1-7 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING?	36.4	13.7	.0	6.3	6.6	14.3	6.1	72.7	.0
E	256	E1-8 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING?	27.3	17.4	.0	18.8	7.5	14.3	4.4	70.5	.0
E	257	E1-9 DO YOU WORK WITH DIRECT COUPLED CIRCUITS?	37.9	22.4	.0	18.8	5.7	14.3	3.5	81.8	.0
E	258	E1-10 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS?	43.9	18.6	.0	18.8	5.7	9.5	2.6	79.5	.0
E	259	E1-11 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS?	19.7	16.8	.0	6.3	5.7	4.8	2.6	70.5	.0
E	260	E1-12 DO YOU WORK WITH OPTICAL COUPLING?	4.5	6.2	.0	.0	2.8	.0	.0	43.2	.0
E	261	E1-13 DO YOU WORK WITH OPTICAL COUPLING CIRCUITS?	4.5	6.2	.0	.0	2.8	.0	.0	40.9	.0
E	262	E1-14 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS?	22.7	16.1	.0	18.8	6.6	14.3	4.4	70.5	.0
E	263	E2-2 DO YOU SOLDER CONNECTIONS?	87.9	88.2	.0	81.3	84.0	81.0	96.0	97.7	.0
E	265	E2-3 DO YOU DESOLDER CONNECTIONS?	87.9	88.2	.0	81.3	85.8	81.0	83.3	97.7	.0
E	266	E2-4 DO YOU PERFORM HIGH RELIABILITY SOLDERING?	72.7	61.5	.0	75.0	58.5	71.4	46.5	86.4	.0
E	267	E2-5 DO YOU INSPECT SOLDERED CONNECTIONS?	87.9	87.6	.0	81.3	85.8	81.0	79.8	95.5	.0
E	268	E2-6 DO YOU CLEAN OR TIN CONNECTIONS?	86.4	85.7	.0	81.3	83.0	81.0	78.9	95.5	.0
E	269	E2-7 DO YOU MAKE HANDWIRE CONNECTIONS?	83.3	81.4	.0	81.3	79.2	71.4	80.7	90.9	.0
E	271	E2-9 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS?	87.9	85.7	.0	81.3	69.8	81.0	32.9	97.7	.0
E	272	E2-10 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS?	87.9	79.5	.0	75.0	48.1	71.4	22.8	95.5	.0
E	273	E2-11 DO YOU SOLDER ACTIVE COMPONENTS, SUCH AS INTEGRATED CIRCUITS?	81.8	47.8	.0	43.8	21.7	38.1	10.5	93.2	.0
E	274	E2-12 DO YOU PERFORM WIRE WRAPPING IN LIEU OF SOLDERING?	68.2	31.1	.0	31.3	78.3	57.1	77.2	36.4	.0
E	275	E2-13 DO YOU PERFORM CRIMPING IN LIEU OF SOLDERING?	69.7	55.3	.0	81.3	46.2	38.1	50.9	84.1	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPT04 PAGE 200

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
E	276	E2-14 DO YOU PERFORM WIRE CONNECTIONS USING A 714 PUNCH-ON TOOL IN LIEU OF SOLDERING?	15.2	8.7	.0	6.3	42.5	23.8	80.7	13.6	.0
E	278	E3-2 DO YOU ADJUST RELAYS?	36.4	39.1	.0	68.8	77.4	76.2	68.4	68.2	.0
E	279	E3-3 DO YOU CLEAN RELAYS?	75.8	55.3	.0	75.0	80.2	81.0	78.9	90.9	.0
F	296	F1-2 DO YOU INSPECT MICROPHONES?	1.5	3.7	.0	12.5	7.5	61.9	14.9	68.2	.0
F	297	F1-3 DO YOU CLEAN MICROPHONES?	.0	3.7	.0	12.5	6.6	52.4	12.3	40.9	.0
F	299	F1-5 DO YOU TROUBLESHOOT MICROPHONES WIRE CONNECTIONS?	1.5	3.7	.0	12.5	8.5	57.1	15.8	65.9	.0
F	300	F1-6 DO YOU TROUBLESHOOT MICROPHONE COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	1.5	3.1	.0	6.3	4.7	23.8	4.4	38.6	.0
F	301	F1-7 DO YOU REMOVE AND REPLACE COMPLETE MICROPHONES?	1.5	3.7	.0	18.8	6.6	66.7	16.7	63.6	.0
F	302	F1-8 DO YOU REMOVE OR REPLACE MICROPHONE COMPONENT PARTS?	1.5	3.7	.0	12.5	5.7	19.0	4.4	40.9	.0
F	303	F1-9 DO YOU PERFORM TASKS ON CARBON MICROPHONES?	1.5	2.5	3.4	.0	8.5	66.7	15.8	18.2	.0
F	304	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES?	1.5	1.9	.0	.0	3.8	19.0	1.8	13.6	.0
F	305	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES?	.0	1.9	.0	.0	2.8	4.8	.9	36.4	.0
F	307	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES?	.0	.0	.0	.0	1.9	.0	.9	6.8	.0
F	308	F1-14 DO YOU PERFORM TASKS ON TRANSDUCERS?	.0	1.2	.0	18.8	2.8	4.8	3.5	72.7	.0
F	310	F2-2 DO YOU INSPECT SPEAKERS?	25.8	4.3	.0	18.8	10.4	81.0	52.6	70.5	.0
F	311	F2-3 DO YOU CLEAN SPEAKERS?	22.7	4.3	.0	12.5	7.5	66.7	38.6	40.9	.0
F	313	F2-5 DO YOU TROUBLESHOOT SPEAKER WIRE CONNECTIONS?	25.8	4.3	.0	18.8	8.5	76.2	53.5	70.5	.0
F	314	F2-6 DO YOU TROUBLESHOOT SPEAKER COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	16.7	2.5	.0	.0	1.9	66.7	21.9	31.8	.0
F	315	F2-7 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS?	25.8	4.3	.0	18.8	8.5	81.0	52.6	68.2	.0
F	316	F2-8 DO YOU REMOVE OR REPLACE SPEAKER PARTS?	13.6	3.1	.0	.0	1.9	52.4	18.4	13.6	.0
F	317	F2-9 DO YOU PERFORM ANY TASKS ON CONE SPEAKER PARTS?	7.0	1.9	.0	.0	1.9	9.5	2.6	15.9	.0
F	318	F2-10 DO YOU PERFORM ANY TASKS ON SPIDER SPEAKER PARTS?	.0	1.2	.0	.0	1.9	9.5	.9	9.1	.0
F	319	F2-11 DO YOU PERFORM ANY TASKS ON FIELD COIL SPEAKER PARTS?	.0	1.2	.0	.0	1.9	14.3	.9	15.9	.0
F	320	F2-12 DO YOU PERFORM ANY TASKS ON VOICE COIL SPEAKER PARTS?	.0	1.2	.0	.0	2.8	14.3	3.5	15.9	.0
F	321	F2-13 DO YOU PERFORM ANY TASKS ON PERMANENT MAGNET SPEAKER PARTS?	4.5	1.2	.0	.0	1.9	9.5	1.8	15.9	.0
F	322	F2-14 DO YOU PERFORM ANY TASKS ON ELECTROMAGNET SPEAKER PARTS?	.0	1.9	.0	.0	1.9	14.3	.9	13.6	.0
F	323	F2-15 DO YOU PERFORM ANY TASKS ON SOFT IRON CORE SPEAKER PARTS?	1.5	1.9	.0	.0	1.9	4.8	.9	9.1	.0
F	324	F3-1 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G1-1; IF YES, CONTINUE.	89.4	78.3	.0	81.3	37.7	71.4	7.9	95.5	.0
F	325	F3-2 DO YOU PERFORM OPERATIONAL CHECKS USING OSCILLOSCOPES?	86.4	69.6	.0	81.3	32.1	57.1	6.1	93.2	.0
F	326	F3-3 DO YOU PERFORM ALIGNMENTS OR ADJUSTMENTS USING OSCILLOSCOPES?	80.3	65.8	.0	68.8	31.1	52.4	5.3	88.6	.0
F	327	F3-4 DO YOU TROUBLESHOOT ELECTRONIC CIRCUITS USING OSCILLOSCOPES?	80.3	76.4	.0	81.3	31.1	61.9	4.4	86.4	.0
F	328	F3-5 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCIES?	69.7	48.4	.0	75.0	32.1	61.9	6.1	90.9	.0
F	329	F3-6 DO YOU USE OSCILLOSCOPES TO MEASURE TIME?	68.2	39.1	.0	81.3	17.9	42.9	.0	93.2	.0
F	330	F3-7 DO YOU USE OSCILLOSCOPES TO OBSERVE LISSAJOUS PATTERNS?	59.1	10.6	.0	18.8	6.6	9.5	.0	27.3	.0
F	331	F3-8 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES.	57.6	46.0	.0	31.3	15.1	23.8	.9	84.1	.0
F	332	F3-9 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS?	42.4	26.7	.0	37.5	15.1	14.3	.0	54.5	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPT04 PAGE 201

OCCUPATIONAL ANALYSIS PROGRAM
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F	332	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGES?	80.3	71.4	.0	81.3	19.8	61.9	3.5	93.2	.0
F	334	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGES?	86.4	77.0	.0	75.0	28.3	61.9	3.5	93.2	.0
F	335	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS?	36.4	32.9	.0	43.8	17.0	38.1	4.4	75.0	.0
F	336	F3-13 DO YOU USE OSCILLOSCOPES TO OBSERVE DATA PATTERNS?	86.4	62.7	.0	62.5	19.8	19.0	1.8	68.2	.0
F	337	F3-14 DO YOU USE OSCILLOSCOPES TO MEASURE RIPPLE VOLTAGES?	86.4	44.7	.0	81.3	13.2	42.9	.9	79.5	.0
F	338	F3-15 DO YOU USE OSCILLOSCOPES TO MEASURE PHASE JITTERS?	22.7	12.4	.0	18.8	13.2	14.3	.0	43.2	.0
F	339	F3-16 DO YOU USE OSCILLOSCOPES TO DISPLAY SWEEP GENERATOR PATTERNS?	42.4	31.1	.0	25.0	12.3	9.5	.9	77.3	.0
F	340	F3-17 DO YOU USE OSCILLOSCOPES TO OBSERVE PHASE RELATIONSHIPS?	69.7	37.3	.0	43.8	15.1	14.3	2.6	88.6	.0
F	341	F3-18 DO YOU USE OSCILLOSCOPES TO OBSERVE SAMPLING DISPLAYS?	37.9	21.7	.0	31.3	12.3	33.3	.9	65.9	.0
G	343	G1-2 DO YOU INSPECT DIODES?	77.3	67.1	.0	75.0	39.6	66.7	9.6	93.2	.0
G	344	G1-3 DO YOU CHECK DIODES?	77.3	68.9	.0	68.8	43.4	61.9	9.6	90.9	.0
G	345	G1-4 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES?	17.1	8.1	.0	6.3	2.8	4.8	.0	18.2	.0
G	346	G1-5 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE?	28.8	13.7	.0	12.5	9.4	19.0	.9	47.7	.0
G	347	G1-6 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES?	28.8	14.3	.0	25.0	8.5	9.5	.0	43.2	.0
G	349	G1-8 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE?	68.2	56.5	.0	43.8	34.0	47.6	6.8	88.6	.0
G	350	G1-9 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW?	18.2	9.9	.0	12.5	5.7	14.3	.0	29.5	.0
G	351	G1-10 DO YOU MEASURE FORWARD BIAS RESISTANCE?	57.6	46.0	.0	56.3	18.9	23.8	1.8	79.5	.0
G	352	G1-11 DO YOU MEASURE REVERSE BIAS RESISTANCE?	56.1	46.0	.0	56.3	17.9	23.8	1.8	79.5	.0
G	353	G1-12 DO YOU READ DIODE COLOR CODING?	31.8	17.4	.0	37.5	8.5	9.5	.9	18.2	.0
G	354	G1-13 DO YOU READ DIODE NUMBERING SYSTEM, SUCH AS IN 538?	54.5	46.0	.0	62.5	17.0	42.9	2.6	81.8	.0
G	355	G1-14 DO YOU USE THE SYMBOL ON DIODE WHICH INDICATES THE CATHODE END?	81.8	63.4	.0	68.8	29.2	52.4	7.0	93.2	.0
G	357	G1-16 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON?	16.7	6.8	.0	25.0	5.7	19.0	.0	63.6	.0
G	358	G1-17 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OR RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)?	33.3	18.6	3.4	18.8	13.2	14.3	.0	68.2	.0
G	359	G1-18 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)?	22.7	12.4	.0	6.3	9.4	28.6	2.6	54.5	.0
G	360	G1-19 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS?	51.5	40.4	.0	18.8	18.9	28.6	5.3	81.8	.0
G	361	G1-20 DO YOU NEED AN UNDERSTANDING OF VALENCE BAND IN SEMICONDUCTOR MATERIALS?	6.1	11.8	.0	12.5	6.6	4.8	.9	40.9	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
G	362	G1-21 DO YOU NEED AN UNDERSTANDING OF FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS?	3.0	9.9	.0	12.5	5.7	4.8	.9	27.3	.0
G	363	G1-22 DO YOU NEED AN UNDERSTANDING OF CONDUCTION BAND IN SEMICONDUCTOR MATERIALS?	6.1	11.2	.0	12.5	6.6	4.8	.9	45.5	.0
G	364	G1-23 DO YOU NEED AN UNDERSTANDING OF CONVALENT BONDING IN SEMICONDUCTOR MATERIALS?	4.5	10.6	.0	12.5	6.6	4.8	.9	27.3	.0
G	365	G1-24 DO YOU NEED AN UNDERSTANDING OF ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS?	6.1	10.6	.0	18.8	6.6	4.8	.9	45.5	.0
G	366	G1-25 DO YOU NEED AN UNDERSTANDING OF ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS?	21.2	18.0	.0	18.8	9.4	9.5	1.8	56.8	.0
G	367	G1-26 DO YOU NEED AN UNDERSTANDING OF DONOR IMPURITY IN SEMICONDUCTORS?	7.6	10.6	.0	12.5	5.7	4.8	.9	31.8	.0
G	368	G1-27 DO YOU NEED AN UNDERSTANDING OF ACCEPTOR IMPURITY IN SEMICONDUCTORS?	4.5	9.9	.0	18.8	5.7	4.8	.9	31.8	.0
G	369	G1-28 DO YOU NEED AN UNDERSTANDING OF P-TYPE SEMICONDUCTOR MATERIAL?	45.5	24.8	.0	31.3	11.3	23.8	3.5	72.7	.0
G	370	G1-29 DO YOU NEED AN UNDERSTANDING OF N-TYPE SEMICONDUCTOR MATERIAL?	47.0	24.8	.0	25.0	11.3	23.8	3.5	72.7	.0
G	371	G1-30 DO YOU NEED AN UNDERSTANDING OF MAJORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.3	.0	12.5	5.7	4.8	.9	43.2	.0
C	372	G1-31 DO YOU NEED AN UNDERSTANDING OF MINORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.9	.0	12.5	5.7	4.8	.9	43.2	.0
G	373	G1-32 DO YOU NEED AN UNDERSTANDING OF JUNCTION RECOMBINATION IN SEMICONDUCTORS?	7.6	11.2	.0	18.8	6.6	4.8	.9	38.6	.0
G	374	G1-33 DO YOU NEED AN UNDERSTANDING OF DEPLETION REGION IN SEMICONDUCTORS?	6.1	12.4	.0	12.5	7.5	4.8	.9	50.0	.0
G	375	G1-34 DO YOU NEED AN UNDERSTANDING OF RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL?	9.1	13.7	.0	12.5	7.5	4.8	.9	47.7	.0
G	376	G1-35 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES?	28.8	17.4	.0	18.8	4.7	4.8	1.8	45.5	.0
G	377	G1-36 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS?	7.6	6.2	.0	.0	5.7	4.8	.9	20.5	.0
G	378	G1-37 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION?	31.8	20.5	.0	25.0	6.6	28.6	.9	81.8	.0
G	379	G1-38 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS?	15.2	14.3	.0	12.5	4.7	.0	.0	70.5	.0
G	380	G1-39 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS?	9.1	12.4	.0	6.3	4.7	.0	.0	52.3	.0
G	381	G1-40 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS?	16.7	11.8	3.4	12.5	4.7	.0	.0	54.5	.0
G	382	G1-41 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS?	19.7	15.5	.0	18.8	4.7	4.8	.0	72.7	.0
G	392	G2-10 DO YOU USE OR REFER TO LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR?	19.7	28.6	.0	18.8	5.7	14.3	2.6	52.3	.0
G	395	G2-13 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION?	59.1	44.7	.0	18.8	11.3	38.1	3.5	95.5	.0

PERCENT S-SKILL LEVEL MEMBERS PERFORMING

FCPT04 PAGE 203

OCCUPATIONAL ANALYSIS PROGRAM
USAFCMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (P)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
G	396	G2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT I(SUB B) IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT I(SUB E) USUALLY I(SUB B) BEING 2 TO 5 PERCENT OF I(SUB E)?	36.4	34.2	.0	18.8	5.7	19.0	.9	68.2	.0
G	397	G2-15 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS?	50.0	50.3	.0	31.3	8.5	19.0	5.3	84.1	.0
G	398	G2-16 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES?	15.2	20.5	.0	12.5	5.7	14.3	1.8	52.3	.0
G	399	G2-17 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES?	6.1	10.6	.0	18.8	.9	9.5	.9	43.2	.0
G	400	G2-18 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS?	3.0	13.0	.0	6.3	.9	.0	1.8	20.5	.0
G	401	G2-19 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS?	.0	12.4	.0	6.3	.9	.0	1.8	15.9	.0
G	402	G2-20 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS?	.0	11.8	.0	6.3	.9	.0	1.8	13.6	.0
G	405	G2-24 DO YOU PERFORM TRANSISTOR MATCHING THROUGH THE USE OF CURVE TRACING?	.0	1.9	.0	12.5	.9	.0	.0	22.7	.0
G	407	G3-1 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM H1-1; IF YES, CONTINUE.	48.5	24.8	.0	31.3	16.0	38.1	8.8	84.1	.0
G	408	G3-2 DO YOU INSPECT TRANSISTOR AMPLIFIERS?	30.4	22.4	.0	31.3	11.3	47.6	6.1	84.1	.0
G	409	G3-3 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS?	24.2	13.7	.0	25.0	12.3	42.9	7.0	65.9	.0
G	410	G3-4 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL?	45.5	19.9	.0	31.3	9.4	38.1	7.9	84.1	.0
G	411	G3-5 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS?	43.9	21.1	.0	18.8	5.7	28.6	2.6	81.8	.0
G	412	G3-6 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER?	36.4	18.0	.0	31.3	12.3	47.6	5.3	79.5	.0
G	413	G3-7 DO YOU REMOVE OR REPLACE AMPLIFIER CIRCUIT COMPONENTS?	39.4	20.5	.0	18.8	3.8	23.8	1.8	81.8	.0
G	414	G3-8 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR CURRENT RESULTS FROM A CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	15.2	14.3	.0	12.5	1.9	9.5	.9	52.3	.0
G	415	G3-9 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO SPECIFIC CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	4.5	6.2	.0	6.3	1.9	9.5	.9	31.8	.0
G	416	G3-10 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE RESULTS FROM A CHANGE IN BASE CURRENT?	18.2	13.7	.0	12.5	1.9	9.5	.9	61.4	.0
G	417	G3-11 DO YOU USE OR REFER TO THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	24.2	14.3	.0	18.8	1.9	14.3	.9	59.1	.0
G	418	G3-12 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE; THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	10.6	8.1	.0	6.3	1.9	9.5	.9	36.4	.0
G	419	G3-13 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)?	4.5	2.5	.0	6.3	.9	.0	1.8	18.2	.0
G	420	G3-14 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR?	12.1	6.2	.0	6.3	1.9	4.8	1.8	31.8	.0
G	421	G3-15 DO YOU MEASURE VOLTAGE GAIN CONCERNING TRANSISTOR AMPLIFIERS?	27.3	14.9	.0	25.0	3.8	19.0	2.6	65.9	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	FCPTOM PAGE 204 306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
G	422	G3-16 DO YOU MEASURE CURRENT GAIN CONCERNING TRANSISTOR AMPLIFIERS?	19.7	14.9	.0	25.0	4.7	14.3	1.8	50.0	.0
G	423	G3-17 DO YOU MEASURE POWER GAIN CONCERNING TRANSISTOR AMPLIFIERS?	16.7	10.6	.0	18.8	4.7	4.8	1.8	38.6	.0
G	424	G3-18 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE CHANGE OF THE BASE COLLECTOR VOLTAGE?	10.6	5.0	.0	12.5	3.8	.0	.0	25.0	.0
G	425	G3-19 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION?	18.2	10.6	.0	18.8	1.9	9.5	.0	45.5	.0
G	426	G3-20 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION?	13.6	6.8	.0	18.8	1.9	9.5	.0	40.9	.0
G	427	G3-21 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION?	16.7	9.9	.0	12.5	1.9	4.8	.0	38.6	.0
G	428	G3-22 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION?	24.2	11.8	.0	18.8	1.9	9.5	.9	43.2	.0
G	429	G3-23 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION?	24.2	12.4	.0	18.8	1.9	4.8	.9	38.6	.0
G	430	G3-24 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION?	6.1	7.5	.0	12.5	1.9	4.8	.0	38.6	.0
G	431	G3-25 DO YOU IDENTIFY OR TROUBLESHOOT AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS?	13.6	11.2	.0	12.5	1.9	28.6	.0	56.8	.0
G	432	G3-26 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS?	12.1	11.2	.0	6.3	2.8	23.8	.0	50.0	.0
G	433	G3-27 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS?	9.1	6.2	.0	12.5	2.8	9.5	.0	47.7	.0
G	434	G3-28 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS?	4.5	7.5	.0	6.3	.9	.0	.0	43.2	.0
G	435	G3-29 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	18.2	6.2	.0	6.3	3.8	14.3	.9	34.1	.0
G	436	G3-30 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	1.5	3.7	.0	6.3	1.9	.0	.9	40.9	.0
G	437	G3-31 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	19.7	10.6	.0	18.8	3.8	19.0	.0	72.7	.0
G	439	G3-32 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS?	3.0	4.3	.0	6.3	1.9	4.8	.0	31.8	.0
G	439	G3-33 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	7.6	1.9	.0	12.5	1.9	.0	.0	40.9	.0
G	440	G3-34 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	10.6	3.7	.0	12.5	1.9	.0	.0	56.8	.0
G	441	G3-35 DO YOU TROUBLESHOOT OR REPAIR VOLTAGE MULTIPLIERS (DOUBLERS/TRIPLERS)?	16.7	9.3	.0	25.0	1.9	.0	.9	72.7	.0
G	442	G3-36 DO YOU TROUBLESHOOT OR REPAIR RF AMPLIFIERS?	24.2	6.8	.0	12.5	2.8	4.8	.0	70.5	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

EGLIN PAGE 205

OCCUPATIONAL ANALYSIS PROGRAM USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
G	443	G3-37 DO YOU TROUBLESHOOT OR REPAIR WIDEBAND AMPLIFIERS (VIDEO AMPS)?	3.0	3.1	.0	.0	1.9	.0	.0	40.9	.0
G	444	G3-38 DO YOU TROUBLESHOOT OR REPAIR AUDIO AMPLIFIERS?	15.2	5.0	.0	18.8	6.6	38.1	1.8	61.4	.0
G	445	G3-39 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER AMPLIFIERS?	22.7	13.7	.0	18.8	2.8	23.8	.9	79.5	.0
G	446	G3-40 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	1.5	3.7	.0	.0	1.9	.0	.0	36.4	.0
G	447	G3-41 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY AMPLIFIERS?	3.0	4.3	.0	.0	1.9	4.8	.0	29.5	.0
G	448	G3-42 DO YOU TROUBLESHOOT OR REPAIR IF AMPLIFIERS?	4.5	5.6	.0	12.5	2.8	.0	.0	34.1	.0
G	449	G3-43 DO YOU TROUBLESHOOT OR REPAIR DIFFERENTIATING AMPLIFIERS (DIFF AMPS)?	24.2	3.7	.0	12.5	1.9	.0	.0	79.5	.0
G	450	G3-44 DO YOU TROUBLESHOOT OR REPAIR OPERATIONAL AMPLIFIERS (OP AMPS)?	12.1	6.8	.0	18.8	1.9	.0	.0	61.8	.0
G	451	G3-45 DO YOU TROUBLESHOOT OR REPAIR INTEGRATING AMPLIFIERS?	16.7	6.8	.0	18.8	1.9	.0	.0	79.5	.0
G	452	G3-46 DO YOU TROUBLESHOOT OR REPAIR SUMMING AMPLIFIERS?	1.5	1.9	.0	.0	.9	.0	.0	45.5	.0
H	453	H1-1 DO YOU USE OR REFER TO VARACTORS/VARICAP COMPONENTS?	7.6	9.3	.0	18.8	3.8	.0	.9	38.6	.0
H	454	H1-2 DO YOU USE OR REFER TO TUNNEL DIODE COMPONENTS?	34.8	14.9	.0	12.5	2.8	.0	.0	61.4	.0
H	455	H1-3 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTOR COMPONENTS?	27.3	18.0	.0	25.0	2.8	9.5	.0	95.5	.0
H	456	H1-4 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTOR COMPONENTS?	62.1	25.5	.0	31.3	4.7	4.8	.9	93.2	.0
H	459	H1-7 DO YOU USE OR REFER TO PIN DIODE COMPONENTS?	9.1	13.7	.0	6.3	5.7	4.8	3.5	34.1	.0
H	461	H1-9 DO YOU USE OR REFER TO FANTAIL TRANSISTOR COMPONENTS?	7.6	7.5	.0	.0	2.8	.0	.0	20.5	.0
H	463	H1-11 DO YOU USE OR REFER TO TRIAC COMPONENTS?	24.2	24.2	.0	18.8	2.8	.0	.0	93.2	.0
H	464	H1-12 DO YOU USE OR REFER TO PROGRAMMABLE UNIJUNCTION TRANSISTOR (PUT) COMPONENTS?	7.6	1.9	.0	6.3	1.9	.0	.0	86.4	.0
H	465	H1-13 DO YOU USE OR REFER TO SILICON CONTROLLED SWITCH (SCS) COMPONENTS?	10.6	3.7	.0	6.3	1.9	.0	.0	75.0	.0
H	466	H1-14 DO YOU USE OR REFER TO SILICON UNILATERAL SWITCH (SUS) COMPONENTS?	6.1	1.9	.0	.0	1.9	.0	.0	77.3	.0
H	473	H2-7 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES?	72.7	75.8	.0	62.5	28.3	71.4	83.3	90.9	.0
H	484	H2-18 DO YOU USE OR REFER TO RIPPLE AMPLITUDE IN YOUR WORK WITH RECTIFIERS?	72.7	28.0	.0	56.3	9.4	19.0	2.6	66.2	.0
H	485	H2-19 DO YOU USE OR REFER TO RIPPLE FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	50.0	21.7	.0	25.0	6.6	4.8	1.8	61.4	.0
H	486	H2-20 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGES IN YOUR WORK WITH RECTIFIERS?	25.8	18.6	.0	18.8	8.5	4.8	2.6	70.5	.0
H	487	H2-21 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS IN YOUR WORK WITH RECTIFIERS?	53.0	44.7	.0	31.3	5.7	33.3	7.5	84.1	.0
H	491	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS?	39.4	21.1	.0	12.5	3.8	9.5	2.6	65.9	.0
H	492	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS?	27.3	16.1	.0	6.3	4.7	4.8	1.8	65.9	.0
H	493	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS?	22.7	11.2	.0	12.5	2.8	4.8	1.8	52.7	.0
H	494	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS?	31.8	11.8	.0	12.5	3.8	9.5	2.6	52.3	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING — FCPT04 PAGE 206

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
M	495	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER?	9.1	5.0	.0	12.5	2.8	.0	3.5	22.7	.0
M	496	H2-30 DO YOU WORK WITH POWER SUPPLY REGULATOR CIRCUITS OTHER THAN SOLID-STATE?	25.8	24.2	.0	25.0	13.2	33.3	7.9	50.0	.0
M	500	H3-3 DO YOU ALIGN OR ADJUST OSCILLATORS?	42.4	12.4	.0	12.5	18.9	57.1	2.6	72.7	.0
M	501	H3-4 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS?	42.4	13.0	.0	12.5	16.0	61.9	.9	65.9	.0
M	502	H3-5 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS?	25.8	12.4	.0	12.5	6.6	14.3	.9	72.7	.0
M	503	H3-6 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL?	40.9	14.9	.0	18.8	13.2	57.1	.9	72.7	.0
M	504	H3-7 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS?	28.8	14.3	.0	.0	7.5	9.5	.0	72.7	.0
M	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9	.0
M	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0	.0
M	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0	.0
M	509	H3-12 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT (CRYSTAL OSCILLATIONS)?	16.7	8.7	3.4	.0	1.9	.0	.0	59.1	.0
M	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5	.0
M	511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1	.0
M	512	H3-15 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS?	33.3	11.8	.0	12.5	3.8	19.0	.0	65.9	.0
M	513	H3-16 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN CRYSTALS?	40.9	10.6	3.4	6.3	3.8	.0	.0	65.9	.0
M	514	H3-17 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN PHASE LOCK LOOPS (PLL)?	10.6	4.3	.0	.0	4.7	.0	.0	34.1	.0
M	516	H3-19 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS?	10.6	3.7	.0	.0	.9	.0	.0	45.5	.0
M	517	H3-20 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS?	18.2	4.3	.0	6.3	.9	.0	.0	50.0	.0
M	518	H3-21 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS?	4.5	2.5	.0	.0	.9	.0	.9	22.7	.0
M	519	H3-22 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS?	6.1	2.5	.0	.0	.9	.0	.9	20.5	.0
M	520	H3-23 DO YOU WORK WITH VOLTAGE CONTROL SINUSOIDAL OSCILLATO	16.7	3.1	.0	12.5	.9	9.5	.0	40.9	.0
M	521	H3-24 DO YOU WORK WITH CRYSTAL SINUSOIDAL OSCILLATORS?	34.8	8.1	.0	6.3	1.9	.0	.0	59.1	.0
M	522	H3-25 DO YOU WORK WITH VOLTAGE CONTROL OSCILLATORS (VCO) SINUSOIDAL OSCILLATORS?	13.6	4.3	.0	12.5	.9	.0	.0	40.9	.0
M	523	H3-26 DO YOU WORK WITH WIEN BRIDGE OSCILLATORS SINUSOIDAL OSCILLATORS?	9.1	5.0	.0	6.3	.0	.0	.0	50.0	.0
M	525	H3-28 DO YOU WORK WITH PULSE GENERATING CIRCUITS?	31.8	15.5	3.4	6.3	10.4	4.8	.0	65.9	.0
M	526	H3-29 DO YOU WORK WITH BLOCKING OSCILLATORS?	3.0	3.7	.0	6.3	1.9	.0	.0	43.2	.0
M	527	H3-30 DO YOU WORK WITH BURST GENERATORS?	3.0	2.5	.0	6.3	1.9	.0	.0	34.1	.0
M	529	H3-31 DO YOU WORK WITH BLOCKED OSCILLATORS?	1.5	1.9	.0	6.3	.9	.0	.0	22.7	.0
I	529	I1-1 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I2-1; IF YES, CONTINUE.	65.2	24.2	.0	6.3	1.9	9.5	.0	34.1	.0
I	530	I1-2 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUIT FREQUENCY DETERMINING DEVICES (FDD)?	21.2	12.4	.0	.0	.0	4.8	.0	65.9	.0
I	531	I1-3 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORK FREQUENCY DETERMINING DEVICES (FDD)?	43.9	18.0	.0	6.3	.9	9.5	.0	68.2	.0
I	532	I1-4 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTAL FREQUENCY DETERMINING DEVICES (FDD)?	36.4	13.0	.0	.0	.0	.0	.0	31.8	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPTC4 PAGE 207

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
I	533	I1-5 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	15.2	6.8	.0	.0	1.9	.0	.0	29.5	.0
I	534	I1-6 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS?	60.6	21.1	.0	6.3	1.9	4.8	.9	81.8	.0
I	535	I1-7 DO YOU WORK WITH MONOSTABLE (ONE SHOT) MULTIVIBRATORS?	63.6	23.6	.0	6.3	.9	4.8	.9	79.5	.0
I	536	I1-8 DO YOU WORK WITH BISTABLE (FLIP FLOP) MULTIVIBRATORS?	68.2	24.8	.0	6.3	.9	4.8	.0	79.5	.0
I	537	I1-9 DO YOU WORK WITH R-S FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	16.7	9.3	.0	6.3	.9	4.8	.0	63.6	.0
I	538	I1-10 DO YOU WORK WITH J-K FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	65.2	21.1	.0	6.3	.9	4.8	.0	81.8	.0
I	539	I1-11 DO YOU WORK WITH "D" FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	19.7	6.2	.0	6.3	.9	4.8	.0	43.2	.0
I	541	I2-2 DO YOU WORK WITH SERIES DIODE LIMITERS?	9.1	11.2	.0	.0	.9	.0	.0	68.2	.0
I	542	I2-3 DO YOU WORK WITH SHUNT DIODE LIMITERS?	9.1	12.4	3.4	.0	.9	.0	.0	68.2	.0
I	543	I2-4 DO YOU WORK WITH LIMITERS WITH BIAS?	7.6	10.6	.0	.0	.9	.0	.0	54.5	.0
I	544	I2-5 DO YOU WORK WITH ZENER DIODE LIMITERS?	16.7	14.9	3.4	6.3	1.9	4.8	.0	75.0	.0
I	545	I2-6 DO YOU WORK WITH TRANSISTOR LIMITERS?	15.2	11.8	3.4	.0	.9	4.8	.0	65.9	.0
I	546	I2-7 DO YOU WORK WITH TRIODE LIMITERS?	3.0	3.1	.0	.0	.9	.0	.0	34.1	.0
I	547	I2-8 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS?	19.7	8.7	.0	.0	.0	.0	.0	61.4	.0
I	548	I2-9 DO YOU WORK WITH BIAS DIODE CLAMPING CIRCUITS?	13.6	6.2	.0	.0	.9	.0	.0	56.8	.0
I	549	I2-10 DO YOU WORK WITH DC RESTORERS?	4.5	4.3	.0	.0	1.9	.0	.0	31.8	.0
I	550	I3-1 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS BASIC ELECTRON TUBES (FOR PURPOSES OF THIS QUESTION DO NOT CONSIDER HIGH-FREQUENCY DEVICES SUCH AS KLYSTRONS, TRAVELING WAVE TUBES, BACKWARD WAVE OSCILLATORS, OR MAGNETRONS AS ELECTRON TUBES)? IF NO, GO TO ITEM J1-1; IF YES, CONTINUE.	3.0	11.2	.0	56.3	7.5	4.8	2.6	52.3	.0
I	551	I3-2 DO YOU CHECK THE CONDITION OF ELECTRON TUBES?	1.5	11.2	.0	62.5	5.7	.0	.9	43.2	.0
I	552	I3-3 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES?	1.5	3.1	.0	43.8	4.7	.0	.0	40.9	.0
I	553	I3-4 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES?	4.5	5.0	.0	62.5	3.8	4.8	.9	50.0	.0
I	554	I3-5 DO YOU USE SCOPES TO CHECK ELECTRON TUBES?	4.5	6.2	.0	25.0	1.9	4.8	.0	50.0	.0
I	555	I3-6 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES?	6.1	10.6	.0	43.8	2.8	.0	1.8	40.9	.0
I	556	I3-7 DO YOU USE OR REFER TO CUTOFF?	.0	6.2	.0	18.8	2.8	.0	1.8	38.6	.0
I	557	I3-8 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING?	1.5	2.5	.0	18.8	3.8	.0	1.8	31.8	.0
I	558	I3-9 DO YOU USE OR REFER TO PEAK CURRENT RATING?	1.5	3.7	.0	18.8	2.8	4.8	1.8	29.5	.0
I	559	I3-10 DO YOU USE OR REFER TO TRANSIT TIME?	.0	1.9	.0	18.8	1.9	.0	1.8	20.5	.0
I	560	I3-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING?	.0	1.9	.0	6.3	3.8	.0	1.8	20.5	.0
I	561	I3-12 DO YOU USE OR REFER TO SATURATION?	1.5	5.0	.0	18.8	4.7	.0	.9	38.6	.0
I	562	I3-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE?	.0	2.5	.0	6.3	2.8	.0	.9	25.0	.0
I	563	I3-14 DO YOU USE OR REFER TO PLATE VOLTAGE?	.0	5.0	.0	50.0	4.7	.0	.9	47.7	.0
I	564	I3-15 DO YOU USE OR REFER TO PLATE CURRENT?	.0	4.3	.0	18.8	1.9	.0	.9	38.6	.0
I	565	I3-16 DO YOU USE OR REFER TO GRID VOLTAGE?	.0	5.6	.0	56.3	4.7	.0	1.8	47.7	.0
I	566	I3-17 DO YOU USE OR REFER TO GRID CURRENT?	.0	5.0	.0	25.0	1.9	.0	.9	38.6	.0
I	567	I3-18 DO YOU USE OR REFER TO CATHODE VOLTAGE?	.0	5.6	.0	62.5	4.7	.0	.9	47.7	.0
I	568	I3-19 DO YOU USE OR REFER TO CATHODE CURRENT?	.0	5.0	.0	25.0	3.8	.0	.9	40.9	.0
I	569	I3-20 DO YOU USE OR REFER TO FILAMENT VOLTAGE?	.0	5.0	.0	56.3	2.8	.0	.9	50.0	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPT04 PAGE 208

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
I	570	I3-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODE IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)?	.0	1.2	.0	6.3	.9	.0	.0	20.5	.0
I	571	I3-22 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC.) AMPLIFICATION FACTORS?	.0	1.2	.0	.0	1.9	.0	1.6	25.0	.0
I	572	I3-23 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)?	.0	.6	.0	.0	.9	.0	1.8	13.6	.0
I	573	I3-24 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE?	.0	1.2	.0	.0	.9	.0	1.8	11.4	.0
I	574	I3-25 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE?	.0	1.9	.0	.0	.9	.0	1.8	15.9	.0
I	575	I3-26 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES?	.0	1.2	.0	6.3	.9	.0	1.8	20.5	.0
I	576	I3-27 DO YOU USE OR REFER TO PLATE VOLTAGE FOR A SPECIFIED BIAS?	.0	4.3	.0	37.5	1.9	.0	.9	36.4	.0
I	577	I3-28 DO YOU USE OR REFER TO PLATE CURRENT FOR A SPECIFIED BIAS?	.0	3.7	.0	12.5	1.9	.0	.0	29.5	.0
I	578	I3-29 DO YOU USE OR REFER TO BIAS REQUIRED FOR CUTOFF?	1.5	5.0	.0	12.5	.9	4.8	.0	40.9	.0
I	579	I3-30 DO YOU USE OR REFER TO BIAS REQUIRED FOR SATURATION?	1.5	5.0	.0	12.5	1.9	4.8	.0	40.9	.0
I	580	I3-31 DO YOU USE OR REFER TO GAIN?	.0	3.1	.0	43.8	.9	4.8	.0	36.4	.0
I	581	I3-32 DO YOU USE OR REFER TO EFFICIENCY?	.0	2.5	.0	6.3	.9	4.8	.0	29.5	.0
I	582	I3-33 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	1.5	4.3	.0	43.8	2.8	4.8	.9	38.6	.0
I	583	I3-34 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	1.5	5.0	.0	37.5	.0	4.8	.9	43.2	.0
I	584	I3-35 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	.0	1.2	.0	18.8	.9	.0	.9	15.9	.0
I	585	I3-36 DO YOU USE OR REFER TO TUBE SOCKET NOTATION?	1.5	5.6	.0	50.0	2.8	.0	.0	47.7	.0
I	586	I3-37 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS?	3.0	8.1	.0	56.3	6.6	.0	.0	47.7	.0
I	587	I3-38 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS?	.0	3.1	.0	18.8	3.8	.0	.0	31.8	.0
I	588	I3-39 DO YOU USE OR REFER TO ELECTRON TUBE DIODES?	1.5	1.9	.0	12.5	2.8	.0	.0	38.6	.0
J	589	J1-1 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM J2-1; IF YES, CONTINUE.	1.5	3.1	.0	6.3	3.8	.0	.9	31.8	.0
J	590	J1-2 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	.0	1.2	.0	.0	.9	.0	.0	15.9	.0
J	591	J1-3 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.0	18.2	.0
J	592	J1-4 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	.0	1.2	.0	.0	.9	.0	.0	27.3	.0
J	593	J1-5 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.0	20.5	.0
J	594	J1-6 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.9	20.5	.0
J	595	J1-7 DO YOU TROUBLESHOOT OR REPAIR - DON'T KNOW WHICH TYPE OF AMPLIFIER?	.0	1.2	.0	6.3	2.8	.0	.0	6.8	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING — FCPT04 PAGE 209

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
J	596	J2-1 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)?	1.5	2.5	.0	25.0	3.8	.0	.9	43.2	.0
J	598	J2-3 DO YOU WORK WITH BEAM POWER TUBES?	1.5	1.2	.0	.0	1.9	.0	.0	38.6	.0
J	599	J2-4 DO YOU WORK WITH THYRATRONS?	1.5	1.9	.0	6.3	.0	.0	.0	31.8	.0
J	600	J2-5 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)?	4.5	13.7	.0	6.3	2.8	4.8	.9	50.0	.0
J	601	J2-6 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	6.1	10.6	.0	18.8	1.9	.0	.9	52.3	.0
J	602	J2-7 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	4.5	9.3	.0	6.3	1.9	.0	.9	38.6	.0
J	603	J2-8 DO YOU USE OR REFER TO PHOSPHOR SCREENS CONCERNING CRT'S?	6.1	13.7	3.4	6.3	1.9	4.8	.0	72.7	.0
J	604	J2-9 DO YOU USE OR REFER TO AQUADAC COATINGS CONCERNING CRT'S?	1.5	1.9	.0	.0	.9	.0	.0	29.5	.0
J	605	J2-10 DO YOU USE OR REFER TO ELECTRON OPTICS CONCERNING CRT'S?	1.5	3.1	.0	6.3	1.9	.0	.0	38.6	.0
J	606	J2-11 DO YOU USE OR REFER TO PERSISTENCE CONCERNING CRT'S?	1.5	1.9	.0	.0	2.8	.0	.0	25.0	.0
J	607	J2-12 DO YOU USE OR REFER TO DECAY TIMES CONCERNING CRT'S?	.0	3.1	.0	.0	1.9	.0	.0	36.4	.0
J	608	J2-13 DO YOU USE OR REFER TO FLOURESCENCE CONCERNING CRT'S?	1.5	5.0	3.4	6.3	1.9	.0	.0	56.8	.0
J	609	J2-14 DO YOU USE OR REFER TO PHOSPHORESCENCE CONCERNING CRT'S?	3.0	5.6	.0	.0	1.9	.0	.0	54.5	.0
J	610	J2-15 DO YOU USE OR REFER TO SHADOW MASK CONCERNING CRT'S?	1.5	3.1	.0	.0	1.9	.0	.0	25.0	.0
J	611	J3-1 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K1-1; IF YES, CONTINUE.	72.7	36.0	10.3	.0	26.4	23.8	22.8	18.2	.0
J	612	J3-2 DO YOU PERFORM TASKS ON FREQUENCY CONVERTER SYSTEMS STAGES?	16.7	9.3	3.4	.0	7.5	.0	.0	13.6	.0
J	613	J3-3 DO YOU PERFORM TASKS ON FREQUENCY MIXER SYSTEMS STAGES?	13.6	3.1	3.4	.0	3.8	.0	.9	13.6	.0
J	614	J3-4 DO YOU PERFORM TASKS ON MODEM SYSTEMS STAGES?	68.2	14.3	3.4	.0	15.1	.0	11.4	11.4	.0
J	615	J3-5 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS?	6.1	.6	.0	.0	.9	.0	.0	11.4	.0
J	616	J3-6 DO YOU PERFORM TASKS ON REACTANCE MODULATOR SYSTEM STAGES?	4.5	.0	3.4	.0	.9	.0	.0	11.4	.0
J	617	J3-7 DO YOU PERFORM TASKS ON MODULATED OSCILLATOR SYSTEM STAGES?	27.3	1.9	3.4	.0	2.8	4.8	.0	13.6	.0
K	618	K1-1 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K2-1; IF YES, CONTINUE.	4.5	2.5	3.4	.0	1.9	.0	1.8	9.1	.0
K	619	K1-2 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	3.4	.0	.9	.0	.9	9.1	.0
K	620	K1-3 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.0	.0	.9	6.8	.0
K	621	K1-4 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.9	9.1	.0
K	622	K1-5 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	3.4	.0	.9	.0	.9	9.1	.0
K	623	K1-6 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	.0	.0	.9	.0	.0	6.8	.0
K	624	K1-7 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.9	9.1	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 5DF (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
K	625	K1-8 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	.0	.0	.9	.0	.0	6.8	.0
K	626	K1-9 DO YOU PERFORM TASKS ON RF OSCILLATORS/SYNTHESIZERS?	1.5	.6	.0	.0	.9	.0	.0	6.8	.0
K	627	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	1.5	.6	.0	.0	.9	.0	.0	9.1	.0
K	629	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	1.5	1.2	.0	.0	.0	.0	.0	9.1	.0
K	629	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	1.5	.6	.0	.0	.0	.0	.0	9.1	.0
K	630	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS?	1.5	.6	.0	.0	.9	.0	.0	6.8	.0
K	631	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	.0	.6	.0	.0	.0	.0	.0	6.8	.0
K	632	K1-15 DO YOU PERFORM TASKS ON DETECTORS?	1.5	.6	.0	.0	.0	.0	.0	9.1	.0
K	633	K1-16 DO YOU PERFORM TASKS ON MIXER AMPLIFIERS?	1.5	.6	.0	.0	.9	.0	.0	6.8	.0
K	634	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS?	.0	1.9	.0	.0	1.9	.0	.9	6.8	.0
K	635	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS?	.0	1.9	.0	.0	.9	.0	.0	6.8	.0
K	636	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS?	.0	1.2	.0	.0	.9	.0	.0	6.8	.0
K	637	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS?	1.5	1.9	.0	.0	.0	.0	.0	6.8	.0
K	638	K2-1 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K3-1; IF YES, CONTINUE.	7.6	1.2	3.4	.0	3.8	.0	1.6	6.8	.0
K	639	K2-2 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	3.4	.0	.9	.0	.9	9.1	.0
K	640	K2-3 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	.0	.0	.9	.0	.9	6.8	.0
K	641	K2-4 DO YOU ALIGN TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	.0	.0	.9	.0	.9	9.1	.0
K	642	K2-5 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	3.4	.0	.9	.0	1.6	9.1	.0
K	643	K2-6 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS?	1.5	.6	3.4	.0	.9	.0	.0	6.8	.0
K	644	K2-7 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	.0	.0	.0	.0	.0	9.1	.0
K	645	K2-8 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS?	3.0	.6	.0	.0	.9	.0	.0	6.8	.0
K	646	K2-9 DO YOU PERFORM LINK PERFORMANCE ASSESSMENTS?	3.0	.6	.0	.0	.9	.0	.0	9.1	.0
K	647	K2-10 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	4.5	.6	.0	.0	1.9	.0	.0	11.4	.0
K	648	K2-11 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS?	4.5	.6	.0	.0	1.9	.0	.0	9.1	.0
K	649	K2-12 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8	.0
K	650	K2-13 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	4.5	.6	.0	.0	1.9	.0	.0	6.8	.0
K	651	K2-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8	.0
K	652	K2-15 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8	.0
K	653	K2-16 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8	.0
K	654	K2-17 DO YOU PERFORM TASKS ON LIMITERS?	1.5	.6	.0	.0	.0	.0	.0	9.1	.0
K	655	K2-18 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS?	1.5	.6	.0	.0	.9	.0	.0	6.8	.0
K	656	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS?	3.0	.6	.0	.0	.9	.0	.0	.0	.0
K	657	K2-20 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS?	3.0	.6	.0	.0	1.9	.0	.0	.0	.0
K	658	K2-21 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSCEIVERS?	1.5	.6	.0	.0	.9	.0	.0	.0	.0
K	659	K2-22 DO YOU MEASURE RECEIVE SIGNAL LEVEL CURVES (RSL)?	1.5	.6	.0	.0	.0	.0	.0	6.8	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
K	660	K3-1 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS?	31.8	6.8	44.8	50.0	4.7	.0	.9	40.9	.0
K	662	K3-3 DO YOU CONVERT DECIMAL NUMBERS TO HEXADECIMAL (BASE 16) NUMBERS?	18.2	5.6	3.4	50.0	5.7	.0	.9	36.4	.0
K	664	K3-5 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS?	30.3	6.2	10.3	43.8	2.8	.0	.9	43.2	.0
K	665	K3-6 DO YOU CONVERT OCTAL NUMBERS TO HEXADECIMAL NUMBERS?	12.1	5.0	.0	50.0	1.9	.0	.0	36.4	.0
K	667	K3-8 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS?	33.3	6.8	20.7	37.5	3.8	.0	.0	40.9	.0
K	668	K3-9 DO YOU CONVERT BINARY NUMBERS TO HEXADECIMAL NUMBERS?	13.6	5.6	.0	62.5	4.7	.0	.0	38.6	.0
K	669	K3-10 DO YOU CONVERT HEXADECIMAL NUMBERS TO DECIMAL NUMBERS?	15.2	5.6	3.4	62.5	3.8	.0	.0	38.6	.0
K	670	K3-11 DO YOU CONVERT HEXADECIMAL NUMBERS TO OCTAL NUMBERS?	12.1	5.0	3.4	50.0	1.9	.0	.0	36.4	.0
K	671	K3-12 DO YOU CONVERT HEXADECIMAL NUMBERS TO BINARY NUMBERS?	12.1	5.6	.0	62.5	5.7	.0	.0	38.6	.0
K	673	K3-14 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD?	27.3	11.8	.0	25.0	2.8	.0	1.8	45.5	.0
K	674	K3-15 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD?	37.9	13.0	.0	43.8	3.8	4.8	4.4	50.0	.0
K	675	K3-16 DO YOU ADD OCTAL NUMBERS?	22.7	6.8	24.1	31.3	1.9	.0	1.8	36.4	.0
K	676	K3-17 DO YOU SUBTRACT OCTAL NUMBERS?	21.2	6.8	17.2	31.3	1.9	.0	1.8	36.4	.0
K	677	K3-18 DO YOU ADD HEXADECIMAL NUMBERS?	12.1	5.6	.0	56.3	1.9	.0	1.8	36.4	.0
K	678	K3-19 DO YOU SUBTRACT HEXADECIMAL NUMBERS?	10.6	5.6	.0	56.3	1.9	.0	.9	36.4	.0
K	679	K3-20 DO YOU DIVIDE BINARY NUMBERS?	27.3	8.7	.0	25.0	2.8	4.8	4.4	36.4	.0
K	680	K3-21 DO YOU MULTIPLY BINARY NUMBERS?	27.3	8.1	.0	31.3	2.8	4.8	4.4	36.4	.0
K	682	K3-23 DO YOU USE OR REFER TO GRAY CODE?	3.0	1.9	.0	6.3	1.9	.0	1.8	22.7	.0
K	683	K3-24 DO YOU USE OR REFER TO ICAO CODE?	1.5	.6	.0	6.3	.0	.0	2.6	9.1	.0
K	684	K3-25 DO YOU USE OR REFER TO EXCESS-3 CODE?	1.5	1.2	.0	.0	.9	.0	1.8	13.6	.0
L	686	L1-2 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	51.5	19.9	6.9	12.5	1.9	4.8	.0	75.0	.0
L	687	L1-3 DO YOU CONSTRUCT TRUTH TABLES FOR 'OR' LOGIC SYSMBOLS OR GATES?	50.0	19.3	6.9	12.5	1.9	4.8	.0	75.0	.0
L	688	L1-4 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	51.5	18.0	6.9	12.5	1.9	4.8	.0	72.7	.0
L	689	L1-5 DO YOU CONSTRUCT TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS OR GATES?	51.5	17.4	6.9	12.5	.9	.0	.0	75.0	.0
L	690	L1-6 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	71.2	32.3	13.8	25.0	1.9	14.3	.0	75.0	.0
L	691	L1-7 DO YOU USE OR REFER TO TRUTH TABLES FOR 'OR' LOGIC SYMBOLS OR GATES?	71.2	32.3	13.8	25.0	1.9	14.3	.0	75.0	.0
L	692	L1-8 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	69.7	30.9	13.8	25.0	1.9	14.3	.0	72.5	.0
L	693	L1-9 DO YOU USE OR REFER TO TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS?	69.7	29.8	6.9	31.3	1.9	4.8	.0	75.0	.0
L	694	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'EXCLUSIVE OR' GATES?	81.8	32.3	20.7	31.3	1.9	14.3	.0	77.3	.0
L	695	L1-14 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR INHIBITED 'AND' GATES?	78.8	34.2	24.1	31.3	.9	14.3	.0	75.0	.0
L	696	L1-15 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "E" BARS?	60.6	4.3	.0	.0	1.9	.0	.0	13.6	.0
L	697	L1-16 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "M" BARS?	60.6	3.1	.0	.0	.9	.0	.0	13.6	.0
L	701	L1-17 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR COMBINERS?	69.0	8.7	.0	6.3	.9	.0	.0	25.0	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
L	702	L1-18 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS?	75.8	29.8	3.4	31.3	.9	19.0	.0	72.7	.0
L	703	L1-19 DO YOU USE OR REFER TO ONE-SHOT MULTIVIBRATOR SYMBOLS?	71.2	22.4	3.4	18.8	.9	9.5	.0	70.5	.0
L	705	L1-21 DO YOU USE OR REFER TO ONE-SHOT CIRCUIT OR SCHEMATIC DIAGRAMS?	71.2	21.7	13.3	18.8	.9	9.5	.0	73.5	.0
L	706	L1-22 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES?	63.6	29.8	.0	18.8	1.9	14.3	.0	61.4	.0
L	707	L1-23 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	45.5	17.4	.0	12.5	.0	.0	.0	45.5	.0
L	708	L1-24 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS?	48.5	17.4	.0	12.5	.9	.0	.0	45.5	.0
L	709	L1-25 DO YOU USE OR REFER TO NONCOMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	36.4	14.3	3.4	6.3	.9	.0	.0	43.2	.0
L	710	L1-26 DO YOU CONSTRUCT TRUTH TABLES FOR "B" BARS?	25.8	1.2	.0	6.3	.9	.0	.0	9.1	.0
L	711	L1-27 DO YOU CONSTRUCT TRUTH TABLES FOR "M" BARS?	27.3	1.2	.0	6.3	.9	.0	.0	9.1	.0
L	712	L1-28 DO YOU CONSTRUCT TRUTH TABLES FOR COMBINERS?	27.3	4.3	.0	6.3	.9	.0	.0	11.4	.0
L	713	L1-29 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS?	57.6	19.9	.0	25.0	.9	4.8	.0	61.4	.0
L	714	L1-30 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS?	54.5	19.9	.0	12.5	.9	.0	.0	47.7	.0
L	715	L1-31 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	57.0	18.4	.0	12.5	.9	.0	.0	47.7	.0
L	716	L1-32 DO YOU TRACE DATA FLOW THROUGH NONCOMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	48.5	16.1	.0	12.5	.0	.0	.0	47.7	.0
L	717	L1-33 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS?	47.0	16.1	.0	6.3	.0	.0	.0	47.7	.0
L	718	L1-1 DO YOU OR DID YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS? IF NO, GO TO ITEM L2-1; IF YES, CONTINUE.	87.9	76.9	96.6	87.5	96.2	95.2	100.0	93.2	76.9
L	719	L2-2 DO YOU APPLY LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS?	7.4	3.0	.0	.0	.0	.0	.0	2.3	.0
L	720	L2-3 DO YOU CONSTRUCT TRUTH TABLES FOR COMPLEMENT MODE LOGIC (CML) CIRCUITS?	7.4	3.0	.0	6.3	.0	.0	.0	2.3	.0
L	721	L2-4 DO YOU DERIVE BOOLEAN EQUATIONS FROM DIGITAL BOOLEAN EQUATIONS?	16.7	5.1	.0	.0	.0	.0	.0	4.5	.0
L	722	L2-5 DO YOU APPLY THE PRINCIPLES OF LOGIC GATES	37.0	14.4	.0	.0	3.8	.0	.0	11.4	.0
L	723	L2-6 DO YOU ANALYZE BOOLEAN EQUATIONS IN TERMS OF SUBCOMBINATIONAL DIGITAL CIRCUITS?	12.1	5.0	.0	.0	.0	.0	.0	4.5	.0
L	724	L2-7 DO YOU SIMPLIFY USING BOOLEAN ALGEBRA	14.8	5.1	.0	.0	.0	.0	.0	4.5	.0
L	725	L2-8 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS?	15.2	8.1	.0	6.3	1.9	.0	.0	6.8	.0
L	726	L2-9 DO YOU CONSTRUCT TRUTH TABLES FOR COMPLEMENT MODE LOGIC (CML) CIRCUITS?	7.6	5.0	.0	6.3	.0	.0	.0	4.5	.0
L	727	L2-10 DO YOU USE OR REFER TO DIAGRAMS CONSISTING OF MODE [illegible]	27.3	10.8	.0	12.5	.0	.0	.0	9.1	.0
L	728	L2-11 DO YOU MEASURE [illegible] FOR DIGITAL [illegible]	9.1	5.0	.0	.0	.0	.0	.0	.0	.0

PERCENT 7-SKILL LEVEL MEMBERS PERFORMING

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
L	729	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS?	22.7	8.7	.0	.0	.9	.0	.0	29.5	.0
L	730	L3-1 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M1-1; IF YES, CONTINUE.	72.7	22.4	.0	25.0	4.7	9.5	.0	59.1	.0
L	731	L3-2 DO YOU USE OR REFER TO UP-COUNTERS?	63.6	20.5	.0	25.0	4.7	14.3	.0	52.3	.0
L	732	L3-3 DO YOU USE OR REFER TO DOWN-COUNTERS?	59.1	17.4	.0	18.8	1.9	9.5	.0	50.0	.0
L	733	L3-4 DO YOU USE OR REFER TO SERIAL COUNTERS?	63.6	20.5	.0	6.3	1.9	9.5	.0	40.9	.0
L	734	L3-5 DO YOU USE OR REFER TO PARALLEL COUNTERS?	54.5	16.1	.0	6.3	.9	9.5	.0	38.6	.0
L	735	L3-6 DO YOU USE OR REFER TO RING COUNTERS?	34.8	10.6	3.4	6.3	1.9	.0	.0	31.8	.0
L	736	L3-7 DO YOU USE OR REFER TO DECADE (MOD 10) COUNTERS?	21.2	8.7	.0	12.5	1.9	.0	.9	40.9	.0
L	738	L3-9 DO YOU USE OR REFER TO DOWN CLOCKS?	50.0	16.8	3.4	6.3	1.9	9.5	.0	52.3	.0
L	739	L3-10 DO YOU USE OR REFER TO UP CLOCKS?	50.0	16.1	3.4	6.3	1.9	9.5	.0	54.5	.0
L	740	L3-11 DO YOU USE OR REFER TO OTHER MODULOUS COUNTERS?	27.3	5.6	.0	6.3	.9	.0	.0	34.1	.0
L	741	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS?	53.0	16.8	.0	12.5	.9	.0	.9	47.7	.0
L	742	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS?	50.0	14.9	.0	12.5	.9	.0	.9	45.5	.0
L	743	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-DOWN COUNTERS?	39.4	12.4	.0	12.5	.9	.0	.9	43.2	.0
L	744	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS?	27.3	8.1	.0	6.3	.9	.0	.9	38.6	.0
L	745	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS?	30.3	9.3	.0	6.3	.9	.0	.9	29.5	.0
L	746	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF COUNTERS FEEDING STORAGE REGISTERS?	43.9	14.3	6.9	6.3	1.9	.0	.0	36.4	.0
L	747	L3-18 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS?	60.6	14.9	3.4	6.3	1.9	.0	.0	38.6	.0
L	748	L3-19 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS?	37.9	6.2	.0	.0	1.9	4.8	.0	27.3	.0
L	749	L3-20 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS?	16.7	4.3	.0	6.3	.9	.0	.0	31.8	.0
L	750	L3-21 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES?	34.8	11.2	.0	6.3	.9	.0	.0	31.8	.0
L	751	L3-22 DO YOU DETERMINE THE APPROPRIATE 'AND' GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT?	51.5	13.7	.0	6.3	1.9	.0	.0	40.9	.0
M	752	M1-1 DO YOU WORK WITH SAWTOOTH WAVE GENERATOR TIMING CIRCUITS?	42.4	12.4	.0	12.5	.0	.0	.0	75.0	.0
M	753	M1-2 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATOR TIMING CIRCUITS?	15.2	5.6	.0	6.3	.9	.0	.0	54.5	.0
M	754	M1-3 DO YOU WORK WITH PULSED OSCILLATOR TIMING CIRCUITS?	37.9	14.9	.0	12.5	1.9	4.8	.9	72.7	.0
M	755	M1-4 DO YOU WORK WITH BLOCKING OSCILLATOR TIMING CIRCUITS?	15.2	5.6	.0	6.3	.9	.0	.0	38.6	.0
M	756	M1-5 DO YOU WORK WITH MASTER STATION TIMING CIRCUITS?	37.9	6.2	.0	6.3	.9	9.5	.0	25.0	.0
M	757	M1-6 DO YOU USE OR REFER TO RISE TIME?	33.3	14.9	.0	50.0	.9	.0	.0	68.2	.0
M	758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	21.2	14.3	.0	50.0	.9	.0	.0	56.8	.0
M	759	M1-8 DO YOU USE OR REFER TO SWEEP TIME?	39.4	19.3	.0	43.8	3.8	.0	.0	77.3	.0
M	760	M1-9 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS?	16.7	11.2	.0	6.3	1.9	.0	.0	56.8	.0

PERCENT S-SKILL LEVEL MEMBERS PERFORMING

FCPTO4 PAGE 214

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	919 50 (M)	MIN IMA *<4
M	761	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS?	22.7	13.0	.0	12.5	1.9	.0	.0	56.8	.0
M	762	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS?	16.7	7.5	.0	6.3	1.9	.0	.0	45.5	.0
M	763	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS?	15.2	6.8	.0	6.3	1.9	.0	.0	43.2	.0
M	764	M2-1 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M3-1; IF YES, CONTINUE.	28.8	59.0	.0	68.8	27.4	81.0	15.6	75.0	.0
M	765	M2-2 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS?	22.7	55.3	.0	56.3	26.8	71.4	12.5	75.0	.0
M	766	M2-3 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS?	21.2	47.2	.0	31.2	14.2	28.6	7.8	59.1	.
M	767	M2-4 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS?	19.7	44.7	.0	12.5	17.4	28.6	7.8	54.5	.0
M	768	M2-5 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS?	18.2	32.3	.0	12.5	4.3	14.2	3.9	52.3	.0
M	769	M2-6 DO YOU USE AUDIO SINE-WAVE GENERATORS?	18.2	4.7	.0	50.0	17.3	42.4	4.6	52.3	.0
M	770	M2-7 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE?	12.1	6.0	.0	31.2	4.3	.0	.0	47.7	.0
M	771	M2-8 DO YOU USE RF GENERATORS LESS THAN 1,000 MH?	4.5	6.0	.0	6.2	2.4	.0	.0	4.5	.0
M	772	M2-9 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH?	4.5	1.2	.0	6.2	1.9	.0	.0	27.3	.0
M	773	M2-10 DO YOU USE WHITE NOISE GENERATORS?	.0	.6	.0	.0	1.9	.0	.0	13.6	.0
M	774	M2-11 DO YOU USE SWEEP GENERATORS?	4.5	27.9	.0	.0	4.3	4.7	.0	9.1	.0
M	775	M2-12 DO YOU USE A HETERODYNE GENERATOR?	.0	5.0	.0	.0	1.9	.0	.0	2.2	.0
M	776	M2-13 DO YOU USE TIME MARK GENERATORS?	.0	5.6	.0	.0	.0	.0	.0	11.4	.0
M	777	M2-14 DO YOU USE SPECIAL PURPOSE OR MULTIFUNCTION GENERATORS?	7.6	13.7	.0	6.2	.0	.0	.0	9.1	.
M	778	M3-5 DO YOU REPLACE COMPLETE MOTORS?	24.2	32.4	.	43.7	.	.	.	.	.
M	779	M3-6 DO YOU REPLACE MOTOR PARTS?	48.5	73.7	.	43.7	.	.	.	.	.
M	780	M3-7 DO YOU REPLACE COMMUTATORS OR COMMUTATOR PARTS OF MOTORS?	27.2	1.2	.0	.	.	.	.	.	.
M	781	M3-8 DO YOU REPLACE BRUSHES IN MOTORS?	18.2	5.0	.	.	.	.	.	.	.
M	782	M3-9 DO YOU REPLACE BEARINGS IN MOTORS?	30.3	46.5	.	.	.	.	.	.	.
M	783	M3-10 DO YOU REPLACE ARMATURES IN MOTORS?	27.2	31.6	.	.	.	.	.	.	.
M	784	M3-11 DO YOU REPLACE FIELD COILS IN MOTORS?	12.1	1.8	.	.	.	.	.	.	.
M	785	M3-12 DO YOU REPLACE BRUSH SPRINGS IN MOTORS?	7.5	1.2	.	.	.	.	.	.	.
M	786	M3-13 DO YOU REPLACE BRUSH HOLDERS IN MOTORS?	7.5	1.2	.0	.	.	.	.	.	.
M	787	M3-14 DO YOU REPLACE BRUSH HOLDER ASSEMBLIES IN MOTORS?	10.6	1.2	.	.	.	.	.	.	.
M	788	M3-15 DO YOU REPLACE BRUSH HOLDER ASSEMBLIES IN MOTORS?	10.6	10.6	.	.	.	.	.	.	.
M	789	M3-16 DO YOU REPLACE BRUSH HOLDER ASSEMBLIES IN MOTORS?	10.6	10.6	.	.	.	.	.	.	.
M	790	M3-17 DO YOU REPLACE BRUSH HOLDER ASSEMBLIES IN MOTORS?	10.6	10.6	.	.	.	.	.	.	.
M	791	M3-18 DO YOU REPLACE BRUSH HOLDER ASSEMBLIES IN MOTORS?	10.6	10.6	.	.	.	.	.	.	.
M	792	M3-19 DO YOU REPLACE BRUSH HOLDER ASSEMBLIES IN MOTORS?	10.6	10.6	.	.	.	.	.	.	.
M	793	M3-20 DO YOU REPLACE BRUSH HOLDER ASSEMBLIES IN MOTORS?	10.6	10.6	.	.	.	.	.	.	.
M	794	M3-21 DO YOU REPLACE BRUSH HOLDER ASSEMBLIES IN MOTORS?	10.6	10.6	.	.	.	.	.	.	.
M	795	M3-22 DO YOU REPLACE BRUSH HOLDER ASSEMBLIES IN MOTORS?	10.6	10.6	.	.	.	.	.	.	.

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
M	800	M3-23 DO YOU WORK WITH SERVOS OR SYNCHROS MOTORS?	9.1	13.0	3.4	6.3	5.7	.0	.0	72.7	.0
M	801	M3-24 DO YOU WORK WITH SHADED-POLE MOTORS?	4.5	1.9	.0	.0	1.9	.0	.0	31.8	.0
M	802	M3-25 DO YOU INSPECT GENERATORS OR ALTERNATORS?	60.6	8.1	34.5	.0	6.6	.0	.0	40.9	.0
M	803	M3-26 DO YOU CLEAN OR LUBRICATE GENERATORS OR ALTERNATORS?	59.1	6.8	6.9	.0	6.6	.0	.0	40.9	.0
M	804	M3-27 DO YOU OPERATE GENERATORS OR ALTERNATORS?	57.6	7.5	37.9	.0	7.5	.0	.0	40.9	.0
M	805	M3-28 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS OR ALTERNATORS?	62.1	5.6	3.4	.0	3.8	.0	.0	31.8	.0
M	806	M3-29 DO YOU REMOVE OR REPLACE GENERATOR, ALTERNATOR, OR PARTS?	40.9	6.2	3.4	.0	4.7	.0	.9	29.5	.0
M	807	M3-30 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS OR ALTERNATORS?	50.0	5.6	20.7	.0	5.7	.0	.9	36.4	.0
M	808	M3-31 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS OR ALTERNATORS?	30.3	5.0	17.2	.0	3.8	.0	.0	27.3	.0
N	810	N1-11 DO YOU CONSIDER BALLASTIC RESPONSE OF METER MOVEMENTS?	6.1	6.2	3.4	.0	7.5	.0	2.6	18.2	.0
N	821	N2-1 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N3-1; IF YES, CONTINUE.	1.5	.6	.0	25.0	1.9	.0	.0	13.6	.0
N	822	N2-2 DO YOU INSPECT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	12.5	1.9	.0	.0	9.1	.0
N	823	N2-3 DO YOU CLEAN SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	12.5	1.9	.0	.0	6.8	.0
N	824	N2-4 DO YOU ADJUST SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	6.3	1.9	.0	.0	6.8	.0
N	825	N2-5 DO YOU TROUBLESHOOT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	18.8	.9	.0	.0	9.1	.0
N	826	N2-6 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS?	.0	.6	.0	18.8	.9	.0	.0	9.1	.0
N	827	N2-7 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS?	.0	.6	.0	18.8	.0	.0	.0	6.8	.0
N	828	N2-8 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS?	.0	.6	.0	.0	.9	.0	.0	4.5	.0
N	829	N2-9 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	.0	1.2	.0	6.3	.9	.0	.0	6.8	.0
N	830	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	1.5	.6	.0	12.5	.9	.0	.0	9.1	.0
N	831	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS?	1.5	1.9	.0	6.3	.0	.0	.0	6.8	.0
N	832	N2-12 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS?	1.5	1.9	.0	18.8	.0	.0	.0	9.1	.0
N	833	N3-1 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 01-1; IF YES, CONTINUE.	43.9	21.1	3.4	12.5	2.8	.0	1.6	68.2	.0
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	31.8	15.5	.0	.0	1.9	.0	.0	59.1	.0
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	34.8	16.8	.0	.0	2.8	.0	.0	63.6	.0
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	19.7	11.8	.0	.0	2.8	.0	.0	54.5	.0
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	18.2	9.3	3.4	.0	2.8	.0	.0	54.5	.0

PERCENT S-SKILL LEVEL MEMBERS PERFORMING — FCPTCM PAGE 216 — OCCUPATIONAL ANALYSIS PROGRAM USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
N	838	N3-6 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS?	28.8	7.5	.0	.0	1.9	.0	.0	59.1	.0
N	839	N3-7 DO YOU USE OR REFER TO INTEGRATING CIRCUITS?	20.8	11.2	.0	6.3	1.9	.0	.0	67.5	.0
N	840	N3-8 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT?	16.7	9.3	.0	6.7	.0	.0	.0	40.9	.0
N	841	N3-9 DO YOU DETERMINE WHETHER AN LP OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION?	15.2	5.0	.0	.0	.0	.0	.0	30.1	.0
N	842	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATOR SOLID STATE CIRCUITS?	37.7	18.6	.0	6.3	.0	.0	.0	68.2	.0
N	843	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATOR SOLID STATE CIRCUITS?	5.1	7.5	.0	.0	.0	.0	.0	52.4	.0
N	844	N3-12 DO YOU WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATOR SOLID STATE CIRCUITS?	21.0	9.9	.	6.3	.0	.0	.0	47.3	.0
N	845	N3-13 DO YOU WORK WITH RAMP (TRAPEZOIDAL) GENERATOR SOLID STATE CIRCUITS?	7.6	7.5	.0	.0	.0	.0	.0	41.4	.0
N	846	N3-14 DO YOU WORK WITH FUNCTION GENERATOR SOLID STATE CIRCUITS?	17.6	5.0	.	.0	.0	.0	.0	48.7	.
N	847	N3-15 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS?	28.8	12.4	.	6.3	.0	.0	.0	61.1	.0
N	848	N3-16 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS?	21.0	10.6	.	6.3	.6	.0	.0	52.3	.0
N	849	N3-17 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS?	17.6	6.2	.	.	.0	.0	.0	43.0	.
N	850	N3-18 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS?	17.0	13.0	.	6.3	.0	.0	.0	57.1	.
N	851	N3-19 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS?	30.7	13.0	.	.	.0	.0	.0	57.1	.
N	852	N3-20 DO YOU REMOVE OR REPLACE COMPONENTS WAVE GENERATING OR SHAPING CIRCUITS?	1.6	7.5	.	.	.	.	.	.	.
N	853	N3-21 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS?	15.7	11.2	.	.	.	.	.	.	.
N	854	N3-22 DO YOU [illegible] IN [illegible] CONDITION?	5.1	3.1	12.5	.	.	.	.	.	.
N	855	N3-23 DO YOU [illegible] YOUR [illegible]	1.6	.	6.3	.	.	.	.	.	.
N	856	N3-24 DO YOU [illegible] OR I [illegible] CIRCUITS?	1.6	1.2	.	.	.	.	.	.	.
N	857	N3-25 DO YOU [illegible] OR I [illegible]	1.6	1.2	.	.	.	.	.	.	.
N	858	N3-26 DO YOU [illegible] OR RECEIVE SYSTEMS?	1.6	1.2	12.5	.	.	.	.	.	.
N	859	N3-27 DO YOU [illegible] SIDE BAND (SSB) OR [illegible] OR RECEIVE COMPONENTS?	1.6	1.2	7.1	.	.	.	.	.	.
N	860	N3-28 DO YOU [illegible] SINGLE SIDE BAND (SSB) OR [illegible] OR RECEIVE SYSTEMS?	3.0	.6	7.1	.	.	.0	.	.	.
N	861	N3-29 DO YOU [illegible] SINGLE SIDE BAND (SSB) OR [illegible] OR RECEIVE COMPONENTS?	3.0	.6	.	.	.	.	.	.	.
N	862	N3-30 DO YOU USE TRANSMIT OR RECEIVE [illegible] SYSTEM A [illegible] DIAGRAM?	7.0	1.2	.	.	.	.	.	.	.

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
0 863	01-10 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM BALANCED MODULATOR STAGE?	1.5	1.2	.0	.0	.0	.0	.0	.0	.0
0 864	01-11 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CARRIER OSCILLATOR STAGE?	1.5	1.2	.0	.0	.0	.0	.0	.0	.0
0 865	01-12 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM LC FILTER STAGE?	1.5	.6	.0	.0	.0	.0	.0	.0	.0
0 866	01-13 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CRYSTAL FILTER STAGE?	.0	.6	.0	.0	.9	.0	.0	.0	.0
0 867	01-14 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MECHANICAL FILTER STAGE?	.0	.6	.0	.0	.9	.0	.0	.0	.0
0 868	01-15 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM OSCILLATOR STAGE?	3.0	1.2	3.4	.0	.9	.0	.0	.0	.0
0 869	01-16 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MIXER STAGE?	1.5	1.2	.0	.0	.9	.0	.0	.0	.0
0 870	01-17 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DRIVER STAGE?	3.0	1.2	.0	.0	.0	.0	.0	.0	.0
0 871	01-18 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM POWER AMPLIFIER STAGES?	1.5	1.2	6.9	.0	.0	.0	.0	.0	.0
0 872	01-19 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM RF AMPLIFIER STAGE?	1.5	.6	3.4	.0	.0	.0	.0	.0	.0
0 873	01-20 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM FREQUENCY CONVERTER STAGES?	.0	.6	3.4	.0	.9	.0	.0	.0	.0
0 874	01-21 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM IF AMPLIFIER STAGE?	.0	1.2	.0	.0	.0	.0	.0	.0	.0
0 875	01-22 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DEMODULATOR STAGE?	1.5	1.2	6.9	.0	.9	.0	.0	.0	.0
0 876	01-23 DO YOU USE OR REFER TO SELECTIVE FADING WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	3.4	.0	.0	.0	.0	.0	.0
0 877	01-24 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	3.4	.0	.0	.0	.0	.0	.0
0 878	01-25 DO YOU USE OR REFER TO FREQUENCY STABILITY WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	.0	.0
0 879	01-26 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.6	.0	.0	.0	.0	.0	.0	.0
0 880	01-27 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB OR ISB TRANSMITTERS?	.0	.6	.0	.0	.0	.0	.0	.0	.0
0 881	01-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB TRANSMITTER SCHEMATIC DIAGRAMS?	1.5	1.2	.0	.0	.0	.0	.0	.0	.0
0 882	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB RECEIVER SCHEMATIC DIAGRAMS?	1.5	.6	.0	.0	.0	.0	.0	.0	.0
0 883	01-30 DO YOU PERFORM AERONAUTIC STATION ASSESSMENT PROGRAMS (ASAP)?	.0	.6	.0	.0	.9	.0	.0	.0	.0
0 884	02-1 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 03-1; IF YES, CONTINUE.	1.5	1.9	.0	.0	2.8	.0	2.6	13.6	.0
0 885	02-2 DO YOU INSPECT PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	1.8	13.6	.0
0 886	02-3 DO YOU REPAIR PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	1.8	13.6	.0
0 887	02-4 DO YOU ALIGN PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.6	.0	.9	13.6	.0
0 888	02-5 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	2.6	13.6	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPT04 PAGE 218

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
0	889	02-6 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS?	1.5	1.2	.0	.0	.9	.0	1.8	13.6	.0
0	890	02-7 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	2.6	11.4	.0
0	891	02-8 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS?	1.5	1.2	.0	.0	.0	.0	1.8	13.6	.0
0	892	02-9 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) PULSE MODULATION SYSTEMS?	1.5	.0	.0	.0	1.9	.0	.0	15.9	.0
0	893	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) PULSE MODULATION SYSTEMS?	3.0	.6	.0	.0	1.9	.0	1.8	15.9	.0
0	894	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) PULSE MODULATION SYSTEMS?	1.5	.0	.0	.0	2.8	.0	.9	11.4	.0
0	895	02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) PULSE MODULATION SYSTEMS?	4.5	.0	.0	.1	.9	.0	.9	11.4	.0
0	896	02-13 DO YOU WORK ON LINE PULSING MODULATION PULSE MODULATION SYSTEMS?	7.0	.6	.0	.0	2.8	.0	1.8	11.4	.0
0	897	02-14 DO YOU WORK ON TIME DIVISION MULTIPLEXING (TDM) PULSE MODULATION SYSTEMS?	4.5	.6	.0	.1	.9	.0	.9	13.6	.0
0	898	02-15 DO YOU WORK ON - DON'T KNOW WHICH TYPE OF MODULATION SYSTEM?	7.0	.0	.0	.0	.9	.0	2.8	9.1	.0
0	899	02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLY STAGE?	.0	.6	.0	.0	.9	.0	.0	15.9	.0
0	900	02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODE STAGE?	.0	.0	.0	.1	.0	.0	.9	9.1	.0
0	901	02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORK STAGE?	1.5	.6	.0	.0	2.8	.0	.9	11.4	.0
0	902	02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMER STAGE?	1.5	.0	.0	.0	.9	.0	.9	9.1	.0
0	903	02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRON STAGE?	.0	.0	.0	.0	.0	.0	.9	9.1	.0
0	904	02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMER STAGE?	1.5	.0	.0	.0	.0	.0	.9	9.1	.0
0	905	02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBE STAGE?	.0	.6	.0	.0	.9	.0	.9	9.1	.0
0	906	02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIER STAGE?	1.5	.6	.0	.0	.9	.0	.9	9.1	.0
0	907	02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTER STAGE?	1.5	.0	.0	.0	1.9	.0	.9	9.1	.0
0	908	02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIER STAGE?	1.5	.6	.0	.0	.9	.0	.9	9.1	.0
0	909	02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTOR STAGE?	1.5	.0	.0	.0	.9	.0	.9	9.1	.0
0	910	02-27 DO YOU PERFORM TASKS ON A PULSE MODULATION SYSTEM VIDEO AMPLIFIER STAGE?	.0	1.2	.0	.0	.9	.0	.9	9.1	.0
0	911	02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIER STAGE?	.0	.0	.0	.0	.0	.0	.9	9.1	.0
0	912	02-29 DO YOU USE OR REFER TO PULSE RECURRANCE FREQUENCY (PRF) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	.6	.0	.0	.9	.0	.9	9.1	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *C*
0	913	02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	.9	.0	.0	13.6	.0
0	914	02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.0	15.9	.0
0	915	02-32 DO YOU USE OR REFER TO PULSE SHAPE WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	.0	.0	.0	15.9	.0
0	916	02-33 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	13.6	.0
0	917	02-34 DO YOU USE OR REFER TO AVERAGE POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	11.4	.0
0	918	02-35 DO YOU USE OR REFER TO DUTY CYCLE (DC) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	.6	.0	.0	.0	.0	.0	11.4	.0
0	919	02-36 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	1.5	.6	.0	.0	.0	.0	.0	9.1	.0
0	920	02-37 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	1.5	.6	.0	.0	.0	.0	.0	11.4	.0
0	921	02-38 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS?	1.5	.0	.0	.0	.0	.0	.0	6.8	.0
0	922	02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS?	1.5	1.2	.0	.0	.9	.0	1.8	13.6	.0
0	923	02-40 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS?	1.5	.6	.0	.0	.9	.0	.9	13.6	.0
0	924	03-1 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P1-1; IF YES, CONTINUE.	1.5	5.6	20.7	.0	.9	.0	1.8	6.8	.0
0	925	03-2 DO YOU INSPECT ANTENNAS?	1.5	4.3	17.2	.0	.0	.0	.9	6.8	.0
0	926	03-3 DO YOU CLEAN ANTENNAS?	1.5	3.7	.0	.0	.0	.0	.0	2.3	.0
0	927	03-4 DO YOU PHYSICALLY ALIGN ANTENNAS?	1.5	3.1	6.9	.0	.0	.0	.0	4.5	.0
0	928	03-5 DO YOU ELECTRICALLY ALIGN ANTENNAS?	.0	2.5	3.4	.0	.0	.0	.0	2.3	.0
0	929	03-6 DO YOU TROUBLESHOOT TO ANTENNAS?	1.5	3.1	24.1	.0	.0	.0	.0	4.5	.0
0	930	03-7 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS?	.0	1.9	6.9	.0	.0	.0	.0	4.5	.0
0	931	03-8 DO YOU REMOVE OR INSTALL ANTENNAS?	1.5	3.1	.0	.0	.0	.0	.0	4.5	.0
0	932	03-9 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS?	.0	1.9	.0	.0	.0	.0	.0	4.5	.0
0	933	03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES?	.0	2.5	.0	.0	.0	.0	.0	2.3	.0
0	934	03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES?	.0	1.9	.0	.0	.0	.0	.0	2.3	.0
0	935	03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS?	1.5	1.9	.0	.0	.0	.0	.0	2.3	.0
0	936	03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS RESISTIVE LOADS TO THE GENERATOR?	.0	1.2	.0	.0	.0	.0	.0	2.3	.0
0	937	03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR?	3.0	.6	.0	.0	1.9	.0	1.8	2.3	.0
0	938	03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR?	1.5	.6	.0	.0	.0	.0	.9	2.3	.0
0	939	03-16 DO YOU WORK WITH HERTZ BASIC ANTENNAS?	.0	1.2	13.8	.0	.0	.0	.0	2.3	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
C	940	03-17 DO YOU WORK WITH MARCONI BASIC ANTENNAS?	.0	.6	3.4	.0	.0	.0	.0	.0	.0
O	941	03-18 DO YOU WORK WITH RHOMBIC BASIC ANTENNAS?	.0	.6	.0	.0	.0	.0	.0	.0	.0
O	942	03-19 DO YOU WORK WITH DIPOLE BASIC ANTENNAS?	.0	3.1	6.9	.0	.9	.0	.0	2.3	.0
O	943	03-20 DO YOU WORK WITH SCIMITAR BASIC ANTENNAS?	.0	.0	.0	.0	.9	.0	.0	.0	.0
O	944	03-21 DO YOU WORK WITH PARABOLIC BASIC ANTENNAS?	.0	3.1	.0	.0	.0	.0	.0	.0	.0
O	945	03-22 DO YOU WORK WITH GROUND PLANE BASIC ANTENNAS?	.0	3.7	3.4	.0	.0	.0	.0	4.5	.0
O	946	03-23 DO YOU WORK WITH FOLDED DIPOLE BASIC ANTENNAS?	.0	2.5	6.9	.0	.0	.0	.0	2.3	.0
O	947	03-24 DO YOU WORK WITH BROADSIDE ARRAYS?	.0	1.2	.0	.0	.0	.0	.0	.0	.0
O	948	03-25 DO YOU WORK WITH END-FIRE ARRAYS?	1.5	1.2	3.4	.0	.0	.0	.0	.0	.0
O	949	03-26 DO YOU WORK WITH CARDIOID ARRAYS?	1.5	1.2	.0	.0	.0	.0	.0	.0	.0
O	950	03-27 DO YOU WORK WITH COLLINEAR ARRAYS?	1.5	.6	.0	.0	.0	.0	.0	.0	.0
O	951	03-28 DO YOU WORK WITH PHASE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
O	952	03-29 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	4.5	.0
C	953	03-30 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS?	.0	.6	.0	.0	.0	.0	.0	.0	.0
O	954	03-31 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS?	.0	1.2	.0	.0	.0	.0	.0	4.5	.0
O	955	03-32 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
C	956	03-33 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION?	.0	1.2	.0	.0	.0	.0	.0	2.3	.0
O	957	03-34 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD?	.0	1.2	.0	.0	.0	.0	.0	2.3	.0
O	958	03-35 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED?	.0	1.2	.0	.0	.0	.0	.0	2.3	.0
O	959	03-36 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED?	.0	.6	.0	.0	.0	.0	.0	.0	.0
O	960	03-37 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON?	.0	.6	.0	.0	.0	.0	.0	2.3	.0
O	961	03-38 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS?	.0	2.5	.0	.0	.0	.0	.0	2.3	.0
O	962	03-39 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS?	.0	1.2	.0	.0	.0	.0	.0	.0	.0
O	963	03-40 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS?	.0	1.2	.0	.0	.0	.0	.0	.0	.0
O	964	03-41 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN - DON'T KNOW WHAT KIND OF ELEMENT?	.0	2.5	17.2	.0	.0	.0	.0	2.3	.0
O	965	03-42 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS?	.0	3.7	6.9	.0	.0	.0	.0	.0	.0
O	966	03-43 DO YOU WORK ON BIDIRECTIONAL ANTENNAS?	.0	3.7	3.4	.0	.0	.0	.0	.0	.0
O	967	03-44 DO YOU WORK ON OMNIDIRECTIONAL ANTENNAS?	1.5	4.3	17.2	.0	.0	.0	.0	4.5	.0
O	968	03-45 DO YOU WORK WITH ROTARY ANTENNA ARRAYS?	.0	2.5	3.4	.0	.0	.0	.0	.0	.0
R	969	P1-1 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES? (DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES.) IF NO, GO TO ITEM P2-1; IF YES, CONTINUE.	7.6	14.9	.0	.0	39.6	23.8	34.2	4.5	.0

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P	970	P1-2 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE COPPER LOSS OR 'I SUB 2 R' LOSS IN TRANSMISSION LINES?	1.5	1.9	.0	.0	5.7	4.8	1.8	2.3	.0
P	971	P1-3 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES?	1.5	.6	.0	.0	6.6	.0	.9	2.3	.0
P	972	P1-4 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE RADIATION LOSS?	3.0	3.1	.0	.0	4.7	.0	.0	2.3	.0
P	973	P1-5 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE DIELECTRIC LOSS?	3.0	1.2	.0	.0	8.5	.0	.0	2.3	.0
P	974	P1-6 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE LEAKAGE LOSSES?	4.5	5.0	.0	.0	10.4	.0	3.5	2.3	.0
P	975	P1-7 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE FARADAY SHIELD?	1.5	2.5	.0	.0	3.8	.0	1.8	2.3	.0
P	976	P1-8 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES?	3.0	10.6	.0	.0	36.8	23.8	26.3	.0	.0
P	977	P1-9 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES?	1.5	8.1	.0	.0	16.0	4.8	14.0	2.3	.0
P	978	P1-10 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES?	4.5	8.7	.0	.0	18.9	4.8	14.0	2.3	.0
P	979	P1-11 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES?	6.1	11.8	.0	.0	11.3	.0	7.9	4.5	.0
P	980	P1-12 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES?	3.0	5.6	.0	.0	5.7	.0	2.6	.0	.0
P	981	P1-13 DO YOU TROUBLESHOOT TRANSMISSION LINES?	4.5	10.6	.0	.0	35.8	19.0	33.3	4.5	.0
P	982	P1-14 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)?	3.0	8.7	.0	.0	22.6	4.8	7.0	2.3	.0
P	983	P1-15 DO YOU SELECT APPROPRIATE TRANSMISSION LINE TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS?	3.0	1.9	.0	.0	5.7	.0	.0	4.5	.0
P	984	P1-16 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS?	3.0	7.5	.0	.0	15.1	19.0	8.8	4.5	.0
P	985	P1-17 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	.0	.6	.0	.0	1.9	.0	.0	2.3	.0
P	986	P1-18 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	.0	.6	.0	.0	1.9	.0	.0	2.3	.0
P	987	P1-19 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS?	.0	.6	.0	.0	1.9	.0	.0	2.3	.0
P	988	P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS?	1.5	1.9	.0	.0	14.2	14.3	2.6	2.3	.0
P	989	P1-21 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING?	.0	.0	.0	.0	1.9	.0	1.8	2.3	.0
P	990	P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES?	.0	.0	.0	.0	5.7	9.5	1.8	4.5	.0
P	991	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES?	.0	.0	.0	.0	4.7	.0	.9	2.3	.0
P	992	P1-24 DO YOU USE OR REFER TO THE TERM CUT OFF FREQUENCY OF TRANSMISSION LINES?	.0	.0	.0	.0	4.7	.0	.0	2.3	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPTC4 PAGE 222

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *C*
P 993	P2-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES?	.0	.0	.0	.0	2.8	.0	.0	2.3	.0
P 994	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES?	.0	1.2	.0	.0	2.8	.0	.9	2.3	.0
P 995	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTHS FOR GIVEN FREQUENCIES?	.0	1.2	.0	.0	1.9	.0	.9	2.3	.0
P 996	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES?	.0	1.9	.0	.0	5.7	.0	1.8	2.3	.0
P 997	P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES?	1.5	1.9	.0	.0	5.7	.0	3.6	4.5	.0
P 998	P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES?	1.5	.6	.0	.0	5.7	4.8	3.6	2.3	.0
P 999	P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING?	1.5	.0	.0	.0	1.9	.0	.9	2.3	.0
P1000	P2-1 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P3-1; IF YES, CONTINUE.	.0	.0	.0	.0	.9	.0	.0	6.8	.0
P1001	P2-2 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	6.8	.0
P1002	P2-3 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	6.8	.0
P1003	P2-4 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	2.3	.0
P1004	P2-5 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	2.3	.0
P1005	P2-6 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	6.8	.0
P1006	P2-7 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
P1007	P2-8 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
P1008	P2-9 DO YOU REMOVE OR INSTALL DUMMY LOADS?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
P1009	P2-10 DO YOU REMOVE OR INSTALL E BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3	.0
P101C	P2-11 DO YOU REMOVE OR INSTALL H BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3	.0
P1011	P2-12 DO YOU REMOVE OR INSTALL OTHER BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3	.0
P1012	P2-13 DO YOU REMOVE OR INSTALL CHOKE JOINTS?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
P1013	P2-14 DO YOU REMOVE OR INSTALL ROTATING JOINTS?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
P1014	P2-15 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
P1015	P2-16 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
P1016	P2-17 DO YOU REMOVE OR INSTALL DUPLEXERS OR MIXERS?	1.5	.0	.0	.0	.0	.0	.0	6.8	.0
P1017	P2-18 DO YOU REMOVE OR INSTALL WAVEGUIDE SHUTTERS?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
P1018	P2-19 DO YOU REMOVE OR INSTALL TRANSMIT (TR) OR ANTITRANSMIT (ATR) TUBES?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
P1019	P2-20 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	.0	.0
P1020	P2-21 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.0	.0	.0
P1021	P2-22 DO YOU USE OR REFER TO CUT OFF FREQUENCY OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	4.5	.0
P1022	P2-23 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	4.5	.0
P1023	P2-24 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	4.5	.0
P1024	P2-25 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	4.5	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

FCPT04 PAGE 223

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
P1025	P2-26 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	4.5	.0
P1026	P2-27 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.9	4.5	.0
P1027	P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OR .7 WAVELENGTHS OF THE OPERATING FREQUENCY?	.0	.0	.0	.0	.0	.0	.9	.0	.0
P1028	P2-29 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 AS AN AVERAGE?	.0	.0	.0	.0	.0	.0	.9	.0	.0
P1029	P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1030	P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	2.6	.0	.0
P1031	P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1032	P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.9	.0	.9	.0	.0
P1033	P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.9	.0	.0
P1034	P2-35 DO YOU WORK WITH HIGH POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5	.0
P1035	P2-36 DO YOU WORK WITH LOW POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5	.0
P1036	P2-37 DO YOU WORK WITH LOOP ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5	.0
P1037	P2-38 DO YOU WORK WITH APERTURES (WINDOWS OR IRISES) ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	2.3	.0
P1038	P2-39 DO YOU WORK WITH CHOKE JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1039	P2-40 DO YOU WORK WITH ROTATING JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1040	P2-41 DO YOU WORK WITH JOINTS IN WAVEGUIDES OR CAVITY RESONATORS BUT DON'T KNOW WHICH KIND?	.0	.0	.0	.0	.0	.0	.0	6.8	.0
P1041	P2-42 DO YOU TUNE CAVITY RESONATORS USING ELECTRICAL METHODS?	.0	.0	.0	.0	.0	.0	.0	6.8	.0
P1042	P2-43 DO YOU TUNE CAVITY RESONATORS USING MECHANICAL METHODS?	.0	.0	.0	.0	.0	.0	.0	4.5	.0
P1043	P2-44 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5	.0
P1044	P3-1 ON YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS? IF NO, GO TO ITEM C1-1; IF YES, CONTINUE.	.0	.6	.0	.0	.9	.0	.0	2.3	.0
P1045	P3-2 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE FACTORS THAT LIMIT HIGH FREQUENCY OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0	.0

PERCENT S-SKILL LEVEL MEMBERS PERFORMING

OCCUPATIONAL ANALYSIS PROGRAM
FCPTO# PAGE 224
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
P1046	P3-3 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1047	P3-4 DO YOU USE OR REFER TO LEAD INDUCTANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1048	P3-5 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1049	P3-6 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION?	.0	.0	.0	.0	.9	.0	1.8	2.3	.0
P1050	P3-7 DO YOU USE OR REFER TO ELECTRON BUNCHING?	.0	.0	.0	.0	.0	.0	.9	2.3	.0
P1051	P3-8 DO YOU WORK WITH TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1052	P3-9 DO YOU WORK WITH THREE-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1053	P3-10 DO YOU WORK WITH REFLEX KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	2.3	.0
P1054	P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1055	P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1056	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1057	P3-14 DO YOU WORK WITH MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1058	P3-15 DO YOU WORK WITH BACKWARD WAVE OSCILLATORS (BWO)?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1059	P3-16 DO YOU INSPECT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3	.0
P1060	P3-17 DO YOU CLEAN KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3	.0
P1061	P3-18 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1062	P3-19 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1063	P3-20 DO YOU PERFORM OPERATIONAL CHECKS ON KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3	.0
P1064	P3-21 DO YOU TROUBLESHOOT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3	.0
P1065	P3-22 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRONS OR TWT'S?	.0	.0	.0	.0	.0	.0	.0	2.3	.0
P1066	P3-23 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1067	P3-24 DO YOU INSPECT PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1068	P3-25 DO YOU CLEAN PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0	.0
P1069	P3-26 DO YOU ADJUST PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0	.0
P1070	P3-27 DO YOU TUNE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0	.0
P1071	P3-28 DO YOU PERFORM OPERATIONAL CHECKS ON PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1072	P3-29 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1073	P3-30 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1074	P3-31 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1075	P3-32 DO YOU INSPECT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1076	P3-33 DO YOU CLEAN MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1077	P3-34 DO YOU ADJUST MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1078	P3-35 DO YOU TUNE MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1079	P3-36 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0

PERCENT E-SKILL LEVEL MEMBERS PERFORMING

FCPT04 PAGE 225

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA **
P1060	P3-37 DO YOU TROUBLESHOOT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1061	P3-38 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1062	P3-39 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1063	P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR PLATE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1064	P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1065	P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1066	P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FEEDBACK LOOP COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1067	P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF DRIFT SPACE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1068	P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1069	P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1070	P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CONTROL GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1071	P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1072	P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REPELLER (REFLECTOR) PLATE COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	2.3	.0
P1073	P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	1.9	.0	1.8	2.3	.0
P1074	P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID CAVITY GAP COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	1.9	.0	1.8	2.3	.0
P1075	P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF RESONANT CAVITY COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3	.0
P1076	P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETIC COUPLING LOOP COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	.0	.0
P1077	P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3	.0
P1078	P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3	.0
P1079	P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF OUTPUT LEAD COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3	.0
P1080	P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1081	P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1082	P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MODULATOR GRID COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1083	P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ANODE COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1084	P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF HELIX COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0

PERCENT S-SKILL LEVEL MEMBERS PERFORMING

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 (M)	306 52 (M)	316 5DF (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 53 (M)	MIN IMA *<*
P1105	P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1106	P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNET COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1107	P3-64 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ATTENUATOR COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1108	P3-65 DO YOU PERFORM TASKS ON FERRITE CIRCULATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.0	.0	.0
P1109	P3-66 DO YOU PERFORM TASKS ON SIGNAL CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0	.0
P1110	P3-67 DO YOU PERFORM TASKS ON IDLER CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0	.0
P1111	P3-68 DO YOU PERFORM TASKS ON VARACTOR DIODE COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0	.0
P1112	P3-69 DO YOU PERFORM TASKS ON FERRITE ISOLATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0	.0
P1113	P3-70 DO YOU PERFORM TASKS ON REVERSE-BIAS BATTERY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0	.0
P1114	P3-71 DO YOU PERFORM TASKS ON ANODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1115	P3-72 DO YOU PERFORM TASKS ON ANODE COOLING FIN COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1116	P3-73 DO YOU PERFORM TASKS ON COUPLING LOOP COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1117	P3-74 DO YOU PERFORM TASKS ON HEATER LEAD COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1118	P3-75 DO YOU PERFORM TASKS ON RESONANT CAVITY COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1119	P3-76 DO YOU PERFORM TASKS ON CATHODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
P1120	P3-77 DO YOU PERFORM TASKS ON MAGNET COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0	.0
Q1121	Q1-1 DO YOU USE OR REFER TO STORAGE REGISTERS?	69.7	31.1	13.9	18.8	2.8	.0	.0	54.5	.0
Q1122	Q1-2 DO YOU USE OR REFER TO SHIFT REGISTERS?	77.3	34.8	.0	18.8	2.8	4.8	.0	56.8	.0
Q1123	Q1-3 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS?	72.7	33.5	3.4	18.8	1.9	.0	.0	54.5	.0
Q1124	Q1-4 DO YOU USE OR REFER TO LOGIC SYMBOLS OR STORAGE REGISTERS?	66.7	30.4	3.4	18.8	1.9	.0	.0	54.5	.0
Q1125	Q1-5 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTER CIRCUITS?	77.7	32.9	.0	18.8	.9	4.8	.0	54.5	.0
Q1126	Q1-6 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPES OF REGISTER CIRCUITS?	67.6	27.3	3.4	18.8	.9	.0	1.6	52.3	.0
Q1127	Q1-7 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED?	72.7	27.3	.0	18.8	1.9	.0	.0	50.0	.0
Q1128	Q2-1 DO YOU [illegible] WITH STORAGE DEVICES IN YOUR PRESENT JOB? IF NO, GO TO ITEM Q3-1; IF YES, CONTINUE.	71.2	26.7	31.1	25.0	16.4	.0	.9	36.4	.0
Q1129	Q2-2 DO YOU [illegible] OR REFER TO DELAY LINES?	10.6	4.3	.0	.	.9	.0	.	13.6	.0

D TSK	TITLES	306 51 (%)	306 52 (%)	316 50F (%)	316 52F (%)	362 51 (%)	362 53 (%)	362 54 (%)	918 50 (%)	MIN IMA *<*
01130	Q2-3 DO YOU USE OR REFER TO MAGNETIC CORES OR BIMAGS?	54.5	5.0	3.4	.0	1.9	.0	.0	11.4	.0
01131	Q2-4 DO YOU USE OR REFER TO MAGNETIC DRUMS?	6.1	3.7	3.4	.0	2.8	.0	.0	11.4	.0
01132	Q2-5 DO YOU USE OR REFER TO MAGNETIC TAPES?	6.1	15.5	3.4	.0	9.4	.0	.9	25.0	.0
01133	Q2-6 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OF MEMORY SYSTEMS?	47.0	8.7	3.4	6.3	2.8	.0	.0	27.3	.0
01134	Q2-7 DO YOU USE OR REFER TO STORAGE CAPACITY OF MEMORY SYSTEMS?	59.1	13.0	13.8	6.3	4.7	.0	.9	25.0	.0
01135	Q2-8 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS?	28.8	8.1	3.4	6.3	2.8	.0	.9	25.0	.0
01136	Q2-9 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES?	16.7	3.1	.0	.0	1.9	.0	.0	13.6	.0
01137	Q2-10 DO YOU USE OR REFER TO MAGNETIC DISKS?	6.1	3.7	.0	18.8	1.9	.0	.0	20.5	.0
01138	Q2-11 DO YOU USE OR REFER TO THIN FILMS?	3.0	3.1	.0	6.3	.9	.0	.0	18.2	.0
01139	Q2-12 DO YOU USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED) CIRCUITS?	25.8	16.1	6.9	.0	3.8	.0	.9	38.6	.0
01140	Q2-13 DO YOU USE OR REFER TO BUBBLE MEMORIES?	.0	2.5	3.4	6.3	1.9	.0	.0	11.4	.0
01141	Q2-14 DO YOU USE OR REFER TO PUNCH CARDS?	59.1	5.6	3.4	.0	.9	.0	.0	20.5	.0
01142	Q2-15 DO YOU USE OR REFER TO PAPER TAPES?	62.1	19.9	31.0	18.8	2.8	.0	.0	11.4	.0
01143	Q2-16 DO YOU USE OR REFER TO RANDOM ACCESS MEMORIES (RAM)?	45.5	18.0	17.2	6.3	5.7	.0	.9	36.4	.0
01144	Q2-17 DO YOU USE OR REFER TO READ ONLY MEMORIES (ROM)?	13.6	18.6	10.3	6.3	4.7	.0	.9	34.1	.0
01145	Q2-18 DO YOU USE OR REFER TO PROGRAMMALBE READ ONLY MEMORIES (PROM)?	7.6	10.6	3.4	12.5	2.8	.0	.0	36.4	.0
01146	Q2-19 DO YOU USE OR REFER TO TRANSFORMER READ ONLY STORAGES (TROS)?	.0	3.1	.0	.0	.9	.0	.0	9.1	.0
01147	Q2-20 DO YOU USE OR REFER TO CAPACITY READ ONLY STORAGES (CROS)?	.0	2.5	.0	.0	.9	.0	.0	6.8	.0
01148	Q2-21 DO YOU INSPECT STORAGE DEVICES?	56.1	22.4	13.8	18.8	8.5	.0	.9	34.1	.0
01149	Q2-22 DO YOU CLEAN STORAGE DEVICES?	59.1	21.7	.0	12.5	9.4	.0	.9	25.0	.0
01150	Q2-23 DO YOU ALIGN STORAGE DEVICES?	21.2	16.1	.0	6.3	3.8	.0	.0	20.5	.0
01151	Q2-24 DO YOU ADJUST STORAGE DEVICES?	21.2	17.4	.0	12.5	3.8	.0	.0	22.7	.0
01152	Q2-25 DO YOU TROUBLESHOOT MEMORY SYSTEM STORAGE DEVICES?	48.5	19.3	20.7	6.3	5.7	.0	.9	31.8	.0
01153	Q2-26 DO YOU REMOVE OR REPLACE SUBASSEMBLIES OR COMPONENTS OF STORAGE DEVICES?	51.5	22.4	3.4	12.5	7.5	.0	.9	38.6	.0
01154	Q2-27 DO YOU TRACE SIGNAL FLOW IN STORAGE DEVICES USING LOGIC DIAGRAMS OR SCHMATICS?	51.5	16.6	3.4	.0	1.9	.0	.0	29.5	.0
01155	Q3-1 (IN YOUR PRESENT JOB,) DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS OR ANALOG-TO-DIGITAL (A/D) CONVERTERS? IF NO, GO TO ITEM Q1-1; IF YES, CONTINUE.	48.5	7.5	.0	12.5	4.7	.0	.9	50.0	.0
01156	Q3-2 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES?	16.7	1.9	.0	.0	.9	.0	.0	31.8	.0
01157	Q3-3 DO YOU REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IS DETERMINED BY APPLYING THE DENOMINATORS OF THE RESISTORS?	9.1	1.2	.0	.0	.9	.0	.0	22.7	.0
01158	Q3-4 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS?	15.2	1.9	.0	.0	1.9	.0	.0	29.5	.0
01159	Q3-5 DO YOU REFER TO TABLES OR SAMPLE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	7.6	1.9	.0	.0	1.9	.0	.0	38.6	.0
01160	Q3-6 DO YOU REFER TO TABLES OR HOLD FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	4.5	1.9	.0	.0	1.9	.0	.0	36.4	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

REPT04 PAGE 228

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
01161	Q3-7 DO YOU PERFORM TASKS ON COMPARE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	9.1	1.9	.0	.0	1.9	.0	.0	34.1	.0
01162	Q3-8 DO YOU PERFORM TASKS ON DIGITIZE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	7.0	1.9	.0	.0	1.9	.0	.0	36.4	.0
01163	Q3-9 DO YOU PERFORM TASKS ON PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS BUT DON'T KNOW WHICH FUNCTION?	16.7	2.5	.0	6.3	.9	.0	.0	9.1	.0
01164	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS?	9.1	1.9	.0	.0	.9	.0	.0	36.4	.0
01165	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS?	4.5	1.9	.0	.0	.9	.0	.0	39.6	.0
01166	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS?	10.6	1.9	.0	.0	.9	.0	.0	34.1	.0
01167	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS?	12.6	1.9	.0	.0	.9	.0	.0	38.6	.0
01168	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS?	4.5	1.9	.0	.0	1.9	.0	.0	27.3	.0
01169	Q3-15 DO YOU PERFORM ANY TASKS ON ELECTRONIC A/D CONVERTERS?	28.2	3.7	.0	.0	2.8	.0	.0	47.7	.0
01170	Q3-16 DO YOU PERFORM ANY TASKS ON DIGITAL-TO-ANALOG (D/A) CONVERTERS?	24.2	4.3	.0	.0	2.8	.0	.0	45.5	.0
01171	Q3-17 DO YOU OPERATE COMPUTER KEYBOARDS?	15.2	1.9	.0	12.5	3.8	.0	.0	29.5	.0
01172	Q3-18 DO YOU WORK AT OR WITH COMPUTER TERMINALS?	19.7	3.7	.0	12.5	3.8	.0	.0	18.2	.0
01173	Q3-19 HAVE YOU BEEN SENT TO FACTORY TRAINING OR TO ANY OTHER SCHOOL FOR THE SPECIFIC PURPOSE OF RECEIVING COMPUTER OR LOGIC CIRCUIT RELATED TRAINING?	24.2	3.1	.0	6.3	2.8	.0	.0	18.2	.0
01174	Q3-20 DO YOU HAVE MICROPROCESSORS OR COMPUTER EQUIPMENT LOCATED AT YOUR WORK STATION WHICH IS OPERATED OR MAINTAINED BY CONTRACTOR PERSONNEL?	24.2	3.1	.0	6.3	1.9	.0	1.6	34.1	.0
01175	Q3-21 WAS THE COMPUTER OR LOGIC CIRCUIT TRAINING YOU RECEIVED IN YOUR 7-LEVEL AWARDING COURSE ADEQUATE IN TERMS OF YOUR PRESENT DUTIES?	25.9	3.1	.0	.0	.9	.0	.0	9.1	.0
01176	Q3-22 ARE YOU ASSIGNED AGAINST A POSITION WHICH REQUIRES A "Q" PREFIX?	.0	.6	.0	.0	.9	.0	.0	.0	.0
01177	R1-1 DO YOU WORK WITH PHANTASTRON CIRCUITRY? IF NO, GO TO ITEM R2-1. IF YES, CONTINUE.	7.6	2.5	.0	.0	.9	.0	.0	2.3	.0
01178	R1-2 PHANTASTRON CIRCUITRY HAS VARIABLE-DELAY APPLICATIONS IN MY JOB.	4.5	.6	.0	.0	1.9	.0	.0	4.5	.0
01179	R1-3 PHANTASTRON CIRCUITRY HAS SEARCH-LOCK AUTOMATIC FREQUENCY CONTROLS (AFC) APPLICATIONS IN MY JOB.	1.5	.6	.0	.0	1.9	.0	.0	4.5	.0
01180	R1-4 PHANTASTRON CIRCUITRY HAS MONOSTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	7.6	2.5	.0	.0	1.9	.0	.0	4.5	.0
01181	R1-5 PHANTASTRON CIRCUITRY HAS BISTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	7.6	2.5	.0	.0	1.9	.0	.0	4.5	.0
01182	R1-6 PHANTASTRON CIRCUITRY HAS FREE-RUNNING MULTIVIBRATORS APPLICATIONS IN MY JOB.	6.1	1.9	.0	.0	1.9	.0	.0	4.5	.0
01183	R2-1 DO YOUR ASSIGNED DUTIES EVER WORK WITH SCHMITT TRIGGER CIRCUITS? IF NO, GO TO ITEM R3-1; IF YES, CONTINUE.	67.6	42.2	.0	18.8	3.8	4.8	.0	43.2	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING — FCPT04 PAGE 229

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
R1184	R2-2 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS?	62.1	39.8	.0	12.5	3.8	4.8	.0	40.9	.0
R1185	R2-3 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS?	62.1	35.4	.0	12.5	3.8	4.8	.0	40.9	.0
R1186	R3-1 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES?	6.1	21.1	.0	56.3	21.7	4.8	37.7	34.1	.0
R1187	R3-2 DO YOU FABRICATE COAXIAL CABLES?	7.6	18.6	.0	37.5	11.3	.0	5.3	40.9	.0
S1191	S1-4 DO YOU USE OR REFER TO TAPE DRIVES (UNITS)?	37.9	44.7	24.1	31.3	13.2	.0	.0	25.0	.0
S1192	S1-5 DO YOU USE OR REFER TO CARD READERS/CARD PUNCHES?	74.2	13.0	6.9	.0	4.7	.0	1.8	18.2	.0
S1193	S1-6 DO YOU USE OR REFER TO VIDEO DISPLAYS (CRT'S)?	7.6	33.5	.0	31.3	18.9	4.8	.9	45.5	.0
S1194	S1-7 DO YOU USE OR REFER TO NIXIE LIGHTS (TUBES)?	6.1	18.6	.0	6.3	.9	.0	.0	27.3	.0
S1196	S1-9 DO YOU USE OR REFER TO LCD'S?	18.2	19.9	10.3	31.3	5.7	.0	.0	43.2	.0
S1200	S1-13 DO YOU USE OR REFER TO TAPE READERS?	63.3	65.2	48.3	37.5	3.8	.0	.0	18.2	.0
S1201	S1-14 DO YOU USE OR REFER TO TAPE PUNCHES?	77.3	66.5	51.7	31.3	3.8	.0	.0	9.1	.0
S1202	S2-1 DO YOU WORK WITH PHOTOLIODE PHOTO SENSITIVE DEVICES?	60.6	13.0	.0	.0	1.9	.0	.0	79.5	.0
S1203	S2-2 DO YOU WORK WITH PHOTOTRANSISTOR PHOTO SENSITIVE DEVICES?	36.4	10.6	.0	.0	1.9	.0	.0	54.5	.0
S1204	S2-3 DO YOU WORK WITH PHOTOTUBE PHOTO SENSITIVE DEVICES?	6.1	2.5	.0	.0	1.9	.0	.0	70.5	.0
S1205	S2-4 DO YOU WORK WITH PHOTO-SCR PHOTO SENSITIVE DEVICES?	7.6	3.1	.0	.0	1.9	.0	.0	22.7	.0
S1206	S2-5 DO YOU WORK WITH PHOTOCELL (PHOTOCONDUCTIVE OR PHOTOVOLTAIC) PHOTO SENSITIVE DEVICES?	68.2	16.8	3.4	.0	1.9	.0	.0	79.5	.0
S1207	S3-1 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS? IF NO, GO TO ITEM T1-1; IF YES, CONTINUE.	3.0	.6	3.4	.0	.9	.0	1.8	34.1	.0
S1208	S3-2 DO YOU USE OR REFER TO EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.6	3.4	.0	1.9	.0	.0	20.5	.0
S1209	S3-3 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	.0	.6	3.4	.0	1.9	.0	.0	22.7	.0
S1210	S3-4 DO YOU MEASURE EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	18.2	.0
S1211	S3-5 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	20.5	.0
S1212	S3-6 DO YOU USE SLOWS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	.0	.0	.0	.0	.0	22.7	.0
S1213	S3-7 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	3.4	.0	.0	.0	.0	22.7	.0
S1214	S3-8 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.0	.0	.0	.0	.0	.0	25.0	.0
S1215	S3-9 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	3.4	.0	.0	.0	.0	27.3	.0
T1216	T1-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS? IF NO, GO TO ITEM T2-1; IF YES, CONTINUE.	.0	.6	.0	43.8	.9	.0	.9	9.1	.0
T1217	T1-2 DO YOU INSPECT INFRARED SYSTEMS?	.0	.0	.0	43.8	.0	.0	.0	9.1	.0
T1218	T1-3 DO YOU CLEAN INFRARED SYSTEMS?	.0	.0	.0	43.8	.9	.0	.0	9.1	.0
T1219	T1-4 DO YOU SERVICE INFRARED SYSTEMS?	.0	.6	.0	43.8	.9	.0	.0	9.1	.0
T1220	T1-5 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1	.0
T1221	T1-6 DO YOU OPERATE INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	6.8	.0
T1222	T1-7 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1	.0

PERCENT 5-SKILL LEVEL MEMBERS PERFORMING

OCCUPATIONAL ANALYSIS PROGRAM
REPT04 PAGE 230 USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *C*
T1223	T1-8 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	.0	.6	.0	47.9	.0	.0	.0	9.1	.0
T1224	T1-9 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS?	.0	.6	.0	43.8	.0	.0	.0	9.1	.0
T1225	T1-10 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	1.5	.6	.0	43.8	.0	.0	.0	9.1	.0
T1226	T1-11 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS?	.0	.6	.0	43.8	.0	.0	.0	9.1	.0
T1227	T1-12 DO YOU USE OR REFER TO FAR REGIONS?	.0	.0	.0	.0	.9	.0	.0	2.3	.0
T1228	T1-13 DO YOU USE OR REFER TO INTERMEDIATE REGIONS?	1.5	.0	.0	.0	.9	.0	.0	2.3	.0
T1229	T1-14 DO YOU USE OR REFER TO NEAR REGIONS?	1.5	.0	.0	.0	.9	.0	.0	2.3	.0
T1230	T1-15 DO YOU USE OR REFER TO MICRONS (M)?	1.5	.0	.0	6.3	.0	.0	.0	2.3	.0
T1231	T1-16 DO YOU USE OR REFER TO GRAY BODIES?	1.5	.0	.0	.0	.0	.0	.0	2.3	.0
T1232	T1-17 DO YOU USE OR REFER TO BLACK BODIES?	1.5	.0	.0	.0	.0	.0	.0	2.3	.0
T1233	T1-18 DO YOU USE OR REFER TO ABSORPTION?	1.5	.0	.0	12.5	.0	.0	.0	6.8	.0
T1234	T1-19 DO YOU USE OR REFER TO SCATTERING?	1.5	.0	.0	.0	.0	.0	.0	6.8	.0
T1235	T1-20 DO YOU USE OR REFER TO ABSOLUTE ZERO?	1.5	.0	.0	12.5	.0	.0	.0	4.5	.0
T1236	T1-21 DO YOU PERFORM TASKS ON BLITZ?	.0	.0	.0	.0	.9	.0	.0	.0	.0
T1237	T1-22 DO YOU PERFORM TASKS ON TARGET BUTTONS?	.0	.0	3.4	.0	.9	.0	.0	.0	.0
T1238	T1-23 DO YOU PERFORM TASKS ON REFLECTOR LENSES?	.0	.0	.0	.0	.9	.0	.0	.0	.0
T1239	T1-24 DO YOU PERFORM TASKS ON OCULAR LENSES?	.0	.0	.0	.0	.9	.0	.0	6.8	.0
T1240	T1-25 DO YOU PERFORM TASKS ON CORRECTION LENSES?	.0	.0	.0	6.3	.9	.0	.0	2.3	.0
T1241	T1-26 DO YOU PERFORM TASKS ON FILTERS?	.0	.0	.0	18.8	.9	.0	.0	6.8	.0
T1242	T1-27 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS?	.0	.0	.0	6.3	.9	.0	.0	2.3	.0
T1243	T1-28 DO YOU PERFORM TASKS ON PLANE MIRRORS?	.0	.0	.0	6.3	.9	.0	.0	4.5	.0
T1244	T2-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS? IF NO, GO TO ITEM T3-1; IF YES, CONTINUE.	4.5	.0	.0	.0	1.9	.0	.9	11.4	.0
T1245	T2-2 DO YOU INSPECT LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	11.4	.0
T1246	T2-3 DO YOU CLEAN LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	6.8	.0
T1247	T2-4 DO YOU SERVICE LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	4.5	.0
T1248	T2-5 DO YOU OPERATE LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	6.8	.0
T1249	T2-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS?	3.0	.0	.0	.0	.0	.0	.0	6.8	.0
T1250	T2-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS?	1.5	.0	.0	.0	.0	.0	.0	6.8	.0
T1251	T2-8 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS?	1.5	.0	.0	.0	.9	.0	.0	4.5	.0
T1252	T2-9 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	4.5	.0
T1253	T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS?	1.5	.0	.0	.0	.9	.0	.0	4.5	.0
T1254	T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)?	.0	.0	.0	.0	.9	.0	.9	4.5	.0
T1255	T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS?	.0	.0	.0	.0	1.9	.0	.9	4.5	.0
T1256	T2-13 DO YOU USE OR REFER TO GROUND STATE?	.0	.0	.0	.0	1.9	.0	.9	4.5	.0
T1257	T2-14 DO YOU USE OR REFER TO EXCITED STATE?	.0	.0	.0	.0	1.9	.0	.9	4.5	.0
T1258	T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION?	.0	.0	.0	.0	1.9	.0	.9	4.5	.0
T1259	T2-16 DO YOU USE OR REFER TO PHOTONS?	.0	.0	.0	.0	.9	.0	.9	4.5	.0
T1260	T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSIONS?	.0	.0	.0	.0	.9	.0	.9	4.5	.0
T1261	T2-18 DO YOU USE OR REFER TO STIMULATED EMISSIONS?	.0	.0	.0	.0	.9	.0	.0	4.5	.0
T1262	T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE?	.0	.0	.0	.0	.9	.0	.0	4.5	.0

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
T1263	T2-20 DO YOU USE OR REFER TO INVERSION LEVELS?	.0	.0	.0	.0	.9	.0	.0	4.5	.0
T1264	T2-21 DO YOU USE OR REFER TO MONOCHROMATIC?	.0	.0	.0	.0	.9	.0	.0	4.5	.0
T1265	T2-22 DO YOU WORK WITH ACTIVE MATERIALS?	.0	.6	.0	.0	1.9	.0	.0	2.3	.0
T1266	T2-23 DO YOU WORK WITH PUMPING SOURCES?	.0	.6	.0	.0	1.9	.0	.0	4.5	.0
T1267	T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS?	1.5	.0	.0	.0	1.9	.0	.0	4.5	.0
T1268	T2-25 DO YOU WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS?	1.5	.0	.0	.0	1.9	.0	.0	4.5	.0
T1269	T2-26 DO YOU WORK WITH HELICAL FLASHTUBES?	1.5	.6	.0	.0	1.9	.0	.0	4.5	.0
T1270	T2-27 DO YOU WORK WITH RUBY MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3	.0
T1271	T2-28 DO YOU WORK WITH HELIUM-NEON MATERIALS?	1.5	.0	.0	.0	1.9	.0	.0	2.3	.0
T1272	T2-29 DO YOU WORK WITH HELIUM-XENON MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3	.0
T1273	T2-30 DO YOU WORK WITH XENON MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	4.5	.0
T1274	T2-31 DO YOU WORK WITH CESIUM-HELIUM MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	.0	.0
T1275	T2-32 DO YOU WORK WITH ARGON MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3	.0
T1276	T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	.0	.0
T1277	T2-34 DO YOU WORK WITH GALLIUM ARSENIDE MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3	.0
T1278	T3-1 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE TUBES (DVST), MULTIPLE MODE STORAGE TUBES (MMST), OR SCAN CONVERTER TUBES (SCT)? IF NO, GO TO ITEM T4-1; IF YES, CONTINUE.	3.0	1.9	.0	.0	2.8	.0	.9	6.8	.0
T1279	T3-2 DO YOU INSPECT DVST OR MMST?	1.5	1.2	.0	.0	.9	.0	.0	6.8	.0
T1280	T3-3 DO YOU CLEAN DVST OR MMST?	1.5	1.2	.0	.0	.9	.0	.0	6.8	.0
T1281	T3-4 DO YOU ADJUST OR CALIBRATE DVST OR MMST?	1.5	.6	.0	.0	.0	.0	.0	4.5	.0
T1282	T3-5 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
T1283	T3-6 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS?	1.5	1.2	.0	.0	.0	.0	.0	4.5	.0
T1284	T3-7 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS?	1.5	.0	.0	.0	.0	.0	.0	4.5	.0
T1285	T3-8 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF DVST?	.0	.0	.0	.0	.0	.0	.9	.0	.0
T1286	T3-9 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF MMST?	.0	.0	.0	.0	.0	.0	.9	.0	.0
T1287	T3-10 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF SCT?	.0	.0	.0	.0	.0	.0	.9	2.3	.0
T1288	T3-11 DO YOU PERFORM TASKS ON FLOOD GUNS?	.0	.0	.0	.0	.9	.0	.0	.0	.0
T1289	T3-12 DO YOU PERFORM TASKS ON WRITE GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0	.0
T1290	T3-13 DO YOU PERFORM TASKS ON REAL GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0	.0
T1291	T3-14 DO YOU PERFORM TASKS ON ATTACK GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0	.0
T1292	T3-15 DO YOU PERFORM TASKS ON ERASE GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0	.0
T1293	T3-16 DO YOU PERFORM TASKS ON STORAGE GRIDS?	.0	.6	.0	.0	1.9	.0	.0	2.3	.0
T1294	T4-1 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS DEALING WITH TELEVISION SYSTEMS INCLUDING LOW LIGHT TELEVISION? IF NO, GO TO ITEM G1-1; IF YES, CONTINUE.	.0	1.2	17.2	6.3	.9	.0	.0	38.6	.0
T1295	T4-2 DO YOU INSPECT TELEVISION SYSTEMS?	.0	1.2	10.3	.0	.9	.0	.0	40.9	.0
T1296	T4-3 DO YOU CLEAN TELEVISION SYSTEMS?	.0	1.2	3.4	.0	.9	.0	.0	38.6	.0
T1297	T4-4 DO YOU ADJUST OR CALIBRATE TELEVISION SYSTEMS?	.0	1.2	17.2	.0	.9	.0	.0	36.4	.0
T1298	T4-5 DO YOU OPERATE TELEVISION SYSTEMS?	.0	1.2	17.2	6.3	.9	.0	.0	38.6	.0
T1299	T4-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF TV SYSTEMS?	.0	1.2	6.9	.0	.9	.0	.0	40.9	.0

PERCENT S-SKILL LEVEL MEMBERS PERFORMING — FCPT04 PAGE 232 — OCCUPATIONAL ANALYSIS PROGRAM USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
T1300	T4-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF TV SYSTEMS?	.0	1.2	6.9	.0	.9	.0	.0	31.8	.0
T1301	T4-8 DO YOU TROUBLESHOOT DOWN TO TV SYSTEM COMPONENT PARTS?	.0	1.2	3.4	.0	.9	.0	.0	29.5	.0
T1302	T4-9 DO YOU REMOVE OR REPLACE TV SYSTEM MAJOR ASSEMBLIES?	.0	.6	.0	.0	.9	.0	.0	31.8	.0
T1303	T4-10 DO YOU REMOVE OR REPLACE TV SYSTEM COMPONENT PARTS?	.0	.6	.0	.0	.9	.0	.0	29.5	.0
U1304	U1-1 IN YOUR PRESENT JOB, DO YOU PERFORM MAINTENANCE ROUTINES OR PROGRAMMING TASKS? IF NO, GO TO ITEM U2-1; IF YES, CONTINUE.	34.8	5.6	20.7	31.3	9.4	.0	2.6	29.5	.0
U1305	U1-2 DO YOU USE OR REFER TO DECIMAL SYSTEMS?	21.2	1.9	10.3	6.3	4.7	.0	.0	25.0	.0
U1306	U1-3 DO YOU USE OR REFER TO OCTAL SYSTEMS?	18.2	.0	17.2	.0	3.8	.0	.0	22.7	.0
U1307	U1-4 DO YOU USE OR REFER TO PARITY DETECTORS/GENERATORS?	28.8	4.3	3.4	.0	3.8	.0	.0	15.9	.0
U1308	U1-5 DO YOU USE OR REFER TO HEXADECIMAL SYSTEMS?	13.6	1.2	.0	25.0	3.8	.0	.0	25.0	.0
U1309	U1-6 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS?	9.1	.6	6.9	.0	2.8	.0	.0	13.6	.0
U1310	U1-7 DO YOU USE OR REFER TO FOUR SYSTEMS?	6.1	.0	.0	.0	.9	.0	.0	11.4	.0
U1311	U1-8 DO YOU USE OR REFER TO BINARY SYSTEMS?	34.8	3.7	13.8	12.5	5.7	.0	.0	27.3	.0
U1312	U1-9 DO YOU USE OR REFER TO TIME-SHARING (MULTI-SEQUENCING)?	9.1	1.2	.0	.0	2.8	.0	.9	15.9	.0
U1313	U1-10 DO YOU USE OR REFER TO DATA WORDS?	22.7	4.3	6.9	12.5	5.7	.0	.0	15.9	.0
U1314	U1-11 DO YOU USE OR REFER TO ADDRESS WORDS?	16.7	4.3	3.4	12.5	7.5	.0	.0	15.9	.0
U1315	U1-12 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS?	19.7	3.1	3.4	12.5	6.6	.0	.9	13.6	.0
U1316	U1-13 DO YOU USE OR REFER TO STEPPING/INFORMATION?	12.1	2.5	6.9	6.3	2.8	.0	.0	11.4	.0
U1317	U1-14 DO YOU USE OR REFER TO INSTRUCTION WORDS?	10.6	3.1	6.9	6.3	6.6	.0	.0	15.9	.0
U1318	U1-15 DO YOU USE OR REFER TO JAP-16?	.0	.0	.0	.0	.9	.0	.0	6.8	.0
U1319	U1-16 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	16.7	1.9	10.3	6.3	2.8	.0	.0	22.7	.0
U1320	U1-17 DO YOU USE OR REFER TO CONTROL WORDS?	9.1	4.3	.0	18.8	4.7	.0	.0	13.6	.0
U1321	U1-18 DO YOU USE OR REFER TO RESPONSE WORDS?	7.6	2.5	.0	25.0	3.8	.0	.0	9.1	.0
U1322	U1-19 DO YOU USE OR REFER TO #PARAMOUND WORDS?	.0	1.2	.0	.0	1.9	.0	.0	6.8	.0
U1323	U1-20 DO YOU USE OR REFER TO TEST OR DIAGNOSTIC PROGRAMS?	18.2	3.1	6.9	25.0	7.5	.0	.9	22.7	.0
U1324	U1-21 DO YOU USE OR REFER TO RELIABILITY PROGRAMS?	6.1	.6	3.4	18.8	.9	.0	.0	11.4	.0
U1325	U1-22 DO YOU USE OR REFER TO COMPILERS?	.0	.0	.0	.0	.9	.0	.0	9.1	.0
U1326	U1-23 DO YOU USE OR REFER TO ASSEMBLERS?	.0	.0	.0	.0	.9	.0	.0	9.1	.0
U1327	U1-24 DO YOU USE OR REFER TO MACHINE LANGUAGE?	4.5	1.2	.0	6.3	4.7	.0	.0	15.9	.0
U1328	U1-25 DO YOU USE OR REFER TO MNEMONICS?	18.0	1.2	.0	6.3	4.7	.0	.9	11.4	.0
U1329	U1-26 DO YOU USE OR REFER TO ROUTINES OR SUBROUTINES?	13.6	1.2	3.4	.0	5.7	.0	.9	13.6	.0
U1330	U1-27 DO YOU USE OR REFER TO FLOW CHARTS OR DIAGRAMS?	12.1	3.1	10.3	12.5	4.7	.0	.9	18.2	.0
U1331	U1-28 DO YOU USE OR REFER TO "ATLAS"?	.0	.0	.0	.0	.9	.0	.0	4.5	.0
U1332	U1-29 DO YOU USE OR REFER TO "JOVIAL"?	.0	.0	.0	.0	.9	.0	.0	4.5	.0
U1333	U1-30 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING SYSTEMS?	4.5	.0	.0	.0	1.9	.0	.9	11.4	.0
U1334	U1-31 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING SYSTEMS?	.0	.6	3.4	.0	2.8	.0	.9	6.8	.0
U1335	U1-32 DO YOU WRITE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	.0	.0	.0	.0	2.8	.0	.9	.0	.0
U1336	U1-33 DO YOU USE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	3.0	1.9	6.9	25.0	6.6	.0	1.8	18.2	.0
U1337	U1-34 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER CONTROL SECTIONS?	27.3	2.5	6.9	6.3	5.7	.0	.0	22.7	.0
U1338	U1-35 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT SECTIONS?	28.8	3.1	10.3	6.3	7.5	.0	.9	20.5	.0

PERCENT S-SKILL LEVEL MEMBERS PERFORMING

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
U1339	U1-36 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT SECTIONS?	30.7	3.1	10.3	6.3	6.6	.0	.9	20.5	.0
U1340	U1-37 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR SECTIONS?	25.8	2.5	10.3	6.3	4.7	.0	.9	18.2	.0
U1341	U1-38 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER TRANSMIT SECTIONS?	30.3	4.3	3.4	6.3	3.8	.0	.0	15.9	.0
U1342	U1-39 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER RECEIVE SECTIONS?	28.8	5.0	3.4	6.3	3.8	.0	.0	13.6	.0
U1343	U1-40 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT DEVICES?	30.3	3.7	6.9	6.3	7.5	.0	.0	25.0	.0
U1344	U1-41 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER STORAGE DEVICES?	24.2	3.7	6.9	6.3	6.6	.0	.0	25.0	.0
U1345	U1-42 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT DEVICES?	30.3	3.7	6.9	6.3	6.6	.0	.0	25.0	.0
U1346	U1-43 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER POWER DEVICES?	25.8	3.7	3.4	6.3	5.7	.0	.0	25.0	.0
U1347	U1-44 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR DEVICES?	28.8	3.7	6.9	6.3	4.7	.0	.0	22.7	.0
U1348	U1-45 DO YOU USE FORTRAN PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	2.3	.0
U1349	U1-46 DO YOU USE COBOL PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	4.5	.0
U1350	U1-47 DO YOU USE RPG PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	2.3	.0
U1351	U1-48 DO YOU USE OR PERFORM TASKS ON MICROPROCESSOR BASED EQUIPMENT?	6.1	2.5	3.4	.0	3.8	4.8	1.8	22.7	.0
U1352	U1-49 DO YOU USE INPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	4.5	1.9	.0	.0	1.9	.0	.0	22.7	.0
U1353	U1-50 DO YOU USE OUTPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	1.9	.0	.0	1.9	.0	.0	22.7	.0
U1354	U1-51 DO YOU USE RAM MEMORY CIRCUITS (STATIC OR DYNAMIC) IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	4.3	3.4	.0	3.8	.0	.0	29.5	.0
U1355	U1-52 DO YOU USE ROM MEMORY CIRCUITS (INCLUDES PROM, EPROM, ETC.) IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	3.7	.0	.0	3.8	.0	.0	29.5	.0
U1356	U1-53 DO YOU USE TRI-STATE CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	1.5	.6	.0	.0	.9	.0	.0	22.7	.0
U1357	U1-54 DO YOU USE CLOCK GENERATOR CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.6	3.1	3.4	.0	3.8	.0	.0	27.3	.0
U1358	U1-55 DO YOU USE STATUS LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	4.5	1.9	.0	.0	1.9	.0	.9	20.5	.0
U1359	U1-56 DO YOU USE BIDIRECTIONAL BUFFER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	6.1	1.2	.0	.0	3.8	.0	.9	20.5	.0
U1360	U1-57 DO YOU USE ENCODER/DECODER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	6.1	1.9	.0	.0	2.8	4.8	.0	22.7	.0
U1361	U2-1 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION?	15.2	9.9	.0	.0	47.2	71.4	15.8	38.6	.0
U1362	U2-2 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS?	4.5	2.5	.0	.0	6.6	.0	.0	11.4	.0
U1363	U2-3 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS?	3.0	2.5	.0	.0	5.7	.0	.9	11.4	.0

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)	MIN IMA *<*
U1364	U2-4 DO YOU USE VTVM (VOLTMETERS) TO CHECK FOR NOISE OR SIGNAL LEVEL?	21.2	13.7	.0	6.3	54.7	76.2	17.5	31.8	.0
U1365	U2-5 DO YOU USE VTVM (VOLTMETERS) TO CHECK OR ADJUST AUDIO AMPLIFIERS?	16.7	6.2	.0	6.3	43.4	76.2	10.3	25.0	.0
U1366	U2-6 DO YOU USE A HP355D OR 344A TEST SET TO ALIGN AUDIO EQUIPMENT?	7.6	3.1	.0	.0	47.2	33.3	7.0	2.3	.0

POI MATCHED WITH SURVEY DATA

POI J3AQR3P02B0 003, ELECTRONIC PRINCIPLES (DATED 31 MARCH 1983), IS PRESENTED BELOW WITH MATCHED JOB INVENTORY TASKS AND OCCUPATIONAL SURVEY DATA.

USE OF POI FACT SHEET PRINTOUTS: POI OBJECTIVES ARE LISTED BETWEEN THE DOTTED LINES, WITH MATCHED TASKS LISTED BELOW AND SURVEY DATA PRINTED TO THE RIGHT OF EACH TASK. TRAINED OBJECTIVES CAN BE COMPARED WITH THE PERCENT PERFORMING (SEE ATCR 52-22 FOR CRITERIA). PERFORMANCE OBJECTIVES WHICH ARE NOT WELL SUPPORTED CAN BE CONSIDERED FOR REPLACEMENT WITH OBJECTIVES INVOLVING TASKS PERFORMED BY HIGHER PERCENTAGES OF INCUMBENTS AND RATED HIGHER IN TRAINING EMPHASIS AND TASK DIFFICULTY. IN ADDITION, TASKS WHICH WERE NOT MATCHED WITH POI OBJECTIVES ARE LISTED IN THE "TASKS NOT REFERENCED" SECTION IN DESCENDING ORDER OF FIRST-TERM TRAINING EMPHASIS/PERCENT OF EPI PERSONNEL PERFORMING. THESE TASKS CAN BE USED TO IDENTIFY TASKS WHICH MAY WARRANT TRAINING AND WHICH CAN BE INCLUDED IN FUTURE POI'S. FOR ASSISTANCE PHONE USAFOMC/CMYO AT AUTOVON 487-5811.

VECTOR TYPE CODES:

(T) = % TIME SPENT BY ALL MEMBERS
(M) = % MEMBERS PERFORMING
(F) = TASK FACTOR
(D) = DICHOTOMOUS SET
(B) = % TIME SPENT BY MEMBERS PERFORMING
(-) = PROGRAM GENERATED VECTOR

NO	TYPE	VECTOR	/MEMBERS/ MEAN - SD	DESCRIPTION	FACTOR #
1	M	306 51	66	DAFSC 30651 AIRMEN	2
2	M	306 52	161	DAFSC 30652 AIRMEN	4
3	M	31650F	29	DAFSC 31650F AIRMEN	6
4	M	31652F	16	DAFSC 31652F AIRMEN	8
5	M	362 51	136	DAFSC 36251 AIRMEN	10
6	M	362 53	71	DAFSC 36253 AIRMEN	12
7	M	362 54	114	DAFSC 36254 AIRMEN	14
8	M	918 50	44	DAFSC 91850 AIRMEN	16

POI J3AQR30020 003, ELECTRONIC PRINCIPLES (DATED 31 MARCH 1983), IS PRESENTED BELOW WITH MATCHED JOB INVENTORY TASKS AND OCCUPATIONAL SURVEY DATA.

USE OF POI FACRPT PRINTOUTS: POI OBJECTIVES ARE LISTED BETWEEN THE DOTTED LINES, WITH MATCHED TASKS LISTED BELOW AND SURVEY DATA PRINTED TO THE RIGHT OF EACH TASK. TRAINING OBJECTIVES CAN BE COMPARED WITH THE PERCENT PERFORMING (SEE ATCR 52-22 FOR CRITERIA). PERFORMANCE OBJECTIVES WHICH ARE NOT WELL SUPPORTED CAN BE CONSIDERED FOR REPLACEMENT WITH OBJECTIVES INVOLVING TASKS PERFORMED BY HIGHER PERCENTAGES OF INCUMBENTS AND RATED HIGHER IN TRAINING EMPHASIS AND TASK DIFFICULTY. IN ADDITION, TASKS WHICH WERE NOT MATCHED WITH POI OBJECTIVES ARE LISTED IN THE "TASKS NOT REFERENCED" SECTION IN DESCENDING ORDER OF FIRST-TERM TRAINING EMPHASIS/PERCENT OF EPI PERSONNEL PERFORMING. THESE TASKS CAN BE USED TO IDENTIFY TASKS WHICH MAY WARRANT TRAINING AND WHICH CAN BE INCLUDED IN FUTURE POI'S. FOR ASSISTANCE PHONE USAFOMC/OMYO AT AUTOVON 487-5611.

D TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	367 51 (M)	362 53 (M)	367 54 (M)	918 50 (M)
001	POI J3AQR30020 003 ELECTRONIC PRINCIPLES 31 MARCH 1983 SHEPPARD TECHNICAL TRAINING CENTER								
002	I. DC CIRCUITS 76 HRS TT								
003	I 1. ORIENTATION AND STUDY SKILLS 3/C								
004	I 2. SAFETY AND FIRST AID 1/C								
005	I 2A. FROM A GROUP OF SIX STATEMENTS, SELECT THREE THAT DESCRIBE SAFETY PRECAUTIONS WHICH SHOULD BE OBSERVED WHEN WORKING ON ELECTRICAL EQUIPMENT. MEAS: PC 3.4/C								
006	I 2B. FROM A GROUP OF FOUR STATEMENTS, SELECT TWO WHICH NAME THE PROPER FIRST AID MEASURE TO BE USED FOR THE TREATMENT OF ELECTRICAL SHOCK. MEASE: PC 3.4/D								

D	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
	007	I 2C. FROM A LIST OF FOUR FIRE EXTINGUISHER TYPES, SELECT THE ONE USED ON ELECTRICAL FIRES. MEAS: PC 0.2/0								
	008	I 3. ELECTRONIC MATHEMATICS 10/4								
	009	I 3A. USE ARITHMETIC PROCEDURES, (1) ADDITION, (2) SUBTRACTION, (3) MULTIPLICATION, AND (4) DIVISION, TO SOLVE PROBLEMS WITH AT LEAST 90% ACCURACY. MEAS: PC 2/0								
	010	I 3B. GIVEN A LIST OF MATHEMATICAL TERMS AND SYMBOLS MATCH THEM WITH THEIR DEFINITIONS WITH AT LEAST 60% ACCURACY. MEAS: PC 0/1.5								
	011	I 3C. GIVEN NUMBERS WITH EXPONENTIAL COMPONENTS, DETERMINE EQUIVALENT VALUES AND SELECT THE BEST RESPONSE WITH AT LEAST 60% ACCURACY. MEAS: PC 1/0								
A	11	A1-11 DO YOU USE MATHEMATICAL EXPONENTS OR SUBSCRIPTS IN OTHER THAN POWERS OF 10?	31.8	13.0	6.9	37.5	12.3	9.5	3.5	54.5
A	4	A1-4 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY?	7.6	6.2	.0	12.5	7.5	.0	3.5	36.4
	012	I 3D. GIVEN NUMERICAL VALUES, CONVERT TO POWERS OF TEN, AND SCIENTIFIC NOTATION, AND SELECTED METRIC PREFIXES AND CONVERSELY WITH AT LEAST 60% ACCURACY. MEAS: PC 3/0								
A	2	A1-2 DO YOU USE PUBLICATIONS, SUCH AS TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE NUMBERS IN ORDER TO USE THEM BEFORE YOU CAN APPLY THE INFORMATION IN A USEFUL WAY ON THE JOB?	33.3	32.3	27.6	68.8	34.9	47.6	31.1	70.5

O TSK TITLES	FCRPTS PAGE 739							
	306	306	316	316	362	362	362	918
	51	52	50F	52F	51	53	54	50
	###	(M)	(M)	(M)	(M)	(M)	(M)	(M)
013 I 3E. GIVEN A SUPPLY OF DATA, SOLVE FOR THE UNKNOWN FACTOR OF GIVEN FORMULAS (EQUATIONS) WITH AT LEAST 90% ACCURACY. MEAS: PC 4/0								
A 3 A1-3 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS?	27.7	13.7	13.8	68.9	17.0	4.8	8.8	77.3
A 5 A1-5 DO YOU SOLVE FOR UNKNOWN QUANTITIES SUCH AS SOLVING FOR X IN THE EQUATION X + 6 = 8?	15.7	11.2	10.3	43.5	17.9	4.9	10.5	68.2
A 10 A1-10 DO YOU SOLVE OR USE PROPORTIONS? AN EXAMPLE OF A PROPORTION IS 2 : 5 :: 4 : 10. ANOTHER WAY TO EXPRESS THE SAME RELATIONSHIP IS 2/5 = 4/10. SOMETIMES, ONE OF THE QUANTITIES IS UNKNOWN AND HAS TO BE SOLVED FOR, SUCH AS 2 : X :: 4 : 10 (X IN THIS CASE IS UNKNOWN).	15.7	9.9	10.3	37.9	9.4	23.8	5.3	61.4
014 I 4. BASIC CIRCUIT REQUIREMENTS 6/2								
15 I 4A. GIVEN SCHEMATIC DIAGRAMS OF A SAFE, CONTROLLABLE, D.C. CIRCUIT, CORRECTLY IDENTIFY THE FIVE CIRCUIT COMPONENTS AS TO NAME, PURPOSE, AND SYMBOL. MEAS: PC 3/0								
A 47 A3-16 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES?	84.8	82.6	27.6	75.0	74.5	76.2	46.2	95.5
016 I 4d. GIVEN TWO LISTS OF APPLICABLE STATEMENTS, CORRECTLY MATCH METHODS OF PRODUCING ELECTRICITY TO DEFINITIONS AND SYMBOLS OF EACH WITH AT LEAST 60% ACCURACY. MEAS: PC 1/0								
A 13 A2-2 DO YOU USE (REFER TO TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTROMOTIVE FORCE (EMF)?	39.8	49.7	13.8	25.0	38.7	38.1	27.2	72.7
017 I 4C. GIVEN THE COLOR-CODE OF TEN RESISTORS, LIST THE RESISTANCE VALUE AND TOLERANCE WITH AT LEAST 80% ACCURACY. MEAS: PC 3/1.5								
A 27 A3-13 DO YOU USE A STUDY GUIDE OR OTHER WHICH INDICATE BASIC VALUE OF A RESISTANCE?	79.8	74.5	6.9	75.0	59.4	76.2	23.0	97.7
A 30 A3-16 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE?	67.2	64.0	3.4	62.5	48.1	71.4	12.8	93.2
A 29 A3-15 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE RESISTANCE?	57.3	38.4	3.4	50.0	25.5	73.3	8.1	97.7

D TSK	TITLES	306 51 AFM	306 52 (M)	316 SCE (M)	316 SCE (M)	462 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
316	I 40. FROM SUPPLIED SYMBOLS, SELECT THE SYMBOL FOR AT LEAST ONE OF THE FOLLOWING RESISTORS: FIXED, TAPPED, OR VARIABLE. MEAS: PC	670.5							
A 35	A3-11 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY POTENTIOMETER?	84.8	77.0	13.8	75.0	63.2	66.7	32.5	97.7
A 32	A3-4 DO YOU ADJUST RESISTORS?	80.3	77.0	6.9	75.0	47.2	76.2	20.2	97.7
A 33	A3-8 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED WIRE?	62.1	61.5	6.9	62.5	67.0	61.9	36.0	90.9
A 34	A3-10 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY RHEOSTAT?	50.0	57.8	13.8	75.0	63.2	61.9	37.7	97.7
A 31	A3-7 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY CARBON?	27.3	37.3	6.9	56.3	46.2	42.9	21.9	72.7
A 37	A3-9 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY SLIDE TAP?	16.7	29.2	.0	56.3	33.6	33.3	7.9	90.9
A 36	A3-12 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED FILM?	16.7	9.3	3.4	31.3	13.2	19.0	2.6	59.1
319	I 41. SELECT THE CORRECT DEFINITION, SYMBOL, AND UNIT OF MEASUREMENT FOR CURRENT AND VOLTAGE, WITH AT LEAST 80% ACCURACY. MEAS: PC	270							
A 10	A2-1 DO YOU USE (PERHAPS IN TECHNICAL ORDERS) THE TERM VOLTAGE OR VOLT (V)?	92.4	95.7	100.0	100.0	94.3	100.0	95.6	100.0
A 20	A2-11 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM CURRENT?	89.4	92.5	89.7	100.0	88.7	95.2	82.5	100.0
A 17	A2-6 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM AMPERE?	87.3	88.8	75.9	87.5	87.7	85.7	73.7	100.0
A 21	A2-13 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTRON?	48.9	42.9	24.1	56.3	30.2	33.3	10.5	72.7
A 19	A2-8 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM COULOMB?	6.1	8.1	6.9	6.3	5.7	9.5	.9	54.5
320	I 42. IDENTIFY THE FACTORS AFFECTING RESISTANCE OF A CONDUCTOR, WITH AT LEAST 80% ACCURACY. MEAS: PC	270							
A 38	A3-1 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM [illegible]	96.4	91.9	86.7	100.0	91.5	90.5	83.3	100.0
A [illegible]	A3-[illegible] [illegible] TEMPERATURE COEFFICIENTS FOR [illegible] ANY TASK YOU PERFORM?	19.7	17.4	.0	25.0	15.1	4.8	2.6	52.3
321	I [illegible] [illegible] USE?	5.5/3							

POI MATCHED WITH SURVEY DATA

FOPETS PAGE 240

			306	306	316	316	362	362	362	918
			51	52	50F	52F	51	53	54	50
S	TSK	TITLE	***	(M)	(M)	(M)	(M)	(M)	(M)	(M)
023		I 5A. GIVEN A MULTIMETER AND FIVE RESISTORS, USE THE MULTIMETER TO DETERMINE THE OHMIC VALUE, WITHIN TOLERANCE, FOR AT LEAST FOUR RESISTORS. MEAS: PC 2/0								
A	29	A3-5 DO YOU MEASURE RESISTORS?	81.8	80.7	13.6	81.3	66.0	85.7	33.3	97.7
B	60	B1-1 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE RESISTANCE?	81.8	88.2	82.8	87.5	90.6	85.7	74.6	100.0
A	1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	69.7	73.9	65.5	81.3	69.8	71.4	48.2	97.7
N	813	N1-5 DO YOU READ METER SCALES?	68.2	76.4	86.2	75.0	66.0	66.7	59.6	88.6
N	816	N1-8 DO YOU ZERO OHMMETERS?	66.7	75.2	72.4	81.3	67.9	66.7	60.5	84.1
D	217	D1-3F DO YOU CHECK RESISTORS USING OHMMETERS?	37.9	27.3	.0	25.0	12.3	28.6	7.9	77.3
023		I 5B. GIVEN THE APPROPRIATE STUDY MATERIAL, COMPLETE WORK ASSIGNMENTS IN THE FAMILIARIZATION AND OPERATIONAL USAGE OF DIGITAL MULTIMETERS WITH AT LEAST 60% ACCURACY. MEAS: PC 0/2								
A	1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	69.7	73.9	65.5	81.3	69.8	71.4	48.2	97.7
024		I 5C. GIVEN A CIRCUIT VOLTAGE VALUE AND A PICTURE OF A MULTIMETER FACE PANEL OR THE MULTIMETER, SELECT THE PROPER FUNCTIONS, RANGE SETTING, AND SCALE TO BE USED FOR MEASURING THE VOLTAGE CORRECTLY WITH AT LEAST 60% ACCURACY. MEAS: PC 2.5/0								
-	41	B1-2 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE VOLTAGE?	66.4	91.3	93.1	87.5	90.6	85.7	80.7	100.0
A	1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	69.7	73.9	65.5	81.3	69.8	71.4	48.2	97.7
N	813	N1-5 DO YOU READ METER SCALES?	68.2	76.4	86.2	75.0	66.0	66.7	59.6	88.6
N	815	N1-7 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)?	33.3	36.0	24.1	50.0	22.6	23.8	18.4	54.5

S TSK	TITLES	306 51 AMN	306 52 (M)	316 90F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
025	I 8. GIVEN A CIRCUIT CURRENT VALUE AND A MULTIMETER FACE PANEL OF THE MULTIMETER, SELECT THE PROPER FUNCTION, RANGE SETTINGS, AND SCALE TO BE USED FOR MEASURING THE CURRENT WITH AT LEAST 80% ACCURACY. MEAS: PC 1/0								
B 62	B1-3 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE CURRENT?	71.2	84.5	51.7	81.3	84.0	66.7	66.4	97.7
A 1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	69.7	73.9	65.5	81.3	56.8	71.4	48.2	97.7
N 13	A1-5 DO YOU READ METER SCALES?	68.2	76.4	86.2	75.0	66.0	66.7	97.6	88.6
023	I 8. SERIES RESISTIVE CIRCUITS 8/2								
027	I 8A. GIVEN APPLICABLE FORMULAS AND A SCHEMATIC DIAGRAM FOR A THREE RESISTOR SERIES CIRCUIT SHOWING APPLIED VOLTAGE AND COMPONENT VALUES, SOLVE FOR TOTAL RESISTANCE, CURRENT, VOLTAGE AND POWER, AND INDIVIDUAL VOLTAGE AND POWER DROPS, CORRECTLY, AT LEAST TWO OUT OF THREE TIMES. MEAS: PC 5/0								
A 27	A2-10 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	60.6	73.9	89.7	81.3	60.4	66.7	93.9	97.7
A 41	A3-17 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	59.1	54.7	13.8	56.3	53.8	61.9	28.7	84.1
A 43	A3-19 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	56.1	56.5	13.8	50.0	45.3	42.9	23.3	88.6
A 42	A3-18 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	53.0	54.7	10.3	56.3	50.9	42.9	23.3	79.5
A 55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.5	44.7	10.3	37.5	42.5	47.6	14.7	88.6
A 44	A3-20 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	40.9	41.0	13.8	50.0	33.0	33.3	21.3	75.0
A 54	A3-30 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	39.4	42.2	10.3	37.5	41.5	33.3	20.7	71.6
A 53	A3-29 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	37.9	42.9	6.9	37.5	38.7	33.3	19.0	69.3
A 52	A3-28 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	25.8	30.4	6.9	31.3	20.2	14.3	7.8	7.8

D	TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D28		I 8B. USING THE THREE RESISTOR SERIES CIRCUIT CONNECTED ON A TRAINER, VERIFY THE PREVIOUSLY CALCULATED VALUES OF VOLTAGE, CURRENT AND RESISTANCE WITH A MULTIMETER WITHIN + OR - 20% ACCURACY. MEAS: PC 1/3								
A	29	A3-5 DO YOU MEASURE RESISTORS?	81.8	80.7	13.8	81.3	66.0	85.7	33.3	97.7
A	41	A3-17 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	59.1	54.7	13.8	56.3	53.8	61.9	33.3	88.6
A	43	A3-19 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	56.1	56.5	13.8	50.0	45.3	42.9	27.2	95.5
A	42	A3-18 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	53.0	54.7	10.3	56.3	50.9	42.9	33.3	88.6
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.5	44.7	10.3	37.5	42.5	47.6	16.7	79.5
A	44	A3-20 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	40.9	41.0	13.8	50.0	33.0	23.8	12.3	72.7
A	56	A3-32 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	39.4	42.2	10.3	37.5	41.5	23.8	16.7	81.8
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	37.9	42.9	6.9	37.5	38.7	23.8	13.2	88.6
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	25.8	30.4	6.9	31.3	30.2	14.3	7.9	70.5
D29		I 8C. USING A MULTIMETER, APPLICABLE FORMULAS, SCHEMATIC DIAGRAM AND A TRAINER HAVING AN OPEN OR SHORTED COMPONENT IN A SERIES RESISTIVE CIRCUIT, LOCATE THE FAULTY COMPONENT AT LEAST TWO OUT OF THREE TIMES. MEAS: PC 2/3								
A	29	A3-5 DO YOU MEASURE RESISTORS?	81.8	80.7	13.8	81.3	66.0	85.7	33.3	97.7
A	41	A3-17 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	59.1	54.7	13.8	56.3	53.8	61.9	33.3	88.6
A	43	A3-19 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	56.1	56.5	13.8	50.0	45.3	42.9	27.2	95.5
A	42	A3-18 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	53.0	54.7	10.3	56.3	50.9	42.9	33.3	88.6
D30		I 9. PARALLEL RESISTIVE CIRCUITS 1/2								

D	TSK	TITLES	306 51 %LR	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
	731	I 9A. GIVEN APPLICABLE FORMULAS AND A SCHEMATIC DIAGRAM FOR A THREE RESISTOR PARALLEL CIRCUIT, SHOWING APPLIED VOLTAGE AND COMPONENT VALUES, SOLVE FOR TOTAL RESISTANCE, TOTAL CURRENT, TOTAL POWER, BRANCH CURRENT, AND POWER DROPS, CORRECTLY, AT LEAST TWO OUT OF THREE TIMES FOR EACH VARIABLE. MEAS: PC 4/0								
A	23	A2-12 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	60.6	73.9	89.7	81.3	60.4	56.7	43.9	97.7
A	50	A3-26 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	53.0	51.6	13.8	37.5	46.2	57.1	26.2	61.8
A	51	A3-27 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	48.5	52.8	10.3	37.5	46.2	42.9	21.9	64.1
A	52	A3-28 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	45.5	52.8	10.3	37.5	39.6	38.1	17.5	68.6
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.5	44.7	10.3	37.5	42.5	47.6	16.7	79.5
A	53	A3-29 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	39.4	45.3	6.9	31.3	36.8	28.6	15.5	86.4
A	56	A3-32 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	39.4	42.2	10.3	37.5	41.5	23.8	16.7	81.8
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	37.9	42.9	6.9	37.5	38.7	23.8	13.2	68.6
A	54	A3-30 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	34.8	37.3	10.3	31.3	32.1	19.0	9.4	70.5
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	31.8	36.6	6.9	37.5	34.9	19.0	12.3	81.8
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	25.8	30.4	6.9	31.3	30.2	14.3	7.9	70.5
	733	I 9B. USING THE THREE RESISTOR PARALLEL CIRCUIT CONNECTED IN A TRAINER, VERIFY THE PREVIOUSLY CALCULATED VALUES OF VOLTAGE, CURRENT AND RESISTANCE WITH A MULTIMETER WITHIN + OR - 10% ACCURACY. MEAS: PC 2/0								
A	23	A3-[illegible] WATTAGE?	81.8	80.7	13.8	81.3	66.0	65.7	33.3	97.7
A	50	A3-26 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	53.0	51.6	13.8	37.5	46.2	57.1	26.2	61.8
A	51	A3-27 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	48.5	52.8	10.3	37.5	46.2	42.9	21.9	64.1
A	52	A3-28 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	45.5	52.8	10.3	37.5	39.6	38.1	17.5	68.6

D	TSK	TITLES	306 51 **M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.5	44.7	10.3	37.5	42.5	47.6	16.7	79.5
A	53	A3-29 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	39.4	45.3	6.9	31.3	36.8	28.6	15.5	86.4
A	56	A3-32 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	39.4	42.2	10.3	37.5	41.5	23.8	16.7	81.8
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	37.9	42.9	6.9	37.5	38.7	23.8	13.2	88.6
A	54	A3-30 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	34.8	37.3	10.3	31.3	32.1	19.0	9.6	70.5
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	31.8	36.6	6.9	37.5	34.9	19.0	12.3	81.8
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	25.8	30.4	6.9	31.3	30.2	14.3	7.9	70.5

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033 I 9C. GIVEN SCHEMATIC DIAGRAMS OF FOUR BRIDGE CIRCUITS, NECESSARY CIRCUIT VALUES AND FORMULAS, DETERMINE WHETHER EACH CIRCUIT IS BALANCED OR UNBALANCED. AT LEAST THREE OUT OF FOUR CORRECT IS REQUIRED. MEAS: PC 0/2

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034 I 9D. USING A MULTIMETER, FORMULAS, SCHEMATIC DIAGRAM AND A TRAINER HAVING AN OPEN OR SHORTED COMPONENT IN A PARALLEL RESISTIVE CIRCUIT, LOCATE THE FAULTY COMPONENT AT LEAST THREE OUT OF FOUR TIMES CORRECTLY. MEAS: PC 2/0

A	29	A3-5 DO YOU MEASURE RESISTORS?	81.8	80.7	13.8	81.3	66.0	85.7	33.3	97.7
A	50	A3-26 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	57.0	51.6	13.8	37.5	46.2	57.1	20.2	91.8
A	51	A3-27 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	48.5	52.8	10.3	37.5	46.2	42.9	11.9	84.1
A	52	A3-28 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	45.5	52.8	10.3	37.5	39.6	38.1	17.5	88.6
A	53	A3-29 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	39.4	45.3	6.9	31.3	36.8	28.6	15.5	86.4
A	54	A3-30 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	34.8	37.3	10.3	31.3	32.1	19.0	9.6	70.5

D	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
	035	I 10. SERIES-PARALLEL RESISTIVE CIRCUITS 10/2								
	036	I 10A. GIVEN APPLICABLE FORMULAS AND A SCHEMATIC DIAGRAM OF A THREE RESISTOR SERIES-PARALLEL CIRCUIT SHOWING APPLIED VOLTAGE AND COMPONENT VALUES, SOLVE FOR TOTAL RESISITANCE, TOTAL CURRENT, TOTAL POWER, VOLTAGE ACROSS EACH RESISITOR AND BRANCH CURRENTS ACCURATELY AT LEAST THREE OUT OF FOUR TIMES. MEAS: PC 2/0								
A	23	A2-10 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	60.6	73.9	89.7	81.3	60.4	66.7	43.9	97.7
A	45	A3-21 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	51.5	52.8	13.8	37.5	49.1	61.9	26.3	84.1
A	46	A3-22 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	54.0	10.3	43.8	48.1	47.6	27.2	86.4
A	47	A3-23 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	56.5	13.8	37.5	41.5	42.9	20.2	95.5
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.5	44.7	10.3	37.5	42.5	47.6	16.7	79.5
A	48	A3-24 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.4	47.2	6.9	31.3	35.8	33.3	19.3	88.6
A	56	A3-32 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	39.4	42.2	10.3	37.5	41.5	23.8	16.7	81.8
A	49	A3-25 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	37.9	41.0	10.3	31.3	31.1	23.8	10.5	72.7
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	37.9	42.9	6.9	37.5	38.7	23.8	13.2	88.6
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	31.8	36.6	6.9	37.5	34.9	19.0	12.3	81.8
A	50	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	25.8	30.4	6.9	31.3	30.2	14.3	7.9	70.5
	037	I 10B. USING A MULTIMETER AND A TRAINER WITH THREE COMPONENT SERIES-PARALLEL RESISTIVE CIRCUIT, VERIFY WITHIN + 5% - 10 PERCENT ACCURACY THE PREVIOUSLY CALCULATED VALUES OF TOTAL RESISTANCE, TOTAL CURRENT AND INDIVIDUAL VOLTAGE DROPS. MEAS: PC 2/0								
A	39	A3-[illegible] RESISTORS?	81.8	80.7	13.8	81.3	66.0	85.7	33.3	97.7

D	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	45	A3-21 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	51.5	52.8	13.8	37.5	49.1	61.9	26.3	84.1
A	46	A3-22 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	54.0	10.3	43.8	48.1	47.6	27.2	86.4
A	47	A3-23 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	56.5	13.8	37.5	41.5	42.9	20.2	95.5
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.5	44.7	10.3	37.5	42.5	47.6	16.7	79.5
A	48	A3-24 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.4	47.2	6.9	31.3	35.8	33.3	19.3	88.6
A	56	A3-32 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	39.4	42.2	10.3	37.5	41.5	23.8	16.7	81.8
A	49	A3-25 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	37.9	41.0	10.3	31.3	31.1	23.8	10.5	72.7
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	37.9	42.9	6.9	37.5	38.7	23.8	13.2	88.6
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	31.8	36.6	6.9	37.5	34.9	19.0	12.3	81.8
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	25.8	30.4	6.9	31.3	30.2	14.3	7.9	70.5

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038 I 10C. USING A MULTIMETER AND A TRAINER WITH A LOADED VOLTAGE DIVIDER, DETERMINE THE CHANGES IN VOLTAGE AT TWO TAPS WITH RESPECT TO GROUND REFERENCE POINT WHEN THE LOAD IS CHANGED, CORRECTLY AT LEAST TWO OUT OF THREE TIMES FOR EACH VARIABLE. MEAS: PC 3/C

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039 I 10D. USING A MULTIMETER, APPLICABLE FORMULAS, A SCHEMATIC DIAGRAM AND A TRAINER HAVING AN OPEN OR SHORTED COMPONENT IN A SERIES-PARALLEL RESISTIVE CIRCUIT, LOCATE THE FAULTY COMPONENT ACCURATELY AT LEAST TWO OUT OF THREE TIMES. MEAS: PC 3/D

A	29	A3-5 DO YOU MEASURE RESISTORS?	81.8	80.7	13.8	81.3	66.0	85.7	33.3	97.7
A	45	A3-21 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	51.5	52.8	13.8	37.5	49.1	61.9	26.3	84.1
A	46	A3-22 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	54.0	10.3	43.8	48.1	47.6	27.2	86.4

C	TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	47	A3-23 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	56.5	13.8	37.5	41.5	42.9	20.2	95.5
A	48	A3-24 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.4	47.2	6.9	31.3	35.8	33.3	19.3	88.6
A	49	A3-25 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	37.9	41.0	10.3	31.3	31.1	23.8	10.5	72.7

040 I 11. MAGNETISM AND RELAYS 1.5/2

041 I 11A. GIVEN A DRAWING OF AN ELECTROMAGNET SUSPENDED BETWEEN THE POLES OF A PERMANENT MAGNET, DETERMINE THE DIRECTION OF MOTION OF THE ELECTROMAGNET WHEN CURRENT FLOWS THROUGH ITS WINDINGS. MEAS: PC 0/2

C										
C	169	C3-2 DO YOU USE OR REFER TO TEMPORARY MAGNETS?	34.8	39.1	3.4	37.5	29.2	28.6	14.0	45.5
C	168	C3-1 DO YOU USE OR REFER TO PERMANENT MAGNETS?	27.3	44.7	10.3	31.3	20.8	23.8	17.5	56.8
C	177	C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION?	22.7	21.7	3.4	6.3	18.9	9.5	10.5	45.5
C	174	C3-7 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX?	21.2	18.6	6.9	12.5	17.9	4.8	6.1	47.7
C	171	C3-4 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS?	16.7	11.2	3.4	6.3	13.2	.0	2.6	22.7
C	173	C3-6 DO YOU USE OR REFER TO RESIDUAL MAGNETISM?	13.6	20.5	3.4	12.5	57.5	14.3	6.1	29.5
C	172	C3-5 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS?	12.1	10.6	3.4	6.3	14.2	.0	3.5	25.0
C	170	C3-3 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS?	10.6	8.7	3.4	6.3	19.8	.0	2.6	20.5
C	178	C3-11 DO YOU USE OR REFER TO FLUX DENSITY?	10.6	5.6	.0	6.3	6.6	.0	1.8	15.9
C	175	C3-8 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM?	6.1	3.7	.0	.0	3.8	.0	3.5	15.9
C	176	C3-9 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM?	3.0	3.7	.0	6.3	4.7	.0	2.6	15.9

042 I 11B. GIVEN A RELAY TRAINER AND A SCHEMATIC DIAGRAM, VERIFY WHICH CONTACTS WILL BE OPEN AND WHICH WILL BE CLOSED WHEN POWER IS APPLIED AND WHEN POWER IS OFF. ACCURACY WITHIN + OR - 10% IS REQUIRED. MEAS: PC 1.5/0

E										
E	289	C3-17 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS?	63.6	45.3	51.7	81.3	57.5	52.4	44.7	90.9
E	290	C3-18 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS?	63.6	44.7	51.7	81.3	57.5	52.4	45.6	90.9
E	288	C3-16 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS?	51.5	33.5	48.3	81.3	48.1	38.1	43.9	88.6
E	291	C3-19 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS?	51.5	34.8	34.5	81.3	68.9	47.6	48.2	84.1

C	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
E	291	E3-15 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS?	50.0	33.5	48.3	81.3	50.0	42.9	46.5	88.6
043		II. AC CIRCUITS 76 HRS TT								
044		II 1. AC TERMS AND VALUES 4/6								
045		II 1A. GIVEN A WAVEFORM THAT REPRESENTS ALTERNATING CURRENT OR VOLTAGE AND A LIST OF TEN TERMS AND VALUES, LABEL THE WAVEFORM WITH THE TERM OR VALUE IN THE APPROPRIATE SPACE PROVIDED ON THE WAVEFORM WITH AT LEAST 80% ACCURACY. MEAS: PC 4/0								
S	69	B2-2 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PEAK TO PEAK VOLTAGE IN YOUR PRESENT JOB?	80.3	68.9	13.8	81.3	30.2	76.2	14.9	93.2
B	72	B2-5 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM FREQUENCY IN YOUR PRESENT JOB?	72.7	59.6	51.7	68.8	63.2	90.5	20.2	93.2
B	71	B2-4 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM WAVE LENGTH IN YOUR PRESENT JOB?	53.0	46.0	13.8	75.0	36.8	47.6	7.9	81.8
B	70	B2-3 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM AVERAGE VOLTAGE (DC) IN YOUR PRESENT JOB?	51.5	62.1	31.0	75.0	43.4	57.1	29.9	86.4
B	68	B2-1 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM EFFECTIVE VOLTAGE (RMS) IN YOUR PRESENT JOB?	45.5	47.8	20.7	37.5	26.4	52.4	16.7	90.9
B	73	B2-6 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM INSTANTANEOUS VALUE IN YOUR PRESENT JOB?	12.1	13.7	3.4	18.8	10.4	.0	.9	52.3
A	9	A1-9 DO YOU USE TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT?	7.6	4.3	.0	6.3	2.8	4.8	1.8	15.9
046		II 1B. GIVEN A PICTORIAL DIAGRAM OF AN AC AND A DC GENERATOR, MATCH THE MAJOR PARTS WITH THEIR FUNCTIONS, WITH AT LEAST 60% ACCURACY. MEAS: PC								
M	789	M3-12 DO YOU PERFORM ANY TASKS ON MOTOR BRUSHES?	34.8	68.9	3.4	.0	10.4	.0	.0	86.4
M	787	M3-10 DO YOU PERFORM ANY TASKS ON MOTOR ARMATURES?	28.8	66.5	3.4	.0	5.7	.0	.0	75.0
M	788	M3-11 DO YOU PERFORM ANY TASKS ON MOTOR ROTORS?	24.2	51.6	3.4	.0	4.7	.0	.0	63.6
M	786	M3-9 DO YOU PERFORM TASKS ON MOTOR FIELD COILS?	19.7	52.2	.0	6.3	2.8	.0	.0	59.1
M	790	M3-13 DO YOU PERFORM ANY TASKS ON MOTOR SLIP RINGS?	19.7	49.7	3.4	.0	5.7	.0	.0	45.5
M	791	M3-14 DO YOU PERFORM ANY TASKS ON MOTOR COMMUTATORS?	12.1	48.4	3.4	.0	6.6	.0	.0	52.3
M	792	M3-15 DO YOU PERFORM ANY TASKS ON MOTOR POLE PIECES?	12.1	39.8	3.4	6.3	4.7	.0	.0	34.1

			306	306	316	316	362	362	362	918
			51	52	50F	50F	51	53	54	50
D	TSK	TITLES	**M**	(P)	(P)	(M)	(M)	(P)	(M)	(M)
047		II 7. INDUCTANCE AND INDUCTIVE REACTANCE 6/0								
048		II 2A. GIVEN A SCHEMATIC DIAGRAM OF THREE INDUCTORS CONNECTED IN SERIES-PARALLEL, VALUES OF INDUCTANCES, SIGNAL FREQUENCY, AND FORMULAS, SOLVE FOR THE TOTAL INDUCTIVE REACTANCE CORRECTLY, AT LEAST TWO OUT OF THREE TIMES. MEAS: PC 2/0								
5	80	B3-6 DO YOU USE OR REFER TO INDUCTANCE?	31.8	31.7	.0	50.0	21.7	14.3	6.1	81.8
B	94	B3-22 DO YOU WORK WITH POWER INDUCTORS?	25.8	26.1	6.9	31.3	13.2	4.8	4.4	63.6
B	81	B3-7 DO YOU USE OR REFER TO HENRIES?	21.2	20.5	.0	18.8	13.2	4.8	1.8	68.2
B	95	B3-21 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS?	16.7	11.2	3.4	.0	16.0	9.5	6.1	52.3
B	80	B3-8 DO YOU USE OR REFER TO INDUCTIVE REACTANCE?	13.6	18.6	.0	18.8	17.0	9.5	1.8	63.6
B	96	B3-22 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS?	13.6	9.3	3.4	.0	7.5	.0	.9	50.0
B	91	B3-17 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS?	12.1	18.0	.0	12.5	14.2	14.3	4.4	61.4
B	86	B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL?	10.6	9.9	.0	.0	12.3	4.8	2.6	36.4
B	89	B3-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMABILITY OF THE CORE MATERIAL?	7.6	8.1	.0	6.3	11.3	4.8	2.6	36.4
B	92	B3-18 DO YOU CALCULATE INDUCTIVE REACTANCE?	7.6	9.3	.0	6.3	10.4	.0	3.5	40.9
B	82	B3-9 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS?	6.1	3.7	.0	.0	7.5	.0	.9	36.4
B	84	B3-11 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS?	6.1	5.0	.0	.0	3.8	.0	.9	34.1
B	87	B3-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE?	6.1	7.5	.0	.0	10.4	4.8	1.8	31.8
B	97	B3-19 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTAIONAL TO FREQUENCY?	6.1	9.3	.0	6.3	16.0	9.5	2.6	43.2
B	85	B3-14 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS?	4.5	6.2	.0	.0	9.4	.0	.9	38.6
B	88	B3-16 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH?	4.5	6.8	.0	6.3	9.4	4.8	1.5	29.5
B	90	B3-16 DO YOU CALCULATE INDUCTANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	4.5	9.3	.0	37.5	10.4	.0	4.4	36.4
049		II 2B. GIVEN AN INDUCTIVE CIRCUIT AND NECESSARY FORMULAS, DETERMINE THE EFFECT ON INDUCTIVE REACTANCE OF VARYING EITHER SIGNAL FREQUENCY OR INDUCTANCE WITHIN + OR - 20% ACCURACY. MEAS: PC 4/0								
5	83	B3-8 DO YOU USE OR REFER TO INDUCTIVE REACTANCE?	13.6	18.6	.0	18.8	17.0	9.5	1.8	63.6

POI MATCHED WITH SURVEY DATA — REPORT PAGE 350

			306	306	316	316	362	362	362	918
			51	52	50F	50F	51	53	54	50
D	TSK	TITLES	**M**	(M)	(M)	(M)	(M)	(M)	(M)	(M)
B	91	B3-17 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS?	12.1	18.0	.0	17.5	14.2	14.3	4.4	61.4
B	92	B3-18 DO YOU CALCULATE INDUCTIVE REACTANCE?	7.6	9.3	.0	6.3	10.4	.0	3.5	40.9
B	93	B3-19 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY?	6.1	9.3	.0	6.3	16.0	9.5	2.6	43.2

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050 II 3. TRANSFORMERS 4/2

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051 II 3A. GIVEN A SCHEMATIC DIAGRAM OF A TRANSFORMER CONNECTED TO A RESISTIVE LOAD, PRIMARY VOLTAGE, NUMBER OF PRIMARY AND SECONDARY TURNS, AND FORMULAS, DETERMINE THE SECONDARY CURRENT AND VOLTAGE WITHIN + OR - 10% ACCURACY. MEAS: PC 4/0

C	138	C2-13 DO YOU WORK WITH POWER TRANSFORMERS?	74.2	68.3	17.2	68.8	27.4	52.4	20.2	93.2
C	149	C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS?	74.2	69.6	24.1	75.0	29.2	66.7	20.2	95.5
C	152	C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	69.7	62.7	13.8	68.8	23.6	38.1	8.6	95.5
C	150	C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS?	62.1	46.0	10.3	68.8	20.8	36.1	11.4	95.5
C	130	C2-5 DO YOU TROUBLESHOOT TRANSFORMERS?	60.6	55.3	10.3	50.0	17.0	42.9	12.3	93.2
C	146	C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES?	59.1	50.2	3.4	43.8	18.9	38.1	12.3	81.8
C	151	C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	54.5	52.2	13.8	62.5	18.9	33.3	8.8	95.5
C	145	C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE?	53.0	55.9	3.4	56.3	23.6	47.6	13.2	84.1
C	154	C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	37.9	24.2	3.4	25.0	17.9	23.8	8.8	70.5
C	157	C2-32 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS?	34.9	23.6	3.4	25.0	11.3	19.0	4.4	81.8
C	160	C2-35 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS?	28.8	36.0	.0	31.3	9.4	23.8	6.1	86.4
C	148	C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	27.3	35.4	.0	12.5	13.2	23.3	4.4	86.4
C	153	C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	27.3	16.1	6.9	25.0	13.2	14.3	4.4	59.1
C	158	C2-33 DO YOU DISCRIMINATE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH?	22.7	8.1	.0	12.5	6.6	4.8	2.6	76.4

D	TSK	TITLES	30F 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	147	C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	19.7	26.1	.0	6.3	9.4	19.0	3.6	50.0
C	165	C2-30 DO YOU REFER TO VARIABLE TRANSFORMER SCHEMATIC SYMBOLS?	19.7	27.3	3.4	56.3	17.0	23.8	5.3	86.4
C	139	C2-14 DO YOU WORK WITH AUDIO TRANSFORMERS?	18.2	14.3	6.9	12.5	15.1	47.6	10.5	65.9
C	159	C2-34 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO?	16.7	12.4	.0	18.8	4.7	14.3	.9	65.9
C	161	C2-36 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	15.2	7.5	.0	6.3	2.8	14.3	.0	52.3
C	134	C2-9 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS?	13.6	11.2	.0	18.8	4.7	14.3	2.6	59.1
C	135	C2-10 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS?	13.6	9.3	.0	.0	3.8	4.8	1.8	22.7
C	140	C2-15 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS?	12.1	7.5	6.9	6.3	2.8	.0	.9	52.3
C	162	C2-37 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	10.6	6.2	.0	6.3	2.8	4.8	.0	34.1
C	137	C2-12 DO YOU WORK WITH AUTOTRANSFORMERS?	7.6	6.8	.0	18.8	4.7	9.5	.9	88.6
C	133	C2-8 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS?	6.1	6.2	.0	6.3	4.7	4.8	.0	29.5
C	136	C2-11 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS?	6.1	2.5	.0	6.3	5.7	.0	.0	13.6
C	132	C2-7 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M?	4.5	3.1	.0	6.3	3.8	.0	1.8	15.9
C	131	C2-6 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)?	3.0	3.1	.0	.0	4.7	.0	.0	18.2

DS2 II 4. CAPACITANCE AND CAPACITIVE REACTANCE 8/0

DS2 II 4A. GIVEN A DIAGRAM OF THREE CAPACITORS CONNECTED IN SERIES-PARALLEL, VALUES OF CAPACITANCE, SIGNAL FREQUENCY AND FORMULAS, SOLVE CORRECTLY FOR TOTAL CAPACITIVE REACTANCE AT LEAST TWO OUT OF THREE TIMES. MEAS: PC 4/0

C	124	C1-24 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS?	84.8	75.8	3.4	68.8	50.9	71.4	31.6	90.9
C	113	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	83.3	80.1	10.3	81.3	51.9	71.4	44.7	95.5
C	125	C1-25 DO YOU WORK WITH OTHER FIXED CAPACITORS?	72.7	68.9	3.4	81.3	47.2	57.1	73.3	95.5
C	116	C1-18 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS?	69.7	68.9	3.4	62.5	47.2	57.1	19.3	93.2
C	107	C1-11 DO YOU USE OR REFER TO CAPACITANCE?	65.2	72.7	3.4	62.5	62.3	57.1	28.1	88.6
C	119	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS?	54.5	49.1	.0	62.5	35.9	47.6	11.4	81.8

POI MATCHED WITH SURVEY DATA — FORMTS PAGE 052

C	TSK	TITLES	306 51 **M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	118	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO?	36.4	38.5	6.9	43.8	31.1	28.6	17.9	72.7
C	110	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE?	28.8	39.8	.0	37.5	29.2	14.3	6.1	65.9
C	122	C1-26 DO YOU WORK WITH VARIABLE CAPACITORS?	27.3	25.5	.0	31.3	17.9	14.3	13.2	77.3
C	115	C1-19 DO YOU CALCULATE CAPACITANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	21.2	16.8	.0	6.3	22.6	14.3	9.6	40.9
C	119	C1-23 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS?	12.2	24.2	.0	18.9	23.6	23.8	10.5	61.4
C	120	C1-24 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY?	12.1	13.7	.0	.0	18.9	9.5	7.0	43.2
C	121	C1-25 DO YOU CALCULATE CAPACITIVE REACTANCE?	12.1	8.1	.0	6.3	14.2	.0	3.5	40.9
C	123	C1-27 DO YOU WORK WITH TRIMMER CAPACITORS?	12.1	14.3	.0	18.8	8.5	.0	2.6	68.2
C	116	C1-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT?	10.6	7.5	.0	.0	16.0	4.8	3.5	25.0
C	104	C1-8 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE?	9.1	14.9	.0	18.8	11.3	9.5	2.6	22.7
C	117	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS?	9.1	6.8	.0	6.3	15.1	.0	3.5	27.3
C	108	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT?	7.6	9.3	.0	.0	12.3	.0	.0	31.8
C	105	C1-9 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC?	4.5	3.1	.0	6.3	4.7	4.8	.0	11.4

C54 II 48. GIVEN A CAPACITIVE CIRCUIT TRAINER AND NECESSARY FORMULAS, DETERMINE THE EFFECT ON CAPACITIVE REACTANCE OF VARYING EITHER APPLIED FREQUENCY OR CAPACITANCE WITHIN + OR - 20 % ACCURACY. MEAS: PC 4/0

C	TSK	TITLES	306 51 **M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	113	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	87.3	80.1	10.3	81.3	51.9	71.4	44.7	93.5
C	110	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE?	28.8	39.8	.0	37.5	29.2	14.3	6.1	65.9
C	100	C1-4 DO YOU ADJUST CAPACITORS?	27.3	25.5	.0	43.8	21.7	14.3	7.9	71.6
C	120	C1-24 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY?	12.1	13.7	.0	.0	18.9	9.5	7.0	43.2
C	121	C1-25 DO YOU CALCULATE CAPACITIVE REACTANCE?	12.1	8.1	.0	6.3	14.2	.0	3.5	40.9

C55 II 5. [illegible] 5.5/0

POI MATCHED WITH SURVEY DATA — REPRTS PAGE 253

P T.SK	TITLES	306 51 **M**	306 52 (M)	316 5CF (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
05A	II 8A. GIVEN A DC OR SINE WAVE INPUT SIGNAL, USE THE OSCILLOSCOPE TO MEASURE VOLTAGE AMPLITUDE WITHIN + OR - 20 % ACCURACY. MEAS: PC 2/0								
F 325	F3-2 DO YOU PERFORM OPERATIONAL CHECKS USING OSCILLOSCOPES?	86.4	69.6	.0	81.3	32.1	57.1	6.1	93.2
F 334	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGES?	86.4	77.0	.0	75.0	28.3	61.9	3.5	93.2
F 326	F3-3 DO YOU PERFORM ALIGNMENTS OR ADJUSTMENTS USING OSCILLOSCOPES?	80.3	65.8	.0	68.8	31.1	52.4	5.3	88.6
F 333	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGES?	80.3	71.4	.0	81.3	19.8	61.9	3.5	93.2
A 1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	69.7	73.9	65.5	81.3	69.8	71.4	48.2	97.7
F 335	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS?	36.4	32.9	.0	43.8	17.0	38.1	4.4	75.0
05B	II 5E. GIVEN SEVERAL UNKNOWN FREQUENCIES USING THE OSCILLOSCOPE, DETERMINE THEIR FREQUENCY WITHIN + OR - 20% ACCURACY. MEAS: PC 3.5/0								
A 1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	69.7	73.9	65.5	81.3	69.8	71.4	48.2	97.7
F 328	F3-5 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCIES?	69.7	48.4	.0	75.0	32.1	61.9	8.1	90.9
F 329	F3-6 DO YOU USE OSCILLOSCOPES TO MEASURE TIME?	68.2	39.1	.0	81.3	17.9	42.9	.0	93.2
05C	II 5. SERIES RCL CIRCUITS 8/2								
05D	II 5A. GIVEN FORMULAS AND A SERIES RCL CIRCUIT SCHEMATIC WITH COMPONENT VALUES, APPLIED VOLTAGE AND FREQUENCY INDICATED, SOLVE FOR TOTAL IMPEDANCE, CURRENT, ALL COMPONENT VOLTAGE DROPS AND APPROXIMATE PHASE ANGLE WITHIN + OR - 10% ACCURACY. MEAS: PC 3/0								
F 332	F3-9 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	87.1	80.1	10.3	81.3	51.9	71.4	44.7	95.5
F 340	F3-17 DO YOU USE OSCILLOSCOPES TO OBSERVE PHASE RELATIONSHIPS?	69.7	37.3	.0	43.8	15.1	14.3	2.6	88.6
[illegible]	[illegible] IN THE ALTERNATING CURRENT (AC) [illegible] CIRCUITS IN YOUR PRESENT JOB?	54.5	37.3	27.6	50.0	21.7	23.8	5.3	88.6
F 339	F3-16 DO YOU USE THE WATTS WHEN WORKING WITH RCL CIRCUITS?	16.7	16.1	3.4	18.8	6.6	4.8	2.6	54.5

POI MATCHED WITH SUPVLY DATA

REPRTS PAGE 254

D	TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	202	D1-23 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS?	10.6	10.6	.0	.0	6.6	4.8	.9	29.5
D	204	D1-25 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS?	9.1	8.1	.0	.0	7.5	4.8	.9	38.6
D	182	D1-3 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	6.1	3.7	.0	.0	4.7	4.8	.0	22.7
D	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.9	29.5
D	203	D1-24 DO YOU USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS?	6.1	3.7	.0	.0	4.7	.0	.0	25.0
D	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	4.5	3.1	.0	.0	2.8	4.8	.0	29.5
D	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	4.5	6.2	.0	.0	4.7	.0	.0	25.0
D	201	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS?	4.5	4.3	.0	6.3	3.8	4.8	.9	25.0
D	205	D1-26 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS?	4.5	3.7	.0	.0	4.7	4.8	.0	20.5
D	207	D1-28 DO YOU USE OR REFER TO TRUE POWER (P SUB T) FOR SERIES RCL CIRCUITS?	4.5	5.6	.0	.0	2.8	.0	.0	25.0
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	3.0	4.3	.0	6.3	1.9	4.8	.9	18.2
D	190	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	3.0	5.0	.0	.0	4.7	.0	.0	20.5
D	206	D1-27 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) FOR SERIES RCL CIRCUITS?	3.0	3.1	.0	.0	2.8	.0	.0	15.9
D	208	D1-29 DO YOU USE OR REFER TO POWER FACTORS (PF) FOR SERIES RCL CIRCUITS?	3.0	5.0	.0	.0	2.8	.0	.0	22.7

D6% IF OP. USING SERIES RCL/RL CIRCUITS AND A GIVEN FREQUENCY, USE THE OSCILLOSCOPE TO DETERMINE THE PHASE RELATIONSHIP BETWEEN EG, EL AND ER WITHIN A TOLERANCE OF + OR - 20%.
PHASE PC 1.5/0

E	240	E3-17 DO YOU USE OSCILLOSCOPES TO OBSERVE PHASE RELATIONSHIPS?	69.7	37.3	.0	43.9	15.1	14.3	2.6	88.6
E	74	K2-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	58.5	37.3	27.6	50.0	21.7	23.8	1.3	88.6
E	186	D1-7 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	16.7	16.1	3.4	18.8	6.7	4.8	2.6	54.5
E	202	D1-23 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS?	10.6	10.6	.0	.0	6.6	.0	.0	29.5
E	204	D1-25 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS?	9.1	8.1	.0	.0	7.5	.0	.0	38.6
E	182	D1-5 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	6.1	3.7	.0	.0	4.7	.0	.0	22.7
E	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.0	29.5

POI MATCHED WITH SURVEY DATA

	TSK	TITLES	306 51 *MA	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	203	01-24 DO YOU USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS?	4.1	3.7	.0	.0	4.7	.0	.0	25.0
F	181	01-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	4.5	3.1	.0	.0	2.8	4.8	.0	29.5
D	191	01-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	4.5	6.2	.0	.0	4.7	.0	.0	25.0
D	201	01-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS?	4.5	4.3	.0	6.3	3.8	4.8	.9	25.0
D	205	01-26 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS?	4.5	3.7	.0	.0	4.7	4.8	.0	20.5
F	207	01-28 DO YOU USE OR REFER TO TRUE POWER (P SUB T) FOR SERIES RCL CIRCUITS?	4.5	5.6	.0	.0	2.8	.0	.0	25.0
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	3.0	4.3	.0	6.3	1.9	4.8	.9	18.2
D	190	01-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	3.0	5.0	.0	.0	4.7	.0	.0	20.5
D	206	01-27 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) FOR SERIES RCL CIRCUITS?	3.0	3.1	.0	.0	2.8	.0	.0	15.9
D	208	01-29 DO YOU USE OR REFER TO POWER FACTORS (PF) FOR SERIES RCL CIRCUITS?	3.0	5.0	.0	.0	2.8	.0	.0	22.7

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961 II EO. USING A SERIES RCL CIRCUIT CONNECTED ON A TRAINER, DETERMINE THE RESONANT FREQUENCY AND BANDWIDTH OF THE FREQUENCY RESPONSE CURVE WITHIN + OR - 20 % ACCURACY.
MEAS: MC 3.5/0

C	113	01-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	83.3	80.1	10.3	81.3	51.9	71.4	44.7	95.5
B	74	02-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	54.5	37.3	27.6	50.0	21.7	23.8	5.3	88.6
D	184	01-7 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	16.7	16.1	3.4	18.8	6.6	4.8	2.6	54.5
D	192	01-17 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	12.1	8.1	.0	6.3	5.7	4.8	2.6	54.5
D	195	01-18 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN	10.6	6.2	.0	12.5	3.8	4.8	.0	52.3

POI MATCHED WITH SURVEY DATA — REPRTS PAGE 256

C	TSK	TITLES	306 51 #/%	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	221	D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS?	6.1	5.6	.0	6.3	3.8	.0	.9	43.2
D	227	D1-44 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 OF THE PEAK CURRENT VALUE?	6.1	6.2	.0	.0	1.9	.0	.0	38.6
C	225	D1-45 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	9.5	.0	31.8
D	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	4.5	3.1	.0	.0	2.8	4.8	.0	29.5
D	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	4.5	6.2	.0	.0	4.7	.0	.0	25.0
C	196	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS?	4.5	4.3	.0	6.3	1.9	.0	.0	29.5
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	3.0	4.3	.0	6.3	1.9	4.8	.9	18.2
C	190	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	3.0	5.0	.0	.0	4.7	.0	.0	20.5
D	197	D1-19 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS?	3.0	4.3	.0	.0	1.9	.0	.0	38.6
D	219	D1-40 DO YOU USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (P SUB A) = TRUE POWER (P SUB T) FOR RESONANT CIRCUITS?	3.0	3.1	.0	.0	2.8	.0	.9	13.6
C	224	D1-45 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE COIL (Q)?	1.5	3.7	.0	.0	.9	.0	.0	27.3

062 II 9. PARALLEL RCL CIRCUITS 8/2

063 II 9A. GIVEN FORMULAS AND A PARALLEL RCL CIRCUIT SCHEMATIC WITH COMPONENT VALUES, APPLIED VOLTAGE, AND FREQUENCY INDICATED, SOLVE FOR BRANCH CURRENTS, IMPEDANCE AND APPROXIMATE PHASE ANGLE WITHIN + OR - 10% ACCURACY. MEAS: PC 4/0

C	113	D1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	83.3	80.1	13.3	81.3	51.9	71.4	44.7	95.5
C	74	B2-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	54.5	37.3	27.6	50.0	21.7	23.8	5.3	88.6
C	117	D1-22 DO YOU USE OHM'S LAW FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	18.2	10.6	.0	12.5	7.5	4.8	1.8	45.5
D	166	D1-[illegible] DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	16.7	16.1	3.4	18.8	6.6	4.8	2.6	54.5
C	209	D1-37 DO YOU USE OR REFER TO TOTAL CURRENT FOR PARALLEL RCL CIRCUITS?	16.7	10.6	.3	6.3	4.7	4.8	.9	43.2

			306	306	316	316	362	362	362	918
			51	52	50F	52F	51	53	54	50
	TSK	TITLES	**M**	(M)	(M)	(M)	(M)	(M)	(M)	(M)
	202	D1-23 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS?	10.6	10.6	.0	.0	6.6	4.8	.9	29.5
	187	D1-5 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	6.1	3.7	.0	.0	4.7	4.8	.0	22.7
	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.9	29.5
	203	D1-24 DO YOU USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS?	6.1	3.7	.0	.0	4.7	.0	.0	25.0
	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	4.5	3.1	.0	.0	2.8	4.8	.0	29.5
	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	4.5	6.2	.0	.0	4.7	.0	.0	25.0
	201	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS?	4.5	4.3	.0	6.3	3.8	4.8	.9	25.0
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	3.0	4.3	.0	6.3	1.9	4.8	.9	18.2
	190	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	3.0	5.0	.0	.0	4.7	.0	.0	20.5

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364 II 93. USING A PARALLEL RCL CIRCUIT CONNECTED ON A TRAINER, DETERMINE THE RESONANT FREQUENCY AND BANDWIDTH OF THE FREQUENCY RESPONSE CURVE WITHIN + OR - 20 % ACCURACY.
MEAS: PC 4/0

	113	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	87.3	80.1	10.3	81.3	51.9	71.4	44.7	95.5
	74	B2-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	54.5	37.3	27.6	50.0	21.7	23.8	5.3	88.6
	186	D1-7 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	16.7	16.1	3.4	18.8	6.6	4.8	2.6	54.5
	199	D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	16.7	11.8	.0	6.3	1.9	.0	.0	63.6
	209	D1-30 DO YOU USE OR REFER TO TOTAL CURRENT FOR PARALLEL RCL CIRCUITS?	16.7	10.6	.0	6.3	4.7	4.8	.9	43.2
	192	D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	12.1	8.1	.0	6.3	5.7	4.8	2.6	54.5
	195	D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS?	10.6	6.2	.0	12.5	3.8	4.8	.0	52.3
	193	D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS?	7.6	5.6	.0	12.5	1.9	4.8	.0	40.9
	187	D1-5 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	6.1	3.7	.0	.0	4.7	4.8	.0	22.7
	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.9	29.5
	194	D1-19 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS?	6.1	4.3	.0	6.3	3.8	9.5	.0	29.5
	198	D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS?	6.1	1.9	.0	.0	.9	.0	.0	22.7

			306	306	316	316	362	362	362	918
			51	52	50F	52F	51	53	54	50
D	TSK	TITLES	**M**	(M)	(M)	(M)	(M)	(M)	(M)	(M)
D	220	D1-41 DO YOU USE OR REFER TO RESONANT FREQUENCIES FOR RCL CIRCUITS?	6.1	6.2	.0	6.3	4.7	.0	1.8	50.0
D	222	D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS?	6.1	5.6	.0	.0	1.9	.0	.0	36.4
D	225	D1-46 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	9.5	.0	31.8
D	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	4.5	3.1	.0	.0	2.8	4.8	.0	29.5
D	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	4.5	6.2	.0	.0	4.7	.0	.0	25.0
D	196	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS?	4.5	4.3	.0	6.3	1.9	.0	.0	29.5
A	R	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	3.0	4.3	.0	6.3	1.9	4.8	.9	18.2
D	193	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	3.0	5.0	.0	.0	4.7	.0	.0	20.5
D	197	D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS?	3.0	4.3	.0	.0	1.9	.0	.0	38.6
D	219	D1-40 DO YOU USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (P SUB A) = TRUE POWER (P SUB T) FOR RESONANT CIRCUITS?	3.0	3.1	.0	.0	1.8	.0	.9	13.6
D	224	D1-45 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE COIL (Q)?	1.5	3.7	.0	.0	.9	.0	.0	27.3

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255 II 10. TROUBLESHOOTING REACTIVE COMPONENTS 2/0

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066 II 10A. USING A MULTIMETER AND TRAINER HAVING AN OPEN OR SHORTED COMPONENT IN A SERIES RCL CIRCUIT, LOCATE THE FAULTY COMPONENT AT LEAST TWO OUT OF THREE TIMES.
MEAS: PC

C	101	C1-5 DO YOU TEST CAPACITORS?	75.8	75.8	3.4	68.8	54.7	52.4	38.9	97.2
D	213	D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS?	34.8	27.3	.0	18.8	10.4	28.6	7.9	72.7
B	79	B3-5 DO YOU MEASURE INDUCTORS?	25.8	28.0	.0	43.8	17.0	9.5	3.9	61.4
C	215	D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS?	24.2	23.8	.0	12.8	8.5	19.0	4.4	65.9
D	214	D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION?	21.2	15.5	.0	12.5	7.8	19.0	2.6	61.4
C	216	D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION?	17.6	13.8	.0	6.3	7.8	14.3	2.6	59.0

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267 II 11. PN JUNCTIONS AND DIODES 4/2

D	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
068		II 11A. GIVEN AN ENERGY LEVEL DIAGRAM OF A SEMICONDUCTOR MATERIAL, IDENTIFY THE VALENCE BAND, FORBIDDEN BAND, CONDUCTION BAND, CURRENT CARRIER PRODUCED BY HEAT AND CURRENT CARRIER PRODUCED BY DOPING, CORRECTLY, AT LEAST TWO OUT OF THREE TIMES. MEAS: PC 1.5/0								
G	335	G1-14 DO YOU USE THE SYMBOL ON DIODE WHICH INDICATES THE CATHODE END?	81.8	63.4	.0	68.8	29.2	52.4	7.0	93.2
G	349	G1-8 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE?	69.2	56.5	.0	43.8	34.0	47.6	8.8	88.6
G	354	G1-13 DO YOU READ DIODE NUMBERING SYSTEM, SUCH AS IN 538?	54.5	46.0	.0	62.5	17.0	42.9	2.6	81.8
G	348	G1-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES?	53.0	39.8	3.4	43.8	24.5	23.8	3.5	72.7
G	370	G1-29 DO YOU NEED AN UNDERSTANDING OF N-TYPE SEMICONDUCTOR MATERIAL?	47.0	24.8	.0	25.0	11.3	23.8	3.5	72.7
G	369	G1-28 DO YOU NEED AN UNDERSTANDING OF P-TYPE SEMICONDUCTOR MATERIAL?	45.5	24.8	.0	31.3	11.3	23.8	3.5	72.7
G	358	G1-17 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OR RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)?	33.3	18.6	3.4	18.8	13.2	14.3	.0	68.2
G	366	G1-25 DO YOU NEED AN UNDERSTANDING OF ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS?	21.2	18.0	.0	18.8	9.4	9.5	1.8	56.8
A	20	A2-9 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM PROTON?	19.7	16.1	3.4	18.8	16.0	.0	3.5	56.8
A	18	A2-7 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM NEUTRON?	18.2	14.9	6.9	18.8	13.2	.0	4.4	54.5
G	350	G1-9 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW?	18.2	9.9	.0	12.5	5.7	14.3	.0	29.5
G	357	G1-16 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON?	16.7	6.8	.0	25.0	5.7	19.0	.0	63.6
G	371	G1-30 DO YOU NEED AN UNDERSTANDING OF MAJORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.3	.0	12.5	5.7	4.8	.9	43.2
G	372	G1-31 DO YOU NEED AN UNDERSTANDING OF MINORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.9	.0	12.5	5.7	4.8	.9	43.2
G	345	G1-4 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES?	12.1	8.1	.0	6.3	2.8	4.8	.0	18.2
G	367	G1-26 DO YOU NEED AN UNDERSTANDING OF DONOR IMPURITY IN SEMICONDUCTORS?	7.6	10.6	.0	12.5	5.7	4.8	.9	31.8
A	15	A2-4 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ION?	6.1	7.5	10.3	81.3	7.5	.0	3.5	72.7
G	361	G1-20 DO YOU NEED AN UNDERSTANDING OF VALENCE BAND IN SEMICONDUCTOR MATERIALS?	6.1	11.8	.0	12.5	6.6	4.8	.9	40.9
G	363	G1-22 DO YOU NEED AN UNDERSTANDING OF CONDUCTION BAND IN SEMICONDUCTOR MATERIALS?	6.1	11.2	.0	12.5	6.6	4.8	.9	45.5
G	368	G1-24 DO YOU NEED AN UNDERSTANDING OF ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS?	6.1	10.6	.0	18.8	6.6	4.8	.9	45.5
G	364	G1-23 DO YOU NEED AN UNDERSTANDING OF COVALENT BONDING IN SEMICONDUCTOR MATERIALS?	4.5	10.6	.0	12.5	6.6	4.8	.9	27.3

D	TSK	TITLES	306 51 **	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	368	G1-27 DO YOU NEED AN UNDERSTANDING OF ACCEPTOR IMPURITY IN SEMICONDUCTORS?	4.5	9.9	.0	18.8	5.7	4.8	.9	31.8
G	362	G1-21 DO YOU NEED AN UNDERSTANDING OF FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS?	7.0	9.9	.0	12.5	5.7	4.8	.9	27.3
D69		II 11b. GIVEN AN ENERGY LEVEL DIAGRAM OF A PN JUNCTION, SELECT FROM A LIST THE STATEMENT(S) THAT DESCRIBE(S) JUNCTION RECOMBINATION, DEPLETION REGION CHARACTERISTICS, FORWARD BIAS CONDUCTION, REVERSE BIAS, CONDUCTION, AND THE EFFECT OF TEMPERATURE CHANGES ON CONDUCTION, CORRECTLY, AT LEAST TWO OUT OF THREE TIMES. MEAS: PC 1/0								
G	356	G1-15 DO YOU DETERMINE DIRECTION OF CURRENT THROUGH A DIODE?	81.8	65.2	3.4	50.0	41.5	52.4	9.6	93.2
G	344	G1-3 DO YOU CHECK DIODES?	77.3	68.9	.0	68.8	43.4	61.9	9.6	90.9
G	351	G1-10 DO YOU MEASURE FORWARD BIAS RESISTANCE?	57.6	46.0	.0	56.3	18.9	23.8	1.6	79.5
G	352	G1-11 DO YOU MEASURE REVERSE BIAS RESISTANCE?	56.1	46.0	.0	56.3	17.9	23.8	1.8	79.5
G	360	G1-19 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS?	51.5	40.4	.0	18.8	18.9	28.6	5.3	81.8
G	370	G1-29 DO YOU NEED AN UNDERSTANDING OF N-TYPE SEMICONDUCTOR MATERIAL?	47.0	24.8	.0	25.0	11.3	23.8	3.5	72.7
G	369	G1-28 DO YOU NEED AN UNDERSTANDING OF P-TYPE SEMICONDUCTOR MATERIAL?	45.5	24.8	.0	31.3	11.3	23.8	3.5	72.7
G	358	G1-17 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OR RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)?	33.3	18.6	3.4	18.8	13.2	14.3	.0	68.2
G	376	G1-35 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES?	28.8	17.4	.0	18.8	4.7	4.8	1.8	45.5
G	359	G1-18 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)?	22.7	12.4	.0	6.3	9.4	28.6	2.6	54.5
G	382	G1-41 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS?	19.7	15.5	.0	18.8	4.7	4.8	.0	72.7
G	350	G1-9 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW?	18.2	9.9	.0	12.5	5.7	14.3	.0	29.5
G	357	G1-16 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON?	16.7	6.8	.0	25.0	5.7	19.0	.0	63.6
G	371	G1-30 DO YOU NEED AN UNDERSTANDING OF MAJORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.3	.0	12.5	5.7	4.8	.9	43.2
G	372	G1-31 DO YOU NEED AN UNDERSTANDING OF MINORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.9	.0	12.5	5.7	4.8	.9	43.2
G	381	G1-40 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS?	16.7	11.8	3.4	12.5	4.7	.0	.0	54.5
G	379	G1-38 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS?	15.2	14.3	.0	12.5	4.7	.0	.0	70.5

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	375	G1-34 DO YOU NEED AN UNDERSTANDING OF RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL?	9.1	13.7	.0	12.5	7.5	4.8	.9	47.7
G	380	G1-39 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS?	9.1	12.4	.0	6.3	4.7	.0	.0	52.3
G	373	G1-32 DO YOU NEED AN UNDERSTANDING OF JUNCTION RECOMBINATION IN SEMICONDUCTORS?	7.6	11.2	.0	18.8	6.6	4.8	.9	38.6
G	377	G1-36 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS?	7.6	6.2	.0	.0	5.7	4.8	.9	20.5
G	374	G1-33 DO YOU NEED AN UNDERSTANDING OF DEPLETION REGION IN SEMICONDUCTORS?	6.1	12.4	.0	12.5	7.5	4.8	.9	50.0
070		II 11C. GIVEN A DIODE CIRCUIT TRAINER AND TEST EQUIPMENT, VARY BIAS VOLTAGE AND PLOT CURVE OF THE RESULTING CURRENT THAT SHOW ITS CORRECT RELATION TO BIAS VOLTAGE WITHIN + OR - 20 % ACCURACY. MEAS: PC 1.5/0								
G	346	G1-5 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE?	28.8	13.7	.0	12.5	9.4	19.0	.9	47.7
G	347	G1-6 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES?	28.8	14.3	.0	25.0	8.5	9.5	.0	43.2
G	376	G1-35 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES?	28.8	17.4	.0	18.8	4.7	4.8	1.8	45.5
G	359	G1-18 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)?	27.7	12.4	.0	6.3	9.4	28.6	2.6	54.5
071		II 12. RECTIFIERS AND FILTERS 5.5/2								
072		II 12A. USING STANDARD TEST EQUIPMENT, DETERMINE THE WAVEFORM AND PEAK AND AVERAGE VOLTAGES OF THE OUTPUT OF AN UNFILTERED FULL WAVE RECTIFIER TRAINER. VOLTAGES MUST BE WITHIN + OR - 20% OF KNOWN OUTPUT. MEAS: PC 3/0								
F	337	F3-14 DO YOU USE OSCILLOSCOPES TO MEASURE RIPPLE VOLTAGES?	86.4	44.7	.0	81.3	13.2	42.9	.9	79.5
H	478	H2-12 DO YOU WORK WITH BRIDGE RECTIFIERS?	81.8	57.8	10.3	75.0	18.9	47.6	12.3	93.2
H	480	H2-14 DO YOU USE OR REFER TO INPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	81.8	68.3	37.9	81.3	34.0	66.7	27.2	93.2
H	479	H2-13 DO YOU WORK WITH HALF-WAVE RECTIFIERS?	72.7	50.9	3.4	56.3	20.8	19.0	7.0	93.2
H	484	H2-18 DO YOU USE OR REFER TO RIPPLE AMPLITUDE IN YOUR WORK WITH RECTIFIERS?	72.7	28.0	.0	56.3	9.4	19.0	2.6	68.2

D	TSK	TITLES	###	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H	477	H2-11 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS?	71.2	57.1	3.4	62.5	26.4	33.3	4.4	38.6
H	483	H2-17 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	66.7	52.2	17.2	50.0	30.2	23.8	26.3	70.5
H	482	H2-16 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	65.2	50.3	13.8	43.8	25.5	38.1	18.4	81.8
H	488	H2-22 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	56.1	42.9	13.8	50.0	21.7	33.3	13.2	79.5
H	487	H2-21 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS IN YOUR WORK WITH RECTIFIERS?	53.0	44.7	.0	31.3	5.7	33.3	3.5	84.1
H	485	H2-19 DO YOU USE OR REFER TO RIPPLE FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	50.0	21.7	.0	25.0	6.6	4.8	1.8	61.4
H	481	H2-15 DO YOU USE OR REFER TO INPUT FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	43.9	29.8	24.1	25.0	13.2	33.3	10.5	72.7
H	479	H2-13 DO YOU WORK WITH THREE-PHASE RECTIFIERS?	30.3	18.0	3.4	50.0	18.9	9.5	2.6	68.2
H	486	H2-20 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGES IN YOUR WORK WITH RECTIFIERS?	25.8	18.6	.0	18.8	8.5	4.8	2.6	70.5
C	163	C2-38 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS?	16.7	6.2	13.8	43.8	5.7	.0	.0	81.8

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073 II 126. GIVEN A RECTIFIER TRAINER WITH A PI TYPE FILTER, A MULTIMETER AND AN OSCILLOSCOPE, DETERMINE THE EFFECT ON OUTPUT VOLTAGE AMPLITUDE AND WAVESHAPE WHEN FILTER COMPONENTS OR LOAD IS CHANGED. ACCURACY WITHIN + OR - 20% IS REQUIRED. MEAS: PC 2.5/0

F	337	F3-14 DO YOU USE OSCILLOSCOPES TO MEASURE RIPPLE VOLTAGES?	86.4	44.7	.0	81.3	13.2	42.9	.0	79.5
H	489	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS?	80.3	51.6	13.8	50.0	14.2	42.9	13.2	84.1
H	490	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS?	43.9	32.9	6.9	25.0	13.2	14.3	12.3	81.8
H	491	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS?	39.4	21.1	.0	12.5	3.8	9.5	2.6	65.9
H	494	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS?	31.8	11.8	.0	12.5	3.8	9.5	2.6	52.3
H	492	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS?	27.3	16.1	.0	6.3	4.7	4.8	1.8	65.9
H	493	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS?	22.7	11.2	.0	12.5	2.8	4.8	1.8	52.3

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074 III. SOLID STATE AMPLIFIERS 38 HRS TT

D TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
075	III 1. AMPLIFIER PRINCIPLES 16/6								
076	III 1A. GIVEN THREE TRANSISTOR CIRCUIT DIAGRAMS, SELECT THE DIAGRAM THAT ILLUSTRATES PROPER BIAS, DIRECTION, AND MAGNITUDE OF CURRENT CORRECTLY AT LEAST TWO OUT OF THREE TIMES. MEAS: PC 2/0								
G 393	G2-11 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS?	86.4	77.0	6.9	81.3	22.6	61.9	13.2	95.5
G 394	G2-12 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, A2, A3, ETC.?	84.8	77.0	3.4	75.0	20.8	61.9	11.4	93.2
G 386	G2-4 DO YOU NEED AN UNDERSTANDING OF EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS?	75.8	65.2	3.4	43.8	23.6	47.6	7.0	90.9
G 387	G2-5 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND RESISTANCE MEASUREMENTS?	74.2	66.5	3.4	62.5	19.8	47.6	7.9	86.4
G 388	G2-6 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS?	74.2	67.1	3.4	62.5	20.8	47.6	7.9	86.4
G 391	G2-9 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE, AND EMITTER)?	54.5	39.1	3.4	43.8	13.2	47.6	4.4	81.8
G 389	G2-7 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION?	51.5	32.3	3.4	31.3	11.3	28.6	3.5	70.5
G 397	G2-15 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS?	50.0	50.3	.0	31.3	8.5	19.0	5.3	84.1
G 390	G2-8 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION?	48.5	32.3	3.4	31.3	11.3	23.8	3.5	65.9
G 396	G2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT I(SUB B) IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT I(SUB E) USUALLY I(SUB B) BEING 2 TO 8 PERCENT OF I(SUB E)?	36.4	34.2	.0	18.8	5.7	19.0	.9	68.2
G 392	G2-10 DO YOU USE OR REFER TO LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR?	19.7	28.6	.0	18.8	5.7	14.3	2.6	52.3
G 395	G2-13 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES?	15.2	20.5	.0	12.5	5.7	14.3	1.8	52.3
G 399	G2-17 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES?	6.1	10.6	.0	18.8	.9	9.5	.9	43.2
077	III 1B. GIVEN FOUR DIAGRAMS OF AN OHMMETER CONNECTED TO A [illegible] TRANSISTOR, CORRECTLY MATCH AT LEAST THREE OUT OF FOUR WITH THE PROPER METER INDICATION. MEAS: PC C/2								
G 385	G2-3 DO YOU CHECK TRANSISTORS?	87.3	79.9	3.4	62.5	24.5	71.4	16.7	93.2

D	TSK	TITLES	706 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
	079	III 10. USING A COMMON EMITTER CIRCUIT AND STANDARD TEST EQUIPMENT, FROM OBSERVATIONS OF CIRCUIT CONDITIONS AND INPUT/OUTPUT SIGNAL RELATIONS, COMPLETE AT LEAST THREE OF FIVE STATEMENTS CORRECTLY ON CIRCUIT OPERATION. MEAS: PC 4/0								
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
G	421	G3-15 DO YOU MEASURE VOLTAGE GAIN CONCERNING TRANSISTOR AMPLIFIERS?	27.3	14.9	.0	25.0	3.8	19.0	2.6	61.9
G	409	G3-3 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS?	24.2	13.7	.0	25.0	12.3	42.9	7.0	35.9
G	417	G3-11 DO YOU USE OR REFER TO THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	24.2	14.3	.0	18.8	1.9	14.3	.9	59.1
G	416	G3-10 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE RESULTS FROM A CHANGE IN BASE CURRENT?	18.2	13.7	.0	12.5	1.9	9.5	.9	61.4
G	414	G3-8 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR CURRENT RESULTS FROM A CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	15.2	14.3	.0	12.5	1.9	9.5	.9	52.3
G	420	G3-14 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR?	12.1	6.2	.0	6.3	1.9	4.8	1.8	31.8
G	418	G3-12 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE; THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	10.6	8.1	.0	6.3	1.9	9.5	.9	36.4
G	424	G3-18 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE CHANGE OF THE BASE COLLECTOR VOLTAGE?	10.6	5.0	.0	12.5	3.8	.0	.0	25.0
G	405	G2-27 DO YOU USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRNSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI x AV)?	4.5	5.6	3.4	6.3	1.9	4.8	.9	22.7
G	415	G3-9 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO SPECIFIC CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	4.5	6.7	.0	6.3	1.9	9.5	.9	31.8
G	419	G3-17 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)?	4.5	2.5	.0	6.3	.9	.0	1.8	18.2
G	407	G2-21 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCB/VBE)?	3.0	6.2	3.4	6.3	1.9	4.8	.9	22.7
G	404	G2-20 DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)?	3.0	5.6	3.4	6.3	2.8	4.8	.9	13.6

PCI MATCHED WITH SURVEY DATA — FORMS PAGE 2OF

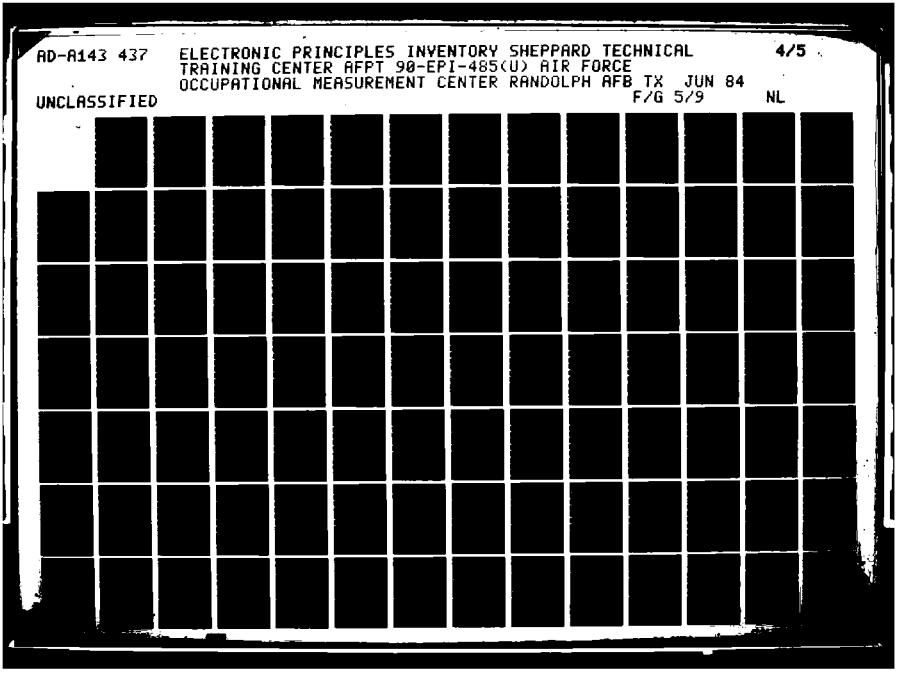
ITEM	TITLES	306 51 PAY*	306 52 (M)	316 52F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
379	III-10. GIVEN A COMMON BASE CIRCUIT AND STANDARD TEST EQUIPMENT, FROM OBSERVATIONS OF CIRCUIT CONDITIONS AND INPUT/OUTPUT SIGNAL RELATIONS, COMPLETE AT LEAST THREE OF FIVE STATEMENTS CORRECTLY ON CIRCUIT OPERATION. BIAS: PP 2.5/D								
114	03-14 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.6	55.7	71.4	44.7	95.5
421	03-15 DO YOU MEASURE VOLTAGE GAIN CONCERNING TRANSISTOR AMPLIFIERS?	27.7	14.9	.0	25.0	3.8	19.0	2.6	65.9
422	03-3 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS?	24.2	13.7	.0	25.0	12.3	42.9	7.0	65.9
417	03-11 DO YOU USE OR REFER TO THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	24.2	14.3	.0	18.8	1.9	14.3	.9	59.1
416	03-13 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE RESULTS FROM A CHANGE IN BASE CURRENT?	18.2	13.7	.0	12.5	1.9	9.5	.9	61.4
418	03-8 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR CURRENT RESULTS FROM A CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	15.2	14.3	.0	12.5	1.9	9.5	.9	52.3
415	03-14 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR?	12.1	6.2	.0	6.3	1.9	4.8	1.8	31.8
419	03-12 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE; THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	10.6	8.1	.0	6.3	1.9	9.5	.9	36.4
414	03-10 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY [illegible] THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE [illegible] OF THE BASE COLLECTOR VOLTAGE?	10.6	5.0	.0	12.5	3.8	.0	.0	25.0
405	02-27 DO YOU USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRANSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI X AV)?	4.5	5.6	3.4	6.3	1.9	4.8	.9	22.7
417	03-9 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO SPECIFIC CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	4.5	6.2	.0	6.3	1.9	9.5	.9	31.8
410	03-17 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)?	4.5	2.5	.0	6.3	.9	.0	1.8	18.2
403	02-21 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCB/VBE)?	3.0	6.2	3.4	6.3	1.9	4.8	.9	22.7
404	02-22 DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)?	3.0	5.0	3.4	6.3	2.8	4.8	.9	18.2

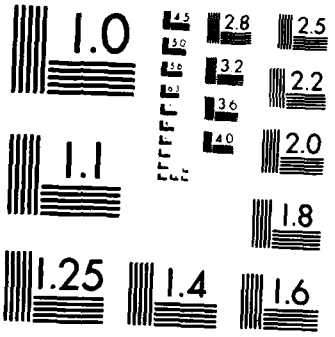
POI MATCHED WITH SURVEY DATA — REPORTS PAGE 266

D	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
		080 III 1E. GIVEN A COMMON COLLECTOR CIRCUIT AND STANDARD TEST EQUIPMENT, FROM OBSERVATIONS OF CIRCUIT CONDITIONS AND INPUT/OUTPUT SIGNAL RELATIONS, COMPLETE AT LEAST THREE OF FIVE STATEMENTS CORRECTLY ON CIRCUIT OPERATION. MEAS: PC 2/0								
C	114	C1-19 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
C	409	G3-3 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS?	24.2	13.7	.0	25.0	12.3	42.9	7.0	65.9
C	417	G3-11 DO YOU USE OR REFER TO THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	24.2	14.3	.0	18.8	1.9	14.3	.9	59.1
C	416	G3-10 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE RESULTS FROM A CHANGE IN BASE CURRENT?	18.2	13.7	.0	12.5	1.9	9.5	.9	61.4
C	414	G3-8 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR CURRENT RESULTS FROM A CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	15.2	14.3	.0	12.5	1.9	9.5	.9	52.3
C	418	G3-12 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE; THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	10.6	8.1	.0	6.3	1.9	9.5	.9	36.4
C	415	G3-23 DO YOU USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRNSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI x AV)?	4.5	5.6	3.4	6.3	1.9	4.8	.9	22.7
C	413	G3-9 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO SPECIFIC CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	4.5	6.2	.0	6.3	1.9	9.5	.9	31.8
C	403	G2-21 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCE/VBE)?	3.0	6.2	3.4	6.3	1.9	4.8	.9	22.7
C	404	G2-22 DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)?	3.0	5.0	3.4	6.3	2.8	4.8	.9	18.2
		081 III 1F. GIVEN A COMMON EMITTER AMPLIFIER CIRCUIT SCHEMATIC, MATCH TROUBLES WITH THEIR SYMPTOMS WITH AT LEAST TWO OUT OF THREE CORRECT. MEAS: PC 0/2								
C	104	G1-6 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DECOUPLING?	47.0	19.9	.0	18.8	5.7	9.5	.9	81.8
C	411	G3-5 DO YOU TROUBLESHOOT TRANSISTOR AMPLIFIER COMPONENTS?	47.0	21.1	.0	18.8	5.7	28.6	2.6	81.8
		082 III 1G. GIVEN A LIST OF STATEMENTS DESCRIBING AMPLIFIER OPERATION, IDENTIFY CORRECTLY AT LEAST THREE OF THE FIVE AS TRUE OR FALSE, OR CORRECT OPERATION. MEAS: PC 1.5/3								

		306 51	306 52	316 50F	316 52F	362 51	362 53	362 54	918 50
Q TSK	TITLES	**M**	(M)	(M)	(M)	(M)	(M)	(M)	(M)
Q 435	03-29 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	18.2	6.2	.0	6.3	3.7	14.3	.9	34.1
083	III 1H. GIVEN A SCHEMATIC DIAGRAM OF A TEMPERATURE STABILIZED TRANSISTOR AMPLIFIER CIRCUIT, CORRECTLY MATCH AT LEAST TWO OF THE THREE METHODS OF MINIMIZING VARIATIONS IN COLLECTOR CURRENT. MEAS: PC 2/0								
Q 428	03-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION?	24.2	11.8	.0	18.9	1.9	9.5	.9	43.2
Q 429	03-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION?	24.2	12.4	.0	18.8	1.9	4.8	.9	38.6
Q 425	03-19 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION?	18.2	10.6	.0	18.8	1.9	9.5	.0	45.5
Q 427	03-21 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION?	16.7	9.9	.0	12.5	1.9	4.8	.0	38.6
Q 426	03-20 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION?	13.6	6.8	.0	18.8	1.9	9.5	.0	40.9
Q 430	03-24 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION?	6.1	7.5	.0	12.5	1.9	4.8	.0	38.6
Q 434	03-29 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS?	4.5	7.5	.0	6.3	.9	.0	.0	43.2
086	III 1I. GIVEN A LIST OF STATEMENTS THAT DESCRIBE THE CAPABILITIES OF DIRECT, RESISTANCE CAPACITANCE, IMPEDANCE OR TRANSFORMER COUPLING AS RELATED TO GAIN AND FREQUENCY RESPONSE, MATCH CORRECTLY AT LEAST TWO OUT OF THREE WITH THAT METHOD OF AMPLIFIER COUPLING. MEAS: PC 1/0								
Q 114	01-19 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
Q 250	01-20 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING?	47.0	19.9	.0	25.0	4.7	9.5	.9	77.3
Q 251	01-21 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS?	43.9	18.6	.0	18.8	5.7	9.5	2.6	79.5

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
E	251	81-3 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING (MATCHING)?	37.9	14.9	.0	6.3	4.7	14.3	5.3	68.2
E	257	81-9 DO YOU WORK WITH IMPACT COUPLED CIRCUITS?	37.9	22.4	.0	18.8	5.7	14.3	3.5	81.8
E	257	81-5 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING?	24.2	19.3	.0	18.8	5.7	14.3	4.4	68.2
E	262	81-14 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS?	22.7	16.1	.0	18.8	6.6	14.3	4.4	70.5
E	259	81-11 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS?	19.7	16.8	.0	6.3	5.7	4.8	2.6	70.5
085		III 1c. GIVEN A LIST OF STATEMENTS DESCRIBING THE CAUSE OF AMPLITUDE, FREQUENCY, OR PHASE DISTORTION, CORRECTLY MATCH AT LEAST THREE OUT OF FOUR WITH THE TYPE OF DISTORTION. MEAS: PC 1/0								
G	431	83-25 DO YOU IDENTIFY OR TROUBLESHOOT AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS?	13.6	11.2	.0	12.5	1.9	28.6	.0	56.8
G	432	83-26 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS?	12.1	11.2	.0	6.3	2.8	23.8	.0	50.0
G	433	83-27 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS?	9.1	6.2	.0	12.5	2.8	9.5	.0	47.7
086		III 2. VOLTAGE REGULATORS 4/2								
087		III 2a. GIVEN A SCHEMATIC DIAGRAM OF A ZENER DIODE VOLTAGE REGULATOR, CORRECTLY COMPLETE AT LEAST THREE OF FIVE STATEMENTS ON CIRCUIT OPERATION. MEAS: PC 1/0								
H	417	81-5 DO YOU USE OR REFER TO ZENER DIODE COMPONENTS?	84.8	75.9	24.1	81.3	17.0	61.9	15.4	93.2
H	447	82-31 DO YOU WORK WITH SOLID-STATE POWER SUPPLY REGULATOR CIRCUITS?	68.2	56.5	6.9	31.3	13.2	38.1	7.7	88.6
[illegible]		III 2c. GIVEN A SERIES ELECTRONIC VOLTAGE REGULATOR, FROM MEASUREMENTS OF CHANGES IN VOLTAGE ACROSS SPECIFIED COMPONENTS AS THE INPUT VOLTAGE, LOAD, OR THE OUTPUT IS VARIED, CORRECTLY COMPLETE AT LEAST THREE OF THE FIVE STATEMENTS. MEAS: PC 3/0								


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ELECTRONIC PRINCIPLES INVENTORY SHEPPARD TECHNICAL TRAINING CENTER AFPT 90-EPI-485(U) AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX JUN 84
4/5
UNCLASSIFIED
F/G 5/9
NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

D TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H 497	H2-31 DO YOU WORK WITH SOLID-STATE POWER SUPPLY REGULATOR CIRCUITS?	68.2	56.5	6.9	31.3	13.2	38.1	9.6	88.6
089	III 2C. GIVEN A LIST OF STATEMENTS, SELECT AT LEAST TWO OF THE THREE CONDITIONS NECESSARY FOR A SILICON CONTROLLED RECTIFIER TO CONDUCT. MEAS: PC 0/2								
H 462	H1-1C DO YOU USE OR REFER TO SILICON CONTROL RECTIFIER (SCR) COMPONENTS?	78.8	22.4	6.9	68.8	4.7	14.3	2.6	95.5
090	III 3. VOLTAGE AMPLIFIERS 4/0								
091	III 3A. GIVEN A TWO-STAGE RC-COUPLED TRANSISTOR AUDIO AMPLIFIER AND STANDARD TEST EQUIPMENT, DETERMINE VOLTAGE GAIN AND PLOT FREQUENCY RESPONSE FROM MEASURED VALUES WITHIN + OR - 20% ACCURACY. MEAS: PC								
G 448	G3-38 DO YOU TROUBLESHOOT OR REPAIR AUDIO AMPLIFIERS?	15.2	5.0	.0	18.8	6.6	38.1	1.8	61.4
G 440	G3-34 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	10.6	3.7	.0	12.5	1.9	.0	.0	56.8
092	III 4. POWER AMPLIFIERS 3.5/0								
093	III 4A. GIVEN STANDARD TEST EQUIPMENT AND A SOLID-STATE PUSH-PULL AMPLIFIER TRAINER, FROM OBSERVATIONS OF THE CIRCUIT OUTPUT AS FORWARD BIAS IS VARIED, CORRECTLY COMPLETE AT LEAST TWO OF THE THREE STATEMENTS ON CLASS OF OPERATION AND CROSSOVER DISTORTION. MEAS: PC 2.5/0								
G 445	G3-35 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER AMPLIFIERS?	22.7	13.7	.0	18.8	2.8	23.8	.9	79.5
G 437	G3-31 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	19.7	10.6	.0	18.8	3.8	19.0	.0	72.7

POI MATCHED WITH SURVEY DATA

D TSK	TITLES	306 51 **M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
094	III 4b. GIVEN A SCHEMATIC DIAGRAM OF A PARAPHASE AMPLIFIER, COMPLETE AT LEAST TWO OF THREE STATEMENTS CORRECTLY THAT DESCRIBE THE PHASE RELATIONSHIP AND AMPLITUDE OF THE OUTPUT SIGNALS OF A PARAPHASE AMPLIFIER. MEAS: PC 1/0								
G 436	G3-3C DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	1.5	3.7	.0	6.3	1.9	.0	.9	40.9
G 446	G3-4D DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	1.5	3.7	.0	.0	1.9	.0	.0	36.4
095	IV. SOLID STATE OSCILLATORS AND MULTIVIBRATORS 38 HRS TT								
096	IV 1. LC OSCILLATORS 6/2								
097	IV 1A. GIVEN A SCHEMATIC DIAGRAM OF AN ARMSTRONG OSCILLATOR CORRECTLY MATCH AT LEAST TWO OF THE THREE FUNCTIONS; FEEDBACK LOOP, FREQUENCY DETERMINING DEVICES, AND FORWARD BIAS NETWORK; WITH ITS COMPONENTS/NETWORK. MEAS: PC 1/0								
C 114	C1-1B DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H 505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H 506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H 508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H 511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1
H 507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H 510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
H 516	H3-19 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS?	10.6	3.7	.0	.0	.9	.0	.0	45.5
098	IV 1B. GIVEN AN ARMSTRONG OSCILLATOR TRAINER, MULTIMETER, AND OSCILLOSCOPE, CONFIGURE TRAINER AND MEASURE THE OUTPUT AMPLITUDE AND FREQUENCY TO + OR - TWENTY PERCENT ACCURACY. MEAS: PC 1.5/0								
C 114	C1-1B DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H 505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2

D TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	919 50 (M)
H 506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H 508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H 511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1
H 507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H 510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
099	IV 1C. GIVEN A SCHEMATIC DIAGRAM OF A SERIES FED HARTLEY OSCILLATOR, CORRECTLY MATCH AT LEAST TWO OF THE THREE FUNCTIONS TO DETERMINE THE FEEDBACK LOOP, FREQUENCY DETERMINING DEVICES AND FORWARD BIAS NETWORK; WITH ITS COMPONENETS/NETWORK. MEAS: PC 1/0								
C 114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H 505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H 506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H 508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H 511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1
H 507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H 510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
100	IV 1D. GIVEN A SERIES FED HARTLEY OSCILLATOR WITH A BUFFER AMPLIFIER TRAINER, MULTIMETER AND OSCILLOSCOPE, CONFIGURE TRAINER AND MEASURE THE OUTPUT AMPLITUDE AND FREQUENCY TO + OR - TWENTY PERCENT ACCURACY. MEAS: PC 1.5/0								
C 114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H 505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H 506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H 508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H 511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1
H 507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H 510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5

D	TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
101		IV 1E. GIVEN A SCHEMATIC DIAGRAM OF A SHUNT FED HARTLEY OSCILLATOR, CORRECTLY MATCH AT LEAST TWO OF THE THREE FUNCTIONS, FORWARD BIAS NETWORK, FEEDBACK LOOP, AND FREQUENCY DETERMINING DEVICES WITH ITS COMPONENTS/NETWORK. MEAS: PC 1/0								
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H	511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1
H	517	H3-20 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS?	18.2	4.3	.0	6.3	.9	.0	.0	50.0
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
102		IV 1F. GIVEN A SCHEMATIC DIAGRAM OF A COLPITTS OSCILLATOR, CORRECTLY MATCH AT LEAST TWO OF THE THREE FUNCTIONS; FORWARD BIAS NETWORK, FEEDBACK LOOP AND FREQUENCY DETERMINING DEVICE WITH ITS COMPONENT/NETWORK. MEAS: PC 0/1								
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H	504	H3-7 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS?	28.8	14.3	.0	.0	7.5	9.5	.0	72.7
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H	511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
H	518	H3-21 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS?	4.5	2.5	.0	.0	.9	.0	.9	22.7
103		IV 1G. GIVEN A SCHEMATIC DIAGRAM OF A CLAPP OSCILLATOR, CORRECTLY MATCH AT LEAST TWO OF THE THREE FUNCTIONS; FORWARD BIAS NETWORK, FEEDBACK LOOP AND FREQUENCY DETERMINING DEVICE WITH ITS COMPONENTS/NETWORK. MEAS: PC 0/1								

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H	511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
H	519	H3-22 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS?	6.1	2.5	.0	.0	.9	.0	.9	20.5

104 IV 2. RC OSCILLATORS 4/2

105 IV 2A. GIVEN A SCHEMATIC DIAGRAM OF A PHASE SHIFT OSCILLATOR CIRCUIT CORRECTLY MATCH AT LEAST TWO OF THE THREE COMPONENTS/NETWORKS THAT COMPRISE THE FEEDBACK LOOP, FREQUENCY DETERMINING DEVICES AND FORWARD BIAS NETWORK. MEAS: PC 1.5/0

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H	512	H3-15 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS?	33.3	11.8	.0	12.5	3.8	19.0	.0	65.9
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5

106 IV 2B. GIVEN A PHASE SHIFT OSCILLATOR TRAINER, A MULTIMETER AND OSCILLOSCOPE, CONFIGURE TRAINER AND MEASURE THE AMPLITUDE AND FREQUENCY OF THE WAVEFORM WITHIN TWENTY PERCENT ACCURACY. MEAS: PC 1.5/0

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H	512	H3-15 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS?	33.3	11.8	.0	12.5	3.8	19.0	.0	65.9

D TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H 505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H 506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H 508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H 507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H 510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
107	IV 2C. GIVEN A SCHEMATIC DIAGRAM OF A WIEN BRIDGE OSCILLATOR CIRCUIT, MATCH AT LEAST THREE OF THE FOUR COMPONENTS/NETWORKS THAT COMPRISE THE FORWARD BIAS NETWORK, REGENERATIVE FEEDBACK LOOP, DEGENERATIVE FEEDBACK LOOP, AND FREQUENCY DETERMINING DEVICE. MEAS: PC 1/0								
C 114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H 512	H3-15 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS?	33.3	11.8	.0	12.5	3.8	19.0	.0	65.9
H 505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H 506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H 508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H 507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H 510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
H 523	H3-26 DO YOU WORK WITH WIEN BRIDGE OSCILLATORS SINUSOIDAL OSCILLATORS?	9.1	5.0	.0	6.3	.0	.0	.0	50.0
108	IV 3. CRYSTAL OSCILLATORS 2/0								
109	IV 3A. GIVEN THE SCHEMATIC DIAGRAM OF THE CRYSTAL CONTROLLED BUTLER OSCILLATOR CIRCUIT, CORRECTLY MATCH AT LEAST TWO OF THE THREE COMPONENTS/NETWORKS THAT COMPRISE THE FORWARD BIAS NETWORK, FEEDBACK LOOP AND FREQUENCY DETERMINING DEVICE. MEAS: PC 2/0								
C 114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
H 513	H3-16 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN CRYSTALS?	40.9	10.6	3.4	6.3	3.8	.0	.0	65.9
H 521	H3-24 DO YOU WORK WITH CRYSTAL SINUSOIDAL OSCILLATORS?	34.8	8.1	.0	6.3	1.9	.0	.0	59.1
H 505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2

D	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETEPMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H	509	H3-12 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT (CRYSTAL OSCILLATIONS)?	16.7	8.7	3.4	.0	1.9	.0	.0	59.1
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
	110	IV 4. TIME CONSTANTS IN 353 6/2								
	111	IV 4A. GIVEN A SERIES RC CIRCUIT, SPECIFIED TIME, COMPONENT VALUES AND A UNIVERSAL TIME CONSTANT CHART, DETERMINE THE PERCENT OF CHARGE AND DISCHARGE OF THE CAPACITOR FOR TWO OF THREE PROBLEMS. MEAS: PC 2/0								
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	67.9	83.9	13.8	81.3	73.6	76.2	46.2	97.7
D	227	D2-2 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)?	10.6	3.7	.0	.0	3.8	.0	.9	34.1
D	230	D2-5 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS?	6.1	3.7	.0	.0	.9	.0	.0	29.5
D	228	D2-3 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS?	4.5	3.7	3.4	.0	.9	.0	.9	22.7
D	229	D2-4 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS?	4.5	3.1	.0	.0	.9	.0	.9	22.7
D	231	D2-6 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES?	3.0	4.3	.0	.0	.9	.0	.0	22.7
	112	IV 4B. GIVEN A SERIES RL CIRCUIT, SPECIFIED TIME, COMPONENT VALUES AND A UNIVERSAL TIME CONSTANT CHART, DETERMINE THE PERCENT OF CURRENT BUILD-UP AND THE PERCENT OF CURRENT DECAY FOR TWO OF THREE PROBLEMS. MEAS: PC 2/0								
D	230	D2-5 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS?	6.1	3.7	.0	.0	.9	.0	.0	29.5
D	228	D2-3 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS?	4.5	3.7	3.4	.0	.9	.0	.9	22.7

D	TSK	TITLES	306 51 **MA	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	229	D2-4 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS?	4.5	3.1	.0	.0	.9	.0	.9	22.7
D	232	D2-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS?	4.5	3.1	.0	.0	1.9	.0	.0	29.5
D	231	D2-6 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES?	3.0	4.3	.0	.0	.9	.0	.0	22.7
	113	IV 4C. GIVEN THE WAVESHAPES PRODUCED BY A SERIES RC CIRCUIT HAVING A SHORT, LONG OR MEDIUM TIME CONSTANT, CORRECTLY MATCH AT LEAST FOUR OF THE SIX WAVESHAPES OF THEIR DESCRIPTION. MEAS: PC 2/0								
N	839	N3-7 DO YOU USE OR REFER TO INTEGRATING CIRCUITS?	39.4	11.2	.0	6.3	1.9	.0	.0	63.6
N	838	N3-6 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS?	28.8	7.5	.0	.0	1.9	.0	.0	59.1
N	840	N3-8 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT?	16.7	9.3	.0	6.3	.0	.0	.0	40.9
N	841	N3-9 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION?	15.2	5.0	.0	.0	.0	.0	.0	34.1
	114	IV 5. MULTIVIBRATORS 9.5/2								
	115	IV 5A. GIVEN A SCHEMATIC DIAGRAM OF AN ASTABLE MULTIVIBRATOR, MATCH AT LEAST TWO OF THE THREE COMPONENTS/ NETWORKS THAT COMPRISE THE FORWARD BIAS NETWORK, OUTPUT PULSE WIDTH, AND PULSE RECURRENCE FREQUENCY. MEAS: PC 1.5/0								
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	87.9	83.9	13.8	81.3	73.6	76.2	48.2	97.7
I	534	I1-6 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS?	60.6	21.1	.0	6.3	1.9	4.8	.9	81.8
I	531	I1-3 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORK FREQUENCY DETERMINING DEVICES (FDD)?	43.9	18.0	.0	6.3	.9	9.5	.9	68.2
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	34.8	16.8	.0	.0	2.8	.0	.0	63.6
N	842	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATOR SOLID STATE CIRCUITS?	33.3	18.6	.0	6.3	.0	.0	.0	68.2
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	31.8	15.5	.0	.0	1.9	.0	.0	59.1

			306	306	316	316	362	362	362	918
			51	52	50F	52F	51	53	54	50
D	TSK	TITLES	*M*	(M)	(M)	(M)	(M)	(M)	(M)	(M)
M	505	M3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
M	506	M3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	19.7	11.8	.0	.0	2.8	.0	.0	54.5
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	18.2	9.3	3.4	.0	2.8	.0	.0	54.5
N	843	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATOR SOLID STATE CIRCUITS?	9.1	7.5	.0	.0	.0	.0	.0	52.3
116		IV 5B. GIVEN AN ASTABLE MULTIVIBRATOR TRAINER, A MULTIMETER AND AN OSCILLOSCOPE, CONFIGURE TRAINER AND DETERMINE THE EFFECT ON OUTPUT PULSE WIDTH AND PULSE RECURRENCE FREQUENCY WHEN COMPONENT VALUES IN THE RC FEEDBACK NETWORKS ARE INCREASED AND DECREASED. ACCURACY WITHIN + OR - TWENTY PERCENT IS REQUIRED. MEAS: PC 2.5/0								
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	87.9	83.9	13.8	81.3	73.6	76.2	48.2	97.7
I	534	I1-6 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS?	60.6	21.1	.0	6.3	1.9	4.8	.9	81.8
I	531	I1-3 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORK FREQUENCY DETERMINING DEVICES (FDD)?	42.9	18.0	.0	6.3	.9	9.5	.9	68.2
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	34.8	16.8	.0	.0	2.8	.0	.0	63.6
N	842	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATOR SOLID STATE CIRCUITS?	33.3	18.6	.0	6.3	.0	.0	.0	68.2
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	31.8	15.5	.0	.0	1.9	.0	.0	59.1
M	505	M3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	19.7	11.8	.0	.0	2.8	.0	.0	54.5
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	18.2	9.3	3.4	.0	2.8	.0	.0	54.5
N	843	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATOR SOLID STATE CIRCUITS?	9.1	7.5	.0	.0	.0	.0	.0	52.3
117		IV 5C. GIVEN A SCHEMATIC DIAGRAM OF A MONOSTABLE MULTIVIBRATOR, MATCH AT LEAST TWO OF THE THREE COMPONENTS/ NETWORKS THAT COMPRISE THE FORWARD BIAS NETWORK, PULSE WIDTH AND OUTPUT FREQUENCY. MEAS: PC 2/0								
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	87.9	83.9	13.8	81.3	73.6	76.2	48.2	97.7
I	537	I1-7 DO YOU WORK WITH MONOSTABLE (ONE SHOT) MULTIVIBRATORS?	67.6	23.6	.0	6.3	.9	4.8	.9	79.5
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	34.8	16.8	.0	.0	2.8	.0	.0	63.6
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	31.8	15.5	.0	.0	1.9	.0	.0	59.1

D	TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H	505	M3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	19.7	11.8	.0	.0	2.8	.0	.0	54.5
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	18.2	9.3	3.4	.0	2.8	.0	.0	54.5
N	843	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATOR SOLID STATE CIRCUITS?	9.1	7.5	.0	.0	.0	.0	.0	52.3

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118 IV 5D. GIVEN A MONOSTABLE MULTIVIBRATOR TRAINER, A MULTIMETER AND AN OSCILLOSCOPE, CONFIGURE TRAINER AND DETERMINE THE EFFECT ON THE OUTPUT FREQUENCY WHEN RC NETWORK COMPONENT VALUES AND INPUT TRIGGER FREQUENCY ARE CHANGED. ACCURACY WITHIN + OR - TWENTY PERCENT IS REQUIRED. MEAS: PC 1.5/0

C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	87.9	83.9	13.8	81.3	73.6	76.2	48.2	97.7
I	535	I1-7 DO YOU WORK WITH MONOSTABLE (ONE SHOT) MULTIVIBRATORS?	63.6	23.6	.0	6.3	.9	4.8	.9	79.5
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	34.8	16.8	.0	.0	2.8	.0	.0	63.6
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	31.8	15.5	.0	.0	1.9	.0	.0	59.1
H	505	M3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	19.7	11.8	.0	.0	2.8	.0	.0	54.5
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	18.2	9.3	3.4	.0	2.8	.0	.0	54.5

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119 IV 5E. GIVEN A BISTABLE MULTIVIBRATOR TRAINER, A MULTIMETER AND AN OSCILLOSCOPE, CONFIGURE TRAINER AND DETERMINE THE EFFECT ON THE OUTPUT PULSE WIDTH AND FREQUENCY WHEN THE INPUT TRIGGER FREQUENCY IS INCREASED AND DECREASED. ACCURACY WITHIN + OR - TWENTY PERCENT IS REQUIRED. MEAS: PC 2/0

C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	87.9	83.9	13.8	81.3	73.6	76.2	48.2	97.7
I	536	I1-8 DO YOU WORK WITH BISTABLE (FLIP FLOP) MULTIVIBRATORS?	68.2	24.8	.0	6.3	.9	4.8	.0	79.5
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	34.8	16.8	.0	.0	2.8	.0	.0	63.6
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	31.8	15.5	.0	.0	1.9	.0	.0	59.1
H	505	M3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	19.7	11.8	.0	.0	2.8	.0	.0	54.5
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	18.2	9.3	3.4	.0	2.8	.0	.0	54.5

D TSK	TITLES	306 51 **%	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
120	IV 5F. GIVEN A SCHEMATIC DIAGRAM OF A SCHMITT TRIGGER CIRCUIT AND A LIST OF STATEMENTS, MATCH THE STATEMENT(S) THAT DESCRIBE(S) THE FUNCTION OF THE CIRCUIT AND CIRCUIT COMPONENTS CORRECTLY THREE OUT OF FOUR TIMES. MEAS: PC 0/2								
C 112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	87.9	83.9	13.8	81.3	73.6	76.2	48.2	97.7
P1184	R2-2 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS?	62.1	39.8	.0	12.5	3.8	4.8	.0	40.9
P1185	R2-3 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS?	62.1	35.4	.0	12.5	3.8	4.8	.0	40.9
121	V. SOLID STATE WAVESHAPING CIRCUITS AND SOLDERING 38 HRS TT								
122	V 1. PULSED AND BLOCKING OSCILLATORS 4/1								
123	V 1A. GIVEN THE SCHEMATIC DIAGRAM OF FOUR PULSED OSCILLATORS, WITH AN INPUT GATE WAVEFORM, MATCH AT LEAST THREE OUTPUTS WITH ITS CORRECT WAVEFORM. MEAS: PC 2/0								
M 754	M1-3 DO YOU WORK WITH PULSED OSCILLATOR TIMING CIRCUITS?	37.9	14.9	.0	12.5	1.9	4.8	.9	72.7
M 525	M3-28 DO YOU WORK WITH PULSE GENERATING CIRCUITS?	31.8	15.5	3.4	6.3	10.4	4.8	.0	65.9
M 755	M1-4 DO YOU WORK WITH BLOCKING OSCILLATOR TIMING CIRCUITS?	15.2	5.6	.0	6.3	.9	.0	.0	38.6
M 527	M3-30 DO YOU WORK WITH BURST GENERATORS?	3.0	2.5	.0	6.3	1.9	.0	.0	34.1
M 528	M3-31 DO YOU WORK WITH BLOCKED OSCILLATORS?	1.5	1.9	.0	6.3	.9	.0	.0	22.7
124	V 1B. GIVEN A TRANSISTOR BLOCKING OSCILLATOR TRAINER, MULTIMETER AND OSCILLOSCOPE, DETERMINE THE OUTPUT PULSE WIDTH, CUTOFF TIME AND PULSE RECURRENCE TIME WITHIN + OR - TWENTY PERCENT ACCURACY WITH ASSISTANCE. MEAS: PC 2/0								
M 757	M1-6 DO YOU USE OR REFER TO RISE TIME?	33.3	1	.0	50.0	.9	.0	.0	68.2
M 758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	21.2	14.3	.0	50.0	.9	.0	.0	56.8
C 141	C2-16 DO YOU WORK WITH SATURABLE CORE TRANSFORMERS?	3.0	4.3	.0	25.0	2.8	.0	.0	36.4
M [illegible]	M3-[illegible] DO YOU WORK WITH BLOCKING OSCILLATORS?	3.0	3.7	.0	6.3	1.9	.0	.0	43.2
125	V 1C. GIVEN A SCHEMATIC DIAGRAM OF A TRANSISTOR BLOCKING OSCILLATOR, AN OSCILLOSCOPE AND TROUBLES; DETERMINE TWO OF THREE TROUBLES. MEAS: PC 0/.5								

			306	306	316	316	362	362	362	916
			51	52	52F	52F	51	53	54	50
D	TSK	TITLES	**M**	(M)	(M)	(M)	(M)	(M)	(M)	(M)
126		V 2. SAWTOOTH AND TRAPEZOIDAL GENERATORS 4/1								
127		V 2A. GIVEN A TRANSISTOR SAWTOOTH WAVE GENERATOR TRAINER, MULTIMETER AND OSCILLOSCOPE, SET UP TRAINER AND DETERMINE THE EFFECT ON THE OUTPUT WAVEFORM AMPLITUDE AND LINEARITY WHEN THE RC NETWORK VALUES ARE CHANGED. SEVENTY-FIVE PERCENT ACCURACY IS REQUIRED WITH ASSISTANCE. MEAS: PC 2/0								
H	456	H1-4 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTOR COMPONENTS?	62.1	25.5	.0	31.3	4.7	4.8	.9	93.2
F	339	F3-16 DO YOU USE OSCILLOSCOPES TO DISPLAY SWEEP GENERATOR PATTERNS?	42.4	31.1	.0	25.0	12.3	9.5	.9	77.3
M	752	M1-1 DO YOU WORK WITH SAWTOOTH WAVE GENERATOR TIMING CIRCUITS?	42.4	12.4	.0	12.5	.0	.0	.0	75.0
M	759	M1-8 DO YOU USE OR REFER TO SWEEP TIME?	39.4	19.3	.0	43.8	3.8	.0	.0	77.3
M	757	M1-6 DO YOU USE OR REFER TO RISE TIME?	33.3	14.9	.0	50.0	.9	.0	.0	68.2
M	761	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS?	22.7	13.0	.0	12.5	1.9	.0	.0	56.8
M	758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	21.2	14.3	.0	50.0	.9	.0	.0	56.8
N	844	N3-12 DO YOU WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATOR SOLID STATE CIRCUITS?	21.2	9.9	.0	6.3	.0	.0	.0	65.9
M	760	M1-9 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS?	16.7	11.2	.0	6.3	1.9	.0	.0	56.8
M	762	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS?	16.7	7.5	.0	6.3	1.9	.0	.0	45.5
M	763	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS?	15.2	6.8	.0	6.3	1.9	.0	.0	43.2
128		V 2B. GIVEN A SCHEMATIC DIAGRAM OF A TRANSISTOR SAWTOOTH GENERATOR MATCH LISTED TROUBLES TO THEIR SYMPTOMS. SEVENTY-FIVE PERCENT ACCURACY IS REQUIRED. MEAS: PC 0/1								
M	752	M1-1 DO YOU WORK WITH SAWTOOTH WAVE GENERATOR TIMING CIRCUITS?	42.4	12.4	.0	12.5	.0	.0	.0	75.0
M	759	M1-8 DO YOU USE OR REFER TO SWEEP TIME?	39.4	19.3	.0	43.8	3.8	.0	.0	77.3
M	757	M1-6 DO YOU USE OR REFER TO RISE TIME?	33.3	14.9	.0	50.0	.9	.0	.0	68.2
N	851	N3-19 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS?	30.3	10.6	.0	.0	.9	.0	.0	59.1
M	761	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS?	22.7	13.0	.0	12.5	1.9	.0	.0	56.8
M	758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	21.2	14.3	.0	50.0	.9	.0	.0	56.8
N	844	N3-12 DO YOU WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATOR SOLID STATE CIRCUITS?	21.2	9.9	.0	6.3	.0	.0	.0	65.9
M	760	M1-9 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS?	16.7	11.2	.0	6.3	1.9	.0	.0	56.8

			306	306	316	316	362	362	362	918
			51	52	50F	52F	51	53	54	50
O	TSK	TITLES	*N*	(M)	(M)	(M)	(M)	(M)	(M)	(M)
N	762	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS?	16.7	7.5	.0	6.3	1.9	.0	.0	45.5
N	763	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS?	15.2	6.8	.0	6.3	1.9	.0	.0	43.2
129		V 2C. GIVEN A TRANSISTOR TRAPEZOIDAL WAVE GENERATOR TRAINER MULTIMETER AND OSCILLOSCOPE, DETERMINE THE EFFECT ON THE OUTPUT WAVEFORM AMPLITUDE, JUMP VOLTAGE, SLOPE VOLTAGE AND LINEARITY WHEN THE RC NETWORK VALUES ARE CHANGED. SEVENTY-FIVE PERCENT ACCURACY IS REQUIRED WITH ASSISTANCE. MEAS: PC 2/0								
F	339	F3-16 DO YOU USE OSCILLOSCOPES TO DISPLAY SWEEP GENERATOR PATTERNS?	42.4	31.1	.0	25.0	12.3	9.5	.9	77.3
N	759	M1-8 DO YOU USE OR REFER TO SWEEP TIME?	39.4	19.3	.0	43.8	3.8	.0	.0	77.3
N	757	M1-6 DO YOU USE OR REFER TO RISE TIME?	33.3	14.9	.0	50.0	.9	.0	.0	68.2
N	758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	21.2	14.3	.0	50.0	.9	.0	.0	56.8
N	760	M1-9 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS?	16.7	11.2	.0	6.3	1.9	.0	.0	56.8
N	753	M1-2 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATOR TIMING CIRCUITS?	15.2	5.6	.0	6.3	.9	.0	.0	54.5
N	845	M3-13 DO YOU WORK WITH RAMP (TRAPEZOIDAL) GENERATOR SOLID STATE CIRCUITS?	7.6	7.5	.0	.0	.0	.0	.0	63.6
130		V 3. LIMITERS AND CLAMPERS 10/2								
131		V 3A. GIVEN THE SCHEMATIC DIAGRAMS AND INPUT WAVEFORMS OF SERIES AND SHUNT LIMITERS WITH OR WITHOUT BIAS, MATCH THE NAME AND OUTPUT TO THE SCHEMATIC. SIXTY PERCENT ACCURACY IS REQUIRED. MEAS: PC 2/0								
I	541	I2-2 DO YOU WORK WITH SERIES DIODE LIMITERS?	9.1	11.2	.0	.0	.9	.0	.0	66.2
I	542	I2-3 DO YOU WORK WITH SHUNT DIODE LIMITERS?	9.1	12.4	3.4	.0	.9	.0	.0	66.2
I	543	I2-4 DO YOU WORK WITH LIMITERS WITH BIAS?	7.6	10.6	.0	.0	.9	.0	.0	54.5

D TSK	TITLES	306 51 **MA	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
132	V 3B. GIVEN A DIODE LIMITER TRAINER, MULTIMETER AND OSCILLOSCOPE SET UP THE TRAINER AND DETERMINE THE EFFECTS ON THE OUTPUT WAVEFORM WHEN THE DIODE IS MOVED OR REVERSED, OR WHEN BIAS IS CHANGED ON A DOUBLE DIODE LIMITER. SEVENTY-FIVE PERCENT ACCURACY IS REQUIRED WITH ASSISTANCE. MEAS: PC 2/0								
I 541	I2-2 DO YOU WORK WITH SERIES DIODE LIMITERS?	9.1	11.2	.0	.0	.9	.0	.0	68.2
I 542	I2-3 DO YOU WORK WITH SHUNT DIODE LIMITERS?	9.1	12.4	3.4	.0	.9	.0	.0	68.2
I 543	I2-4 DO YOU WORK WITH LIMITERS WITH BIAS?	7.6	10.6	.0	.0	.9	.0	.0	54.5
133	V 3C. GIVEN AN NPN AND PNP TRANSISTOR LIMITER AND THREE OUTPUT WAVEFORMS FROM EACH, MATCH AT LEAST FOUR OF THE SIX OUTPUT WAVEFORMS TO THEIR PROPER IDENTITY. MEAS: PC 0/2								
I 545	I2-6 DO YOU WORK WITH TRANSISTOR LIMITERS?	15.2	11.8	3.4	.0	.9	4.8	.0	65.9
134	V 3D. GIVEN THE SCHEMATIC DIAGRAMS AND INPUT WAVEFORMS OF POSITIVE OR NEGATIVE CLAMPERS WITH OR WITHOUT BIAS MATCH THE NAME AND OUTPUT TO THE SCHEMATIC. SIXTY PERCENT ACCURACY IS REQUIRED. MEAS: PC 3/0								
I 547	I2-8 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS?	19.7	8.7	.0	.0	.0	.0	.0	61.4
I 548	I2-9 DO YOU WORK WITH BIAS DIODE CLAMPING CIRCUITS?	13.6	6.2	.0	.0	.9	.0	.0	56.8
135	V 3E. GIVEN A DIODE CLAMPER TRAINER, MULTIMETER AND OSCILLOSCOPE SET UP THE TRAINER AND DETERMINE THE EFFECTS ON THE OUTPUT WAVEFORM WHEN THE DIODE IS REVERSED OR WHEN THE BIAS IS CHANGED. SEVENTY-FIVE PERCENT ACCURACY IS REQUIRED WITH ASSISTANCE. MEAS: PC 3/0								
I 547	I2-8 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS?	19.7	8.7	.0	.0	.0	.0	.0	61.4
I 548	I2-9 DO YOU WORK WITH BIAS DIODE CLAMPING CIRCUITS?	13.6	6.2	.0	.0	.9	.0	.0	56.8
136	V 4. SOLDERING TECHNIQUES 9.5/4								

D TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
137	V 4A. GIVEN A LIST OF STATEMENTS PERTAINING TO SOLDERING PROCEDURES, SELECT THE STATEMENT(S) THAT DESCRIBE(S) THE USE OF TOOLS AND MATERIALS, TYPE OF SOLDER AND FLUX USED IN ELECTRONIC WORK, AND THE CHARACTERISTICS OF PROPERLY SOLDERED CONNECTION. MUST ANSWER 9 OF 14 CORRECTLY. MEAS: PC 1/2								
E 264	E2-2 DO YOU SOLDER CONNECTIONS?	87.9	88.2	.0	81.3	84.0	81.0	86.0	97.7
E 265	E2-3 DO YOU DESOLDER CONNECTIONS?	87.9	88.2	.0	81.3	85.8	81.0	83.3	97.7
E 267	E2-5 DO YOU INSPECT SOLDERED CONNECTIONS?	87.9	87.6	.0	81.3	85.8	81.0	79.8	95.5
E 270	E2-8 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS?	87.9	80.7	3.4	81.3	38.7	57.1	21.1	95.5
E 271	E2-9 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS?	87.9	85.7	.0	81.3	69.8	81.0	32.5	97.7
E 272	E2-10 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS?	87.9	79.5	.0	75.0	48.1	71.4	22.8	95.5
E 268	E2-6 DO YOU CLEAN OR TIN CONNECTIONS?	86.4	85.7	.0	81.3	83.0	81.0	78.9	95.5
E 269	E2-7 DO YOU MAKE HARDWIRE CONNECTIONS?	83.3	81.4	.0	81.3	79.2	71.4	80.7	90.9
138	V 4B. GIVEN THE TOOLS AND MATERIALS, SOLDER CONNECTIONS TO SLOTTED AND TURRET TERMINALS IN ACCORDANCE WITH TO DD-25-234. ACCEPTABLE QUALITY OF WORK IS REQUIRED. MEAS: PC 2/0								
E 264	E2-2 DO YOU SOLDER CONNECTIONS?	87.9	88.2	.0	81.3	84.0	81.0	86.0	97.7
E 270	E2-8 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS?	87.9	80.7	3.4	81.3	38.7	57.1	21.1	95.5
E 271	E2-9 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS?	87.9	85.7	.0	81.3	69.8	81.0	32.5	97.7
E 272	E2-10 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS?	87.9	79.5	.0	75.0	48.1	71.4	22.8	95.5
E 268	E2-6 DO YOU CLEAN OR TIN CONNECTIONS?	86.4	85.7	.0	81.3	33.0	81.0	78.9	95.5
E 269	E2-7 DO YOU MAKE HARDWIRE CONNECTIONS?	83.3	81.4	.0	81.3	79.2	71.4	80.7	90.9
139	V 4C. GIVEN THE TOOLS AND MATERIALS, DESOLDER CONNECTIONS FROM SLOTTED AND TURRET TERMINALS IN ACCORDANCE WITH TO DD-25-234. ACCEPTABLE QUALITY OF WORK IS REQUIRED. MEAS: PC 3/0								
E 265	E2-3 DO YOU DESOLDER CONNECTIONS?	87.9	88.2	.0	81.3	85.8	81.0	83.3	97.7
140	V 4D. GIVEN THE TOOLS AND MATERIALS, SOLDER CONNECTIONS ON PRINTED CIRCUIT BOARDS IN ACCORDANCE WITH TO DD-25-234. ACCEPTABLE QUALITY OF WORK IS REQUIRED. MEAS: PC 2.5/0								
E 264	E2-2 DO YOU SOLDER CONNECTIONS?	87.9	88.2	.0	81.3	84.0	81.0	86.0	97.7

D TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
E 270	E2-8 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS?	87.9	80.7	3.4	81.3	38.7	57.1	21.1	95.5
E 271	E2-9 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS?	87.9	85.7	.0	81.3	69.8	81.0	32.5	97.7
E 272	E2-10 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS?	87.9	79.5	.0	75.0	48.1	71.4	22.8	95.5
E 268	E2-6 DO YOU CLEAN OR TIN CONNECTIONS?	86.4	85.7	.0	81.3	83.0	81.0	78.9	95.5
E 269	E2-7 DO YOU MAKE HARDWIRE CONNECTIONS?	83.3	81.4	.0	81.3	79.2	71.4	80.7	90.9
141	V 8E. GIVEN THE TOOLS AND MATERIALS, DESOLDER CONNECTIONS FROM PRINTED CIRCUIT BOARDS IN ACCORDANCE WITH TO 00-25-234. ACCEPTABLE QUALITY OF WORK IS REQUIRED. MEAS: PC 1/0								
E 265	E2-3 DO YOU DESOLDER CONNECTIONS?	87.9	88.2	.0	81.3	85.8	91.0	83.3	97.7
142	VI. DIGITAL TECHNIQUES 38 HRS TT								
143	VI 1. NUMBERING SYSTEMS 6/2								
144	VI 1A. CONVERT TWO OUT OF THREE WHOLE NUMBERS FROM DECIMAL, BINARY, OCTAL AND HEXADECIMAL TO THEIR EQUIVALENT IN THE OTHER NUMBERING SYSTEMS. MEAS: PC 2/0								
K 666	K3-7 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS?	53.0	13.7	6.9	56.3	7.5	4.8	1.8	59.1
K 661	K3-2 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS?	48.5	13.7	13.8	62.5	6.6	9.5	2.6	61.4
U1311	U1-8 DO YOU USE OR REFER TO BINARY SYSTEMS?	34.8	3.7	13.8	12.5	5.7	.0	.0	27.3
K 663	K3-4 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS?	33.3	6.2	51.7	50.0	2.8	4.8	.9	40.9
K 667	K3-8 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS?	33.3	6.8	20.7	37.5	3.8	.0	.0	40.9
K 660	K3-1 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS?	31.8	6.8	44.8	50.0	4.7	.0	.9	40.9
K 664	K3-5 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS?	30.3	6.2	10.3	43.8	2.8	.0	.9	43.2
U1305	U1-2 DO YOU USE OR REFER TO DECIMAL SYSTEMS?	21.2	1.9	10.3	6.3	4.7	.0	.0	25.0
K 662	K3-3 DO YOU CONVERT DECIMAL NUMBERS TO HEXADECIMAL (BASE 16) NUMBERS?	18.2	5.6	3.4	50.0	5.7	.0	.9	36.4
U1306	U1-3 DO YOU USE OR REFER TO OCTAL SYSTEMS?	18.2	.0	17.2	.0	3.8	.0	.0	22.7
K 669	K3-10 DO YOU CONVERT HEXADECIMAL NUMBERS TO DECIMAL NUMBERS?	15.2	5.6	3.4	62.5	3.8	.0	.0	38.6
K 668	K3-9 DO YOU CONVERT BINARY NUMBERS TO HEXADECIMAL NUMBERS?	13.6	5.6	.0	62.5	4.7	.0	.0	38.6

D TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 53 (M)
U1306	U1-5 DO YOU USE OR REFER TO HEXADECIMAL SYSTEMS?	17.6	1.2	.0	25.0	3.8	.0	.0	25.0
K 665	K3-6 DO YOU CONVERT OCTAL NUMBERS TO HEXADECIMAL NUMBERS?	12.1	5.0	.0	50.0	1.9	.0	.0	36.4
K 670	K3-11 DO YOU CONVERT HEXADECIMAL NUMBERS TO OCTAL NUMBERS?	12.1	5.0	3.4	50.0	1.9	.0	.0	36.4
K 671	K3-12 DO YOU CONVERT HEXADECIMAL NUMBERS TO BINARY NUMBERS?	12.1	5.6	.0	62.5	5.7	.0	.0	38.6
145	VI 1B. SOLVE TWO OUT OF THREE BINARY ADDITION PROBLEMS MEAS: PC 1/0								
K 672	K3-13 DO YOU ADD BINARY NUMBERS?	47.9	17.4	10.3	50.0	6.6	9.5	4.4	61.4
146	VI 1C. SOLVE TWO OUT OF THREE BINARY SUBTRACTION PROBLEMS. MEAS: PC 1/0								
K 674	K3-15 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD?	37.9	13.0	.0	43.8	3.8	4.8	4.4	50.0
K 673	K3-14 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD?	27.3	11.8	.0	25.0	2.8	.0	1.6	45.5
147	VI 1D. SOLVE TWO OUT OF THREE OCTAL ADDITION PROBLEMS. MEAS: PC 1/0								
K 675	K3-16 DO YOU ADD OCTAL NUMBERS?	22.7	6.8	24.1	31.3	1.9	.0	1.8	36.4
148	VI 1E. SOLVE TWO OUT OF THREE OCTAL SUBTRACTION PROBLEMS. MEAS: PC 1/0								
K 676	K3-17 DO YOU SUBTRACT OCTAL NUMBERS?	21.2	6.8	17.2	31.3	1.9	.0	1.8	36.4
149	VI 1F. SOLVE TWO OUT OF THREE BINARY MULTIPLICATION PROBLEMS. MEAS: PC 0/1								
K 680	K3-21 DO YOU MULTIPLY BINARY NUMBERS?	27.3	8.1	.0	31.3	2.8	4.8	4.4	36.4
150	VI 1G. SOLVE TWO OUT OF THREE BINARY DIVISION PROBLEMS. MEAS: PC 0/1								
K 679	K3-20 DO YOU DIVIDE BINARY NUMBERS?	27.3	8.7	.0	25.0	2.8	4.8	4.4	36.4

D TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
151	VI 2. LOGIC FUNCTIONS AND BOOLEAN EQUATIONS 6/2								
152	VI 2A. GIVEN THE SCHEMATIC AND/OR LOGIC DIAGRAMS OF A DIODE AND, OR AND EXCLUSIVE OR GATES, CORRECTLY MATCH AT LEAST TWO OF THE THREE LOGIC SYMBOLS AND TWO OF THE THREE TRUTH TABLES WITH THEIR SCHEMATIC. MEAS: PC 2/D								
L 694	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'AND' GATES?	83.3	35.4	37.9	43.8	1.9	14.3	.9	77.3
L 695	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'OR' GATES?	83.3	35.4	37.9	37.5	1.9	14.3	1.8	77.3
L 696	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'NAND' OR 'NOR' GATES?	83.3	35.4	34.5	37.5	1.9	14.3	.9	77.3
L 697	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'EXCLUSIVE OR' GATES?	81.8	32.3	20.7	31.3	1.9	14.3	.0	77.3
L 698	L1-14 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR INHIBITED 'AND' GATES?	78.8	34.2	24.1	31.3	.9	14.3	.0	75.0
L 690	L1-6 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	71.2	32.3	13.8	25.0	1.9	14.3	.0	75.0
L 691	L1-7 DO YOU USE OR REFER TO TRUTH TABLES FOR 'OR' LOGIC SYMBOLS OR GATES?	71.2	32.3	13.8	25.0	1.9	14.3	.0	75.0
L 692	L1-8 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	69.7	30.4	13.8	25.0	1.9	14.3	.0	70.5
L 693	L1-9 DO YOU USE OR REFER TO TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS?	69.7	29.8	6.9	31.3	1.9	4.8	.0	75.0
L 686	L1-2 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	51.5	19.9	6.9	12.5	1.9	4.8	.0	75.0
L 688	L1-4 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	51.5	18.0	6.9	12.5	1.9	4.8	.0	72.7
L 689	L1-5 DO YOU CONSTRUCT TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS OR GATES?	51.5	17.4	6.9	12.5	.9	.0	.0	75.0
L 687	L1-3 DO YOU CONSTRUCT TRUTH TABLES FOR 'OR' LOGIC SYSMBOLS OR GATES?	50.0	19.3	6.9	12.5	1.9	4.8	.0	75.0
153	VI 2B. GIVEN THE LOGIC CIRCUITS FOR NPN AND PNP, SERIES AND PARALLEL DIRECT COUPLED TRANSISTOR LOGIC CIRCUITS, COMPLETE A TRUTH TABLE, AND DRAW A LOGIC SYMBOL FOR EACH WITH A 75% ACCURACY. MEAS: PC 1/D								
L 719	L2-2 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS?	7.6	5.0	.0	.0	.9	.0	.0	29.5

D TSK	TITLES	306 51 **M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
154	VI 2C. GIVEN A SCHEMATIC OF A CURRENT MODE LOGIC CIRCUIT, CONSTRUCT THE TRUTH TABLE WITH AN ACCURACY OF 75%. MEAS: PC 1/0								
L 720	L2-3 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	7.6	5.0	.0	6.3	.9	.0	.0	15.9
L 726	L2-9 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	7.6	5.6	.0	12.5	.9	.0	.0	20.5
155	VI 2D. GIVEN A LOGIC DIAGRAM, DEVELOP THE BOOLEAN EQUATION (CONSISTING OF THREE TO SIX GATES) CORRECTLY THREE OUT OF FIVE TIMES. MEAS: PC 2/0								
L 701	L1-17 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR COMBINERS?	68.2	8.7	.0	6.3	.9	.0	.0	25.0
L 727	L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE?	36.4	16.8	6.9	18.8	.9	.0	.0	45.5
L 721	L2-4 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS?	16.7	5.6	.0	.0	.9	.0	.0	27.3
L 725	L2-8 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES?	15.2	8.1	3.4	6.3	1.9	.0	.0	31.8
156	VI 3. LOGIC CIRCUITS 3/0								
157	VI 3A. GIVEN THE LOGIC DIAGRAM OF A SERIAL HALF OR SERIAL FULL ADDER, AND INPUT CONDITION, DETERMINE THE SUM AND CARRY OUTPUTS WITH AN ACCURACY OF 75%. MEAS: PC 3/0								
L 728	L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS?	15.2	5.6	.0	.0	.9	.0	.0	22.7
158	VI 3B. GIVEN THE LOGIC DIAGRAM OF A FOUR-BIT PARALLEL ADDER TRACE DATA FLOW AND WRITE THE STATE OF EACH SUM AND CARRY OUTPUT WITH AN ACCURACY OF 75%. MEAS: PC 3/0								
L 729	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS?	22.7	8.7	.0	.0	.9	.0	.0	29.5

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	919 50 (M)
159		VI 3C. GIVEN THE SCHEMATIC DIAGRAM OF ANY ONE OF THE FOLLOWING NAMED LOGIC CIRCUITS AND A LIST OF STATEMENTS THAT DESCRIBES THEIR APPLICATION IN DIGITAL CIRCUITS, MATCH AT LEAST THREE OF THE FOUR CIRCUITS WITH ITS APPLICATION: ASTABLE, MONSTABLE AND BISTABLE MULTIVIBRATOR; SCHMITT TRIGGER CIRCUIT. MEAS: PC 2/0								
L	704	L1-20 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT OR SCHEMATIC DIAGRAMS?	81.8	31.7	13.8	18.8	1.9	19.0	.9	72.7
L	702	L1-18 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS?	75.8	29.8	3.4	31.3	.9	19.0	.0	72.7
L	703	L1-19 DO YOU USE OR REFER TO ONE-SHOT MULTIVIBRATOR SYMBOLS?	71.2	22.4	3.4	18.8	.9	9.5	.0	70.5
L	705	L1-21 DO YOU USE OR REFER TO ONE-SHOT CIRCUIT OR SCHEMATIC DIAGRAMS?	71.2	21.7	10.3	18.8	.9	9.5	.0	70.5
L	714	L1-30 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS?	54.5	19.9	.0	12.5	.9	.0	.9	47.7
L	715	L1-31 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	53.0	18.6	.0	12.5	.9	4.8	.9	45.5
L	708	L1-24 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS?	48.5	17.4	.0	12.5	.9	.0	.0	45.5
L	716	L1-32 DO YOU TRACE DATA FLOW THROUGH NONCOMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	48.5	16.1	.0	12.5	.9	.0	.0	45.5
L	707	L1-23 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	45.5	17.4	.0	12.5	.0	.0	.0	45.5
I	537	I1-9 DO YOU WORK WITH P-S FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	16.7	9.3	.0	6.3	.9	4.8	.0	63.6
160		VI 3D. GIVEN THE LOGIC SYMBOL FOR A J-K FLIP-FLOP, CONSTRUCT THE TRUTH WITH AN ACCURACY OF 75%. MEAS: PC 0/2								
I	538	I1-10 DO YOU WORK WITH J-K FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	65.2	21.1	.0	6.3	.9	4.8	.0	81.8
L	706	L1-22 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES?	63.6	29.8	.0	18.8	1.9	14.3	.0	61.4
L	717	L1-33 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS?	47.0	16.1	.0	6.3	.9	.0	.0	45.5
161		VI 4. COUNTERS AND REGISTERS 7.5/2								

D TSK	TITLES	30F 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
162	VI 4A. GIVEN THE LOGIC DIAGRAM OF A FOUR STAGE SERIAL UP-COUNTER OR DOWN-COUNTER HAVING COMPLEMENTING FLIP-FLOPS DETERMINE THE STATE OF THE FLIP-FLOPS AND WRITE THE BINARY COUNT AFTER A CLEAR OR SET PULSE IS APPLIED AND A GIVEN NUMBER OF CLOCK PULSES HAVE PASSED TO AN ACCURACY OF 75%. MEAS: PC 1.5/0								
L 731	L3-2 DO YOU USE OR REFER TO UP-COUNTERS?	63.6	20.5	.0	25.0	4.7	14.3	.0	52.3
L 733	L3-4 DO YOU USE OR REFER TO SERIAL COUNTERS?	63.6	20.5	.0	6.3	1.9	9.5	.0	40.9
L 732	L3-3 DO YOU USE OR REFER TO DOWN-COUNTERS?	59.1	17.4	.0	18.8	1.9	9.5	.0	50.0
L 741	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS?	53.0	16.8	.0	12.5	.9	.0	.9	47.7
L 738	L3-9 DO YOU USE OR REFER TO DOWN CLOCKS?	50.0	16.8	3.4	6.3	1.9	9.5	.0	52.3
L 742	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS?	50.0	14.9	.0	12.5	.9	.0	.9	45.5
163	VI 4B. GIVEN THE LOGIC DIAGRAM OF A FOUR STAGE SERIAL UP-COUNTER OR DOWN-COUNTER HAVING COMPLEMENTED FLIP-FLOPS, DETERMINE THE STATE OF THE FLIP-FLOPS AND WRITE THE BINARY COUNT AFTER A CLEAR OR SET PULSE IS APPLIED AND A GIVEN NUMBER OF CLOCK PULSES HAVE PASSED TO AN ACCURACY OF 75%. MEAS: PC 1.5/0								
L 731	L3-2 DO YOU USE OR REFER TO UP-COUNTERS?	63.6	20.5	.0	25.0	4.7	14.3	.0	52.3
L 733	L3-4 DO YOU USE OR REFER TO SERIAL COUNTERS?	63.6	20.5	.0	6.3	1.9	9.5	.0	40.9
L 732	L3-3 DO YOU USE OR REFER TO DOWN-COUNTERS?	59.1	17.4	.0	18.8	1.9	9.5	.0	50.0
L 734	L3-5 DO YOU USE OR REFER TO PARALLEL COUNTERS?	54.5	16.1	.0	6.3	.9	9.5	.0	38.6
L 741	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS?	53.0	16.8	.0	12.5	.9	.0	.9	47.7
L 738	L3-9 DO YOU USE OR REFER TO DOWN CLOCKS?	50.0	16.8	3.4	6.3	1.9	9.5	.0	52.3
L 742	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS?	50.0	14.9	.0	12.5	.9	.0	.9	45.5
L 744	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS?	27.3	8.1	.0	6.3	.9	.0	.9	38.6
164	VI 4C. GIVEN THE LOGIC DIAGRAM OF A FOUR-STAGE RING COUNTER WRITE THE STATE OF EACH FLIP-FLOP AFTER A CLEAR PULSE AND A GIVEN NUMBER OF INPUT PULSES HAVE PASSES WITH AN ACCURACY OF 75%. MEAS: PC 1/0								
L 735	L3-6 DO YOU USE OR REFER TO RING COUNTERS?	34.8	10.6	3.4	6.3	1.9	.0	.0	31.8
L 750	L3-21 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES?	34.8	11.2	.0	6.3	.9	.0	.0	31.8
L 745	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS?	30.3	9.3	.0	6.3	.9	.0	.9	29.5

D TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
165	VI 4D. GIVEN THE LOGIC DIAGRAM OF A DECADE COUNTER, CONSTRUCT THE TRUTH TABLE WITH AN ACCURACY OF 75%. MEAS: PC 0/2								
L 736	L3-7 DO YOU USE OR REFER TO DECADE (MOD 10) COUNTERS?	21.2	8.7	.0	12.5	1.9	.0	.9	40.9
L 749	L3-20 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS?	16.7	4.3	.0	6.3	.9	.0	.0	31.8
166	VI 4E. GIVEN THE LOGIC DIAGRAM OF A COUNT DETECT CIRCUIT, CONNECT THE AND GATE CONNECTIONS TO THE FLIP-FLOPS TO INDICATE A REQUIRED COUNT; ACCURACY OF TWO OUT OF THREE TIMES. MEAS: PC 1.5/0								
L 751	L3-22 DO YOU DETERMINE THE APPROPRIATE "AND" GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT?	51.5	13.7	.0	6.3	1.9	.0	.0	40.9
L 737	L3-8 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS?	42.4	13.7	3.4	12.5	.9	9.5	.9	45.5
167	VI 4F. GIVEN THE LOGIC DIAGRAM OF A SERIAL UP-COUNTER (CONTAINING A SPECIFIED COUNT) FEEDING A PARALLEL STORAGE REGISTER, TRACE DATA FLOW AND WRITE THE BINARY COUNT STORED IN THE STORAGE REGISTER AFTER A READ-IN PULSE HAS PASSED; ACCURACY OF THREE OUT OF FOUR CORRECT. MEAS: PC 1/0								
Q1121	Q1-1 DO YOU USE OR REFER TO STORAGE REGISTERS?	69.7	31.1	13.8	18.8	2.8	.0	.0	54.5
Q1124	Q1-4 DO YOU USE OR REFER TO LOGIC SYMBOLS OR STORAGE REGISTERS?	66.7	30.4	3.4	18.8	1.9	.0	.0	54.5
L 746	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF COUNTERS FEEDING STORAGE REGISTERS?	43.0	14.3	6.9	6.3	1.9	.0	.0	36.4
168	VI 4G. GIVEN THE LOGIC DIAGRAM OF A THREE-STAGE SHIFT REGISTER CONTAINING A SPECIFIED COUNT, TRACE DATA FLOW AND WRITE THE STATE OF EACH FLIP-FLOP AFTER A SPECIFIED NUMBER SHIFT PULSES HAVE PASSED CORRECTLY THREE OUT OF FOUR TIMES. MEAS: PC 1/0								
Q1122	Q1-2 DO YOU USE OR REFER TO SHIFT REGISTERS?	77.3	34.8	.0	18.8	2.8	4.8	.0	56.8
Q1125	Q1-5 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTER CIRCUITS?	77.3	32.9	.0	18.8	.9	4.8	.9	54.5
Q1123	Q1-3 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS?	72.7	33.5	3.4	18.8	1.9	.0	.0	54.5
Q1127	Q1-7 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED?	72.7	27.3	.0	12.5	1.9	.0	.9	50.0

D TSK	TITLES	306 51 **M**	306 52 (F)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
L 747	L3-18 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS?	60.6	14.9	3.4	6.3	1.9	.0	.0	38.6
169	VII. INTEGRATED CIRCUITS/DEVICES 38 HRS IT								
170	VII 1. INTEGRATED CIRCUITS 2/0								
171	VII 1A. GIVEN A LIST OF NINE CHARACTERISTICS, CORRECTLY SELECT AT LEAST SIX THAT APPLY TO INTEGRATED CIRCUITS. MEAS: PC								
H 458	H1-6 DO YOU USE OR REFER TO INTEGRATED CIRCUIT COMPONENTS?	87.9	62.7	13.8	81.3	19.8	19.0	22.8	93.2
172	VII 2. BASIC COMPUTERS 2/2								
173	VII 2A. GIVEN A LIST OF FIVE BASIC COMPUTER UNITS AND SEVEN UNIT FUNCTIONS, CORRECTLY MATCH AT LEAST FIVE OF THE FUNCTIONS WITH ITS UNITS. MEAS: PC 1/0								
S1200	S1-13 DO YOU USE OR REFER TO TAPE READERS?	83.3	65.2	48.3	37.5	3.8	.0	.0	18.2
S1197	S1-3 DO YOU USE OR REFER TO PRINTERS?	77.3	78.3	13.8	37.5	17.9	4.8	1.8	45.5
S1201	S1-14 DO YOU USE OR REFER TO TAPE PUNCHES?	77.3	66.5	51.7	31.3	3.8	.0	.0	9.1
S1192	S1-5 DO YOU USE OR REFER TO CARD READERS/CARD PUNCHES?	74.2	13.0	6.9	.0	4.7	.0	1.8	18.2
S1189	S1-2 DO YOU USE OR REFER TO KEYBOARDS OR TELETYPEWRITERS?	68.2	78.9	6.9	43.8	19.8	4.8	1.8	31.8
S1191	S1-4 DO YOU USE OR REFER TO TAPE DRIVES (UNITS)?	37.9	44.7	24.1	31.3	13.2	.0	.0	25.0
U1339	U1-36 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT SECTIONS?	30.3	3.1	10.3	6.3	6.6	.0	.9	20.5
U1338	U1-35 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT SECTIONS?	28.8	3.1	10.3	6.3	7.5	.0	.9	20.5
U1337	U1-34 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER CONTROL SECTIONS?	27.3	2.5	6.9	6.3	5.7	.0	.0	22.7
U1340	U1-37 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR SECTIONS?	25.8	2.5	10.3	6.3	4.7	.0	.9	18.2
S1197	S1-6 DO YOU USE OR REFER TO VIDEO DISPLAYS (CRT'S)?	7.6	33.5	.0	31.3	18.9	4.8	.9	45.5

D TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
174	VII 2B. GIVEN A LIST OF FOUR MAGNETIC STORAGE DEVICES AND A LIST OF NINE FUNCTIONAL CHARACTERISTICS, CORRECTLY MATCH AT LEAST SIX OF THE CHARACTERISTICS TO THE CORRECT STORAGE DEVICE. MEAS: PC 1/0								
Q1134	Q2-7 DO YOU USE OR REFER TO STORAGE CAPACITY OF MEMORY SYSTEMS?	59.1	13.0	13.8	6.3	4.7	.0	.9	25.0
Q1130	Q2-3 DO YOU USE OR REFER TO MAGNETIC CORES OR BIMAGS?	54.5	5.0	3.4	.0	1.9	.0	.0	11.4
Q1133	Q2-6 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OF MEMORY SYSTEMS?	47.0	8.7	3.4	6.3	2.8	.0	.0	27.3
Q1135	Q2-8 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS?	28.8	8.1	3.4	6.3	2.8	.0	.9	25.0
Q1131	Q2-4 DO YOU USE OR REFER TO MAGNETIC DRUMS?	6.1	3.7	3.4	.0	2.8	.0	.0	11.4
Q1132	Q2-5 DO YOU USE OR REFER TO MAGNETIC TAPES?	6.1	15.5	3.4	.0	9.4	.0	.9	25.0
Q1137	Q2-10 DO YOU USE OR REFER TO MAGNETIC DISKS?	6.1	3.7	.0	18.8	1.9	.0	.0	20.5
175	VII 2C. GIVEN A LIST OF FIVE BASIC COMPUTER TERMS, COPRECTLY MATCH THREE OF THEM WITH THEIR DIFINITIONS. MEAS: PC 0/2								
Q1143	Q2-16 DO YOU USE OR REFER TO RANDOM ACCESS MEMORIES (RAM)?	45.5	18.0	17.2	6.3	5.7	.0	.9	36.4
Q1144	Q2-17 DO YOU USE OR REFER TO READ ONLY MEMORIES (ROM)?	13.6	18.6	10.3	6.3	4.7	.0	.9	34.1
Q1145	Q2-18 DO YOU USE OR REFER TO PROGRAMMALBE READ ONLY MEMORIES (PROM)?	7.6	10.6	3.4	12.5	2.8	.0	.0	36.4
176	VII 3. MICROPROCESSORS 3.5/0								
177	VII 3A. GIVEN A LIST OF EIGHT CHARACTERISTICS CORRECTLY SELECT AT LEAST FIVE THAT APPLY TO MICROPROCESSORS. MEAS: PC 2/0								
H 455	H1-3 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTOR COMPONENTS?	27.3	18.0	.0	25.0	2.8	9.5	.0	95.5
178	VII 3B. GIVEN A LIST OF SEVEN MAJOR MICROPROCESSOR SECTIONS CORRECTLY MATCH AT LEAST FIVE TO THEIR FUNCTION. MEAS: PC 1.5/0								
U1313	U1-10 DO YOU USE OR REFER TO DATA WORDS?	22.7	4.3	6.9	12.5	5.7	.0	.0	15.9
U1315	U1-12 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS?	18.7	3.1	3.4	12.5	6.6	.0	.9	13.6
U1314	U1-11 DO YOU USE OR REFER TO ADDRESS WORDS?	16.7	4.3	3.4	12.5	7.5	.0	.0	15.9
U1317	U1-14 DO YOU USE OR REFER TO INSTRUCTION WORDS?	10.6	3.1	6.9	6.3	6.6	.0	.0	15.9
U1320	U1-17 DO YOU USE OR REFER TO CONTROL WORDS?	9.1	4.3	.0	18.8	4.7	.0	.0	13.6

D TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
179	VII 4. COMBINATIONAL LOGIC CIRCUIT 14/4								
180	VII 4A. GIVEN A LOGIC LAB TRAINER AND PRACTICAL DIGITAL ELECTRONICS LABORATORY WORKBOOK, TEST EQUIPMENT AND CIRCUIT COMPONENTS, SATISFACTORILY COMPLETE AT LEAST FOUR OF THE SEVEN EXPERIMENTS NUMBERED 3 THRU 9. MEAS: PC 14/0								
181	VII 4B. GIVEN A SCHEMATIC OF THE TTL LOGIC ELEMENT CIRCUIT, COMPLETE THE TRUTH TABLE TO A 75 PERCENT ACCURACY. MEAS: PC 0/2								
182	VII 4C. GIVEN A SCHEMATIC OF A TYPICAL INTEGRATED CIRCUIT DECODER (2-LINE-TO-4-LINE) AND A COMBINATION OF INPUTS, COMPLETE A TRUTH TABLE TO A 75 PERCENT ACCURACY. MEAS: PC 0/2								
U136C	U1-57 DO YOU USE ENCODER/DECODER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	6.1	1.9	.0	.0	2.8	4.8	.0	22.7
183	VII 5. INTRODUCTION TO OPERATIONAL AMPLIFIERS 6/2								
184	VII 5A. GIVEN FIVE SCHEMATIC DIAGRAMS AND THE NAMES OF THE CIRCUIT STAGES OF AN OPERATIONAL AMPLIFIER, CORRECTLY MATCH AT LEAST THREE OF THE CIRCUIT NAMES WITH THEIR SCHEMATIC DIAGRAMS. MEAS: PC 1.5/0								
S 449	G3-43 DO YOU TROUBLESHOOT OR REPAIR DIFFERENTIATING AMPLIFIERS (DIFF AMPS)?	24.7	3.7	.0	12.5	1.9	.0	.0	79.5
S 451	G3-44 DO YOU TROUBLESHOOT OR REPAIR OPERATIONAL AMPLIFIERS (OP AMPS)?	12.1	6.8	.0	19.9	1.9	.0	.0	81.8

D	TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
	185	VII 5B. GIVEN THE SCHEMATIC DIAGRAM OR CIRCUIT TITLE OF THE FIVE OP-AMP SECTIONS AND A LIST OF FUNCTIONS AND CHARACTERISTICS, CORRECTLY MATCH AT LEAST FOUR OF THE SIX CHARACTERISTICS WITH THEIR SCHEMATIC OR CIRCUIT TITLE. MEAS: PC 1/0								
G	449	G3-43 DO YOU TROUBLESHOOT OR REPAIR DIFFERENTIATING AMPLIFIERS (DIFF AMPS)?	24.2	3.7	.0	12.5	1.9	.0	.0	79.5
G	450	G3-44 DO YOU TROUBLESHOOT OR REPAIR OPERATIONAL AMPLIFIERS (OP AMPS)?	12.1	6.8	.0	18.8	1.9	.0	.0	81.8
	186	VII 5C. GIVEN FOUR INVERTING OPERATIONAL AMPLIFIERS, WITH RESISTIVE INPUTS TO A SUMMING JUNCTION, FEEDBACK RESISTOR AND INPUT VOLTAGES, SOLVE FOR THE CORRECT OUTPUT VOLTAGE AT LEAST THREE TIMES. MEAS: PC 0/2								
G	452	G3-46 DO YOU TROUBLESHOOT OR REPAIR SUMMING AMPLIFIERS?	1.5	1.9	.0	.0	.9	.0	.0	45.5
	187	VII 5D. GIVEN FIVE OP-AMP SCHEMATIC SYMBOLS, ASSOCIATED EXTERNAL CIRCUITRY, AND INPUT AND OUTPUT WAVEFORMS, SELECT THE CORRECT OUTPUT WAVEFORM FOR AT LEAST THREE OF THE INPUT CONDITIONS. MEAS: PC 3.5/0								

D TSK	TITLES	306 51 **M**	306 52 (M)	316 90F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
	TASKS NOT REFERENCED								
F 324	F3-1 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G1-1; IF YES, CONTINUE.	89.4	78.3	.0	81.3	37.7	71.4	7.9	95.5
H 467	H2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES? IF NO, GO TO ITEM H3-1; IF YES, CONTINUE.	89.4	79.5	86.2	81.3	45.3	81.0	86.8	93.2
E 263	E2-1 IN YOUR PRESENT JOB, DO YOU CONNECT ELECTRONIC CIRCUITS USING SOLDERLESS CONNECTIONS OR SOLDERING TECHNIQUES? IF NO, GO TO ITEM E3-1; IF YES, CONTINUE.	86.4	83.9	6.9	75.0	76.4	81.0	78.9	97.7
F 336	F3-13 DO YOU USE OSCILLOSCOPES TO OBSERVE DATA PATTERNS?	86.4	62.7	.0	62.5	19.8	19.0	1.8	68.2
H 469	H2-3 DO YOU CLEAN POWER SUPPLIES?	86.4	75.8	6.9	81.3	43.4	76.2	72.8	77.3
H 470	H2-4 DO YOU ALIGN OR ADJUST POWER SUPPLIES?	86.4	67.7	62.1	75.0	35.8	76.2	19.3	90.9
H 471	H2-5 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL?	86.4	75.2	55.2	62.5	35.8	81.0	57.9	90.9
H 472	H2-6 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS?	86.4	68.3	69.0	75.0	29.2	81.0	38.6	93.2
H 474	H2-8 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS?	86.4	68.3	3.4	75.0	25.5	76.2	30.7	93.2
L 685	L1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS? IF NO, GO TO ITEM L2-1; IF YES, CONTINUE.	86.4	34.8	37.9	43.8	2.8	14.3	1.8	77.3
G 383	G2-1 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM G3-1; IF YES, CONTINUE.	84.8	80.1	6.9	75.0	30.2	71.4	19.3	95.5
H 468	H2-2 DO YOU INSPECT POWER SUPPLIES?	84.8	79.5	69.0	75.0	44.3	81.0	82.5	90.9
A 26	A3-2 DO YOU INSPECT RESISTORS?	83.3	82.6	3.4	81.3	60.4	85.7	36.0	90.9
C 98	C1-2 DO YOU INSPECT CAPACITORS?	83.3	82.0	.0	81.3	56.6	76.2	33.3	93.2
C 102	C1-6 DO YOU DISCHARGE CAPACITORS?	83.3	71.4	.0	62.5	43.4	66.7	28.1	86.4
G 384	G2-2 DO YOU INSPECT TRANSISTORS?	83.3	76.4	3.4	75.0	26.4	71.4	14.0	93.2
E 273	E2-11 DO YOU SOLDER ACTIVE COMPONENTS, SUCH AS INTEGRATED CIRCUITS?	81.8	47.8	.0	43.8	21.7	38.1	10.5	93.2
G 342	G1-1 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G2-1; IF YES, CONTINUE.	81.8	70.2	3.4	75.0	47.2	66.7	11.4	93.2
A 25	A3-1 DO YOU WORK WITH RESISTORS OR RESISTIVE CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM B1-1; IF YES, CONTINUE.	80.3	78.3	17.2	62.5	68.9	71.4	43.0	77.3
C 97	C1-1 DO YOU WORK WITH CAPACITORS OR CICUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C2-1; IF YES, CONTINUE.	80.3	75.8	17.2	75.0	62.3	57.1	40.4	93.2
F 327	F3-4 DO YOU TROUBLESHOOT ELECTRONIC CIRCUITS USING OSCILLOSCOPES?	80.3	76.4	.0	81.3	31.1	61.9	4.4	86.4
S1196	S1-1 DO YOU WORK WITH INPUT OR OUTPUT DEVICES ON YOUR PRESENT JOB? IF NO, GO TO ITEM S2-1; IF YES, CONTINUE.	80.3	76.4	51.7	43.8	23.6	14.3	7.9	47.7
E 277	E3-1 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB? IF NO, GO TO ITEM F1-1; IF YES, CONTINUE.	78.8	67.7	69.0	81.3	73.6	81.0	77.2	90.9
G 343	G1-2 DO YOU INSPECT DIODES?	77.3	67.1	.0	75.0	39.6	66.7	9.6	93.2
H 465	H1-3 DO YOU USE OR REFER TO LED'S/LCD'S COMPONENTS?	77.3	46.6	20.7	68.8	16.9	19.0	22.8	95.5
E 279	E3-3 DO YOU CLEAN RELAYS?	75.8	55.3	.0	75.0	80.2	81.0	76.9	90.9
E 276	E3-4 DO YOU INSPECT RELAYS?	75.8	61.5	27.6	81.3	81.1	81.0	79.8	93.2
E 287	E3-7 DO YOU REMOVE OR REPLACE RELAYS?	74.2	64.0	24.1	81.3	76.4	81.0	60.5	90.9
M 7[illegible]	M2-3 DO YOU CLEAN OR LUBRICATE MOTORS?	74.2	74.4	13.8	25.0	18.9	9.5	7.5	90.9
M 780	M3-5 DO YOU REMOVE OR REPLACE COMPLETE MOTORS?	74.2	77.0	.0	25.0	12.3	9.5	7.0	90.9
E 264	E2-4 DO YOU PERFORM HIGH RELIABILITY SOLDERING?	72.7	61.5	.0	75.0	58.5	71.4	46.5	86.4
E 281	E3-5 DO YOU TROUBLESHOOT RELAYS?	72.7	60.9	65.5	81.3	80.2	81.0	75.4	93.2

D	TSK	TITLES	*M*	306 (M)	316 (M)	316 (M)	362 (M)	362 (M)	362 (M)	918 (M)
				51	52	52F	51	53	54	50
H	473	H2-7 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES?	72.7	75.8	.0	62.5	28.3	71.4	83.3	90.9
J	611	J3-1 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K1-1; IF YES, CONTINUE.	72.7	36.0	10.3	.0	26.4	23.8	22.6	18.2
L	730	L3-1 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M1-1; IF YES, CONTINUE.	72.7	22.4	.0	25.0	4.7	9.5	.0	59.1
M	778	M3-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS, GENERATORS (SERVO), OR ALTERNATORS? IF NO, GO TO ITEM N1-1; IF YES, CONTINUE.	72.7	77.0	51.7	25.0	19.8	19.0	10.5	88.6
M	779	M3-2 DO YOU INSPECT MOTORS?	72.7	79.5	44.8	25.0	18.9	9.5	6.1	90.9
C	126	C2-1 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C3-1; IF YES, CONTINUE.	71.2	67.7	27.6	75.0	28.3	57.1	24.6	93.2
Q	1128	Q2-1 DO YOU WORK WITH STORAGE DEVICES IN YOUR PRESENT JOB? IF NO, GO TO ITEM Q3-1; IF YES, CONTINUE.	71.2	26.7	31.0	25.0	10.4	.0	.9	36.4
C	127	C2-2 DO YOU INSPECT TRANSFORMERS?	69.7	67.7	6.9	68.8	26.4	66.7	21.9	95.5
E	275	E2-13 DO YOU PERFORM CRIMPING IN LIEU OF SOLDERING?	69.7	55.3	.0	81.3	46.2	38.1	50.9	84.1
S	1198	S1-11 DO YOU USE OR REFER TO TOGGLE OR PUSH BUTTON SWITCH INPUTS?	69.7	44.1	37.9	31.3	9.4	9.5	5.3	38.6
B	64	B1-5 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE FREQUENCY?	68.2	49.1	34.5	75.0	68.9	71.4	25.4	84.1
D	233	D3-1 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM E1-1; IF YES, CONTINUE.	68.2	42.2	6.9	31.3	11.3	57.1	18.4	75.0
E	274	E2-12 DO YOU PERFORM WIRE WRAPPING IN LIEU OF SOLDERING?	68.2	31.1	.0	31.3	78.3	57.1	77.2	36.4
E	284	E3-8 DO YOU PERFORM TASKS ON CONTACTS OF RELAYS?	68.2	51.6	10.3	81.3	81.1	81.0	76.3	93.2
J	614	J3-4 DO YOU PERFORM TASKS ON MODEM SYSTEMS STAGES?	68.2	14.3	3.4	.0	15.1	.0	11.4	11.4
N	809	N1-1 DO YOU WORK WITH METERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N2-1; IF YES, CONTINUE.	68.2	73.3	86.2	75.0	67.0	66.7	62.3	88.6
S	1206	S2-5 DO YOU WORK WITH PHOTOCELL (PHOTOCONDUCTIVE OR PHOTOVOLTAIC) PHOTO SENSITIVE DEVICES?	68.2	16.8	3.4	.0	1.9	.0	.0	79.5
M	781	M3-4 DO YOU OPERATE MOTORS?	66.7	72.0	44.8	25.0	18.9	4.8	5.3	90.9
I	529	I1-1 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I2-1; IF YES, CONTINUE.	65.2	24.2	.0	6.3	1.9	9.5	.9	84.1
M	784	M3-7 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS?	65.2	73.9	24.1	18.8	15.1	4.8	7.9	90.9
A	27	A3-3 DO YOU CLEAN RESISTORS?	63.6	62.7	3.4	68.8	41.5	66.7	15.8	72.7
Q	1126	Q1-6 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPES OF REGISTER CIRCUITS?	63.6	27.3	3.4	18.8	.9	.0	1.8	52.3
R	1183	R2-1 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS? IF NO, GO TO ITEM R3-1; IF YES, CONTINUE.	63.6	42.2	.0	18.8	3.8	4.8	.0	43.2
M	805	M3-28 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS OR ALTERNATORS?	62.1	5.6	3.4	.0	3.8	.0	.0	31.8
Q	1142	Q2-15 DO YOU USE OR REFER TO PAPER TAPES?	62.1	19.9	31.0	18.8	2.8	.0	.0	11.4
L	699	L1-15 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "B" BARS?	60.6	4.3	.0	.0	1.9	.0	.0	13.6
L	700	L1-16 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "M" BARS?	60.6	3.1	.0	.0	.9	.0	.0	13.6
M	802	M3-25 DO YOU INSPECT GENERATORS OR ALTERNATORS?	60.6	9.1	34.5	.0	6.6	.0	.0	40.9
S	1195	S1-8 DO YOU USE OR REFER TO LED'S?	60.6	44.1	31.0	31.3	12.3	4.8	2.6	50.0
S	1202	S2-1 DO YOU WORK WITH PHOTODIODE PHOTO SENSITIVE DEVICES?	60.6	13.0	.0	.0	1.9	.0	.0	79.5
F	330	F3-7 DO YOU USE OSCILLOSCOPES TO OBSERVE LISSAJOUS PATTERNS?	59.1	10.6	.0	18.8	6.6	9.5	.0	27.3

POI MATCHED WITH SURVEY DATA

OCCUPATIONAL ANALYSIS PROGRAM
FCPRTS PAGE 297
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	395	G2-13 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION?	59.1	44.7	.0	18.8	11.3	38.1	3.5	95.5
M	903	M3-26 DO YOU CLEAN OR LUBRICATE GENERATORS OR ALTERNATORS?	59.1	6.8	6.9	.0	6.6	.0	.0	40.9
Q	1141	Q2-14 DO YOU USE OR REFER TO PUNCH CARDS?	59.1	5.6	3.4	.0	.9	.0	.0	20.5
Q	1149	Q2-22 DO YOU CLEAN STORAGE DEVICES?	59.1	21.7	.0	12.5	9.4	.0	.9	25.0
C	99	C1-3 DO YOU CLEAN CAPACITORS?	57.6	64.6	.0	68.8	45.3	47.6	15.8	61.4
D	238	D3-6 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF FILTER CIRCUITS?	57.6	31.7	6.9	25.0	4.7	14.3	7.0	77.3
E	286	E3-12 DO YOU PERFORM TASKS ON SPRINGS OF RELAYS?	57.6	45.3	3.4	68.8	32.1	61.9	54.4	77.3
F	731	F3-8 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES.	57.6	46.0	.0	31.3	15.1	23.8	.9	84.1
L	713	L1-29 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS?	57.6	19.9	.0	25.0	.9	4.8	.9	61.4
M	904	M3-27 DO YOU OPERATE GENERATORS OR ALTERNATORS?	57.6	7.5	37.9	.0	7.5	.0	.0	40.9
C	144	C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE?	56.1	50.2	3.4	62.5	25.5	47.6	11.4	93.2
D	237	D3-5 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL?	56.1	29.8	.0	31.3	5.7	47.6	12.3	77.3
H	498	H3-1 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I1-1; IF YES, CONTINUE.	56.1	17.4	6.9	25.0	30.2	71.4	6.1	72.7
Q	1148	Q2-21 DO YOU INSPECT STORAGE DEVICES?	56.1	22.4	13.8	18.8	8.5	.0	.9	34.1
D	234	D3-2 DO YOU INSPECT FILTER CIRCUITS?	54.5	36.6	.0	31.3	8.5	42.9	10.5	70.5
E	287	E3-11 DO YOU PERFORM TASKS ON ARMATURES OF RELAYS?	54.5	46.0	3.4	68.8	78.3	52.4	36.8	72.7
C	103	C1-7 DO YOU MEASURE CAPACITORS?	53.0	60.2	.0	62.5	41.5	38.1	20.2	79.5
C	103	C2-3 DO YOU CLEAN TRANSFORMERS?	51.5	59.0	.0	68.8	20.8	47.6	14.9	72.7
Q	1153	Q2-26 DO YOU REMOVE OR REPLACE SUBASSEMBLIES OR COMPONENTS OF STORAGE DEVICES?	51.5	22.4	3.4	12.5	7.5	.0	.9	38.6
Q	1154	Q2-27 DO YOU TRACE SIGNAL FLOW IN STORAGE DEVICES USING LOGIC DIAGRAMS OR SCHMATICS?	51.5	18.6	3.4	.0	1.9	.0	.0	29.5
E	294	E3-18 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE?	50.0	47.2	10.3	68.8	66.0	57.1	31.6	88.6
L	739	L3-10 DO YOU USE OR REFER TO UP CLOCKS?	50.0	16.1	3.4	6.3	1.9	9.5	.0	54.5
M	907	M3-30 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS OR ALTERNATORS?	50.0	5.6	20.7	.0	5.7	.0	.9	36.4
G	467	G3-1 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM H1-1; IF YES, CONTINUE.	48.5	24.8	.0	31.3	16.0	38.1	8.8	84.1
M	783	M3-6 DO YOU REMOVE OR REPLACE MOTOR PARTS?	48.5	73.3	.0	6.3	11.3	.0	.0	88.6
Q	1152	Q2-25 DO YOU TROUBLESHOOT MEMORY SYSTEM STORAGE DEVICES?	48.5	19.3	20.7	6.3	5.7	.0	.9	31.8
D	235	D3-3 DO YOU CLEAN FILTER CIRCUITS?	47.0	31.1	.0	25.0	8.5	33.3	7.9	52.3
L	719	L2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS? IF NO, GO TO ITEM L3-1; IF YES, CONTINUE.	47.0	16.1	6.9	18.8	2.8	.0	1.8	40.9
C	156	C2-31 DO YOU REFER TO COMBINATIONS OF SCHEMATIC SYMBOLS FOR TRANSFORMERS?	45.5	36.0	10.3	62.5	16.0	38.1	7.9	90.9
E	249	E1-1 DO YOU WORK WITH COUPLING DEVICES OR CIRCUITRY IN YOUR PRESENT JOB? IF NO, GO TO ITEM E2-1; IF YES, CONTINUE.	45.5	24.2	.0	18.8	7.5	14.3	7.9	79.5
G	410	G3-4 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL?	45.5	19.9	.0	31.3	9.4	38.1	7.9	84.1
H	499	H3-2 DO YOU INSPECT OSCILLATORS?	45.5	16.8	3.4	6.3	17.9	66.7	2.6	75.0
Q	1155	G3-1 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS OR ANALOG-TO-DIGITAL (A/D) CONVERTERS? IF NO, GO TO ITEM H1-1; IF YES, CONTINUE.	45.5	7.5	.0	12.5	4.7	.0	.9	50.0

POI MATCHED WITH SURVEY DATA

FCPRTS PAGE 298

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
N	833	N3-1 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 01-1; IF YES, CONTINUE.	43.9	21.1	3.4	12.5	2.8	.0	1.8	68.2
F	332	F3-9 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS?	42.4	26.7	.0	37.5	15.1	14.3	.0	54.5
H	500	H3-3 DO YOU ALIGN OR ADJUST OSCILLATORS?	42.4	12.4	.0	12.5	18.9	57.1	2.6	72.7
H	501	H3-4 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS?	42.4	13.0	.0	12.5	16.0	61.9	.9	65.9
B	76	B3-2 DO YOU INSPECT INDUCTORS?	40.9	38.5	.0	56.3	18.9	14.3	7.9	75.0
H	503	H3-6 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL?	40.9	14.9	.0	18.8	13.2	57.1	.9	72.7
M	806	M3-29 DO YOU REMOVE OR REPLACE GENERATOR, ALTERNATOR, OR PARTS?	40.9	6.2	3.4	.0	4.7	.0	.9	29.5
G	408	G3-2 DO YOU INSPECT TRANSISTOR AMPLIFIERS?	39.4	22.4	.0	31.3	11.3	47.6	6.1	84.1
G	413	G3-7 DO YOU REMOVE OR REPLACE AMPLIFIER CIRCUIT COMPONENTS?	39.4	20.5	.0	18.8	3.8	23.8	1.8	81.8
L	709	L1-25 DO YOU USE OR REFER TO NONCOMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	39.4	14.3	3.4	6.3	.9	.0	.0	43.2
L	743	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-DOWN COUNTERS?	39.4	12.4	.0	12.5	.9	.0	.9	43.2
S	1199	S1-12 DO YOU USE OR REFER TO INTERFACE ADAPTER UNITS?	39.4	30.4	10.3	37.5	6.6	4.8	1.8	29.5
B	75	B3-1 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C1-1; IF YES, CONTINUE.	37.9	36.6	6.9	37.5	21.7	14.3	12.3	68.2
F	341	F3-18 DO YOU USE OSCILLOSCOPES TO OBSERVE SAMPLING DISPLAYS?	37.9	21.7	.0	31.3	12.3	33.3	.9	65.9
L	722	L2-5 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES?	37.9	14.3	.0	18.8	1.9	.0	.0	45.5
L	748	L3-19 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS?	37.9	6.2	.0	.0	1.9	4.8	.0	27.3
M	756	M1-5 DO YOU WORK WITH MASTER STATION TIMING CIRCUITS?	37.9	6.2	.0	6.3	.9	9.5	.0	25.0
M	785	M3-8 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS?	37.9	71.4	17.2	6.3	9.4	.0	.0	86.4
N	815	N1-7 DO YOU EXTEND THE RANGE OF VOLTMETERS?	37.9	39.8	41.4	25.0	36.8	23.8	24.6	52.3
B	63	B1-4 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE POWER?	36.4	47.2	34.5	31.3	52.8	42.9	37.7	59.1
B	66	B1-7 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE PRESSURE?	36.4	8.7	44.8	56.3	25.5	4.8	6.1	72.7
E	255	E1-7 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING?	36.4	13.7	.0	6.3	6.6	14.3	6.1	72.7
E	278	E3-2 DO YOU ADJUST RELAYS?	36.4	39.1	.0	68.8	77.4	76.2	68.4	68.2
G	412	G3-6 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER?	36.4	18.0	.0	31.3	12.3	47.6	5.3	79.5
I	532	I1-4 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTAL FREQUENCY DETERMINING DEVICES (FDD)?	36.4	13.0	.0	.0	.0	.0	.0	70.5
S	1203	S2-2 DO YOU WORK WITH PHOTOTRANSISTOR PHOTO SENSITIVE DEVICES?	36.4	10.6	.0	.0	1.9	.0	.0	54.5
D	239	D3-7 DO YOU WORK WITH LOW PASS FILTERS?	34.8	20.5	.0	12.5	2.8	52.4	.9	61.4
H	454	H1-2 DO YOU USE OR REFER TO TUNNEL DIODE COMPONENTS?	34.8	14.9	.0	12.5	2.8	.0	.0	61.4
U	1304	U1-1 IN YOUR PRESENT JOB, DO YOU PERFORM MAINTENANCE ROUTINES OR PROGRAMMING TASKS? IF NO, GO TO ITEM U2-1; IF YES, CONTINUE.	34.8	5.6	20.7	31.3	9.4	.0	2.6	29.5
E	67	E1-8 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE LIGHT LEVELS?	33.3	1.9	6.9	.0	1.9	.0	6.1	47.7
L	712	L1-28 DO YOU CONSTRUCT TRUTH TABLES FOR COMBINERS?	33.3	4.3	.0	6.3	.9	.0	.0	11.4
B	77	B3-3 DO YOU CLEAN INDUCTORS?	31.8	28.6	.0	56.3	14.2	9.5	6.1	59.1

POI MATCHED WITH SURVEY DATA

FCPRTS PAGE 299

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	180	D1-1 DO YOU WORK WITH RC, LR, OR RCL CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM D2-1; IF YES, CONTINUE.	31.8	25.5	3.4	12.5	9.4	14.3	4.4	77.3
D	243	D3-11 DO YOU WORK WITH FILTERS BUT DON'T REMEMBER WHICH TYPE?	31.8	22.4	6.9	25.0	7.5	9.5	14.0	29.5
E	286	E3-10 DO YOU PERFORM TASKS ON COILS OF RELAYS?	31.8	28.6	3.4	43.8	56.6	38.1	11.4	61.4
G	353	G1-12 DO YOU READ DIODE COLOR CODING?	31.8	17.4	.0	37.5	8.5	9.5	.9	18.2
G	378	G1-37 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION?	31.8	20.5	.0	25.0	6.6	28.6	.9	81.8
M	808	M3-31 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS OR ALTERNATORS?	30.3	5.0	17.2	.0	3.8	.0	.0	27.3
N	853	N3-21 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS?	30.3	11.8	.0	.0	.9	.0	.9	61.4
U	1341	U1-38 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER TRANSMIT SECTIONS?	30.3	4.3	3.4	6.3	3.8	.0	.0	15.9
U	1343	U1-40 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT DEVICES?	30.3	3.7	6.9	6.3	7.5	.0	.0	25.0
U	1345	U1-42 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT DEVICES?	30.3	3.7	6.9	6.3	6.6	.0	.0	25.0
D	236	D3-4 DO YOU ALIGN OR ADJUST FILTER CIRCUITS?	28.8	16.1	.0	25.0	5.7	28.6	5.3	68.2
M	764	M2-1 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M3-1; IF YES, CONTINUE.	28.8	59.0	.0	68.8	27.4	81.0	15.8	75.0
N	847	N3-15 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS?	28.8	12.4	.0	6.3	.9	.0	.9	61.4
N	852	N3-20 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS?	28.8	9.9	.0	6.3	.9	.0	.9	59.1
U	1307	U1-4 DO YOU USE OR REFER TO PARITY DETECTORS/GENERATORS?	28.8	4.3	3.4	.0	3.8	.0	.0	15.9
U	1342	U1-39 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER RECEIVE SECTIONS?	28.8	5.0	3.4	6.3	3.8	.0	.0	13.6
U	1347	U1-44 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR DEVICES?	28.8	3.7	6.9	6.3	4.7	.0	.0	22.7
E	256	E1-8 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING?	27.3	17.4	.0	18.9	7.5	14.3	4.4	70.5
F	309	F2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS? IF NO, GO TO ITEM F3-1; IF YES, CONTINUE.	27.3	5.0	6.9	18.8	11.3	81.0	57.9	72.7
J	617	J3-7 DO YOU PERFORM TASKS ON MODULATED OSCILLATOR SYSTEM STAGES?	27.3	1.9	3.4	.0	2.8	4.8	.0	13.6
K	681	K3-22 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	27.3	8.1	6.9	43.8	4.7	4.8	1.8	40.9
L	711	L1-27 DO YOU CONSTRUCT TRUTH TABLES FOR "M" BARS?	27.3	1.2	.0	6.3	.9	.0	.0	9.1
L	740	L3-11 DO YOU USE OR REFER TO OTHER MODULOUS COUNTERS?	27.3	5.6	.0	6.3	.9	.0	.0	34.1
N	850	N3-18 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS?	27.3	13.0	.0	6.3	.9	.0	.9	61.4
F	310	F2-2 DO YOU INSPECT SPEAKERS?	25.8	4.3	.0	18.8	10.4	81.0	52.6	70.5
F	313	F2-5 DO YOU TROUBLESHOOT SPEAKER WIRE CONNECTIONS?	25.8	4.3	.0	18.8	8.5	76.2	53.5	70.5
F	315	F2-7 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS?	25.8	4.3	.0	18.8	8.5	81.0	52.6	68.2
H	496	H2-30 DO YOU WORK WITH POWER SUPPLY REGULATOR CIRCUITS OTHER THAN SOLID-STATE?	25.8	24.2	.0	25.0	13.2	33.3	7.9	50.0
H	502	H3-5 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS?	25.8	12.4	.0	12.5	6.6	14.3	.9	72.7
L	710	L1-26 DO YOU CONSTRUCT TRUTH TABLES FOR "B" BARS?	25.8	1.2	.0	6.3	.9	.0	.0	9.1
M	796	M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS?	25.8	73.9	3.4	6.3	8.5	.0	1.6	81.8
N	814	N1-6 DO YOU EXTEND THE RANGE OF AMMETERS?	25.8	31.1	27.6	18.8	30.2	14.3	15.9	45.5

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
Q1139		Q2-12 DO YOU USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED) CIRCUITS?	25.8	16.1	6.9	.0	3.8	.0	.9	38.6
Q1175		Q3-21 WAS THE COMPUTER OR LOGIC CIRCUIT TRAINING YOU RECEIVED IN YOUR 3-LEVEL AWARDING COURSE ADEQUATE IN TERMS OF YOUR PRESENT DUTIES?	25.8	3.1	.0	.0	.9	.0	.0	9.1
U1346		U1-43 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER POWER DEVICES?	25.8	3.7	3.4	6.3	5.7	.0	.0	25.0
A	24	A2-13 DO YOU DETERMINE IF TWO OR MORE BATTERIES MUST BE CONNECTED IN SERIES OR PARALLEL TO ACHIEVE A SPECIFIC VOLTAGE AND/OR CURRENT?	24.2	34.2	17.2	56.3	48.1	28.6	33.3	79.5
B	65	B1-6 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE TEMPERATURE?	24.2	7.5	37.9	81.3	38.7	28.6	5.3	86.4
D	240	D3-8 DO YOU WORK WITH HIGH PASS FILTERS?	24.2	16.8	.0	12.5	4.7	28.6	.9	61.4
D	244	D3-12 DO YOU WORK WITH L-SECTION FILTER CONFIGURATIONS?	24.2	9.3	.0	6.3	.9	4.8	2.6	38.6
G	442	G3-36 DO YOU TROUBLESHOOT OR REPAIR RF AMPLIFIERS?	24.2	6.8	.0	12.5	2.8	4.8	.0	70.5
H	463	H1-11 DO YOU USE OR REFER TO TRIAC COMPONENTS?	24.2	24.2	.0	18.8	2.8	.0	.0	93.2
N	817	N1-9 DO YOU ZERO AMMETERS?	24.2	29.2	31.0	62.5	32.1	14.3	23.7	56.8
Q1169		Q3-15 DO YOU PERFORM ANY TASKS ON ELECTRONIC A/D CONVERTERS?	24.2	3.7	.0	.0	2.8	.0	.0	47.7
Q1170		Q3-16 DO YOU PERFORM ANY TASKS ON DIGITAL-TO-ANALOG (D/A) CONVERTERS?	24.2	4.3	.0	.0	2.8	.0	.0	45.5
Q1173		Q3-19 HAVE YOU BEEN SENT TO FACTORY TRAINING OR TO ANY OTHER SCHOOL FOR THE SPECIFIC PURPOSE OF RECEIVING COMPUTER OR LOGIC CIRCUIT RELATED TRAINING?	24.2	3.1	.0	6.3	2.8	.0	.0	18.2
Q1174		Q3-20 DO YOU HAVE MICROPROCESSORS OR COMPUTER EQUIPMENT LOCATED AT YOUR WORK STATION WHICH IS OPERATED OR MAINTAINED BY CONTRACTOR PERSONNEL?	24.2	3.1	.0	6.3	1.9	.0	1.8	34.1
U1344		U1-41 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER STORAGE DEVICES?	24.2	3.7	6.9	6.3	6.6	.0	.0	25.0
E	282	E3-6 DO YOU MONITOR BIAS OUTPUT ON RELAYS?	22.7	15.5	3.4	12.5	29.2	23.8	12.3	29.5
F	311	F2-3 DO YOU CLEAN SPEAKERS?	22.7	4.3	.0	12.5	7.5	66.7	38.6	40.9
F	338	F3-15 DO YOU USE OSCILLOSCOPES TO MEASURE PHASE JITTERS?	22.7	12.4	.0	18.8	13.2	14.3	.0	43.2
M	765	M2-2 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS?	22.7	55.3	.0	56.3	20.8	71.4	12.3	75.0
M	799	M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS?	22.7	11.8	10.3	12.5	11.3	4.8	.0	68.2
N	820	N1-12 DO YOU CONSIDER OTHER METER MOVEMENTS?	22.7	28.0	20.7	25.0	24.5	14.3	17.5	43.2
S1197		S1-10 DO YOU USE OR REFER TO INCANDESENT DISPLAYS?	22.7	11.8	13.8	18.8	3.8	4.8	.9	29.5
E	285	E3-9 DO YOU PERFORM TASKS ON CORES OF RELAYS?	21.2	18.6	3.4	31.3	52.8	33.3	6.8	40.9
F	312	F2-4 DO YOU OPERATE SPEAKERS?	21.2	3.7	6.9	12.5	9.4	76.2	51.8	59.1
I	530	I1-2 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUIT FREQUENCY DETERMINING DEVICES (FDD)?	21.2	12.4	.0	.0	.0	4.8	.0	65.9
I	540	I2-1 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I3-1; IF YES, CONTINUE.	21.2	16.1	3.4	6.3	1.9	4.8	.9	72.7
M	766	M2-3 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS?	21.2	47.2	.0	31.3	14.2	28.6	7.9	59.1
N	-8	N3-16 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS?	21.2	10.6	.0	6.3	.9	.0	.9	61.4
Q1150		Q2-23 DO YOU ALIGN STORAGE DEVICES?	21.2	16.1	.0	6.3	3.8	.0	.0	20.5

D TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
Q1151	Q2-24 DO YOU ADJUST STORAGE DEVICES?	21.2	17.4	.0	12.5	3.8	.0	.0	22.7
U1364	U2-4 DO YOU USE VTVM (DB METERS) TO CHECK FOR NOISE OR SIGNAL LEVEL?	21.2	13.7	.0	6.3	54.7	76.2	17.5	31.8
C 111	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES?	19.7	20.5	.0	37.5	14.2	9.5	5.3	43.2
C 129	C2-4 DO YOU ADJUST TRANSFORMERS?	19.7	24.8	.0	43.8	12.3	9.5	3.5	65.9
G 422	G3-16 DO YOU MEASURE CURRENT GAIN CONCERNING TRANSISTOR AMPLIFIERS?	19.7	14.9	.0	25.0	4.7	14.3	1.8	50.0
I 559	I1-11 DO YOU WORK WITH "D" FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	19.7	6.2	.0	6.3	.9	4.8	.0	43.2
M 767	M2-4 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS?	19.7	44.7	.0	12.5	10.4	28.6	7.0	54.5
Q1172	Q3-18 DO YOU WORK AT OR WITH COMPUTER TERMINALS?	19.7	3.7	.0	12.5	3.8	.0	.0	18.2
B 78	B3-4 DO YOU ADJUST INDUCTORS?	18.2	19.3	3.4	43.8	13.2	.0	1.8	56.8
D 218	D1-39 DO YOU CHECK RESISTORS USING SUBSTITUTION?	18.2	13.7	.0	6.3	3.8	19.0	3.5	52.3
D 241	D3-9 DO YOU WORK WITH BANDPASS FILTERS?	18.2	6.2	.0	6.3	3.8	14.3	2.6	52.3
D 245	D3-13 DO YOU WORK WITH T-SECTION FILTER CONFIGURATIONS?	18.2	8.1	.0	12.5	.9	.0	1.8	36.4
D 246	D3-14 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATIONS?	18.2	8.7	.0	6.3	1.9	.0	1.8	34.1
M 768	M2-5 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS?	18.2	32.3	.0	12.5	4.7	14.3	1.8	52.3
M 769	M2-6 DO YOU USE AUDIO SINE-WAVE GENERATORS?	18.2	8.7	.0	50.0	11.3	52.4	4.4	52.3
M 797	M3-20 DO YOU WORK WITH INDUCTION MOTORS?	18.2	10.6	.0	.0	7.5	.0	.9	79.5
S1196	S1-9 DO YOU USE OR REFER TO LCD'S?	18.2	19.9	10.3	31.3	5.7	.0	.0	43.2
U1323	U1-20 DO YOU USE OR REFER TO TEST OR DIAGNOSTIC PROGRAMS?	18.2	3.1	6.9	25.0	7.5	.0	.9	22.7
U1328	U1-25 DO YOU USE OR REFER TO MNEMONICS?	18.2	1.2	.0	6.3	4.7	.0	.9	11.4
E 314	E2-6 DO YOU TROUBLESHOOT SPEAKER COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	16.7	2.5	.0	.0	1.9	66.7	21.9	31.8
G 423	G3-17 DO YOU MEASURE POWER GAIN CONCERNING TRANSISTOR AMPLIFIERS?	16.7	10.6	.0	18.8	4.7	4.8	1.8	38.6
G 441	G3-35 DO YOU TROUBLESHOOT OR REPAIR VOLTAGE MULTIPLIERS (DOUBLERS/TRIPLERS)?	16.7	9.3	.0	25.0	1.9	.0	.9	72.7
G 451	G3-45 DO YOU TROUBLESHOOT OR REPAIR INTEGRATING AMPLIFIERS?	16.7	6.8	.0	18.8	1.9	.0	.0	79.5
H 520	H3-23 DO YOU WORK WITH VOLTAGE CONTROL SINUSOIDAL OSCILLATO	16.7	3.1	.0	12.5	.9	9.5	.0	40.9
H 524	H3-27 DO YOU WORK WITH - DON'T KNOW WHICH TYPE OF SINUSOIDAL OSCILLATOR?	16.7	8.7	3.4	6.3	14.2	28.6	.9	29.5
I 544	I2-5 DO YOU WORK WITH ZENER DIODE LIMITERS?	16.7	14.9	3.4	6.3	1.9	4.8	.0	75.0
J 612	J3-2 DO YOU PERFORM TASKS ON FREQUENCY CONVERTER SYSTEMS STAGES?	16.7	9.3	3.4	.0	7.5	.0	.0	13.6
Q1136	Q2-9 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES?	16.7	3.1	.0	.0	1.9	.0	.0	13.6
Q1156	Q3-2 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES?	16.7	1.9	.0	.0	.9	.0	.0	31.8
Q1163	Q3-9 DO YOU PERFORM TASKS ON PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS BUT DON'T KNOW WHICH FUNCTION?	16.7	2.5	.0	6.3	.9	.0	.0	9.1
U1319	U1-16 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	16.7	1.9	10.3	6.3	2.8	.0	.0	22.7
U1365	U2-5 DO YOU USE VTVM (DB METERS) TO CHECK OR ADJUST AUDIO AMPLIFIERS?	16.7	6.2	.0	6.3	43.4	76.2	12.3	25.0
E 276	E2-14 DO YOU PERFORM WIRE CONNECTIONS USING A 714 PUNCH-ON TOOL IN LIEU OF SOLDERING?	15.2	8.7	.0	6.3	42.5	23.6	80.7	13.6

D	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
I	533	I1-5 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	15.2	6.8	.0	.0	1.9	.0	.0	29.5
L	724	L2-7 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA?	15.2	5.6	.0	.0	2.8	.0	.0	27.3
Q1159		Q3-4 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS?	15.2	1.9	.0	.0	1.9	.0	.0	29.5
Q1171		Q3-17 DO YOU OPERATE COMPUTER KEYBOARDS?	15.2	1.9	.0	12.5	3.8	.0	.0	29.5
U1361		U2-1 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION?	15.2	9.9	.0	.0	47.2	71.4	15.8	38.6
C	143	C2-18 DO YOU WORK WITH CONTROL TRANSFORMERS?	13.6	9.3	3.4	25.0	8.5	.0	2.6	59.1
C	164	C2-39 DO YOU INSPECT THREE PHASE TRANSFORMERS?	13.6	5.6	6.9	31.3	7.5	.0	1.8	77.3
F	316	F2-8 DO YOU REMOVE OR REPLACE SPEAKER PARTS?	13.6	3.1	.0	.0	1.9	52.4	18.4	13.6
H	522	H3-25 DO YOU WORK WITH VOLTAGE CONTROL OSCILLATORS (VCO) SINUSOIDAL OSCILLATORS?	13.6	4.3	.0	12.5	.9	.0	.0	40.9
J	613	J3-3 DO YOU PERFORM TASKS ON FREQUENCY MIXER SYSTEMS STAGES?	13.6	3.1	3.4	.0	3.8	.0	.9	13.6
M	794	M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR?	13.6	26.1	.0	6.3	2.8	.0	.0	40.9
N	811	N1-3 DO YOU CONSIDER THE FUNCTIONS OF MOVING COIL INTERNAL METER PARTS?	13.6	31.7	3.4	18.8	17.9	9.5	4.4	45.5
Q1167		Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS?	13.6	1.9	.0	.0	.9	.0	.0	38.6
U1329		U1-26 DO YOU USE OR REFER TO ROUTINES OR SUBROUTINES?	13.6	1.2	3.4	.0	5.7	.0	.9	13.6
H	515	H3-18 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	12.1	5.0	3.4	6.3	11.3	33.3	.9	22.7
K	677	K3-18 DO YOU ADD HEXADECIMAL NUMBERS?	12.1	5.6	.0	56.3	1.9	.0	1.8	36.4
L	723	L2-6 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS?	12.1	6.2	.0	.0	1.9	.0	.0	25.0
M	770	M2-7 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE?	12.1	5.0	.0	31.3	.9	.0	.0	47.7
M	798	M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS?	12.1	6.2	3.4	12.5	4.7	.0	.9	52.3
N	849	N3-17 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS?	12.1	8.1	.0	.0	.0	.0	.9	61.4
U1316		U1-13 DO YOU USE OR REFER TO STEERING/INFORMATION?	12.1	2.5	6.9	6.3	2.8	.0	.0	11.4
U1330		U1-27 DO YOU USE OR REFER TO FLOW CHARTS OR DIAGRAMS?	12.1	3.1	10.3	12.5	4.7	.0	.9	18.2
D	226	D2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS? IF NO, GO TO ITEM D3-1; IF YES, CONTINUE.	10.6	5.6	.0	.0	2.8	.0	.0	38.6
H	465	H1-13 DO YOU USE OR REFER TO SILICON CONTROLLED SWITCH (SCS) COMPONENTS?	10.6	3.7	.0	6.3	1.9	.0	.0	75.0
H	514	H3-17 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN PHASE LOCK LOOPS (PLL)?	10.6	4.3	.0	.0	4.7	.0	.0	34.1
J	597	J2-2 DO YOU WORK WITH CATHODE-RAY TUBES (CRT)?	10.6	26.1	6.9	18.8	6.6	4.8	2.6	79.5
K	678	K3-19 DO YOU SUBTRACT HEXADECIMAL NUMBERS?	10.6	5.6	.0	56.3	1.9	.0	.9	36.4
N	812	N1-4 DO YOU CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS INTERNAL METER PARTS?	10.6	17.4	3.4	18.8	14.2	14.3	.9	43.2
N	846	N3-14 DO YOU WORK WITH FUNCTION GENERATOR SOLID STATE CIRCUITS?	10.6	5.0	.0	.0	.0	.0	.0	68.2
Q1129		Q2-2 DO YOU USE OR REFER TO DELAY LINES?	10.6	4.3	.0	.0	.9	.0	.0	13.6

PCI MATCHED WITH SURVEY DATA

FCPPTS PAGE 303

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
	Q1166	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS?	10.6	1.9	.0	.0	.9	.0	.0	34.1
D	248	D3-16 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS?	9.1	1.9	.0	6.3	1.9	.0	.9	18.2
H	459	H1-7 DO YOU USE OR REFER TO PIN DIODE COMPONENTS?	9.1	13.7	.0	6.3	5.7	4.8	3.5	34.1
H	495	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER?	9.1	5.0	.0	12.5	2.8	.0	3.5	22.7
M	800	M3-23 DO YOU WORK WITH SERVOS OR SYNCHROS MOTORS?	9.1	13.0	3.4	6.3	5.7	.0	.0	72.7
Q	1157	Q3-3 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IS DETERMINED BY ADDING THE DENOMINATORS OF THE RESISTORS?	9.1	1.2	.0	.0	.9	.0	.0	22.7
Q	1161	Q3-7 DO YOU PERFORM TASKS ON COMPARE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	9.1	1.9	.0	.0	1.9	.0	.0	34.1
Q	1164	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS?	9.1	1.9	.0	.0	.9	.0	.0	36.4
U	1309	U1-6 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS?	9.1	.6	6.9	.0	2.8	.0	.0	13.6
U	1312	U1-9 DO YOU USE OR REFER TO TIME-SHARING (MULTI-SEQUENCING)?	9.1	1.2	.0	.0	2.8	.0	.9	15.9
C	167	C2-42 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS?	7.6	3.7	.0	31.3	5.7	.0	.9	72.7
D	183	D1-4 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS?	7.6	1.9	.0	6.3	4.7	.0	.0	25.0
D	242	D3-10 DO YOU WORK WITH BAND-REJECT FILTERS?	7.6	3.7	.0	12.5	3.8	4.8	.9	31.8
G	439	G3-33 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	7.6	1.9	.0	12.5	1.9	.0	.0	40.9
H	453	H1-1 DO YOU USE OR REFER TO VARACTORS/VARICAP COMPONENTS?	7.6	9.3	.0	18.8	3.8	.0	.9	38.6
H	461	H1-9 DO YOU USE OR REFER TO FANTAIL TRANSISTOR COMPONENTS?	7.6	7.5	.0	.0	2.8	.0	.0	20.5
H	464	H1-12 DO YOU USE OR REFER TO PROGRAMMABLE UNIJUNCTION TRANSISTOR (PUT) COMPONENTS?	7.6	1.9	.0	6.3	1.9	.0	.0	86.4
K	638	K2-1 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K3-1; IF YES, CONTINUE.	7.6	1.2	3.4	.0	3.8	.0	1.9	6.8
M	777	M2-14 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS?	7.6	19.3	.0	25.0	8.5	9.5	.9	50.0
M	797	M3-16 DO YOU DETERMINE OR MEASURE FORCE OR TORQUE CREATED BY A MOTOR?	7.6	21.7	.0	.0	1.9	.0	.0	18.2
N	810	N1-2 DO YOU CONSIDER THE FUNCTIONS OF PERMANENT MAGNET INTERNAL METER PARTS?	7.6	32.9	3.4	43.8	13.2	14.3	5.3	43.2
P	969	P1-1 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES? (DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES.) IF NO, GO TO ITEM P2-1; IF YES, CONTINUE.	7.6	14.9	.0	.0	39.6	23.8	34.2	4.5
Q	1159	Q3-5 DO YOU PERFORM TASKS ON SAMPLE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	7.6	1.9	.0	.0	1.9	.0	.0	39.6
R	1177	R1-1 DO YOU WORK WITH PHANTASTRON CIRCUITRY? IF NO, GO TO ITEM R2-1. IF YES, CONTINUE.	7.6	2.5	.0	.0	.9	.0	.0	2.3
R	1180	R1-4 PHANTASTRON CIRCUITRY HAS MONOSTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	7.6	2.5	.0	.0	1.9	.0	.0	4.5
R	1181	R1-5 PHANTASTRON CIRCUITRY HAS BISTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	7.6	2.5	.0	.0	1.9	.0	.0	4.5

			306	306	316	316	362	362	362	919
			51	52	50F	52F	51	53	54	50
D	TSK	TITLES	**M**	(M)	(M)	(M)	(M)	(M)	(M)	(M)
R1187	R3-2	DO YOU FABRICATE COAXIAL CABLES?	7.6	18.6	.0	37.5	11.3	.0	5.3	40.9
S1205	S2-4	DO YOU WORK WITH PHOTO-SCR PHOTO SENSITIVE DEVICES?	7.6	3.1	.0	.0	1.9	.0	.0	22.7
U1321	U1-18	DO YOU USE OR REFER TO RESPONSE WORDS?	7.6	2.5	.0	25.0	3.8	.0	.0	9.1
U1357	U1-54	DO YOU USE CLOCK GENERATOR CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.6	3.1	3.4	.0	3.8	.0	.0	27.3
U1366	U2-6	DO YOU USE A HP3550 OR 344A TEST SET TO ALIGN AUDIO EQUIPMENT?	7.6	3.1	.0	.0	47.2	33.3	7.0	2.3
C 142	C2-17	DO YOU WORK WITH SENSING TRANSFORMERS?	6.1	3.1	3.4	18.8	4.7	.0	.9	31.8
C 165	C2-40	DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS?	6.1	3.7	.0	6.3	5.7	.0	.9	56.8
D 184	D1-5	DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS?	6.1	1.9	.0	6.3	4.7	.0	.0	22.7
D 189	D1-10	DO YOU USE OR REFER TO AVERAGE POWER (P SUB AVE) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.0	31.8
D 211	D1-32	DO YOU USE THE ASSUMED VOLTAGE METHOD FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	6.1	4.3	.0	.0	2.8	.0	.0	20.5
F 295	F1-1	IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES OR OTHER SENSING DEVICES SUCH AS TRANSDUCERS? IF NO, GO TO ITEM F2-1; IF YES, CONTINUE.	6.1	6.2	13.8	31.3	7.5	66.7	20.2	75.0
H 466	H1-14	DO YOU USE OR REFER TO SILICON UNILATERAL SWITCH (SUS) COMPONENTS?	6.1	1.9	.0	.0	1.9	.0	.0	77.3
H 475	H2-9	DO YOU INSPECT OR SERVICE COOLANT LEVELS?	6.1	4.3	6.9	12.5	9.4	19.0	3.5	40.9
I 555	I3-6	DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES?	6.1	10.6	.0	43.8	2.8	.0	1.8	40.9
J 601	J2-6	DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	6.1	10.6	.0	18.8	1.9	.0	.9	52.3
J 603	J2-8	DO YOU USE OR REFER TO PHOSPHOR SCREENS CONCERNING CRT'S?	6.1	13.7	3.4	6.3	1.9	4.8	.0	72.7
J 615	J3-5	DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS?	6.1	.6	.0	.0	.9	.0	.0	11.4
M 795	M3-18	DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS?	6.1	16.8	.0	.0	1.9	.0	.0	25.0
N 819	N1-11	DO YOU CONSIDER BALLASTIC RESPONSE OF METER MOVEMENTS?	6.1	6.2	3.4	.0	7.5	.0	2.6	18.2
P 979	P1-11	DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES?	6.1	11.8	.0	.0	11.3	.0	7.9	4.5
R1182	R1-6	PHANTASTRON CIRCUITRY HAS FREE-RUNNING MULTIVIBRATORS APPLICATIONS IN MY JOB.	6.1	1.9	.0	.0	1.9	.0	.0	4.5
R1186	R3-1	IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES?	6.1	21.1	.0	56.3	21.7	4.8	37.7	34.1
S1194	S1-7	DO YOU USE OR REFER TO NIXIE LIGHTS (TUBES)?	6.1	18.6	.0	6.3	.9	.0	.0	27.3
S1204	S2-3	DO YOU WORK WITH PHOTOTUBE PHOTO SENSITIVE DEVICES?	6.1	2.5	.0	.0	1.9	.0	.0	70.5
U1310	U1-7	DO YOU USE OR REFER TO FOUR SYSTEMS?	6.1	.0	.0	.0	.9	.0	.0	11.4
U1324	U1-21	DO YOU USE OR REFER TO RELIABILITY PROGRAMS?	6.1	.6	3.4	18.8	.9	.0	.0	11.4
U1351	U1-48	DO YOU USE OR PERFORM TASKS ON MICROPROCESSOR BASED EQUIPMENT?	6.1	2.5	3.4	.0	3.8	4.8	1.8	22.7
U1359	U1-56	DO YOU USE BIDIRECTIONAL BUFFER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	6.1	1.2	.0	.0	3.8	.0	.9	20.5
C 179	C3-12	DO YOU USE OR REFER TO SATURABLE REACTANCE?	4.5	3.7	.0	6.3	9.4	.0	1.8	18.2

POI MATCHED WITH SURVEY DATA

FCPRTS PAGE 305

D	TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	168	E1-9 DO YOU USE OR REFER TO MAXIMUM POWER (P SUB M) WHEN WORKING WITH ECL CIRCUITS?	4.5	5.6	.0	.0	5.7	.0	.0	27.3
D	210	D1-31 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS?	4.5	2.5	.0	.0	3.8	.0	.0	18.2
E	252	E1-4 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH OPTICAL COUPLING?	4.5	7.5	.0	6.3	2.8	.0	.0	45.5
E	260	E1-12 DO YOU WORK WITH OPTICAL COUPLING?	4.5	6.2	.0	.0	2.8	.0	.0	43.2
E	261	E1-13 DO YOU WORK WITH OPTICAL COUPLING CIRCUITS?	4.5	6.2	.0	.0	2.8	.0	.0	40.9
F	321	F2-13 DO YOU PERFORM ANY TASKS ON PERMANENT MAGNET SPEAKER PARTS?	4.5	1.2	.0	.0	1.9	9.5	1.8	15.9
G	448	G3-42 DO YOU TROUBLESHOOT OR REPAIR IF AMPLIFIERS?	4.5	5.6	.0	12.5	2.8	.0	.0	34.1
I	549	I2-10 DO YOU WORK WITH DC RESTORERS?	4.5	4.3	.0	.0	1.9	.0	.0	31.8
I	553	I3-4 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES?	4.5	5.0	.0	62.5	3.8	4.8	.9	50.0
I	554	I3-5 DO YOU USE SCOPES TO CHECK ELECTRON TUBES?	4.5	6.2	.0	25.0	1.9	4.8	.0	50.0
J	600	J2-5 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)?	4.5	13.7	.0	6.3	2.8	4.8	.9	50.0
J	602	J2-7 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTPSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	4.5	9.3	.0	6.3	1.9	.0	.9	38.6
J	616	J3-6 DO YOU PERFORM TASKS ON REACTANCE MODULATOR SYSTEM STAGES?	4.5	.0	3.4	.0	.9	.0	.0	11.4
K	618	K1-1 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K2-1; IF YES, CONTINUE.	4.5	2.5	3.4	.0	1.9	.0	1.8	9.1
K	647	K2-10 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	4.5	.6	.0	.0	1.9	.0	.0	11.4
K	648	K2-11 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS?	4.5	.6	.0	.0	1.9	.0	.0	9.1
K	650	K2-13 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	4.5	.6	.0	.0	1.9	.0	.0	6.8
M	771	M2-8 DO YOU USE RF GENERATORS LESS THAN 1,000 MH?	4.5	5.0	.0	6.3	3.8	.0	.9	40.9
M	772	M2-9 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH?	4.5	1.2	.0	6.3	1.9	.0	.9	27.3
M	774	M2-11 DO YOU USE PATTERN GENERATORS?	4.5	37.9	.0	.0	2.8	4.8	.0	36.4
M	861	M3-24 DO YOU WORK WITH SHADED-POLE MOTORS?	4.5	1.9	.0	.0	1.9	.0	.0	31.8
O	895	O2-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) PULSE MODULATION SYSTEMS?	4.5	.0	.0	.0	.9	.0	.9	11.4
O	897	O2-14 DO YOU WORK ON TIME DIVISION MULTIPLEXING (TDM) PULSE MODULATION SYSTEMS?	4.5	.6	.0	.0	.9	.0	.0	13.6
P	974	P1-6 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE LEAKAGE LOSSES?	4.5	5.0	.0	.0	10.4	.0	3.5	2.3
P	978	P1-10 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES?	4.5	8.7	.0	.0	18.9	4.8	14.0	2.3
P	981	P1-13 DO YOU TROUBLESHOOT TRANSMISSION LINES?	4.5	10.6	.0	.0	35.8	19.0	33.3	4.5
Q	1163	Q3-6 DO YOU PERFORM TASKS ON HOLD FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	4.5	1.9	.0	.0	1.9	.0	.0	36.4
Q	1165	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS?	4.5	1.9	.0	.0	.9	.0	.0	38.6
Q	1168	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS?	4.5	1.9	.0	.0	1.9	.0	.0	27.3
R	1179	R1-2 TRANSISTOR CIRCUITRY HAS VARIABLE-DELAY APPLICATIONS IN MY JOB.	4.5	.6	.0	.0	1.9	.0	.0	4.5
T	1244	T2-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS? IF NO, GO TO ITEM T3-1; IF YES, CONTINUE.	4.5	.0	.0	.0	1.9	.0	.9	11.4

POI MATCHED WITH SURVEY DATA

FCPRTS PAGE 306

		TITLES	306 *M*	306 (M)	316 (M)	316 (M)	362 (M)	362 (M)	362 (M)	918 (M)
			51	52	50F	52F	51	53	54	50
U	1327	U1-24 DO YOU USE OR REFER TO MACHINE LANGUAGE?	4.5	1.2	.0	6.3	4.7	.0	.0	15.9
U	1333	U1-30 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING SYSTEMS?	4.5	.0	.0	.0	1.9	.0	.9	11.4
U	1352	U1-49 DO YOU USE INPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	4.5	1.9	.0	.0	1.9	.0	.0	22.7
U	1358	U1-55 DO YOU USE STATUS LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	4.5	1.9	.0	.0	1.9	.0	.9	20.5
U	1362	U2-2 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS?	4.5	2.5	.0	.0	6.6	.0	.0	11.4
A	6	A1-6 DO YOU USE LOGARITHM TABLES?	3.0	3.1	.0	.0	3.8	4.8	1.8	15.9
A	7	A1-7 DO YOU SOLVE QUADRATIC EQUATIONS SUCH AS SOLVING FOR X IN THE EQUATION X**2 + 4X + 4 =0?	3.0	2.5	.0	.0	4.7	.0	2.6	27.3
D	185	D1-6 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS?	3.0	1.9	.0	.0	4.7	.0	.0	27.3
F	298	F1-4 DO YOU OPERATE MICROPHONES?	3.0	4.3	13.8	12.5	7.5	57.1	15.8	63.6
F	317	F2-9 DO YOU PERFORM ANY TASKS ON CONE SPEAKER PARTS?	3.0	1.9	.0	.0	1.9	9.5	2.6	15.9
G	400	G2-18 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS?	3.0	13.0	.0	6.3	.9	.0	1.8	20.5
G	438	G3-32 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS?	3.0	4.3	.0	6.3	1.9	4.8	.0	31.8
G	443	G3-37 DO YOU TROUBLESHOOT OR REPAIR WIDEBAND AMPLIFIERS (VIDEO AMPS)?	3.0	3.1	.0	.0	1.9	.0	.0	40.9
G	447	G3-41 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY AMPLIFIERS?	3.0	4.3	.0	.0	1.9	4.8	.0	29.5
I	546	I2-7 DO YOU WORK WITH TRIODE LIMITERS?	3.0	3.1	.0	.0	.9	.0	.0	34.1
I	550	I3-1 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS BASIC ELECTRON TUBES (FOR PURPOSES OF THIS QUESTION DO NOT CONSIDER HIGH-FREQUENCY DEVICES SUCH AS KLYSTRONS, TRAVELING WAVE TUBES, BACKWARD WAVE OSCILLATORS, OR MAGNETRONS AS ELECTRON TUBES)? IF NO, GO TO ITEM J1-1; IF YES, CONTINUE.	3.0	11.2	.0	56.3	7.5	4.8	2.6	52.3
I	586	I3-37 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS?	3.0	8.1	.0	56.3	6.6	.0	.0	47.7
J	609	J2-14 DO YOU USE OR REFER TO PHOSPHORESCENCE CONCERNING CRT'S?	3.0	5.6	.0	.0	1.9	.0	.0	54.5
K	645	K2-8 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS?	3.0	.6	.0	.0	.9	.0	.0	6.8
K	646	K2-9 DO YOU PERFORM LINK PERFORMANCE ASSESSMENTS?	3.0	.6	.0	.0	.9	.0	.0	2.3
K	656	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS?	3.0	.6	.0	.0	.9	.0	.9	9.1
K	657	K2-20 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS?	3.0	.6	.0	.0	1.9	.0	.9	9.1
K	682	K3-23 DO YOU USE OR REFER TO GRAY CODE?	3.0	1.9	.0	6.3	1.9	.0	1.8	22.7
O	854	O1-1 DO YOU WORK ON SINGLE OR INDEPENDENT SIDEBAND SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM O2-1; IF YES, CONTINUE.	3.0	1.2	13.8	.0	1.9	4.8	.0	.0
O	860	O1-7 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	3.0	.6	3.4	.0	.9	4.8	.0	.0
O	861	O1-8 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	3.0	.6	.0	.0	.9	4.8	.0	.0

POI MATCHED WITH SURVEY DATA

FCPRTS PAGE 307

D	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	862	01-9 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM AUDIO AMPLIFIER STAGE?	3.0	1.2	.0	.0	.9	.0	.0	.0
0	868	01-15 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM OSCILLATOR STAGE?	3.0	1.2	3.4	.0	.9	.0	.0	.0
0	870	01-17 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DRIVER STAGE?	3.0	1.2	.0	.0	.0	.0	.0	.0
0	893	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) PULSE MODULATION SYSTEMS?	3.0	.6	.0	.0	1.9	.0	1.8	15.9
0	896	02-13 DO YOU WORK ON LINE PULSING MODULATION PULSE MODULATION SYSTEMS?	3.0	.6	.0	.0	2.8	.0	1.8	11.4
0	898	02-15 DO YOU WORK ON - DON'T KNOW WHICH TYPE OF MODULATION SYSTEM?	3.0	.0	.0	.0	.9	.0	2.6	6.8
0	937	03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR?	3.0	.6	.0	.0	1.9	.0	1.8	2.3
P	972	P1-4 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE RADIATION LOSS?	3.0	3.1	.0	.0	4.7	.0	.0	2.3
P	973	P1-5 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE DIELECTRIC LOSS?	3.0	1.2	.0	.0	3.8	.0	.0	2.3
P	976	P1-8 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES?	3.0	10.6	.0	.0	36.8	23.8	26.3	.0
P	980	P1-12 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES?	3.0	5.6	.0	.0	5.7	.0	2.6	.0
P	982	P1-14 DO YOU ANALYZE VOLTAGE OR CURENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)?	3.0	8.7	.0	.0	22.6	4.8	7.0	2.3
P	983	P1-15 DO YOU SELECT APPROPRIATE TRANSMISSION LINE TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS?	3.0	1.9	.0	.0	5.7	.0	.0	4.5
P	984	P1-16 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS?	3.0	7.5	.0	.0	15.1	19.0	8.8	4.5
Q	1128	Q2-11 DO YOU USE OR REFER TO THIN FILMS?	3.0	3.1	.0	6.3	.9	.0	.0	18.2
Q	1160	Q3-8 DO YOU PERFORM TASKS ON DIGITIZE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	3.0	1.9	.0	.0	1.9	.0	.0	36.4
Q	1207	Q3-1 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS? IF NO, GO TO ITEM T1-1; IF YES, CONTINUE.	3.0	.6	3.4	.0	.9	.0	1.8	34.1
T	1240	T2-2 DO YOU INSPECT LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	11.4
T	1241	T2-3 DO YOU CLEAN LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	6.8
T	1242	T2-4 DO YOU SERVICE LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	4.5
T	1243	T2-5 DO YOU OPERATE LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	6.8
T	1244	T2-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS?	3.0	.0	.0	.0	.0	.0	.0	6.8
T	1250	T2-9 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	4.5
T	1277	T3-1 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DI-PLOT VIEW STORAGE TUBES (DVST), MULTIPLE MODE STORAGE TUBES (MAST), OR SCAN CONVERTER TUBES (SCT)? IF NO, GO TO ITEM T4-1; IF YES, CONTINUE.	3.0	1.9	.0	.0	3.8	.0	.9	6.8
T	1278	T3-2 DO YOU USE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	3.0	1.9	6.3	25.0	6.6	.0	1.8	18.2
T	1313	T4-5 DO YOU USE OUTPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	1.9	.0	.0	1.9	.0	.0	22.7

POI MATCHED WITH SURVEY DATA

FCPRTS PAGE 308

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
	U1354	U1-51 DO YOU USE RAM MEMORY CIRCUITS (STATIC OR DYNAMIC) IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	4.3	3.4	.0	3.8	.0	.0	29.5
	U1355	U1-52 DO YOU USE ROM MEMORY CIRCUITS (INCLUDES PROM, EPROM, ETC.) IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	3.7	.0	.0	3.8	.0	.0	29.5
	U1363	U2-3 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS?	3.0	2.5	.0	.0	5.7	.0	.9	11.4
A	16	A2-5 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM DYNE?	1.5	5.0	6.9	.0	2.8	.0	4.4	29.5
D	200	D1-21 DO YOU DETERMINE VALUES OR TRIGONOMETRIC FUNCTIONS USING FORMULAS SUCH AS: SINE OF AND ANGLE = OPPOSITE SIDE/ HYPOTENUSE?	1.5	1.9	.0	.0	2.8	.0	.0	13.6
F	296	F1-2 DO YOU INSPECT MICROPHONES?	1.5	3.7	.0	12.5	7.5	61.9	14.9	68.2
F	299	F1-5 DO YOU TROUBLESHOOT MICROPHONES WIRE CONNECTIONS?	1.5	3.7	.0	12.5	8.5	57.1	15.8	65.9
F	300	F1-6 DO YOU TROUBLESHOOT MICROPHONE COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	1.5	3.1	.0	6.3	4.7	23.8	4.4	38.6
F	301	F1-7 DO YOU REMOVE AND REPLACE COMPLETE MICROPHONES?	1.5	3.7	.0	18.8	6.6	66.7	16.7	63.6
F	302	F1-8 DO YOU REMOVE OR REPLACE MICROPHONE COMPONENT PARTS?	1.5	3.7	.0	12.5	5.7	19.0	4.4	40.9
F	303	F1-9 DO YOU PERFORM TASKS ON CARBON MICROPHONES?	1.5	2.5	3.4	.0	8.5	66.7	15.8	18.2
F	304	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES?	1.5	1.9	.0	.0	3.8	19.0	1.8	13.6
F	306	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES?	1.5	1.9	3.4	6.3	2.8	28.6	.9	36.4
F	323	F2-15 DO YOU PERFORM ANY TASKS ON SOFT IRON CORE SPEAKER PARTS?	1.5	1.9	.0	.0	1.9	4.8	.9	9.1
I	551	I3-2 DO YOU CHECK THE CONDITION OF ELECTRON TUBES?	1.5	11.2	.0	62.5	5.7	.0	.9	43.2
I	552	I3-3 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES?	1.5	3.1	.0	43.8	4.7	.0	.0	40.9
I	557	I3-8 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING?	1.5	2.5	.0	18.8	3.8	.0	1.8	31.8
I	558	I3-9 DO YOU USE OR REFER TO PEAK CURRENT RATING?	1.5	3.7	.0	18.8	2.8	4.8	1.8	29.5
I	561	I3-12 DO YOU USE OR REFER TO SATURATION?	1.5	5.0	.0	18.8	4.7	.0	.9	38.6
I	578	I3-29 DO YOU USE OR REFER TO BIAS REQUIRED FOR CUTOFF?	1.5	5.0	.0	12.5	.9	4.8	.0	40.9
I	579	I3-30 DO YOU USE OR REFER TO BIAS REQUIRED FOR SATURATION?	1.5	5.0	.0	12.5	1.9	4.8	.0	40.9
I	582	I3-33 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	1.5	4.3	.0	43.8	2.8	4.8	.9	38.6
I	583	I3-34 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	1.5	5.0	.0	37.5	.0	4.8	.9	43.2
I	585	I3-36 DO YOU USE OR REFER TO TUBE SOCKET NOTATION?	1.5	5.6	.0	50.0	2.8	.0	.0	43.2
I	588	I3-39 DO YOU USE OR REFER TO ELECTRON TUBE DIODES?	1.5	1.9	.0	12.5	2.8	.0	.0	36.4
J	589	J1-1 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM J2-1; IF YES, CONTINUE.	1.5	3.1	.0	6.3	3.8	.0	.9	31.8
J	598	J2-1 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)?	1.5	2.5	.0	25.0	3.8	.0	.9	43.2
J	598	J2-3 DO YOU WORK WITH BEAM POWER TUBES?	1.5	1.2	.0	.0	1.9	.0	.0	38.6
J	599	J2-4 DO YOU WORK WITH THYRATRONS?	1.5	1.9	.0	6.3	.0	.0	.0	31.8
J	604	J2-9 DO YOU USE OR REFER TO AQUA - G COATINGS CONCERNING CRT'S?	1.5	1.9	.0	.0	.9	.0	.0	29.5
J	605	J2-10 DO YOU USE OR REFER TO ELECTRON OPTICS CONCERNING CRT'S?	1.5	3.1	.0	6.3	1.9	.0	.0	38.6
J	606	J2-11 DO YOU USE OR REFER TO PERSISTENCE CONCERNING CRT'S?	1.5	1.9	.0	.0	2.8	.0	.0	25.0
J	608	J2-13 DO YOU USE OR REFER TO FLOURESCENCE CONCERNING CRT'S?	1.5	5.0	3.4	6.3	1.9	.0	.0	56.8
J	610	J2-15 DO YOU USE OR REFER TO SHADOW MASK CONCERNING CRT'S?	1.5	3.1	.0	.0	1.9	.0	.0	25.0

POI MATCHED WITH SURVEY DATA

D	TSK	TITLES	306 51 **M** (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
K	619	K1-2 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	3.4	.0	.9	.0	.9	9.1
K	620	K1-3 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.0	.0	.9	6.8
K	621	K1-4 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.9	9.1
K	622	K1-5 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	3.4	.0	.9	.0	.9	9.1
K	623	K1-6 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	.0	.0	.9	.0	.0	6.8
K	624	K1-7 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.9	9.1
K	625	K1-8 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	.0	.0	.9	.0	.0	6.8
K	626	K1-9 DO YOU PERFORM TASKS ON RF OSCILLATORS/SYNTHESIZERS?	1.5	.6	.0	.0	.9	.0	.0	6.8
K	627	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	1.5	.6	.0	.0	.9	.0	.0	9.1
K	628	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	1.5	1.2	.0	.0	.0	.0	.0	9.1
K	629	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	1.5	.6	.0	.0	.0	.0	.0	9.1
K	630	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS?	1.5	.6	.0	.0	.9	.0	.0	6.8
K	632	K1-15 DO YOU PERFORM TASKS ON DETECTORS?	1.5	.6	.0	.0	.0	.0	.0	9.1
K	633	K1-16 DO YOU PERFORM TASKS ON MIXER AMPLIFIERS?	1.5	.6	.0	.0	.9	.0	.0	6.8
K	637	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS?	1.5	1.9	.0	.0	.0	.0	.0	6.8
K	639	K2-2 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	3.4	.0	.9	.0	.9	9.1
K	640	K2-3 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	.0	.0	.9	.0	.9	6.8
K	641	K2-4 DO YOU ALIGN TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	.0	.0	.9	.0	.9	9.1
K	642	K2-5 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	3.4	.0	.9	.0	1.8	9.1
K	643	K2-6 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS?	1.5	.6	3.4	.0	.9	.0	.0	6.8
K	644	K2-7 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	.0	.0	.9	.0	.9	9.1
K	649	K2-12 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8
K	651	K2-14 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	9.1
K	652	K2-15 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8
K	653	K2-16 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8
K	654	K2-17 DO YOU PERFORM TASKS ON LIMITERS?	1.5	.6	.0	.0	.9	.0	.0	9.1
K	655	K2-18 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS?	1.5	.6	.0	.0	.9	.0	.9	6.8
K	658	K2-21 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSCEIVERS?	1.5	.6	.0	.0	.9	.0	.0	9.1
K	659	K2-22 DO YOU PLOT RECEIVE SIGNAL LEVEL CURVES (RSL)?	1.5	.6	.0	.0	.9	.0	.0	2.3
K	683	K3-24 DO YOU USE OR REFER TO ICAO CODE?	1.5	.6	.0	6.3	.0	.0	2.6	9.1
K	684	K3-25 DO YOU USE OR REFER TO EXCESS-3 CODE?	1.5	1.2	.0	.0	.9	.0	1.8	13.6
N	801	N2-1 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N3-1; IF YES, CONTINUE.	1.5	.6	.0	25.0	1.9	.0	.0	13.6
N	802	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	1.5	.6	.0	12.5	.9	.0	.0	9.1
N	803	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS?	1.5	1.9	.0	6.3	.0	.0	.0	6.8
N	804	N2-12 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS?	1.5	1.9	.0	18.8	.0	.0	.0	9.1
N	805	N3-2 DO YOU INSPECT SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	6.9	.0	1.9	4.6	.0	.0

POI MATCHED WITH SURVEY DATA

FCPRTS PAGE 310

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	856	01-3 DO YOU CLEAN SINGLE SIDE BAND (SSB) OR INDEPENENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	.0	.0	1.9	4.8	.0	.0
0	857	01-4 DO YOU ALIGN SINGLE SIDE BAND (SSE) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	3.4	.0	1.9	4.8	.0	.0
0	858	01-5 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISE) TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	10.3	.0	1.9	4.8	.0	.0
0	859	01-6 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	3.4	.0	.0	4.8	.0	.0
0	863	01-10 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM BALANCED MODULATOR STAGE?	1.5	1.2	.0	.0	.0	.0	.0	.0
0	864	01-11 DO YOU PERFORM TASKS ON SSP OR ISB TRANSMIT OR RECEIVE SYSTEM CARRIER OSCILLATOR STAGE?	1.5	1.2	.0	.0	.0	.0	.0	.0
0	865	01-12 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM LC FILTER STAGE?	1.5	.6	.0	.0	.0	.0	.0	.0
0	869	01-16 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MIXER STAGE?	1.5	1.2	.0	.0	.9	.0	.0	.0
0	871	01-18 DO YOU PERFORM TASKS ON SSP OR ISB TRANSMIT OR RECEIVE SYSTEM POWER AMPLIFIER STAGES?	1.5	1.2	6.9	.0	.0	.0	.0	.0
0	872	01-19 DO YOU PERFORM TASKS ON SSP OR ISB TRANSMIT OR RECEIVE SYSTEM RF AMPLIFIER STAGE?	1.5	.6	3.4	.0	.0	.0	.0	.0
0	875	01-22 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DEMODULATOR STAGE?	1.5	1.2	6.9	.0	.9	.0	.0	.0
0	881	01-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSR OR ISB TRANSMITTER SCHEMATIC DIAGRAMS?	1.5	1.2	.0	.0	.0	.0	.0	.0
0	882	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB RECEIVER SCHEMATIC DIAGRAMS?	1.5	.6	.0	.0	.0	.0	.0	.0
0	884	02-1 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 03-1; IF YES, CONTINUE.	1.5	1.9	.0	.0	2.8	.0	2.6	13.6
0	885	02-2 DO YOU INSPECT PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	1.8	13.6
0	886	02-3 DO YOU CLEAN PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	1.8	13.6
0	887	02-4 DO YOU ALIGN PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	.9	13.6
0	888	02-5 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	2.6	13.6
0	889	02-6 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS?	1.5	1.2	.0	.0	.9	.0	1.6	13.6
0	890	02-7 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	2.6	11.4
0	891	02-8 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS?	1.5	1.2	.0	.0	.0	.0	1.8	13.6
0	892	02-9 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) PULSE MODULATION SYSTEMS?	1.5	.0	.0	.0	1.9	.0	.0	15.9
0	894	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) PULSE MODULATION SYSTEMS?	1.5	.0	.0	.0	2.8	.0	.9	11.4
0	901	02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORK STAGE?	1.5	.6	.0	.0	2.8	.0	.9	15.9
0	902	02-19 DO YOU PERFORM TASKS ON PULSE MODULATIN SYSTEM TIMER STAGE?	1.5	.0	.0	.0	.9	.0	.0	15.9
0	904	02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMER STAGE?	1.5	.0	.0	.0	.9	.0	.0	13.6
0	906	02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIER STAGE?	1.5	.6	.0	.0	.0	.0	.0	13.6

POI MATCHED WITH SURVEY DATA

FCPRTS PAGE 311

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	907	02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTER STAGE?	1.5	.6	.0	.0	1.9	.0	.0	15.9
0	908	02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIER STAGE?	1.5	.6	.0	.0	1.9	.0	.0	13.6
0	909	02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTOR STAGE?	1.5	.6	.0	.0	.0	.0	.9	15.9
0	912	02-29 DO YOU USE OR REFER TO PULSE RECURRANCE FREQUENCY (PRF) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	.6	.0	.0	.9	.0	.0	13.6
0	913	02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	.9	.0	.0	13.6
0	914	02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.0	15.9
0	915	02-32 DO YOU USE OR REFER TO PULSE SHAPE WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	.0	.0	.0	15.9
0	918	02-35 DO YOU USE OR REFER TO DUTY CYCLE (DC) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	.6	.0	.0	.0	.0	.0	11.4
0	919	02-36 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	1.5	.6	.0	.0	.0	.0	.0	9.1
0	920	02-37 DO YOU MEASURE PULSE RECURPENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	1.5	.6	.0	.0	.0	.0	.0	11.4
0	921	02-38 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS?	1.5	.0	.0	.0	.0	.0	.0	6.8
0	922	02-39 DO YOU TRACE SIGNALS OR CUPRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS?	1.5	1.2	.0	.0	.9	.0	1.8	13.6
0	923	02-40 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS?	1.5	.6	.0	.0	.9	.0	.9	13.6
0	924	03-1 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P1-1; IF YES, CONTINUE.	1.5	5.6	20.7	.0	.9	.0	1.8	6.8
0	925	03-2 DO YOU INSPECT ANTENNAS?	1.5	4.3	17.2	.0	.0	.0	.9	6.8
0	926	03-3 DO YOU CLEAN ANTENNAS?	1.5	3.7	.0	.0	.0	.0	.0	2.3
0	927	03-4 DO YOU PHYSICALLY ALIGN ANTENNAS?	1.5	3.1	6.9	.0	.0	.0	.0	4.5
0	929	03-6 DO YOU TROUBLESHOOT TO ANTENNAS?	1.5	3.1	24.1	.0	.0	.0	.0	4.5
0	931	03-8 DO YOU REMOVE OR INSTALL ANTENNAS?	1.5	3.1	.0	.0	.0	.0	.0	4.5
0	935	03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS?	1.5	1.9	.0	.0	.0	.0	.0	2.3
0	938	03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR?	1.5	.6	.0	.0	.0	.0	.9	2.3
0	948	03-25 DO YOU WORK WITH END-FIRE ARRAYS?	1.5	1.2	3.4	.0	.0	.0	.0	.0
0	949	03-26 DO YOU WORK WITH CARDIOID ARRAYS?	1.5	1.2	.0	.0	.0	.0	.0	.0
0	950	03-27 DO YOU WORK WITH COLLINEAR ARRAYS?	1.5	.6	.0	.0	.0	.0	.0	.0
0	967	03-44 DO YOU WORK ON OMNIDIRECTIONAL ANTENNAS?	1.5	4.3	17.2	.0	.0	.0	.0	4.5
P	970	P1-2 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE COPPER LOSS OR 'I SQUARED R' LOSS IN TRANSMISSION LINES?	1.5	1.9	.0	.0	5.7	4.8	1.8	2.3
P	971	P1-3 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES?	1.5	.6	.0	.0	5.6	.0	.9	2.3

POI MATCHED WITH SURVEY DATA

FCPRTS PAGE 312

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P 975	P1-7 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE FARADAY SHIELD?	1.5	2.5	.0	.0	3.8	.0	1.8	2.3
P 977	P1-9 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES?	1.5	8.1	.0	.0	16.0	4.8	14.0	2.3
P 986	P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS?	1.5	1.9	.0	.0	14.2	14.3	2.6	2.3
P 997	P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES?	1.5	1.9	.0	.0	5.7	.0	3.5	4.5
P 998	P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES?	1.5	.6	.0	.0	5.7	4.8	3.5	2.3
P 999	P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING?	1.5	.0	.0	.0	1.9	.0	.9	2.3
P1002	P2-3 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	6.8
P1003	P2-4 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1004	P2-5 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1005	P2-6 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	6.8
P1006	P2-7 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1007	P2-8 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1008	P2-9 DO YOU REMOVE OR INSTALL DUMMY LOADS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1009	P2-10 DO YOU REMOVE OR INSTALL E BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1010	P2-11 DO YOU REMOVE OR INSTALL H BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1011	P2-12 DO YOU REMOVE OR INSTALL OTHER BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1012	P2-13 DO YOU REMOVE OR INSTALL CHOKE JOINTS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1013	P2-14 DO YOU REMOVE OR INSTALL ROTATING JOINTS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1014	P2-15 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1015	P2-16 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1016	P2-17 DO YOU REMOVE OR INSTALL DUPLEXERS OR MIXERS?	1.5	.0	.0	.0	.0	.0	.0	6.8
P1017	P2-18 DO YOU REMOVE OR INSTALL WAVEGUIDE SHUTTERS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1018	P2-19 DO YOU REMOVE OR INSTALL TRANSMIT (TR) OR ANTITRANSMIT (ATR) TUBES?	1.5	.0	.0	.0	.0	.0	.0	4.5
P1019	P2-20 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	.0
P1020	P2-21 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	.0
P1021	P2-22 DO YOU USE OR REFER TO CUT OFF FREQUENCY OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	4.5
P1092	P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REPELLER (REFLECTOR) PLATE COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1093	P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	1.9	.0	1.8	2.3
P1094	P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID CAVITY GAP COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	1.9	.0	1.8	2.3
P1095	P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF RESONANT CAVITY COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3
P1096	P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETIC COUPLING LOOP COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	.0
P1097	P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3
P1098	P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3
P1099	P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF OUTPUT LEAD COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3

POI MATCHED WITH SURVEY DATA

D TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
R1179	R1-3 PHANTASTRON CIRCUITRY HAS SEARCH-LOCK AUTOMATIC FREQUENCY CONTROLS (AFC) APPLICATIONS IN MY JOB.	1.5	.6	.0	.0	1.9	.0	.0	4.5
T1225	T1-10 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	1.5	.6	.0	43.8	.0	.0	.0	9.1
T1228	T1-13 DO YOU USE OR REFER TO INTERMEDIATE REGIONS?	1.5	.0	.0	.0	.9	.0	.0	2.3
T1229	T1-14 DO YOU USE OR REFER TO NEAR REGIONS?	1.5	.0	.0	.0	.9	.0	.0	2.3
T1230	T1-15 DO YOU USE OR REFER TO MICRONS (M)?	1.5	.0	.0	6.3	.0	.0	.0	2.3
T1231	T1-16 DO YOU USE OR REFER TO GRAY BODIES?	1.5	.0	.0	.0	.0	.0	.0	2.3
T1232	T1-17 DO YOU USE OR REFER TO BLACK BODIES?	1.5	.0	.0	.0	.0	.0	.0	2.3
T1233	T1-18 DO YOU USE OR REFER TO ABSORPTION?	1.5	.0	.0	12.5	.0	.0	.0	6.8
T1234	T1-19 DO YOU USE OR REFER TO SCATTERING?	1.5	.0	.0	.0	.0	.0	.0	6.8
T1235	T1-20 DO YOU USE OR REFER TO ABSOLUTE ZERO?	1.5	.0	.0	12.5	.0	.0	.0	4.5
T1250	T2-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS?	1.5	.0	.0	.0	.0	.0	.0	6.8
T1251	T2-8 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS?	1.5	.0	.0	.0	.9	.0	.0	4.5
T1253	T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS?	1.5	.0	.0	.0	.9	.0	.0	4.5
T1267	T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS?	1.5	.0	.0	.0	1.9	.0	.0	4.5
T1268	T2-25 DO YOU WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS?	1.5	.0	.0	.0	1.9	.0	.0	4.5
T1269	T2-26 DO YOU WORK WITH HELICAL FLASHTUBES?	1.5	.6	.0	.0	1.9	.0	.0	4.5
T1271	T2-28 DO YOU WORK WITH HELIUM-NEON MATERIALS?	1.5	.0	.0	.0	1.9	.0	.0	2.3
T1279	T3-2 DO YOU INSPECT DVST OR MMST?	1.5	1.2	.0	.0	.9	.0	.0	6.8
T1280	T3-3 DO YOU CLEAN DVST OR MMST?	1.5	1.2	.0	.0	.9	.0	.0	6.8
T1281	T3-4 DO YOU ADJUST OR CALIBRATE DVST OR MMST?	1.5	.6	.0	.0	.0	.0	.0	4.5
T1282	T3-5 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST?	1.5	.0	.0	.0	.0	.0	.0	4.5
T1283	T3-6 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS?	1.5	1.2	.0	.0	.0	.0	.0	4.5
T1284	T3-7 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS?	1.5	.0	.0	.0	.0	.0	.0	4.5
U1356	U1-53 DO YOU USE TRI-STATE CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	1.5	.6	.0	.0	.9	.0	.0	22.7
C 166	C2-41 DO YOU ADJUST THREE PHASE TRANSFORMERS?	.0	3.1	.0	6.3	5.7	.0	.9	56.8
D 247	D3-15 DO YOU WORK WITH YTTRIUM IRON GARNET (YIG) FILTERS?	.0	.0	.0	6.3	.9	.0	.0	9.1
F 297	F1-3 DO YOU CLEAN MICROPHONES?	.0	3.7	.0	12.5	6.6	52.4	12.3	40.9
F 305	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES?	.0	1.9	.0	.0	2.8	4.8	.9	36.4
F 307	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES?	.0	.0	.0	.0	1.9	.0	.9	6.8
F 308	F1-14 DO YOU PERFORM TASKS ON TRANSDUCERS?	.0	1.2	.0	18.8	2.8	4.8	3.5	72.7
F 318	F2-10 DO YOU PERFORM ANY TASKS ON SPIDER SPEAKER PARTS?	.0	1.2	.0	.0	1.9	9.5	.9	9.1
F 319	F2-11 DO YOU PERFORM ANY TASKS ON FIELD COIL SPEAKER PARTS?	.0	1.2	.0	.0	1.9	14.3	.9	15.9
F 320	F2-12 DO YOU PERFORM ANY TASKS ON VOICE COIL SPEAKER PARTS?	.0	1.2	.0	.0	2.8	14.3	3.5	15.9
F 322	F2-14 DO YOU PERFORM ANY TASKS ON ELECTROMAGNET SPEAKER PARTS?	.0	1.9	.0	.0	1.9	14.3	.9	13.6
G 401	G2-19 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS?	.0	12.4	.0	6.3	.9	.0	1.6	15.9
G 402	G2-20 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS?	.0	11.8	.0	6.3	.9	.0	1.8	13.6
G 406	G2-24 DO YOU PERFORM TRANSISTOR MATCHING THROUGH THE USE OF CURVE TRACING?	.0	1.9	.0	12.5	.9	.0	.0	22.7
I 556	I3-7 DO YOU USE OR REFER TO CUTOFF?	.0	6.2	.0	18.8	2.8	.0	1.8	38.6
I 559	I3-10 DO YOU USE OR REFER TO TRANSIT TIME?	.0	1.9	.0	18.8	1.9	.0	1.8	20.5

D	TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
I	560	I3-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING?	.0	1.9	.0	6.3	3.8	.0	1.8	20.5
I	562	I3-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE?	.0	2.5	.0	6.3	2.8	.0	.9	25.0
I	563	I3-14 DO YOU USE OR REFER TO PLATE VOLTAGE?	.0	5.0	.0	50.0	4.7	.0	.9	47.7
I	564	I3-15 DO YOU USE OR REFER TO PLATE CURRENT?	.0	4.3	.0	18.8	1.9	.0	.9	38.6
I	565	I3-16 DO YOU USE OR REFER TO GRID VOLTAGE?	.0	5.6	.0	56.3	4.7	.0	1.8	47.7
I	566	I3-17 DO YOU USE OR REFER TO GRID CURRENT?	.0	5.0	.0	25.0	1.9	.0	.9	38.6
I	567	I3-18 DO YOU USE OR REFER TO CATHODE VOLTAGE?	.0	5.6	.0	62.5	4.7	.0	.9	47.7
I	568	I3-19 DO YOU USE OR REFER TO CATHODE CURRENT?	.0	5.0	.0	25.0	3.8	.0	.9	40.9
I	569	I3-20 DO YOU USE OR REER TO FILAMENT VOLTAGE?	.0	5.0	.0	56.3	2.8	.0	.9	50.0
I	570	I3-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODE IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)?	.0	1.2	.0	6.3	.9	.0	.0	20.5
I	571	I3-22 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC.) AMPLIFICATION FACTORS?	.0	1.2	.0	.0	1.9	.0	1.8	25.0
I	572	I3-23 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)?	.0	.6	.0	.0	.9	.0	1.8	13.6
I	573	I3-24 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE?	.0	1.2	.0	.0	.9	.0	1.8	11.4
I	574	I3-25 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE?	.0	1.9	.0	.0	.9	.0	1.8	15.9
I	575	I3-26 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES?	.0	1.2	.0	6.3	.9	.0	1.8	20.5
I	576	I3-27 DO YOU USE OR REFER TO PLATE VOLTAGE FOR A SPECIFIED BIAS?	.0	4.3	.0	37.5	1.9	.0	.9	36.4
I	577	I3-28 DO YOU USE OR REFER TO PLATE CURRENT FOR A SPECIFIED BIAS?	.0	3.7	.0	12.5	1.9	.0	.0	29.5
I	580	I3-31 DO YOU USE OR REFER TO GAIN?	.0	3.1	.0	43.8	.9	4.8	.0	36.4
I	581	I3-32 DO YOU USE OR REFER TO EFFICIENCY?	.0	2.5	.0	6.3	.9	4.8	.0	29.5
I	584	I3-35 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	.0	1.2	.0	18.8	.9	.0	.9	15.9
I	587	I3-38 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS?	.0	3.1	.0	18.8	3.8	.0	.0	45.5
J	590	J1-2 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	.0	1.2	.0	.0	.9	.0	.0	15.9
J	591	J1-3 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.0	18.2
J	592	J1-4 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	.0	1.2	.0	.0	.9	.0	.0	27.3
J	593	J1-5 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.0	20.5
J	594	J1-6 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.9	20.5
J	595	J1-7 DO YOU TROUBLESHOOT OR REPAIR - DON'T KNOW WHICH TYPE OF AMPLIFIER?	.0	1.2	.0	6.3	2.8	.0	.0	6.8
J	607	J2-12 DO YOU USE OR REFER TO DECAY TIMES CONCERNING CRT'S?	.0	3.1	.0	.0	1.9	.0	.0	36.4
K	631	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	.0	.6	.0	.0	.0	.0	.0	6.8
K	634	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS?	.0	1.9	.0	.0	1.9	.0	.9	6.8

POI MATCHED WITH SURVEY DATA

OCCUPATIONAL ANALYSIS PROGRAM
FCPRTS PAGE 315 USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 **M**	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
K	635	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS?	.0	1.9	.0	.0	.9	.0	.0	6.8
K	636	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS?	.0	1.2	.0	.0	.9	.0	.0	6.8
M	773	M2-10 DO YOU USE WHITE NOISE GENERATORS?	.0	.6	.0	.0	1.9	.0	.0	38.6
M	775	M2-12 DO YOU USE PSEUDO-RANDOM GENERATORS?	.0	5.0	.0	.0	1.9	.0	.0	11.4
M	776	M2-13 DO YOU USE TIME MARK GENERATORS?	.0	15.5	.0	6.3	1.9	.0	.0	54.5
N	822	N2-2 DO YOU INSPECT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	12.5	1.9	.0	.0	9.1
N	823	N2-3 DO YOU CLEAN SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	12.5	1.9	.0	.0	6.8
N	824	N2-4 DO YOU ADJUST SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	6.3	1.9	.0	.0	6.8
N	825	N2-5 DO YOU TROUBLESHOOT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	18.8	.9	.0	.0	9.1
N	826	N2-6 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS?	.0	.6	.0	18.8	.9	.0	.0	9.1
N	827	N2-7 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS?	.0	.6	.0	18.8	.0	.0	.0	6.8
N	828	N2-8 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS?	.0	.6	.0	.0	.9	.0	.0	4.5
N	829	N2-9 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	.0	1.2	.0	6.3	.9	.0	.0	6.8
O	866	O1-13 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CRYSTAL FILTER STAGE?	.0	.6	.0	.0	.9	.0	.0	.0
O	867	O1-14 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MECHANICAL FILTER STAGE?	.0	.6	.0	.0	.9	.0	.0	.0
O	873	O1-20 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM FREQUENCY CONVERTER STAGES?	.0	.6	3.4	.0	.9	.0	.0	.0
O	874	O1-21 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM IF AMPLIFIER STAGE?	.0	1.2	.0	.0	.0	.0	.0	.0
O	876	O1-23 DO YOU USE OR REFER TO SELECTIVE FADING WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	3.4	.0	.0	.0	.0	.0
O	877	O1-24 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	3.4	.0	.0	.0	.0	.0
O	878	O1-25 DO YOU USE OR REFER TO FREQUENCY STABILITY WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	.0
O	879	O1-26 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.6	.0	.0	.0	.0	.0	.0
O	880	O1-27 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB OR ISB TRANSMITTERS?	.0	.6	.0	.0	.0	.0	.0	.0
O	881	O1-30 DO YOU PERFORM AERONAUTIC STATION ASSESSMENT PROGRAMS (ASAP)?	.0	.6	.0	.0	.9	.0	.0	.0
O	899	O2-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLY STAGE?	.0	.6	.0	.0	.9	.0	.0	15.9
O	900	O2-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODE STAGE?	.0	.0	.0	.0	.0	.0	.0	15.9
O	901	O2-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRON STAGE?	.0	.0	.0	.0	.0	.0	.0	13.6

D	TSK	TITLES	306 51 *M*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	905	02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBE STAGE?	.0	.6	.0	.0	.9	.0	.0	11.4
0	910	02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIER STAGE?	.0	1.2	.0	.0	.0	.0	.0	11.4
0	911	02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIER STAGE?	.0	.6	.0	.0	.9	.0	.0	6.8
0	916	02-33 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	13.6
0	917	02-34 DO YOU USE OR REFER TO AVERAGE POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	11.4
C	928	03-5 DO YOU ELECTRICALLY ALIGN ANTENNAS?	.0	2.5	3.4	.0	.0	.0	.0	2.3
0	930	03-7 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS?	.0	1.9	6.9	.0	.0	.0	.0	4.5
0	932	03-9 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS?	.0	1.9	.0	.0	.0	.0	.0	4.5
0	933	03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES?	.0	2.5	.0	.0	.0	.0	.0	2.3
C	934	03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES?	.0	1.9	.0	.0	.0	.0	.0	2.3
0	936	03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS RESISTIVE LOADS TO THE GENERATOR?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	939	03-16 DO YOU WORK WITH HERTZ BASIC ANTENNAS?	.0	1.2	13.8	.0	.0	.0	.0	2.3
C	940	03-17 DO YOU WORK WITH MARCONI BASIC ANTENNAS?	.0	.6	3.4	.0	.0	.0	.0	.0
0	941	03-18 DO YOU WORK WITH RHOMBIC BASIC ANTENNAS?	.0	.6	.0	.0	.0	.0	.0	.0
0	942	03-19 DO YOU WORK WITH DIPOLE BASIC ANTENNAS?	.0	3.1	6.9	.0	.9	.0	.0	2.3
0	943	03-20 DO YOU WORK WITH SCIMITAR BASIC ANTENNAS?	.0	.0	.0	.0	.9	.0	.0	.0
0	944	03-21 DO YOU WORK WITH PARABOLIC BASIC ANTENNAS?	.0	3.1	.0	.0	.0	.0	.0	.0
0	945	03-22 DO YOU WORK WITH GROUND PLANE BASIC ANTENNAS?	.0	3.7	3.4	.0	.0	.0	.0	4.5
0	946	03-23 DO YOU WORK WITH FOLDED DIPOLE BASIC ANTENNAS?	.0	2.5	6.9	.0	.0	.0	.0	2.3
0	947	03-24 DO YOU WORK WITH BROADSIDE ARRAYS?	.0	1.2	.0	.0	.0	.0	.0	.0
0	951	03-28 DO YOU WORK WITH PHASE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0
0	952	03-29 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	4.5
0	953	03-30 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS?	.0	.6	.0	.0	.0	.0	.0	.0
C	954	03-31 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS?	.0	1.2	.0	.0	.0	.0	.0	4.5
C	955	03-32 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0
C	956	03-33 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	957	03-34 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD?	.0	1.2	.0	.0	.0	.0	.0	2.3
C	958	03-35 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	959	03-36 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED?	.0	.6	.0	.0	.0	.0	.0	.0
0	960	03-37 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON?	.0	.6	.0	.0	.0	.0	.0	2.3

POI MATCHED WITH SURVEY DATA

OCCUPATIONAL ANALYSIS PROGRAM
REPORTS PAGE 317
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
O	961	03-38 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS?	.0	2.5	.0	.0	.0	.0	.0	2.3
O	962	03-39 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS?	.0	1.2	.0	.0	.0	.0	.0	.0
O	963	03-40 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS?	.0	1.2	.0	.0	.0	.0	.0	.0
O	964	03-41 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN - DON'T KNOW WHAT KIND OF ELEMENT?	.0	2.5	17.2	.0	.0	.0	.0	2.3
O	965	03-42 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS?	.0	3.7	6.9	.0	.0	.0	.0	.0
O	966	03-43 DO YOU WORK ON BIDIRECTIONAL ANTENNAS?	.0	3.7	3.4	.0	.0	.0	.0	.0
O	968	03-45 DO YOU WORK WITH ROTARY ANTENNA ARRAYS?	.0	2.5	3.4	.0	.0	.0	.0	.0
P	985	P1-17 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	.0	.6	.0	.0	1.9	.0	.0	2.3
P	986	P1-18 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	.0	.6	.0	.0	1.9	.0	.0	2.3
P	987	P1-19 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS?	.0	.6	.0	.0	1.9	.0	.0	2.3
P	989	P1-21 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING?	.0	.0	.0	.0	1.9	.0	1.8	2.3
P	990	P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES?	.0	.0	.0	.0	5.7	9.5	1.8	4.5
P	991	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES?	.0	.0	.0	.0	4.7	.0	.9	2.3
P	992	P1-24 DO YOU USE OR REFER TO THE TERM CUT OFF FREQUENCY OF TRANSMISSION LINES?	.0	.0	.0	.0	4.7	.0	.0	2.3
P	993	P2-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES?	.0	.0	.0	.0	2.8	.0	.0	2.3
P	994	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES?	.0	1.2	.0	.0	2.8	.0	.9	2.3
P	995	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTHS FOR GIVEN FREQUENCIES?	.0	1.2	.0	.0	1.9	.0	.9	2.3
P	996	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES?	.0	1.9	.0	.0	5.7	.0	1.8	2.3
P	1000	P2-1 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P3-1; IF YES, CONTINUE.	.0	.0	.0	.0	.9	.0	.0	6.8
P	1001	P2-2 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	6.8
P	1022	P2-23 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	4.5
P	1023	P2-24 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	4.5
P	1024	P2-25 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	4.5

D TSK	TITLES	306 51 *P*	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1025	P2-26 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1026	P2-27 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.9	4.5
P1027	P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OR .7 WAVELENGTHS OF THE OPERATING FREQUENCY?	.0	.0	.0	.0	.0	.0	.9	.0
P1028	P2-29 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 AS AN AVERAGE?	.0	.0	.0	.0	.0	.0	.9	.0
P1029	P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION?	.0	.0	.0	.0	.0	.0	.0	.0
P1030	P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	2.6	.0
P1031	P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1032	P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.9	.0	.9	.0
P1033	P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.9	.0
P1034	P2-35 DO YOU WORK WITH HIGH POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1035	P2-36 DO YOU WORK WITH LOW POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1036	P2-37 DO YOU WORK WITH LOOP ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1037	P2-38 DO YOU WORK WITH APERTURES (WINDOWS OR IRISES) ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	2.3
P1038	P2-39 DO YOU WORK WITH CHOKE JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0
P1039	P2-40 DO YOU WORK WITH ROTATING JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0
P1040	P2-41 DO YOU WORK WITH JOINTS IN WAVEGUIDES OR CAVITY RESONATORS BUT DON'T KNOW WHICH KIND?	.0	.0	.0	.0	.0	.0	.0	6.8
P1041	P2-42 DO YOU TUNE CAVITY RESONATORS USING ELECTRICAL METHODS?	.0	.0	.0	.0	.0	.0	.0	6.8
P1042	P2-43 DO YOU TUNE CAVITY RESONATORS USING MECHANICAL METHODS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1043	P2-44 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1044	P3-1 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS? IF NO, GO TO ITEM 01-1; IF YES, CONTINUE.	.0	.6	.0	.0	.9	.0	.0	2.3
P1045	P3-2 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0

POI MATCHED WITH SURVEY DATA

D TSK	TITLES	306 51 **	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1046	P3-3 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0
P1047	P3-4 DO YOU USE OR REFER TO LEAD INDUCTANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTINAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0
P1048	P3-5 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0
P1049	P3-6 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION?	.0	.0	.0	.0	.9	.0	1.8	2.3
P1050	P3-7 DO YOU USE OR REFER TO ELECTRON BUNCHING?	.0	.0	.0	.0	.0	.0	.9	2.3
P1051	P3-8 DO YOU WORK WITH TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1052	P3-9 DO YOU WORK WITH THREE-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1053	P3-10 DO YOU WORK WITH REFLEX KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	2.3
P1054	P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0
P1055	P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1056	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1057	P3-14 DO YOU WORK WITH MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1058	P3-15 DO YOU WORK WITH BACKWARD WAVE OSCILLATORS (BWO)?	.0	.0	.0	.0	.0	.0	.0	.0
P1059	P3-16 DO YOU INSPECT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1060	P3-17 DO YOU CLEAN KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1061	P3-18 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1062	P3-19 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1063	P3-20 DO YOU PERFORM OPERATIONAL CHECKS ON KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1064	P3-21 DO YOU TROUBLESHOOT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1065	P3-22 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRONS OR TWT'S?	.0	.0	.0	.0	.0	.0	.0	2.3
P1066	P3-23 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1067	P3-24 DO YOU INSPECT PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1068	P3-25 DO YOU CLEAN PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0
P1069	P3-26 DO YOU ADJUST PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0
P1070	P3-27 DO YOU TUNE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0
P1071	P3-28 DO YOU PERFORM OPERATIONAL CHECKS ON PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1072	P3-29 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1073	P3-30 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1074	P3-31 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1075	P3-32 DO YOU INSPECT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1076	P3-33 DO YOU CLEAN MAGNETRONS?	.0	.6	.0	.0	.0	.0	.0	.0
P1077	P3-34 DO YOU ADJUST MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1078	P3-35 DO YOU TUNE MAGNETRONS?	.0	.6	.0	.0	.0	.0	.0	.0
P1079	P3-36 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1080	P3-37 DO YOU TROUBLESHOOT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0

C TSK	TITLES	306 51 ***	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1081	P3-38 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1082	P3-39 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1083	P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR PLATE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1084	P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1085	P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1086	P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FEEDBACK LOOP COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1087	P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF DRIFT SPACE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1088	P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1089	P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1090	P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CONTROL GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1091	P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1100	P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1101	P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1102	P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MODULATOR GRID COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1103	P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ANODE COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1104	P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF HELIX COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1105	P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1106	P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNET COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1107	P3-64 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ATTENUATOR COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1108	P3-65 DO YOU PERFORM TASKS ON FERRITE CIRCULATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.0	.0
P1109	P3-66 DO YOU PERFORM TASKS ON SIGNAL CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1110	P3-67 DO YOU PERFORM TASKS ON IDLER CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1111	P3-68 DO YOU PERFORM TASKS ON VARACTOR DIODE COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1112	P3-69 DO YOU PERFORM TASKS ON FERRITE ISOLATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1113	P3-70 DO YOU PERFORM TASKS ON REVERSE-BIAS BATTERY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0

D TSK	TITLES	306 51 *P*	306 52 (M)	316 SOF (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1114	P3-71 DO YOU PERFORM TASKS ON ANODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1115	P3-72 DO YOU PERFORM TASKS ON ANODE COOLING PIN COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1116	P3-73 DO YOU PERFORM TASKS ON COUPLING LOOP COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1117	P3-74 DO YOU PERFORM TASKS ON HEATER LEAD COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1118	P3-75 DO YOU PERFORM TASKS ON RESONANT CAVITY COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1119	P3-76 DO YOU PERFORM TASKS ON CATHODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1120	P3-77 DO YOU PERFORM TASKS ON MAGNET COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
Q1140	Q2-13 DO YOU USE OR REFER TO BUBBLE MEMORIES?	.0	2.5	3.4	4.3	1.9	.0	.0	11.4
Q1146	Q2-19 DO YOU USE OR REFER TO TRANSFORMER READ ONLY STORAGES (TROS)?	.0	3.1	.0	.0	.9	.0	.0	9.1
Q1147	Q2-20 DO YOU USE OR REFER TO CAPACITY READ ONLY STORAGES (CROS)?	.0	2.5	.0	.0	.9	.0	.0	6.8
Q1176	Q3-22 ARE YOU ASSIGNED AGAINST A POSITION WHICH REQUIRES A "D" PREFIX?	.0	.6	.0	.0	.9	.0	.0	.0
S1208	S3-2 DO YOU USE OR REFER TO EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.6	3.4	.0	1.9	.0	.0	20.5
S1209	S3-3 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	.0	.6	3.4	.0	1.9	.0	.0	22.7
S1210	S3-4 DO YOU MEASURE EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	18.2
S1211	S3-5 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	20.5
S1212	S3-6 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	.0	.0	.0	.0	.0	22.7
S1213	S3-7 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	3.4	.0	.0	.0	.0	22.7
S1214	S3-8 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.0	.0	.0	.0	.0	.0	25.0
S1215	S3-9 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	3.4	.0	.0	.0	.0	27.3
T1216	T1-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS? IF NO, GO TO ITEM T2-1; IF YES, CONTINUE.	.0	.6	.0	43.8	.9	.0	.9	9.1
T1217	T1-2 DO YOU INSPECT INFRARED SYSTEMS?	.0	.0	.0	43.8	.0	.0	.0	9.1
T1218	T1-3 DO YOU CLEAN INFRARED SYSTEMS?	.0	.0	.0	43.8	.9	.0	.0	9.1
T1219	T1-4 DO YOU SERVICE INFRARED SYSTEMS?	.0	.6	.0	43.8	.9	.0	.0	9.1
T1220	T1-5 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1221	T1-6 DO YOU OPERATE INFRA SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	6.8
T1222	T1-7 DO YOU TROUBLESHOO CONNECTIONS OF INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1223	T1-8 DO YOU TROUBLESHO OR ASSEMBLIES OF INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1

POI MATCHED WITH SURVEY DATA

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	70A 51 ****	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
T1224	T1-9 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1226	T1-11 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1227	T1-12 DO YOU USE OR REFER TO FAR REGIONS?	.0	.0	.0	.0	.9	.0	.0	2.3
T1236	T1-21 DO YOU PERFORM TASKS ON BLITZ?	.0	.0	.0	.0	.9	.0	.0	.0
T1237	T1-22 DO YOU PERFORM TASKS ON TARGET BUTTONS?	.0	.0	3.4	.0	.9	.0	.0	.0
T1238	T1-23 DO YOU PERFORM TASKS ON ERECTOR LENSES?	.0	.0	.0	.0	.9	.0	.0	.0
T1239	T1-24 DO YOU PERFORM TASKS ON OCULAR LENSES?	.0	.0	.0	.0	.9	.0	.0	6.8
T1240	T1-25 DO YOU PERFORM TASKS ON CORRECTION LENSES?	.0	.0	.0	6.3	.9	.0	.0	2.3
T1241	T1-26 DO YOU PERFORM TASKS ON FILTERS?	.0	.0	.0	18.8	.9	.0	.0	6.8
T1242	T1-27 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS?	.0	.0	.0	6.3	.9	.0	.0	2.3
T1243	T1-28 DO YOU PERFORM TASKS ON PLANE MIRRORS?	.0	.0	.0	6.3	.9	.0	.0	4.5
T1254	T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)?	.0	.0	.0	.0	.9	.0	.9	4.5
T1255	T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS?	.0	.0	.0	.0	1.9	.0	.9	4.5
T1256	T2-13 DO YOU USE OR REFER TO GROUND STATE?	.0	.0	.0	.0	1.9	.0	.9	4.5
T1257	T2-14 DO YOU USE OR REFER TO EXCITED STATE?	.0	.0	.0	.0	1.9	.0	.9	4.5
T1258	T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION?	.0	.0	.0	.0	1.9	.0	.9	4.5
T1259	T2-16 DO YOU USE OR REFER TO PHOTONS?	.0	.0	.0	.0	.9	.0	.9	4.5
T1260	T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSIONS?	.0	.0	.0	.0	.9	.0	.9	4.5
T1261	T2-18 DO YOU USE OR REFER TO STIMULATED EMISSIONS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1262	T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE?	.0	.0	.0	.0	.9	.0	.0	4.5
T1263	T2-20 DO YOU USE OR REFER TO INVERSION LEVELS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1264	T2-21 DO YOU USE OR REFER TO MONOCHROMATIC?	.0	.0	.0	.0	.9	.0	.0	4.5
T1265	T2-22 DO YOU WORK WITH ACTIVE MATERIALS?	.0	.6	.0	.0	1.9	.0	.0	2.3
T1266	T2-23 DO YOU WORK WITH PUMPING SOURCES?	.0	.6	.0	.0	1.9	.0	.0	4.5
T1270	T2-27 DO YOU WORK WITH RUBY MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3
T1272	T2-29 DO YOU WORK WITH HELIUM-XENON MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3
T1273	T2-30 DO YOU WORK WITH XENON MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	4.5
T1274	T2-31 DO YOU WORK WITH CESIUM-HELIUM MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1275	T2-32 DO YOU WORK WITH ARGON MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3
T1276	T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1277	T2-34 DO YOU WORK WITH GALLIUM ARSENIDE MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3
T1285	T3-8 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF DVST?	.0	.0	.0	.0	.0	.0	.0	.0
T1286	T3-9 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF MVST?	.0	.0	.0	.0	.0	.0	.9	.0
T1287	T3-10 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF SCT?	.0	.0	.0	.0	.0	.0	.9	2.3
T1288	T3-11 DO YOU PERFORM TASKS ON FLOOD GUNS?	.0	.0	.0	.0	.9	.0	.0	.0
T1289	T3-12 DO YOU PERFORM TASKS ON WRITE GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1290	T3-13 DO YOU PERFORM TASKS ON READ GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1291	T3-14 DO YOU PERFORM TASKS ON ATTACK GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1292	T3-15 DO YOU PERFORM TASKS ON ERASE GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1293	T3-16 DO YOU PERFORM TASKS ON STORAGE GRIDS?	.0	.6	.0	.0	1.9	.0	.0	2.3
T1294	T4-1 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS DEALING WITH TELEVISION SYSTEMS INCLUDING LOW LIGHT TELEVISION? IF NO, GO TO ITEM 01-1; IF YES, CONTINUE.	.0	1.2	12.5	6.3	.9	.0	.0	29.6
T1295	T4-2 DO YOU INSPECT TELEVISION SYSTEMS?	.0	1.2	12.5	.0	.0	.0	.0	29.6

POI MATCHED WITH SURVEY DATA

OCCUPATIONAL ANALYSIS PROGRAM
FCPRTS PAGE 323 USAFOMC (ATC) RANDOLPH AFB TX

		306	306	316	316	362	362	362	918
		51	52	50F	52F	51	53	54	50
D TSK	TITLES	*M*	(M)	(M)	(M)	(M)	(M)	(M)	(M)
T1296	T4-3 DO YOU CLEAN TELEVISION SYSTEMS?	.0	1.2	3.4	.0	.9	.0	.0	38.6
T1297	T4-4 DO YOU ADJUST OR CALIBRATE TELEVISION SYSTEMS?	.0	1.2	10.3	.0	.9	.0	.0	36.4
T1299	T4-5 DO YOU OPERATE TELEVISION SYSTEMS?	.0	1.2	17.2	6.3	.9	.0	.0	38.6
T1299	T4-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF TV SYSTEMS?	.0	1.2	6.9	.0	.9	.0	.0	40.9
T1300	T4-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF TV SYSTEMS?	.0	1.2	6.9	.0	.9	.0	.0	31.8
T1301	T4-8 DO YOU TROUBLESHOOT DOWN TO TV SYSTEM COMPONENT PARTS?	.0	1.2	3.4	.0	.9	.0	.0	29.5
T1302	T4-9 DO YOU REMOVE OR REPLACE TV SYSTEM MAJOR ASSEMBLIES?	.0	.6	.0	.0	.9	.0	.0	31.8
T1303	T4-10 DO YOU REMOVE OR REPLACE TV SYSTEM COMPONENT PARTS?	.0	.6	.0	.0	.9	.0	.0	29.5
U1318	U1-15 DO YOU USE OR REFER TO DAP-16?	.0	.0	.0	.0	.9	.0	.0	6.8
U1322	U1-19 DO YOU USE OR REFER TO WRAPAROUND WORDS?	.0	1.2	.0	.0	1.9	.0	.0	6.8
U1325	U1-22 DO YOU USE OR REFER TO COMPILERS?	.0	.0	.0	.0	.9	.0	.0	9.1
U1326	U1-23 DO YOU USE OR REFER TO ASSEMBLERS?	.0	.0	.0	.0	.9	.0	.0	9.1
U1331	U1-28 DO YOU USE OR REFER TO 'ATLAS'?	.0	.0	.0	.0	.9	.0	.0	4.5
U1332	U1-29 DO YOU USE OR REFER TO 'ELAN'?	.0	.0	.0	.0	.9	.0	.0	4.5
U1334	U1-31 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING SYSTEMS?	.0	.6	3.4	.0	2.8	.0	.9	6.8
U1335	U1-32 DO YOU WRITE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	.0	.0	.0	.0	2.8	.0	.9	.0
U1348	U1-45 DO YOU USE FORTRAN PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	2.3
U1349	U1-46 DO YOU USE COBOL PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	4.5
U1350	U1-47 DO YOU USE RPG PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	2.3

SHEP EPI CAREER LADDER, ELECTRONIC PRINCIPLES INVENTORY (EPI) DATA ARE PRESENTED BELOW EACH DUTY TITLE. DATA FOR THIS PRINTOUT WERE COLLECTED FROM CAREER LADDER INCUMBENTS DURING THE PERIOD AUGUST 1983 THROUGH JANUARY 1984.

USE OF EPI PRINTOUT: THE PERCENT OF VARIOUS CAREER LADDER GROUPS RESPONDING TO EPI QUESTIONS IS LISTED TO THE RIGHT OF EACH EPI ITEM. THUS, THE APPROPRIATE SAMPLE CRITERION GROUPS CAN BE IDENTIFIED WITH THE COLUMN HEADINGS AT THE TOP RIGHT OF EACH PRINTOUT PAGE. THEN THE PERCENT OF THAT GROUP USING THE CONCEPT OF PIECE OF EQUIPMENT CAN BE IDENTIFIED.

USE OF EPI DATA. THESE DATA MAY BE USED IN HELPING TO IDENTIFY, DELINEATE, AND VALIDATE ELECTRONIC PRINCIPLES ITEMS IN THE STS. CRITERIA LISTED IN ATCR 52-22 FOR ABR TRAINING MAY BE USEFUL IN HELPING DEVELOP ENTRY-LEVEL ELECTRONIC PRINCIPLE COURSES. ALSO, CDC WRITERS MAY USE EPI DATA TO HELP DETERMINE AREAS TO EMPHASIZE IN 5- AND 7-SKILL LEVEL CDCS, CONSISTENT WITH STS CODES.

FOR ASSISTANCE IN USING PRINTOUTS PHONE USAFOMC/OMYO, AUTOVON 487-5811.

VECTOR TYPE CODES:

(T) = % TIME SPENT BY ALL MEMBERS
(M) = % MEMBERS PERFORMING
(F) = TASK FACTOR
(D) = DICHOTOMOUS SET
(B) = % TIME SPENT BY MEMBERS PERFORMING
(-) = PROGRAM GENERATED VECTOR

NO	TYPE	VECTOR	/MEMBERS/ MEAN -	SD	DESCRIPTION	FACTOR #
1	M	306 51	66		DAFSC 30651 AIRMEN	2
2	M	306 52	161		DAFSC 30652 AIRMEN	4
3	M	31650F	29		DAFSC 31650F AIRMEN	6
4	M	31652F	16		DAFSC 31652F AIRMEN	8
5	M	362 51	106		DAFSC 36251 AIRMEN	10
6	M	362 53	21		DAFSC 36253 AIRMEN	12
7	M	362 54	114		DAFSC 36254 AIRMEN	14
8	M	918 50	44		DAFSC 91850 AIRMEN	16

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USE OF EPI PRINTOUT: THE PERCENT OF VARIOUS CAREER LADDER GROUPS RESPONDING TO EPI QUESTIONS IS LISTED TO THE RIGHT OF EACH EPI ITEM. THUS, THE APPROPRIATE SAMPLE CRITERION GROUPS CAN BE IDENTIFIED WITH THE COLUMN HEADINGS AT THE TOP RIGHT OF EACH PRINTOUT PAGE. THEN THE PERCENT OF THAT GROUP USING THE CONCEPT OF PIECE OF EQUIPMENT CAN BE IDENTIFIED.

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FOR ASSISTANCE IN USING PRINTOUTS PHONE USAFOMC/OMYO, AUTOVON 487-5811.

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A		MATHEMATICS (A1), DIRECT CURRENT (A2), RESISTANCE AND RESISTIVE CIRCUITS (A3)								
A	1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	69.7	73.9	65.5	81.3	69.8	71.4	48.2	97.7
A	2	A1-2 DO YOU USE PUBLICATIONS, SUCH AS TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB?	33.3	32.3	27.6	68.8	34.9	47.6	21.1	70.5
A	3	A1-3 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS?	27.3	13.7	13.8	68.8	17.0	4.8	8.8	77.3
A	4	A1-4 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY?	7.6	6.2	.0	12.5	7.5	.0	3.5	36.4
A	5	A1-5 DO YOU SOLVE FOR UNKNOWN QUANTITIES SUCH AS SOLVING FOR X IN THE EQUATION X + 6 = 8?	15.2	11.2	10.3	43.8	17.9	4.8	10.5	68.2
A	6	A1-6 DO YOU USE LOGARITHM TABLES?	3.0	3.1	.0	.0	3.8	4.8	1.8	15.9
A	7	A1-7 DO YOU SOLVE QUADRATIC EQUATIONS SUCH AS SOLVING FOR X IN THE EQUATION X**2 + 4X + 4 =0?	3.0	2.5	.0	.0	4.7	.0	2.6	27.3
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	3.0	4.3	.0	6.3	1.9	4.8	.9	19.7
A	9	A1-9 DO YOU USE TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT?	7.6	4.3	.0	6.3	2.8	4.8	1.8	15.9
A	10	A1-10 DO YOU SOLVE OR USE PROPORTIONS? AN EXAMPLE OF A PROPORTION IS 2 : 5 :: 4 : 10. ANOTHER WAY TO EXPRESS THE SAME RELATIONSHIP IS 2/5 = 4/10. SOMETIMES, ONE OF THE QUANTITIES IS UNKNOWN AND HAS TO BE SOLVED FOR, SUCH AS 2 : X :: 4 : 10 (X IN THIS CASE IS UNKNOWN).	15.2	9.9	10.3	37.5	9.4	23.8	5.3	61.4
A	11	A1-11 DO YOU USE MATHEMATICAL EXPONENTS OR SUBSCRIPTS IN OTHER THAN POWERS OF 10?	31.8	13.0	6.9	37.5	12.3	9.5	7.5	54.5
A	12	A2-1 DO YOU USE (PERHAPS IN TECHNICAL ORDERS) THE TERM VOLTAGE OR VOLT (V)?	92.4	95.7	100.0	100.0	94.3	100.0	95.6	100.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	13	A2-2 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTROMOTIVE FORCE (EMF)?	39.4	49.7	13.8	25.0	38.7	38.1	27.2	72.7
A	14	A2-3 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM OHM?	86.4	91.9	89.7	100.0	91.5	90.5	83.3	100.0
A	15	A2-4 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ION?	6.1	7.5	10.3	81.3	7.5	.0	3.5	72.7
A	16	A2-5 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM DYNE?	1.5	5.0	6.9	.0	2.8	.0	4.4	29.5
A	17	A2-6 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM AMPERE?	83.3	88.8	75.9	87.5	87.7	85.7	73.7	100.0
A	18	A2-7 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM NEUTRON?	18.2	14.9	6.9	18.8	13.2	.0	4.4	54.5
A	19	A2-8 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM COULOMB?	6.1	8.1	6.9	6.3	5.7	9.5	.9	54.5
A	20	A2-9 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM PROTON?	19.7	16.1	3.4	18.8	16.0	.0	2.5	56.8
A	21	A2-10 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTRON?	40.9	42.9	24.1	56.3	30.2	33.3	10.5	72.7
A	22	A2-11 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM CURRENT?	89.4	92.5	89.7	100.0	88.7	95.2	82.5	100.0
A	23	A2-12 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	60.6	73.9	89.7	81.3	60.4	66.7	43.9	97.7
A	24	A2-13 DO YOU DETERMINE IF TWO OR MORE BATTERIES MUST BE CONNECTED IN SERIES OR PARALLEL TO ACHIEVE A SPECIFIC VOLTAGE AND/OR CURRENT?	24.2	34.2	17.2	56.3	48.1	28.6	33.3	79.5
A	25	A3-1 DO YOU WORK WITH RESISTORS OR RESISTIVE CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM B1-1; IF YES, CONTINUE.	80.3	78.3	17.2	62.5	68.9	71.4	43.0	77.3
A	26	A3-2 DO YOU INSPECT RESISTORS?	83.3	82.6	3.4	81.3	60.4	85.7	36.0	90.9
A	27	A3-3 DO YOU CLEAN RESISTORS?	63.6	62.7	3.4	68.8	41.5	66.7	15.8	72.7

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	28	A3-4 DO YOU ADJUST RESISTORS?	80.3	77.0	6.9	75.0	47.2	76.2	20.2	97.7
A	29	A3-5 DO YOU MEASURE RESISTORS?	81.8	80.7	13.8	81.3	66.0	85.7	33.3	97.7
A	30	A3-6 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASK YOU PERFORM?	19.7	17.4	.0	25.0	15.1	4.8	2.6	52.3
A	31	A3-7 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY CARBON?	27.3	37.3	6.9	56.3	46.2	42.9	21.9	72.7
A	32	A3-8 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED WIRE?	62.1	61.5	6.9	62.5	67.0	61.9	36.0	90.9
A	33	A3-9 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY SLIDE TAP?	16.7	29.2	.0	56.3	23.6	33.3	7.9	90.9
A	34	A3-10 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY RHEOSTAT?	50.0	57.8	10.3	75.0	63.2	61.9	37.7	97.7
A	35	A3-11 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY POTENTIOMETER?	84.8	77.0	13.8	75.0	63.2	66.7	32.5	97.7
A	36	A3-12 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED FILM?	16.7	9.3	3.4	31.3	13.2	19.0	2.6	59.1
A	37	A3-13 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE?	78.8	74.5	6.9	75.0	59.4	76.2	23.7	97.7
A	38	A3-14 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE?	68.2	64.0	3.4	62.5	48.1	71.4	12.3	93.2
A	39	A3-15 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE?	30.3	30.4	3.4	50.0	25.5	33.3	6.1	47.7
A	40	A3-16 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPPESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES?	84.8	82.6	27.6	75.0	74.5	76.2	48.2	95.5
A	41	A3-17 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	59.1	54.7	13.8	56.3	53.8	61.9	33.3	88.6
A	42	A3-18 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	53.0	54.7	10.3	56.3	50.9	42.9	33.3	88.6

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	43	A3-19 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	56.1	56.5	13.8	50.0	45.3	42.9	27.2	95.5
A	44	A3-20 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	40.9	41.0	13.8	50.0	33.0	23.8	12.3	72.7
A	45	A3-21 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	51.5	52.8	13.8	37.5	49.1	61.9	26.3	84.1
A	46	A3-22 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	54.0	10.3	43.8	48.1	47.6	27.2	86.4
A	47	A3-23 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	47.0	56.5	13.8	37.5	41.5	42.9	20.2	95.5
A	48	A3-24 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.4	47.2	6.9	31.3	35.8	33.3	19.3	88.6
A	49	A3-25 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	37.9	41.0	10.3	31.3	31.1	23.8	10.5	72.7
A	50	A3-26 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	53.0	51.6	13.8	37.5	46.2	57.1	20.2	81.8
A	51	A3-27 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	48.5	52.8	10.3	37.5	46.2	42.9	21.9	84.1
A	52	A3-28 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	45.5	52.8	10.3	37.5	39.6	38.1	17.5	88.6
A	53	A3-29 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	39.4	45.3	6.9	31.3	36.8	28.6	15.8	86.4
A	54	A3-30 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	34.8	37.3	10.3	31.3	32.1	19.0	9.6	70.5
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.5	44.7	10.3	37.5	42.5	47.6	16.7	79.5
A	56	A3-32 DO YOU CALCULATE TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	39.4	42.2	10.3	37.5	41.5	23.8	16.7	61.8

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	37.9	42.9	6.9	37.5	38.7	23.8	13.2	88.6
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	31.8	36.6	6.9	37.5	34.9	19.0	12.3	81.8
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	25.8	30.4	6.9	31.3	30.2	14.3	7.9	70.5
B		METERS/MULTIMETERS (B1), ALTERNATING CURRENT (AC) (B2), INDUCTORS AND INDUCTIVE REACTANCE (B3)								
B	60	B1-1 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE RESISTANCE?	81.8	88.2	82.8	87.5	90.6	85.7	74.6	100.0
B	61	B1-2 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE VOLTAGE?	86.4	91.3	93.1	87.5	90.6	85.7	80.7	100.0
B	62	B1-3 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE CURRENT?	71.2	84.5	51.7	81.3	84.0	66.7	68.4	97.7
B	63	B1-4 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE POWER?	36.4	47.2	34.5	31.3	52.8	42.9	37.7	59.1
B	64	B1-5 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE FREQUENCY?	60.2	49.1	34.5	75.0	68.9	71.4	25.4	84.1
B	65	B1-6 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE TEMPERATURE?	24.2	7.5	37.9	81.3	38.7	28.6	5.3	86.4
B	66	B1-7 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE PRESSURE?	36.4	8.7	44.8	56.3	25.5	4.8	6.1	72.7

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
B	67	B1-8 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE LIGHT LEVELS?	33.3	1.9	6.9	.0	1.9	.0	6.1	47.7
B	68	B2-1 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM EFFECTIVE VOLTAGE (RMS) IN YOUR PRESENT JOB?	45.5	47.8	20.7	37.5	26.4	52.4	16.7	90.9
B	69	B2-2 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PEAK TO PEAK VOLTAGE IN YOUR PRESENT JOB?	80.3	68.9	13.8	81.3	30.2	76.2	14.9	93.2
B	70	B2-3 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM AVERAGE VOLTAGE (DC) IN YOUR PRESENT JOB?	51.5	62.1	31.0	75.0	43.4	57.1	28.9	86.4
B	71	B2-4 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM WAVE LENGTH IN YOUR PRESENT JOB?	53.0	46.0	13.8	75.0	36.8	47.6	7.9	81.8
B	72	B2-5 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM FREQUENCY IN YOUR PRESENT JOB?	72.7	59.6	51.7	68.8	63.2	90.5	20.2	93.2
B	73	B2-6 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM INSTANTANEOUS VALUE IN YOUR PRESENT JOB?	12.1	13.7	3.4	18.8	10.4	.0	.9	52.3
B	74	B2-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	54.5	37.3	27.6	50.0	21.7	23.8	5.3	88.6
B	75	B3-1 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C1-1; IF YES, CONTINUE.	37.9	36.6	6.9	37.5	21.7	14.3	12.3	68.2
B	76	B3-2 DO YOU INSPECT INDUCTORS?	40.9	38.5	.0	56.3	18.9	14.3	7.9	75.0
B	77	B3-3 DO YOU CLEAN INDUCTORS?	31.8	28.6	.0	56.3	14.2	9.5	6.1	59.1
B	78	B3-4 DO YOU ADJUST INDUCTORS?	18.2	19.3	3.4	43.8	13.2	.0	1.8	56.8
B	79	B3-5 DO YOU MEASURE INDUCTORS?	25.8	28.0	.0	43.8	17.0	9.5	3.5	61.4
B	80	B3-6 DO YOU USE OR REFER TO INDUCTANCE?	31.8	31.7	.0	50.0	21.7	14.3	6.1	81.8
B	81	B3-7 DO YOU USE OR REFER TO HENRIES?	21.2	20.5	.0	18.8	13.2	4.8	1.8	68.2
B	82	B3-8 DO YOU USE OR REFER TO INDUCTIVE REACTANCE?	13.6	18.6	.0	18.8	17.0	9.5	1.8	63.6
B	83	B3-9 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS?	6.1	3.7	.0	.0	7.5	.0	.9	36.4
B	84	B3-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS?	6.1	5.0	.0	.0	3.8	.0	.9	34.1
B	85	B3-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS?	4.5	6.2	.0	.0	9.4	.0	.9	38.6

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
B	86	B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL?	10.6	9.9	.0	.0	12.3	4.8	2.6	36.4
B	87	B3-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE?	6.1	7.5	.0	.0	10.4	4.8	1.8	31.8
B	88	B3-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH?	4.5	6.8	.0	6.3	9.4	4.8	1.8	29.5
B	89	B3-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMABILITY OF THE CORE MATERIAL?	7.6	8.1	.0	6.3	11.3	4.8	2.6	36.4
B	90	B3-16 DO YOU CALCULATE INDUCTANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	4.5	9.3	.0	37.5	10.4	.0	4.4	36.4
B	91	B3-17 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS?	12.1	18.0	.0	12.5	14.2	14.3	4.4	61.4
B	92	B3-18 DO YOU CALCULATE INDUCTIVE REACTANCE?	7.6	9.3	.0	6.3	10.4	.0	3.5	40.9
B	93	B3-19 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTAIONAL TO FREQUENCY?	6.1	9.3	.0	6.3	16.0	9.5	2.6	43.2
B	94	B3-20 DO YOU WORK WITH POWER INDUCTORS?	25.8	26.1	6.9	31.3	13.2	4.8	4.4	63.6
B	95	B3-21 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS?	16.7	11.2	3.4	.0	16.0	9.5	6.1	52.3
B	96	B3-22 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS?	13.6	9.3	3.4	.0	7.5	.0	.9	50.0

C CAPACITORS AND CAPACITIVE REACTANCE (C1), TRANSFORMERS (C2), MAGNETISM (C3)

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	97	C1-1 DO YOU WORK WITH CAPACITORS OR CICUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C2-1; IF YES, CONTINUE.	80.3	75.8	17.2	75.0	62.3	57.1	40.4	93.2
C	98	C1-2 DO YOU INSPECT CAPACITORS?	83.3	82.0	.0	81.3	56.6	76.2	33.3	93.2
C	99	C1-3 DO YOU CLEAN CAPACITORS?	57.6	64.6	.0	68.8	45.3	47.6	15.8	61.4
C	100	C1-4 DO YOU ADJUST CAPACITORS?	27.3	25.5	.0	43.8	21.7	14.3	3.5	70.5
C	101	C1-5 DO YOU TEST CAPACITORS?	75.8	75.8	3.4	68.8	54.7	52.4	28.9	93.2
C	102	C1-6 DO YOU DISCHARGE CAPACITORS?	83.3	71.4	.0	62.5	43.4	66.7	28.1	86.4
C	103	C1-7 DO YOU MEASURE CAPACITORS?	53.0	60.2	.0	62.5	41.5	38.1	20.2	79.5
C	104	C1-8 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE?	9.1	14.9	.0	18.8	11.3	9.5	2.6	22.7
C	105	C1-9 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC?	4.5	3.1	.0	6.3	4.7	4.8	.0	11.4
C	106	C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS?	69.7	68.9	3.4	62.5	47.2	57.1	19.3	93.2
C	107	C1-11 DO YOU USE OR REFER TO CAPACITANCE?	65.2	72.7	3.4	62.5	62.3	57.1	28.1	88.6
C	108	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT?	7.6	9.3	.0	.0	12.3	.0	.0	31.8
C	109	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS?	54.5	49.1	.0	62.5	35.8	47.6	11.4	81.8
C	110	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE?	28.8	39.8	.0	37.5	29.2	14.3	6.1	65.9
C	111	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES?	19.7	20.5	.0	37.5	14.2	9.5	5.3	43.2
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	87.9	83.9	13.8	81.3	73.6	76.2	48.2	97.7
C	113	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	83.3	80.1	10.3	81.3	51.9	71.4	44.7	95.5
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	75.8	73.9	10.3	68.8	55.7	71.4	44.7	95.5
C	115	C1-19 DO YOU CALCULATE CAPACITANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	21.2	16.8	.0	6.3	22.6	14.3	9.6	40.9
C	116	C1-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT?	10.6	7.5	.0	.0	16.0	4.8	3.5	25.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	117	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS?	9.1	6.8	.0	6.3	15.1	.0	3.5	27.3
C	118	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO?	36.4	38.5	6.9	43.8	31.1	28.6	17.5	72.7
C	119	C1-23 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS?	18.2	24.2	.0	18.8	23.6	23.8	10.5	61.4
C	120	C1-24 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY?	12.1	13.7	.0	.0	18.9	9.5	7.0	43.2
C	121	C1-25 DO YOU CALCULATE CAPACITIVE REACTANCE?	12.1	8.1	.0	6.3	14.2	.0	3.5	40.9
C	122	C1-26 DO YOU WORK WITH VARIABLE CAPACITORS?	27.3	25.5	.0	31.3	17.9	14.3	13.2	77.3
C	123	C1-27 DO YOU WORK WITH TRIMMER CAPACITORS?	12.1	14.3	.0	18.8	8.5	.0	2.6	68.2
C	124	C1-28 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS?	84.8	75.8	3.4	68.8	50.9	71.4	31.6	90.9
C	125	C1-29 DO YOU WORK WITH OTHER FIXED CAPACITORS?	72.7	68.9	3.4	81.3	47.2	57.1	33.3	95.5
C	126	C2-1 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C3-1; IF YES, CONTINUE.	71.2	67.7	27.6	75.0	28.3	57.1	24.6	93.2
C	127	C2-2 DO YOU INSPECT TRANSFORMERS?	69.7	67.7	6.9	68.8	26.4	66.7	21.9	95.5
C	128	C2-3 DO YOU CLEAN TRANSFORMERS?	51.5	59.0	.0	68.8	20.8	47.6	14.9	72.7
C	129	C2-4 DO YOU ADJUST TRANSFORMERS?	19.7	24.8	.0	43.8	12.3	9.5	3.5	65.9
C	130	C2-5 DO YOU TROUBLESHOOT TRANSFORMERS?	60.6	55.3	10.3	50.0	17.0	42.9	12.3	93.2
C	131	C2-6 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)?	3.0	3.1	.0	.0	4.7	.0	.0	18.2
C	132	C2-7 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M?	4.5	3.1	.0	6.3	3.8	.0	1.8	15.9
C	133	C2-8 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS?	6.1	6.2	.0	6.3	4.7	4.8	.0	29.5
C	134	C2-9 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS?	13.6	11.2	.0	18.8	4.7	14.3	2.6	59.1

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	135	C2-10 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS?	13.6	9.3	.0	.0	3.8	4.8	1.8	22.7
C	136	C2-11 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS?	6.1	2.5	.0	6.3	5.7	.0	.0	13.6
C	137	C2-12 DO YOU WORK WITH AUTOTRANSFORMERS?	7.6	6.8	.0	18.8	4.7	9.5	.9	88.6
C	138	C2-13 DO YOU WORK WITH POWER TRANSFORMERS?	74.2	68.3	17.2	68.8	27.4	52.4	20.2	93.2
C	139	C2-14 DO YOU WORK WITH AUDIO TRANSFORMERS?	18.2	14.3	6.9	12.5	15.1	47.6	10.5	65.9
C	140	C2-15 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS?	12.1	7.5	6.9	6.3	2.8	.0	.9	52.3
C	141	C2-16 DO YOU WORK WITH SATURABLE CORE TRANSFORMERS?	3.0	4.3	.0	25.0	2.8	.0	.0	36.4
C	142	C2-17 DO YOU WORK WITH SENSING TRANSFORMERS?	6.1	3.1	3.4	18.8	4.7	.0	.9	31.8
C	143	C2-18 DO YOU WORK WITH CONTROL TRANSFORMERS?	13.6	9.3	3.4	25.0	8.5	.0	2.6	59.1
C	144	C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE?	56.1	60.2	3.4	62.5	25.5	47.6	11.4	93.2
C	145	C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE?	53.0	55.9	3.4	56.3	23.6	47.6	13.2	84.1
C	146	C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES?	59.1	50.3	3.4	43.8	18.9	38.1	12.3	81.8
C	147	C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	19.7	26.1	.0	6.3	9.4	19.0	2.6	50.0
C	148	C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	27.3	35.4	.0	12.5	13.2	33.3	4.4	86.4
C	149	C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS?	74.2	69.6	24.1	75.0	29.2	66.7	20.2	95.5
C	150	C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS?	62.1	46.0	10.3	68.8	20.8	38.1	11.4	95.5
C	151	C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	59.5	52.2	13.8	62.5	18.9	33.3	8.8	95.5
C	152	C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	69.7	62.7	13.8	68.8	23.6	38.1	8.8	95.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	153	C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	27.3	16.1	6.9	25.0	13.2	14.3	4.4	59.1
C	154	C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	37.9	24.2	3.4	25.0	17.9	23.8	8.8	70.5
C	155	C2-30 DO YOU REFER TO VARIABLE TRANSFORMER SCHEMATIC SYMBOLS?	19.7	27.3	3.4	56.3	17.0	23.8	5.3	86.4
C	156	C2-31 DO YOU REFER TO COMBINATIONS OF SCHEMATIC SYMBOLS FOR TRANSFORMERS?	45.5	36.0	10.3	62.5	16.0	38.1	7.9	90.9
C	157	C2-32 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS?	34.8	23.6	3.4	25.0	11.3	19.0	4.4	81.8
C	158	C2-33 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH?	22.7	8.1	.0	12.5	6.6	4.8	2.6	36.4
C	159	C2-34 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO?	16.7	12.4	.0	18.8	4.7	14.3	.9	65.9
C	160	C2-35 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS?	28.8	36.0	.0	31.3	9.4	23.8	6.1	86.4
C	161	C2-36 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	15.2	7.5	.0	6.3	2.8	14.3	.0	52.3
C	162	C2-37 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	10.6	6.2	.0	6.3	2.8	4.8	.0	34.1
C	163	C2-38 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS?	16.7	6.2	13.8	43.8	5.7	.0	.0	81.8
C	164	C2-39 DO YOU INSPECT THREE PHASE TRANSFORMERS?	13.6	5.6	6.9	31.3	7.5	.0	1.8	77.3
C	165	C2-40 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS?	6.1	3.7	.0	6.3	5.7	.0	.9	56.8
C	166	C2-41 DO YOU ADJUST THREE PHASE TRANSFORMERS?	.0	3.1	.0	6.3	5.7	.0	.9	56.8
C	167	C2-42 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS?	7.6	3.7	.0	31.3	5.7	.0	.9	72.7
C	168	C3-1 DO YOU USE OR REFER TO PERMANENT MAGNETS?	27.3	44.7	10.3	31.3	20.8	23.8	17.5	56.8
C	169	C3-2 DO YOU USE OR REFER TO TEMPORARY MAGNETS?	34.8	39.1	3.4	37.5	29.2	28.6	14.0	45.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
C	170	C3-3 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS?	10.6	8.7	3.4	6.3	19.8	.0	2.6	20.5
C	171	C3-4 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS?	16.7	11.2	3.4	6.3	13.2	.0	2.6	22.7
C	172	C3-5 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS?	12.1	10.6	3.4	6.3	14.2	.0	3.5	25.0
C	173	C3-6 DO YOU USE OR REFER TO RESIDUAL MAGNETISM?	13.6	20.5	3.4	12.5	57.5	14.3	6.1	29.5
C	174	C3-7 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX?	21.2	18.6	6.9	12.5	17.9	4.8	6.1	47.7
C	175	C3-8 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM?	6.1	3.7	.0	.0	3.8	.0	3.5	15.9
C	176	C3-9 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM?	3.0	3.7	.0	6.3	4.7	.0	2.6	15.9
C	177	C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION?	22.7	21.7	3.4	6.3	18.9	9.5	10.5	45.5
C	178	C3-11 DO YOU USE OR REFER TO FLUX DENSITY?	10.6	5.6	.0	6.3	6.6	.0	1.8	15.9
C	179	C3-12 DO YOU USE OR REFER TO SATURABLE REACTANCE?	4.5	3.7	.0	6.3	9.4	.0	1.8	18.2
D		RCL CIRCUITS (D1), TIME CONSTANTS (D2), FILTERS (D3)								
D	180	D1-1 DO YOU WORK WITH RC, LR, OR RCL CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM D2-1; IF YES, CONTINUE.	31.8	25.5	3.4	12.5	9.4	14.3	4.4	77.3
D	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	4.5	3.1	.0	.0	2.8	4.8	.0	29.5
D	182	D1-3 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	6.1	3.7	.0	.0	4.7	4.8	.0	22.7
D	183	D1-4 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS?	7.6	1.9	.0	6.3	4.7	.0	.0	25.0
D	184	D1-5 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS?	6.1	1.9	.0	6.3	4.7	.0	.0	22.7

E	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	185	D1-6 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS?	3.0	1.9	.0	.0	4.7	.0	.0	27.3
D	186	D1-7 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	16.7	16.1	3.4	18.8	6.6	4.8	2.6	54.5
D	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.9	29.5
D	188	D1-9 DO YOU USE OR REFER TO MAXIMUM POWER (P SUB M) WHEN WORKING WITH RCL CIRCUITS?	4.5	5.6	.0	.0	5.7	.0	.0	27.3
D	189	D1-10 DO YOU USE OR REFER TO AVERAGE POWER (P SUB AVE) WHEN WORKING WITH RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	.0	.0	31.8
D	190	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	3.0	5.0	.0	.0	4.7	.0	.0	20.5
D	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	4.5	6.2	.0	.0	4.7	.0	.0	25.0
D	192	D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	12.1	8.1	.0	6.3	5.7	4.8	2.6	54.5
D	193	D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS?	7.6	5.6	.0	12.5	1.9	4.8	.0	40.9
D	194	D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS?	6.1	4.3	.0	6.3	3.8	9.5	.0	29.5
D	195	D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS?	10.6	6.2	.0	12.5	3.8	4.8	.0	52.3
D	196	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS?	4.5	4.3	.0	6.3	1.9	.0	.0	29.5
D	197	D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS?	3.0	4.3	.0	.0	1.9	.0	.0	38.6
D	198	D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS?	6.1	1.9	.0	.0	.9	.0	.0	22.7
D	199	D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	16.7	11.8	.0	6.3	1.9	.0	.0	63.6

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	200	D1-21 DO YOU DETERMINE VALUES OR TRIGONOMETRIC FUNCTIONS USING FORMULAS SUCH AS: SINE OF AND ANGLE = OPPOSITE SIDE/ HYPOTENUSE?	1.5	1.9	.0	.0	2.8	.0	.0	13.6
D	201	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS?	4.5	4.3	.0	6.3	3.8	4.8	.9	25.0
D	202	D1-23 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS?	10.6	10.6	.0	.0	6.6	4.8	.9	29.5
D	203	D1-24 DO YOU USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS?	6.1	3.7	.0	.0	4.7	.0	.0	25.0
D	204	D1-25 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS?	9.1	8.1	.0	.0	7.5	4.8	.9	38.6
D	205	D1-26 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS?	4.5	3.7	.0	.0	4.7	4.8	.0	20.5
D	206	D1-27 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) FOR SERIES RCL CIRCUITS?	3.0	3.1	.0	.0	2.8	.0	.0	15.9
D	207	D1-28 DO YOU USE OR REFER TO TRUE POWER (P SUB T) FOR SERIES RCL CIRCUITS?	4.5	5.6	.0	.0	2.8	.0	.0	25.0
D	208	D1-29 DO YOU USE OR REFER TO POWER FACTORS (PF) FOR SERIES RCL CIRCUITS?	3.0	5.0	.0	.0	2.8	.0	.0	22.7
D	209	D1-30 DO YOU USE OR REFER TO TOTAL CURRENT FOR PARALLEL RCL CIRCUITS?	16.7	10.6	.0	6.3	4.7	4.8	.9	43.2
D	210	D1-31 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS?	4.5	2.5	.0	.0	3.8	.0	.0	18.2
D	211	D1-32 DO YOU USE THE ASSUMED VOLTAGE METHOD FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	6.1	4.3	.0	.0	2.8	.0	.0	20.5
D	212	D1-33 DO YOU USE OHM'S LAW FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	18.2	10.6	.0	12.5	7.5	4.8	1.8	45.5
D	213	D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS?	34.8	27.3	.0	18.8	10.4	28.6	7.9	72.7
D	214	D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION?	21.2	15.5	.0	12.5	3.8	19.0	2.6	61.4
D	215	D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS?	24.2	23.6	.0	18.8	8.5	19.0	4.4	65.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	216	D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION?	13.6	13.0	.0	6.3	3.8	14.3	3.5	50.0
D	217	D1-38 DO YOU CHECK RESISTORS USING OHMMETERS?	37.9	27.3	.0	25.0	12.3	28.6	7.9	77.3
D	218	D1-39 DO YOU CHECK RESISTORS USING SUBSTITUTION?	18.2	13.7	.0	6.3	3.8	19.0	3.5	52.3
D	219	D1-40 DO YOU USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (P SUB A) = TRUE POWER (P SUB T) FOR RESONANT CIRCUITS?	3.0	3.1	.0	.0	2.8	.0	.9	13.6
D	220	D1-41 DO YOU USE OR REFER TO RESONANT FREQUENCIES FOR RCL CIRCUITS?	6.1	6.2	.0	6.3	4.7	.0	1.8	50.0
D	221	D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS?	6.1	5.6	.0	6.3	3.8	.0	.9	43.2
D	222	D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS?	6.1	5.6	.0	.0	1.9	.0	.0	36.4
D	223	D1-44 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 OF THE PEAK CURRENT VALUE?	6.1	6.2	.0	.0	1.9	.0	.0	38.6
D	224	D1-45 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE COIL (Q)?	1.5	3.7	.0	.0	.9	.0	.0	27.3
D	225	D1-46 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS?	6.1	6.2	.0	.0	4.7	9.5	.0	31.8
D	226	D2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS? IF NO, GO TO ITEM D3-1; IF YES, CONTINUE.	10.6	5.6	.0	.0	2.8	.0	.0	38.6
D	227	D2-2 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)?	10.6	3.7	.0	.0	3.8	.0	.9	34.1
D	228	D2-3 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS?	4.5	3.7	3.4	.0	.9	.0	.9	22.7

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	229	D2-4 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS?	4.5	3.1	.0	.0	.9	.0	.9	22.7
D	230	D2-5 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS?	6.1	3.7	.0	.0	.9	.0	.0	29.5
D	231	D2-6 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES?	7.0	4.3	.0	.0	.9	.0	.0	22.7
D	232	D2-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS?	4.5	3.1	.0	.0	1.9	.0	.0	29.5
D	233	D3-1 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM E1-1; IF YES, CONTINUE.	68.2	42.2	6.9	31.3	11.3	57.1	18.4	75.0
D	234	D3-2 DO YOU INSPECT FILTER CIRCUITS?	54.5	36.6	.0	31.3	8.5	42.9	10.5	70.5
D	235	D3-3 DO YOU CLEAN FILTER CIRCUITS?	47.0	31.1	.0	25.0	8.5	33.3	7.9	52.3
D	236	D3-4 DO YOU ALIGN OR ADJUST FILTER CIRCUITS?	28.8	16.1	.0	25.0	5.7	28.6	5.3	68.2
D	237	D3-5 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL?	56.1	29.8	.0	31.3	5.7	47.6	12.3	77.3
D	238	D3-6 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF FILTER CIRCUITS?	57.6	31.7	6.9	25.0	4.7	14.3	7.0	77.3
D	239	D3-7 DO YOU WORK WITH LOW PASS FILTERS?	34.8	20.5	.0	12.5	2.8	52.4	.9	61.4
D	240	D3-8 DO YOU WORK WITH HIGH PASS FILTERS?	24.2	16.8	.0	12.5	4.7	28.6	.9	61.4
D	241	D3-9 DO YOU WORK WITH BANDPASS FILTERS?	18.2	6.2	.0	6.3	3.8	14.3	2.6	52.3
D	242	D3-10 DO YOU WORK WITH BAND-REJECT FILTERS?	7.6	3.7	.0	12.5	3.8	4.8	.9	31.8
D	243	D3-11 DO YOU WORK WITH FILTERS BUT DON'T REMEMBER WHICH TYPE?	31.8	22.4	6.9	25.0	7.5	9.5	14.0	29.5
D	244	D3-12 DO YOU WORK WITH L-SECTION FILTER CONFIGURATIONS?	24.2	9.3	.0	6.3	.9	4.8	2.6	38.6
D	245	D3-13 DO YOU WORK WITH T-SECTION FILTER CONFIGURATIONS?	18.2	8.1	.0	12.5	.9	.0	1.8	36.4
D	246	D3-14 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATIONS?	18.2	8.7	.0	6.3	1.9	.0	1.8	34.1

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
D	247	D3-15 DO YOU WORK WITH YTTRIUM IPON GARNET (YIG) FILTERS?	.0	.0	.0	6.3	.9	.0	.0	9.1
D	248	D3-16 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS?	9.1	1.9	.0	6.3	1.9	.0	.9	18.2
E		COUPLING (E1), SOLDERING OR SOLDERLESS CONNECTIONS(E2), RELAYS (E3)								
E	249	E1-1 DO YOU WORK WITH COUPLING DEVICES OR CIRCUITRY IN YOUR PRESENT JOB? IF NO, GO TO ITEM E2-1; IF YES, CONTINUE.	45.5	24.2	.0	18.8	7.5	14.3	7.9	79.5
E	250	E1-2 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING?	47.0	19.9	.0	25.0	4.7	9.5	.9	77.3
E	251	E1-3 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING (MATCHING)?	37.9	14.9	.0	6.3	4.7	14.3	5.3	68.2
E	252	E1-4 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH OPTICAL COUPLING?	4.5	7.5	.0	6.3	2.8	.0	.0	45.5
E	253	E1-5 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING?	24.2	19.3	.0	18.8	5.7	14.3	4.4	68.2
E	254	E1-6 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING?	47.0	19.9	.0	18.8	5.7	9.5	.9	81.8
E	255	E1-7 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING?	36.4	13.7	.0	6.3	6.6	14.3	6.1	72.7
E	256	E1-8 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING?	27.3	17.4	.0	18.8	7.5	14.3	4.4	70.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
E	257	E1-9 DO YOU WORK WITH DIRECT COUPLED CIRCUITS?	37.9	22.4	.0	18.8	5.7	14.3	3.5	81.8
E	256	E1-10 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS?	43.9	18.6	.0	18.8	5.7	9.5	2.6	79.5
E	259	E1-11 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS?	19.7	16.8	.0	6.3	5.7	4.8	2.6	70.5
E	260	E1-12 DO YOU WORK WITH OPTICAL COUPLING?	4.5	6.2	.0	.0	2.8	.0	.0	43.2
E	261	E1-13 DO YOU WORK WITH OPTICAL COUPLING CIRCUITS?	4.5	6.2	.0	.0	2.8	.0	.0	40.9
E	262	E1-14 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS?	22.7	16.1	.0	18.8	6.6	14.3	4.4	70.5
E	263	E2-1 IN YOUR PRESENT JOB, DO YOU CONNECT ELECTRONIC CIRCUITS USING SOLDERLESS CONNECTIONS OR SOLDERING TECHNIQUES? IF NO, GO TO ITEM E3-1; IF YES, CONTINUE.	86.4	83.9	6.9	75.0	76.4	81.0	78.9	97.7
E	264	E2-2 DO YOU SOLDER CONNECTIONS?	87.9	88.2	.0	81.3	84.0	81.0	86.0	97.7
E	265	E2-3 DO YOU DESOLDER CONNECTIONS?	87.9	88.2	.0	81.3	85.8	81.0	83.3	97.7
E	266	E2-4 DO YOU PERFORM HIGH RELIABILITY SOLDERING?	72.7	61.5	.0	75.0	58.5	71.4	46.5	86.4
E	267	E2-5 DO YOU INSPECT SOLDERED CONNECTIONS?	87.9	87.6	.0	81.3	85.8	81.0	79.6	95.5
E	268	E2-6 DO YOU CLEAN OR TIN CONNECTIONS?	86.4	85.7	.0	81.3	83.0	81.0	78.9	95.5
E	269	E2-7 DO YOU MAKE HARDWIRE CONNECTIONS?	83.3	81.4	.0	81.3	79.2	71.4	80.7	90.9
E	270	E2-8 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS?	87.9	80.7	3.4	81.3	38.7	57.1	21.1	95.5
E	271	E2-9 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS?	87.9	85.7	.0	81.3	69.8	81.0	32.5	97.7
E	272	E2-10 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS?	87.9	79.5	.0	75.0	48.1	71.4	22.8	95.5
E	273	E2-11 DO YOU SOLDER ACTIVE COMPONENTS, SUCH AS INTEGRATED CIRCUITS?	81.8	47.8	.0	43.8	21.7	38.1	10.5	93.2
E	274	E2-12 DO YOU PERFORM WIRE WRAPPING IN LIEU OF SOLDERING?	68.2	31.1	.0	31.3	78.3	57.1	77.2	36.4
E	275	E2-13 DO YOU PERFORM CRIMPING IN LIEU OF SOLDERING?	69.7	55.3	.0	81.3	46.2	38.1	50.9	84.1
E	276	E2-14 DO YOU PERFORM WIRE CONNECTIONS USING A 714 PUNCH-ON TOOL IN LIEU OF SOLDERING?	15.2	8.7	.0	6.3	42.5	23.8	80.7	13.6
E	277	E3-1 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB? IF NO, GO TO ITEM F1-1; IF YES, CONTINUE.	78.8	67.7	69.0	81.3	73.6	81.0	77.2	90.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
E	278	E3-2 DO YOU ADJUST RELAYS?	36.4	39.1	.0	68.8	77.4	76.2	68.4	68.2
E	279	E3-3 DO YOU CLEAN RELAYS?	75.8	55.3	.0	75.0	80.2	81.0	78.9	90.9
E	280	E3-4 DO YOU INSPECT RELAYS?	75.8	61.5	27.6	81.3	81.1	81.0	79.8	93.2
E	281	E3-5 DO YOU TROUBLESHOOT RELAYS?	72.7	60.9	65.5	81.3	80.2	81.0	75.4	93.2
E	282	E3-6 DO YOU MONITOR BIAS OUTPUT ON RELAYS?	22.7	15.5	3.4	12.5	29.2	23.8	12.3	29.5
E	283	E3-7 DO YOU REMOVE OR REPLACE RELAYS?	74.2	64.0	24.1	81.3	76.4	81.0	80.3	90.9
E	284	E3-8 DO YOU PERFORM TASKS ON CONTACTS OF RELAYS?	68.2	51.6	10.3	81.3	81.1	81.0	76.2	93.2
E	285	E3-9 DO YOU PERFORM TASKS ON CORES OF RELAYS?	21.2	18.6	3.4	31.3	52.8	33.3	8.8	40.9
E	286	E3-10 DO YOU PERFORM TASKS ON COILS OF RELAYS?	31.8	28.6	3.4	43.8	56.6	38.1	11.4	61.4
E	287	E3-11 DO YOU PERFORM TASKS ON ARMATURES OF RELAYS?	54.5	46.0	3.4	68.8	78.3	52.4	36.8	72.7
E	288	E3-12 DO YOU PERFORM TASKS ON SPRINGS OF RELAYS?	57.6	45.3	3.4	68.8	82.1	61.9	54.4	77.3
E	289	E3-13 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS?	63.6	45.3	51.7	81.3	57.5	52.4	44.7	90.9
E	290	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS?	63.6	44.7	51.7	81.3	57.5	52.4	45.6	90.9
E	291	E3-15 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS?	50.0	33.5	48.3	81.3	50.0	42.9	46.5	88.6
E	292	E3-16 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS?	51.5	33.5	48.3	81.3	48.1	38.1	43.9	88.6
E	293	E3-17 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS?	51.5	34.8	34.5	81.3	68.9	47.6	48.2	84.1
E	294	E3-18 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE?	50.0	47.2	10.3	68.8	66.0	57.1	31.6	88.6

F MICROPHONES AND SENSING DEVICES (F1), SPEAKERS (F2), OSCILLOSCOPES (F3)

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
F	295	F1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES OR OTHER SENSING DEVICES SUCH AS TRANSDUCERS? IF NO, GO TO ITEM F2-1; IF YES, CONTINUE.	6.1	6.2	13.8	31.3	7.5	66.7	20.2	75.0
F	296	F1-2 DO YOU INSPECT MICROPHONES?	1.5	3.7	.0	12.5	7.5	61.9	14.9	68.2
F	297	F1-3 DO YOU CLEAN MICROPHONES?	.0	3.7	.0	12.5	6.6	52.4	12.3	40.9
F	298	F1-4 DO YOU OPERATE MICROPHONES?	3.0	4.3	13.8	12.5	7.5	57.1	15.8	63.6
F	299	F1-5 DO YOU TROUBLESHOOT MICROPHONES WIRE CONNECTIONS?	1.5	3.7	.0	12.5	8.5	57.1	15.8	65.9
F	300	F1-6 DO YOU TROUBLESHOOT MICROPHONE COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	1.5	3.1	.0	6.3	4.7	23.8	4.4	38.6
F	301	F1-7 DO YOU REMOVE AND REPLACE COMPLETE MICROPHONES?	1.5	3.7	.0	18.8	6.6	66.7	16.7	63.6
F	302	F1-8 DO YOU REMOVE OR REPLACE MICROPHONE COMPONENT PARTS?	1.5	3.7	.0	12.5	5.7	19.0	4.4	40.9
F	303	F1-9 DO YOU PERFORM TASKS ON CARBON MICROPHONES?	1.5	2.5	3.4	.0	8.5	66.7	15.8	18.2
F	304	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES?	1.5	1.9	.0	.0	3.8	19.0	1.8	13.6
F	305	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES?	.0	1.9	.0	.0	2.8	4.8	.9	36.4
F	306	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES?	1.5	1.9	3.4	6.3	2.8	28.6	.9	36.4
F	307	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES?	.0	.0	.0	.0	1.9	.0	.9	6.8
F	308	F1-14 DO YOU PERFORM TASKS ON TRANSDUCERS?	.0	1.2	.0	18.8	2.8	4.8	3.5	72.7
F	309	F2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS? IF NO, GO TO ITEM F3-1; IF YES, CONTINUE.	27.3	5.0	6.9	18.8	11.3	81.0	57.9	72.7
F	310	F2-2 DO YOU INSPECT SPEAKERS?	25.8	4.3	.0	18.8	10.4	81.0	52.6	70.5
F	311	F2-3 DO YOU CLEAN SPEAKERS?	22.7	4.3	.0	12.5	7.5	66.7	38.6	40.9
F	312	F2-4 DO YOU OPERATE SPEAKERS?	21.2	3.7	6.9	12.5	9.4	76.2	51.8	59.1
F	313	F2-5 DO YOU TROUBLESHOOT SPEAKER WIRE CONNECTIONS?	25.8	4.3	.0	18.8	8.5	76.2	53.5	70.5
F	314	F2-6 DO YOU TROUBLESHOOT SPEAKER COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	16.7	2.5	.0	.0	1.9	66.7	21.9	31.8
F	315	F2-7 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS?	25.8	4.3	.0	18.8	8.5	81.0	52.6	68.2
F	316	F2-8 DO YOU REMOVE OR REPLACE SPEAKER PARTS?	13.6	3.1	.0	.0	1.9	52.4	18.4	13.6
F	317	F2-9 DO YOU PERFORM ANY TASKS ON CONE SPEAKER PARTS?	3.0	1.9	.0	.0	1.9	9.5	2.6	15.9
F	318	F2-10 DO YOU PERFORM ANY TASKS ON SPIDER SPEAKER PARTS?	.0	1.2	.0	.0	1.9	9.5	.9	9.1
F	319	F2-11 DO YOU PERFORM ANY TASKS ON FIELD COIL SPEAKER PARTS?	.0	1.2	.0	.0	1.9	14.3	.9	15.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
F	320	F2-12 DO YOU PERFORM ANY TASKS ON VOICE COIL SPEAKER PARTS?	.0	1.2	.0	.0	2.8	14.3	3.5	15.9
F	321	F2-13 DO YOU PERFORM ANY TASKS ON PERMANENT MAGNET SPEAKER PARTS?	4.5	1.2	.0	.0	1.9	9.5	1.8	15.9
F	322	F2-14 DO YOU PERFORM ANY TASKS ON ELECTROMAGNET SPEAKER PARTS?	.0	1.9	.0	.0	1.9	14.3	.9	13.6
F	323	F2-15 DO YOU PERFORM ANY TASKS ON SOFT IRON CORE SPEAKER PARTS?	1.5	1.9	.0	.0	1.9	4.8	.9	9.1
F	324	F3-1 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G1-1; IF YES, CONTINUE.	89.4	78.3	.0	81.3	37.7	71.4	7.9	95.5
F	325	F3-2 DO YOU PERFORM OPERATIONAL CHECKS USING OSCILLOSCOPES?	86.4	69.6	.0	81.3	32.1	57.1	6.1	93.2
F	326	F3-3 DO YOU PERFORM ALIGNMENTS OR ADJUSTMENTS USING OSCILLOSCOPES?	80.3	65.8	.0	68.8	31.1	52.4	5.3	88.6
F	327	F3-4 DO YOU TROUBLESHOOT ELECTRONIC CIRCUITS USING OSCILLOSCOPES?	80.3	76.4	.0	81.3	31.1	61.9	4.4	86.4
F	328	F3-5 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCIES?	69.7	48.4	.0	75.0	32.1	61.9	6.1	90.9
F	329	F3-6 DO YOU USE OSCILLOSCOPES TO MEASURE TIME?	68.2	39.1	.0	61.3	17.9	42.9	.0	93.2
F	330	F3-7 DO YOU USE OSCILLOSCOPES TO OBSERVE LISSAJOUS PATTERNS?	59.1	10.6	.0	18.8	6.6	9.5	.0	27.3
F	331	F3-8 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES.	57.6	46.0	.0	31.3	15.1	23.8	.9	84.1
F	332	F3-9 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS?	42.4	26.7	.0	37.5	15.1	14.3	.0	54.5
F	333	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGES?	80.3	71.4	.0	81.3	19.8	61.9	3.5	93.2
F	334	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGES?	86.4	77.0	.0	75.0	28.3	61.9	3.5	93.2
F	335	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS?	36.4	32.9	.0	43.8	17.0	38.1	4.4	75.0
F	336	F3-13 DO YOU USE OSCILLOSCOPES TO OBSERVE DATA PATTERNS?	86.4	62.7	.0	62.5	19.8	19.0	1.8	68.2
F	337	F3-14 DO YOU USE OSCILLOSCOPES TO MEASURE RIPPLE VOLTAGES?	86.4	44.7	.0	81.3	13.2	42.9	.9	79.5
F	338	F3-15 DO YOU USE OSCILLOSCOPES TO MEASURE PHASE JITTERS?	22.7	12.4	.0	18.8	13.2	14.3	.0	43.2

O TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
F 339	F3-16 DO YOU USE OSCILLOSCOPES TO DISPLAY SWEEP GENERATOR PATTERNS?	42.4	31.1	.0	25.0	12.3	9.5	.9	77.3
F 340	F3-17 DO YOU USE OSCILLOSCOPES TO OBSERVE PHASE RELATIONSHIPS?	69.7	37.3	.0	43.8	15.1	14.3	2.6	88.6
F 341	F3-18 DO YOU USE OSCILLOSCOPES TO OBSERVE SAMPLING DISPLAYS?	37.9	21.7	.0	31.3	12.3	33.3	.9	65.9
G	SEMICONDUCTOR DIODES (G1), TRANSISTORS (G2), TRANSISTOR AMPLIFIERS (G3)								
G 342	G1-1 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G2-1; IF YES, CONTINUE.	81.8	70.2	3.4	75.0	47.2	66.7	11.4	93.2
G 343	G1-2 DO YOU INSPECT DIODES?	77.3	67.1	.0	75.0	39.6	66.7	9.6	93.2
G 344	G1-3 DO YOU CHECK DIODES?	77.3	68.9	.0	68.8	43.4	61.9	9.6	90.9
G 345	G1-4 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES?	12.1	8.1	.0	6.3	2.8	4.8	.0	18.2
G 346	G1-5 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE?	28.8	13.7	.0	12.5	9.4	19.0	.9	47.7
G 347	G1-6 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES?	28.8	14.3	.0	25.0	8.5	9.5	.0	43.2
G 348	G1-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES?	53.0	39.8	3.4	43.8	24.5	23.8	3.5	72.7
G 349	G1-8 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE?	68.2	56.5	.0	43.8	34.0	47.6	8.8	88.6
G 350	G1-9 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW?	18.2	9.9	.0	12.5	5.7	14.3	.0	29.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	351	G1-10 DO YOU MEASURE FORWARD BIAS RESISTANCE?	57.6	46.0	.0	56.3	18.9	23.8	1.8	79.5
G	352	G1-11 DO YOU MEASURE REVERSE BIAS RESISTANCE?	56.1	46.0	.0	56.3	17.9	23.8	1.8	79.5
G	353	G1-12 DO YOU READ DIODE COLOR CODING?	31.8	17.4	.0	37.5	8.5	9.5	.9	18.2
G	354	G1-13 DO YOU READ DIODE NUMBERING SYSTEM, SUCH AS IN 516?	54.5	46.0	.0	62.5	17.0	42.9	7.6	81.8
G	355	G1-14 DO YOU USE THE SYMBOL ON DIODE WHICH INDICATES THE CATHODE END?	81.8	63.4	.0	68.8	29.2	52.4	7.1	93.2
G	356	G1-15 DO YOU DETERMINE DIRECTION OF CURRENT THROUGH A DIODE?	81.8	65.2	3.4	50.0	41.5	52.4	9.6	93.2
G	357	G1-16 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON?	16.7	6.8	.0	25.0	5.7	19.0	.0	63.6
G	358	G1-17 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OR RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)?	37.7	18.6	3.4	18.8	13.2	14.3	.0	68.2
G	359	G1-18 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)?	22.7	12.4	.0	6.3	9.4	28.6	2.6	54.5
G	360	G1-19 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS?	51.5	40.4	.0	18.8	18.9	28.6	5.3	81.8
G	361	G1-20 DO YOU NEED AN UNDERSTANDING OF VALENCE BAND IN SEMICONDUCTOR MATERIALS?	6.1	11.8	.0	12.5	6.6	4.8	.9	40.9
G	362	G1-21 DO YOU NEED AN UNDERSTANDING OF FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS?	3.0	9.9	.0	12.5	5.7	4.8	.9	27.3
	363	G1-22 DO YOU NEED AN UNDERSTANDING OF CONDUCTION BAND IN SEMICONDUCTOR MATERIALS?	6.1	11.2	.0	12.5	6.6	4.8	.9	45.5
G	364	G1-23 DO YOU NEED AN UNDERSTANDING OF CONVALENT BONDING IN SEMICONDUCTOR MATERIALS?	4.5	10.6	.0	12.5	6.6	4.8	.9	27.3
G	365	G1-24 DO YOU NEED AN UNDERSTANDING OF ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS?	6.1	10.6	.0	18.8	6.6	4.8	.9	45.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	366	G1-25 DO YOU NEED AN UNDERSTANDING OF ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS?	21.2	18.0	.0	18.8	9.4	9.5	1.8	56.8
G	367	G1-26 DO YOU NEED AN UNDERSTANDING OF DONOR IMPURITY IN SEMICONDUCTORS?	7.6	10.6	.0	12.5	5.7	4.8	.9	31.8
G	368	G1-27 DO YOU NEED AN UNDERSTANDING OF ACCEPTOR IMPURITY IN SEMICONDUCTORS?	4.5	9.9	.0	18.8	5.7	4.8	.9	31.8
G	369	G1-28 DO YOU NEED AN UNDERSTANDING OF P-TYPE SEMICONDUCTOR MATERIAL?	45.5	24.8	.0	31.3	11.3	23.8	3.5	72.7
G	370	G1-29 DO YOU NEED AN UNDERSTANDING OF N-TYPE SEMICONDUCTOR MATERIAL?	47.0	24.8	.0	25.0	11.3	23.8	3.5	72.7
G	371	G1-30 DO YOU NEED AN UNDERSTANDING OF MAJORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.3	.0	12.5	5.7	4.8	.9	43.2
G	372	G1-31 DO YOU NEED AN UNDERSTANDING OF MINORITY CARRIERS IN SEMICONDUCTORS?	16.7	14.9	.0	12.5	5.7	4.8	.9	43.2
G	373	G1-32 DO YOU NEED AN UNDERSTANDING OF JUNCTION RECOMBINATION IN SEMICONDUCTORS?	7.6	11.2	.0	18.8	6.6	4.8	.9	38.6
G	374	G1-33 DO YOU NEED AN UNDERSTANDING OF DEPLETION REGION IN SEMICONDUCTORS?	6.1	12.4	.0	12.5	7.5	4.8	.9	50.0
G	375	G1-34 DO YOU NEED AN UNDERSTANDING OF RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL?	9.1	13.7	.0	12.5	7.5	4.8	.9	47.7
G	376	G1-35 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES?	28.8	17.4	.0	18.8	4.7	4.8	1.8	45.5
G	377	G1-36 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS?	7.6	6.2	.0	.0	5.7	4.8	.9	20.5
G	378	G1-37 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION?	31.8	20.5	.0	25.0	6.6	28.6	.9	81.8
G	379	G1-38 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS?	15.2	14.3	.0	12.5	4.7	.0	.0	70.5
G	380	G1-39 DO YOU USE OR REFER TO PEAK RECUPRENT FORWARD CURRENT DIODE RATINGS?	9.1	12.4	.0	6.3	4.7	.0	.0	52.3

O	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	381	G1-40 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS?	16.7	11.8	3.4	12.5	4.7	.0	.0	54.5
G	382	G1-41 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS?	19.7	15.5	.0	18.8	4.7	4.8	.0	72.7
G	383	G2-1 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM G2-1; IF YES, CONTINUE.	84.8	80.1	6.9	75.0	30.2	71.4	19.3	95.5
G	384	G2-2 DO YOU INSPECT TRANSISTORS?	83.3	76.4	3.4	75.0	26.4	71.4	14.0	93.2
G	385	G2-3 DO YOU CHECK TRANSISTORS?	83.3	78.9	3.4	62.5	24.5	71.4	16.7	93.2
G	386	G2-4 DO YOU NEED AN UNDERSTANDING OF EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS?	75.8	65.2	3.4	43.8	23.6	47.6	7.0	90.9
G	387	G2-5 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND RESISTANCE MEASUREMENTS?	74.2	66.5	3.4	62.5	19.8	47.6	7.9	86.4
G	388	G2-6 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS?	74.2	67.1	3.4	62.5	20.8	47.6	7.9	86.4
G	389	G2-7 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION?	51.5	32.3	3.4	31.3	11.3	28.6	3.5	70.5
G	390	G2-8 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION?	48.5	32.3	3.4	31.3	11.3	23.8	3.5	65.9
G	391	G2-9 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE, AND EMITTER)?	54.5	39.1	3.4	43.8	13.2	47.6	4.4	81.8
G	392	G2-10 DO YOU USE OR REFER TO LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR?	19.7	28.6	.0	18.8	5.7	14.3	2.6	52.3
G	393	G2-11 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS?	86.4	77.0	6.9	81.3	22.6	61.9	13.2	95.5
G	394	G2-12 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, A2, A3, ETC.?	84.8	77.0	3.4	75.0	20.8	61.9	11.4	93.2
G	395	G2-13 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION?	59.1	44.7	.0	18.8	11.3	38.1	3.5	95.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	396	G2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR CASE CURRENT I(SUB E) IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT I(SUB E) USUALLY I(SUB E) BEING 2 TO 8 PERCENT OF I(SUB E)?	36.4	34.2	.0	18.8	5.7	19.0	.9	68.2
G	397	G2-15 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS?	50.0	50.3	.0	31.3	8.5	19.0	5.3	84.1
G	398	G2-16 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES?	15.2	20.5	.0	12.5	5.7	14.3	1.8	52.3
G	399	G2-17 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES?	6.1	10.6	.0	18.8	.9	9.5	.9	43.2
G	400	G2-18 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS?	3.0	13.0	.0	6.3	.9	.0	1.8	20.5
G	401	G2-19 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS?	.0	12.4	.0	6.3	.9	.0	1.8	15.9
G	402	G2-20 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS?	.0	11.8	.0	6.3	.9	.0	1.8	13.6
G	403	G2-21 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCB/VBE)?	3.0	6.2	3.4	6.3	1.9	4.8	.9	22.7
G	404	G2-22 DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)?	3.0	5.0	3.4	6.3	2.8	4.8	.9	18.2
G	405	G2-23 DO YOU USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRNSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI X AV)?	4.5	5.6	3.4	6.3	1.9	4.8	.9	22.7
G	406	G2-24 DO YOU PERFORM TRANSISTOR MATCHING THROUGH THE USE OF CURVE TRACING?	.0	1.9	.0	12.5	.9	.0	.0	22.7
G	407	G3-1 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM H1-1; IF YES, CONTINUE.	48.5	24.8	.0	31.3	16.0	38.1	8.8	84.1
G	408	G3-2 DO YOU INSPECT TRANSISTOR AMPLIFIERS?	39.4	22.4	.0	31.3	11.3	47.6	6.1	84.1
G	409	G3-3 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS?	24.2	13.7	.0	25.0	12.3	42.9	7.0	65.9

ELECTRONIC PRINCIPLES INVENTORY DATA ON E-LEVELS

REPORT PAGE 351

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G 410	G3-4 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL?	45.5	19.9	.0	31.7	9.4	38.1	7.9	84.1
G 411	G3-5 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS?	43.9	21.1	.0	18.8	5.7	28.6	2.6	81.8
G 412	G3-6 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER?	36.4	18.0	.0	31.3	12.3	47.6	5.3	79.5
G 413	G3-7 DO YOU REMOVE OR REPLACE AMPLIFIER CIRCUIT COMPONENTS?	39.4	20.5	.0	18.8	3.8	23.8	1.8	81.8
G 414	G3-8 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR CURRENT RESULTS FROM A CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	15.2	14.3	.0	12.5	1.9	9.5	.9	52.3
G 415	G3-9 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO SPECIFIC CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	4.5	6.2	.0	6.3	1.9	9.5	.9	31.8
G 416	G3-10 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE RESULTS FROM A CHANGE IN BASE CURRENT?	18.2	13.7	.0	12.5	1.9	9.5	.9	61.4
G 417	G3-11 DO YOU USE OR REFER TO THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	24.2	14.3	.0	18.8	1.9	14.3	.9	59.1
G 418	G3-12 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE; THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	10.6	8.1	.0	6.3	1.9	9.5	.9	36.4
G 419	G3-13 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)?	4.5	2.5	.0	6.3	.9	.0	1.8	18.2
G 420	G3-14 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR?	12.1	6.2	.0	6.3	1.9	4.8	1.8	31.8
G 421	G3-15 DO YOU MEASURE VOLTAGE GAIN CONCERNING TRANSISTOR AMPLIFIERS?	27.3	14.9	.0	25.0	3.8	19.0	2.6	65.9
G 422	G3-16 DO YOU MEASURE CURRENT GAIN CONCERNING TRANSISTOR AMPLIFIERS?	19.7	14.9	.0	25.0	4.7	14.3	1.8	50.0
G 423	G3-17 DO YOU MEASURE POWER GAIN CONCERNING TRANSISTOR AMPLIFIERS?	16.7	10.6	.0	18.8	4.7	4.8	1.8	38.6

E	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	424	G3-18 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE CHANGE OF THE BASE COLLECTOR VOLTAGE?	10.6	5.0	.0	12.5	3.8	.0	.0	25.0
G	425	G3-19 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION?	18.2	10.6	.0	18.8	1.9	9.5	.0	45.5
G	426	G3-20 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION?	13.6	6.8	.0	18.8	1.9	9.5	.0	40.9
G	427	G3-21 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION?	16.7	9.9	.0	12.5	1.9	4.8	.0	38.6
G	428	G3-22 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION?	24.2	11.8	.0	18.8	1.9	9.5	.9	43.2
G	429	G3-23 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TRUBLESHOOTING THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION?	24.2	12.4	.0	18.8	1.9	4.8	.9	38.6
G	430	G3-24 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION?	6.1	7.5	.0	12.5	1.9	4.8	.0	38.6
G	431	G3-25 DO YOU IDENTIFY OR TROUBLESHOOT AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS?	13.6	11.2	.0	12.5	1.9	28.6	.0	56.8
G	432	G3-26 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS?	12.1	11.2	.0	6.3	2.8	23.8	.0	50.0
G	433	G3-27 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS?	9.1	6.2	.0	12.5	2.8	9.5	.0	47.7
G	434	G3-28 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS?	4.5	7.5	.0	6.3	.9	.0	.0	43.2

O	TS#	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
G	435	G3-29 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	18.2	6.2	.0	6.3	3.8	14.3	.9	34.1
G	436	G3-30 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	1.5	3.7	.0	6.3	1.9	.0	.9	40.9
G	437	G3-31 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	19.7	10.6	.0	18.8	3.8	19.0	.0	72.7
G	438	G3-32 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS?	3.0	4.3	.0	6.3	1.9	4.8	.0	31.8
G	439	G3-33 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	7.6	1.9	.0	12.5	1.9	.0	.0	40.9
G	440	G3-34 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	10.6	3.7	.0	12.5	1.9	.0	.0	56.8
G	441	G3-35 DO YOU TROUBLESHOOT OR REPAIR VOLTAGE MULTIPLIERS (DOUBLERS/TRIPLERS)?	16.7	9.3	.0	25.0	1.9	.0	.9	72.7
G	442	G3-36 DO YOU TROUBLESHOOT OR REPAIR RF AMPLIFIERS?	24.2	6.8	.0	12.5	2.8	4.8	.0	70.5
G	443	G3-37 DO YOU TROUBLESHOOT OR REPAIR WIDEBAND AMPLIFIERS (VIDEO AMPS)?	3.0	3.1	.0	.0	1.9	.0	.0	40.9
G	444	G3-38 DO YOU TROUBLESHOOT OR REPAIR AUDIO AMPLIFIERS?	15.2	5.0	.0	18.8	6.6	38.1	1.8	61.4
G	445	G3-39 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER AMPLIFIERS?	22.7	13.7	.0	18.8	2.8	23.8	.9	79.5
G	446	G3-40 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	1.5	3.7	.0	.0	1.9	.0	.0	36.4
G	447	G3-41 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY AMPLIFIERS?	3.0	4.3	.0	.0	1.9	4.8	.0	29.5
G	448	G3-42 DO YOU TROUBLESHOOT OR REPAIR IF AMPLIFIERS?	4.5	5.6	.0	12.5	2.8	.0	.0	34.1
G	449	G3-43 DO YOU TROUBLESHOOT OR REPAIR DIFFERENTIATING AMPLIFIERS (DIFF AMPS)?	24.2	3.7	.0	12.5	1.9	.0	.0	79.5
G	450	G3-44 DO YOU TROUBLESHOOT OR REPAIR OPERATIONAL AMPLIFIERS (OP AMPS)?	12.1	6.8	.0	18.8	1.9	.0	.0	81.8
G	451	G3-45 DO YOU TROUBLESHOOT OR REPAIR INTEGRATING AMPLIFIERS?	16.7	6.8	.0	18.8	1.9	.0	.0	79.5
G	452	G3-46 DO YOU TROUBLESHOOT OR REPAIR SUMMING AMPLIFIERS?	1.5	1.9	.0	.0	.9	.0	.0	45.5

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H		SOLID-STATE SPECIAL PURPOSE DEVICES (H1), POWER SUPPLIES (H2), OSCILLATORS (H3)								
H	453	H1-1 DO YOU USE OR REFER TO VARACTORS/VARICAP COMPONENTS?	7.6	9.3	.0	18.8	3.8	.0	.9	38.6
H	454	H1-2 DO YOU USE OR REFER TO TUNNEL DIODE COMPONENTS?	38.8	14.9	.0	12.5	2.8	.0	.0	61.4
H	455	H1-3 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTOR COMPONENTS?	27.7	18.0	.0	25.0	2.8	9.5	.0	95.5
H	456	H1-4 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTOR COMPONENTS?	62.1	25.5	.0	31.3	4.7	4.8	.9	93.2
H	457	H1-5 DO YOU USE OR REFER TO ZENER DIODE COMPONENTS?	86.4	75.8	24.1	81.3	17.0	61.9	25.4	93.2
H	458	H1-6 DO YOU USE OR REFER TO INTEGRATED CIRCUIT COMPONENTS?	87.9	62.7	13.8	81.3	19.8	19.0	22.8	93.2
H	459	H1-7 DO YOU USE OR REFER TO PIN DIODE COMPONENTS?	9.1	13.7	.0	6.3	5.7	4.8	3.5	34.1
H	460	H1-8 DO YOU USE OR REFER TO LED'S/LCD'S COMPONENTS?	77.3	46.6	20.7	68.8	18.9	19.0	22.8	95.5
H	461	H1-9 DO YOU USE OR REFER TO FANTAIL TRANSISTOR COMPONENTS?	7.6	7.5	.0	.0	2.8	.0	.0	20.5
H	462	H1-10 DO YOU USE OR REFER TO SILICON CONTROL RECTIFIER (SCR) COMPONENTS?	78.8	22.4	6.9	68.8	4.7	14.3	2.6	95.5
H	463	H1-11 DO YOU USE OR REFER TO TRIAC COMPONENTS?	24.2	24.2	.0	18.8	2.8	.0	.0	93.2
H	464	H1-12 DO YOU USE OR REFER TO PROGRAMMABLE UNIJUNCTION TRANSISTOR (PUT) COMPONENTS?	7.6	1.9	.0	6.3	1.9	.0	.0	86.4
H	465	H1-13 DO YOU USE OR REFER TO SILICON CONTROLLED SWITCH (SCS) COMPONENTS?	10.6	3.7	.0	6.3	1.9	.0	.0	75.0
H	466	H1-14 DO YOU USE OR REFER TO SILICON UNILATERAL SWITCH (SUS) COMPONENTS?	6.1	1.9	.0	.0	1.9	.0	.0	77.3
H	467	H2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES? IF NO, GO TO ITEM H3-1; IF YES, CONTINUE.	89.4	79.5	86.2	81.3	45.3	81.0	86.8	93.2
H	468	H2-2 DO YOU INSPECT POWER SUPPLIES?	84.8	79.5	69.0	75.0	44.3	81.0	82.5	90.9
H	469	H2-3 DO YOU CLEAN POWER SUPPLIES?	66.4	75.8	6.9	81.3	43.4	76.2	72.8	77.3
H	470	H2-4 DO YOU ALIGN OR ADJUST POWER SUPPLIES?	86.4	67.7	62.1	75.0	35.8	76.2	19.3	90.9
H	471	H2-5 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL?	86.4	75.2	55.2	62.5	35.8	81.0	57.9	90.9
H	472	H2-6 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS?	86.4	68.3	69.0	75.0	29.2	81.0	38.6	93.2
H	473	H2-7 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES?	72.7	75.8	.0	62.5	28.3	71.4	83.3	90.9
H	474	H2-8 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS?	86.4	68.3	3.4	75.0	25.5	76.2	30.7	93.2
H	475	H2-9 DO YOU INSPECT OR SERVICE COOLANT LEVELS?	6.1	4.3	6.9	12.5	9.4	19.0	3.5	40.9
H	476	H2-10 DO YOU WORK WITH HALF-WAVE RECTIFIERS?	72.7	50.9	3.4	56.3	20.8	19.0	7.0	93.2
H	477	H2-11 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS?	71.2	57.1	3.4	62.5	26.4	33.3	4.4	88.6
H	478	H2-12 DO YOU WORK WITH BRIDGE RECTIFIERS?	81.8	57.8	10.3	75.0	18.9	47.6	12.3	93.2
H	479	H2-13 DO YOU WORK WITH THREE-PHASE RECTIFIERS?	30.3	18.0	3.4	50.0	18.9	9.5	2.6	68.2
H	480	H2-14 DO YOU USE OR REFER TO INPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	81.8	68.3	37.9	81.3	34.0	66.7	27.2	93.2
H	481	H2-15 DO YOU USE OR REFER TO INPUT FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	43.9	29.8	24.1	25.0	13.2	33.3	10.5	72.7
H	482	H2-16 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	65.2	50.3	13.8	43.8	25.5	38.1	18.4	81.8
H	483	H2-17 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	66.7	52.2	17.2	50.0	30.2	23.8	26.3	70.5
H	484	H2-18 DO YOU USE OR REFER TO RIPPLE AMPLITUDE IN YOUR WORK WITH RECTIFIERS?	72.7	28.0	.0	56.3	9.4	19.0	2.6	68.2
H	485	H2-19 DO YOU USE OR REFER TO RIPPLE FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	50.0	21.7	.0	25.0	6.6	4.8	1.8	61.4

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
H	486	H2-20 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGES IN YOUR WORK WITH RECTIFIERS?	25.8	18.6	.0	18.8	8.5	4.8	2.6	70.5
H	487	H2-21 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS IN YOUR WORK WITH RECTIFIERS?	53.0	44.7	.0	31.3	5.7	33.3	3.5	84.1
H	488	H2-22 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	56.1	42.9	13.8	50.0	21.7	33.3	13.2	79.5
H	489	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS?	80.3	51.6	13.8	50.0	14.2	42.9	13.2	84.1
H	490	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS?	43.9	32.9	6.9	25.0	13.2	14.3	12.3	81.8
H	491	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS?	39.4	21.1	.0	12.5	3.8	9.5	2.6	65.9
H	492	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS?	27.3	16.1	.0	6.3	4.7	4.8	1.8	65.9
H	493	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS?	22.7	11.2	.0	12.5	2.8	4.8	1.8	52.3
H	494	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS?	31.8	11.8	.0	12.5	3.8	9.5	2.6	52.3
H	495	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER?	9.1	5.0	.0	12.5	2.8	.0	3.5	22.7
H	496	H2-30 DO YOU WORK WITH POWER SUPPLY REGULATOR CIRCUITS OTHER THAN SOLID-STATE?	25.8	24.2	.0	25.0	13.2	33.3	7.9	50.0
H	497	H2-31 DO YOU WORK WITH SOLID-STATE POWER SUPPLY REGULATOR CIRCUITS?	68.2	56.5	6.9	31.3	13.2	38.1	9.6	88.6
H	498	H3-1 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I1-1; IF YES, CONTINUE.	56.1	17.4	6.9	25.0	30.2	71.4	6.1	72.7
H	499	H3-2 DO YOU INSPECT OSCILLATORS?	45.5	16.8	3.4	6.3	17.9	66.7	2.6	75.0
H	500	H3-3 DO YOU ALIGN OR ADJUST OSCILLATORS?	42.4	12.4	.0	12.5	18.9	57.1	2.6	72.7
H	501	H3-4 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS?	42.4	13.0	.0	12.5	16.0	61.9	.9	65.9
H	502	H3-5 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS?	25.8	12.4	.0	12.5	6.6	14.3	.9	72.7
H	503	H3-6 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL?	40.9	14.9	.0	18.8	13.2	57.1	.9	72.7
H	504	H3-7 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS?	28.8	14.9	.0	.0	7.5	9.5	.0	72.7
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	27.3	8.1	3.4	6.3	6.6	14.3	.9	68.2
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	27.3	8.1	.0	12.5	8.5	23.8	.0	65.9
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	15.2	8.1	.0	.0	7.5	19.0	.0	50.0
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	21.2	9.9	.0	6.3	10.4	23.8	.9	50.0
H	509	H3-12 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT (CRYSTAL OSCILLATIONS)?	16.7	8.7	3.4	.0	1.9	.0	.0	59.1
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	10.6	8.7	.0	.0	4.7	4.8	.0	45.5
H	511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	21.2	8.7	.0	12.5	3.8	9.5	.0	59.1
H	512	H3-15 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS?	33.3	11.8	.0	12.5	3.8	19.0	.0	65.9
H	513	H3-16 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN CRYSTALS?	40.9	10.6	3.4	6.3	3.8	.0	.0	65.9
H	514	H3-17 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN PHASE LOCK LOOPS (PLL)?	10.6	4.3	.0	.0	4.7	.0	.0	34.1

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H	515	H3-18 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	12.1	5.0	3.4	6.3	11.3	33.3	.9	22.7
H	516	H3-19 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS?	10.6	3.7	.0	.0	.9	.0	.0	45.5
H	517	H3-20 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS?	16.2	4.3	.0	6.3	.9	.0	.0	50.0
H	518	H3-21 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS?	4.5	2.5	.0	.0	.9	.0	.9	22.7
H	519	H3-22 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS?	6.1	2.5	.0	.0	.9	.0	.9	20.5
H	520	H3-23 DO YOU WORK WITH VOLTAGE CONTROL SINUSOIDAL OSCILLATO	16.7	3.1	.0	12.5	.9	9.5	.0	40.9
H	521	H3-24 DO YOU WORK WITH CRYSTAL SINUSOIDAL OSCILLATORS?	34.8	8.1	.0	6.3	1.9	.0	.0	59.1
H	522	H3-25 DO YOU WORK WITH VOLTAGE CONTROL OSCILLATORS (VCO) SINUSOIDAL OSCILLATORS?	13.6	4.3	.0	12.5	.9	.0	.0	40.9
H	523	H3-26 DO YOU WORK WITH WIEN BRIDGE OSCILLATORS SINUSOIDAL OSCILLATORS?	9.1	5.0	.0	6.3	.0	.0	.0	50.0
H	524	H3-27 DO YOU WORK WITH - DON'T KNOW WHICH TYPE OF SINUSOIDAL OSCILLATOR?	16.7	8.7	3.4	6.3	14.2	28.6	.9	29.5
H	525	H3-28 DO YOU WORK WITH PULSE GENERATING CIRCUITS?	31.8	15.5	3.4	6.3	10.4	4.8	.0	65.9
H	526	H3-29 DO YOU WORK WITH BLOCKING OSCILLATORS?	3.0	3.7	.0	6.3	1.9	.0	.0	43.2
H	527	H3-30 DO YOU WORK WITH BURST GENERATORS?	3.0	2.5	.0	6.3	1.9	.0	.0	34.1
H	528	H3-31 DO YOU WORK WITH BLOCKED OSCILLATORS?	1.5	1.9	.0	6.3	.9	.0	.0	22.7
I		MULTIVIBRATORS (I1), LIMITERS AND CLAMPERS (I2), ELECTRON TUBES (I3)								
I	529	I1-1 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I2-1; IF YES, CONTINUE.	65.2	24.2	.0	6.3	1.9	9.5	.9	84.1
I	530	I1-2 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUIT FREQUENCY DETERMINING DEVICES (FDD)?	21.2	12.4	.0	.0	.0	4.8	.0	65.9
I	531	I1-3 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORK FREQUENCY DETERMINING DEVICES (FDD)?	43.9	18.0	.0	6.3	.9	9.5	.9	68.2
I	532	I1-4 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTAL FREQUENCY DETERMINING DEVICES (FDD)?	36.4	13.0	.0	.0	.0	.0	.0	70.5
I	533	I1-5 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	15.2	6.8	.0	.0	1.9	.0	.0	29.5
I	534	I1-6 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS?	60.6	21.1	.0	6.3	1.9	4.8	.9	81.8
I	535	I1-7 DO YOU WORK WITH MONOSTABLE (ONE SHOT) MULTIVIBRATORS?	63.6	23.6	.0	6.3	.9	4.8	.9	79.5
I	536	I1-8 DO YOU WORK WITH BISTABLE (FLIP FLOP) MULTIVIBRATORS?	68.2	24.8	.0	6.3	.9	4.8	.0	79.5
I	537	I1-9 DO YOU WORK WITH R-S FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	16.7	9.3	.0	6.3	.9	4.8	.0	63.6
I	538	I1-10 DO YOU WORK WITH J-K FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	65.2	21.1	.0	6.3	.9	4.8	.0	81.8
I	539	I1-11 DO YOU WORK WITH "D" FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	19.7	6.2	.0	6.3	.9	4.8	.0	43.2
I	540	I2-1 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I3-1; IF YES, CONTINUE.	21.2	16.1	3.4	6.3	1.9	4.8	.9	72.7
I	541	I2-2 DO YOU WORK WITH SERIES DIODE LIMITERS?	9.1	11.2	.0	.0	.9	.0	.0	68.2

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I	542	I2-3 DO YOU WORK WITH SHUNT DIODE LIMITERS?	9.1	12.4	3.4	.0	.9	.0	.0	68.2
I	543	I2-4 DO YOU WORK WITH LIMITERS WITH BIAS?	7.6	10.6	.0	.0	.9	.0	.0	54.5
I	544	I2-5 DO YOU WORK WITH ZENER DIODE LIMITERS?	16.7	14.9	3.4	6.3	1.9	4.8	.0	75.0
I	545	I2-6 DO YOU WORK WITH TRANSISTOR LIMITERS?	15.2	11.8	3.4	.0	.9	4.8	.0	65.9
I	546	I2-7 DO YOU WORK WITH TRIODE LIMITERS?	7.0	3.1	.0	.0	.9	.0	.0	34.1
I	547	I2-8 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS?	19.7	8.7	.0	.0	.0	.0	.0	61.4
I	548	I2-9 DO YOU WORK WITH BIAS DIODE CLAMPING CIRCUITS?	13.6	6.2	.0	.0	.9	.0	.0	56.8
I	549	I2-10 DO YOU WORK WITH DC RESTORERS?	4.5	4.3	.0	.0	1.9	.0	.0	31.8
I	550	I3-1 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS BASIC ELECTRON TUBES (FOR PURPOSES OF THIS QUESTION DO NOT CONSIDER HIGH-FREQUENCY DEVICES SUCH AS KLYSTRONS, TRAVELING WAVE TUBES, BACKWARD WAVE OSCILLATORS, OR MAGNETRONS AS ELECTRON TUBES)? IF NO, GO TO ITEM J1-1; IF YES, CONTINUE.	7.0	11.2	.0	56.3	7.5	4.8	2.6	52.3
I	551	I3-2 DO YOU CHECK THE CONDITION OF ELECTRON TUBES?	1.5	11.2	.0	62.5	5.7	.0	.9	43.2
I	552	I3-3 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES?	1.5	3.1	.0	43.8	4.7	.0	.0	40.9
I	553	I3-4 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES?	4.5	5.0	.0	62.5	3.8	4.8	.9	50.0
I	554	I3-5 DO YOU USE SCOPES TO CHECK ELECTRON TUBES?	4.5	6.2	.0	25.0	1.9	4.8	.0	50.0
I	555	I3-6 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES?	6.1	10.6	.0	43.8	2.8	.0	1.8	40.9
I	556	I3-7 DO YOU USE OR REFER TO CUTOFF?	.0	6.2	.0	18.8	2.8	.0	1.8	38.6
I	557	I3-8 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING?	1.5	2.5	.0	18.8	3.8	.0	1.8	31.8
I	558	I3-9 DO YOU USE OR REFER TO PEAK CURRENT RATING?	1.5	3.7	.0	18.8	2.8	4.8	1.8	29.5
I	559	I3-10 DO YOU USE OR REFER TO TRANSIT TIME?	.0	1.9	.0	18.8	1.9	.0	1.8	20.5
I	560	I3-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING?	.0	1.9	.0	6.3	3.8	.0	1.8	20.5
I	561	I3-12 DO YOU USE OR REFER TO SATURATION?	1.5	5.0	.0	18.8	4.7	.0	.9	38.6
I	562	I3-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE?	.0	2.5	.0	6.3	2.8	.0	.9	25.0
I	563	I3-14 DO YOU USE OR REFER TO PLATE VOLTAGE?	.0	5.0	.0	50.0	4.7	.0	.9	47.7
I	564	I3-15 DO YOU USE OR REFER TO PLATE CURRENT?	.0	4.3	.0	18.8	1.9	.0	.9	38.6
I	565	I3-16 DO YOU USE OR REFER TO GRID VOLTAGE?	.0	5.6	.0	56.3	4.7	.0	1.8	47.7
I	566	I3-17 DO YOU USE OR REFER TO GRID CURRENT?	.0	5.0	.0	25.0	1.9	.0	.9	38.6
I	567	I3-18 DO YOU USE OR REFER TO CATHODE VOLTAGE?	.0	5.6	.0	62.5	4.7	.0	.9	47.7
I	568	I3-19 DO YOU USE OR REFER TO CATHODE CURRENT?	.0	5.0	.0	25.0	3.8	.0	.9	40.9
I	569	I3-20 DO YOU USE OR REFER TO FILAMENT VOLTAGE?	.0	5.0	.0	56.3	2.8	.0	.9	50.0
I	570	I3-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODE IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)?	.0	1.2	.0	6.3	.9	.0	.0	20.5
I	571	I3-22 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC.) AMPLIFICATION FACTORS?	.0	1.2	.0	.0	1.9	.0	1.8	25.0
I	572	I3-23 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)?	.0	.6	.0	.0	.9	.0	1.8	13.6
I	573	I3-24 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE?	.0	1.2	.0	.0	.9	.0	1.8	11.4
I	574	I3-25 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE?	.0	1.9	.0	.0	.9	.0	1.8	15.9
I	575	I3-26 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES?	.0	1.2	.0	6.3	.9	.0	1.8	20.5
I	576	I3-27 DO YOU USE OR REFER TO PLATE VOLTAGE FOR A SPECIFIED BIAS?	.0	4.3	.0	37.5	1.9	.0	.9	36.4

D	TSK	TITLES	304 51 (M)	306 52 (M)	316 50F (M)	716 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
I	577	I3-28 DO YOU USE OR REFER TO PLATE CURRENT FOR A SPECIFIED BIAS?	.0	3.7	.0	12.5	1.9	.0	.0	29.5
I	578	I3-29 DO YOU USE OR REFER TO BIAS REQUIRED FOR CUTOFF?	1.5	5.0	.0	12.5	.9	4.8	.0	40.9
I	579	I3-30 DO YOU USE OR REFER TO BIAS REQUIRED FOR SATURATION?	1.5	5.0	.0	12.5	1.9	4.8	.0	40.9
I	580	I3-31 DO YOU USE OR REFER TO GAIN?	.0	3.1	.0	43.8	.9	4.8	.0	36.4
I	581	I3-32 DO YOU USE OR REFER TO EFFICIENCY?	.0	2.5	.0	6.3	.9	4.8	.0	29.5
I	582	I3-33 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	1.5	4.3	.0	43.8	2.8	4.8	.9	38.6
I	583	I3-34 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	1.5	5.0	.0	37.5	.0	4.8	.9	43.2
I	584	I3-35 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	.0	1.2	.0	18.8	.9	.0	.9	15.9
I	585	I3-36 DO YOU USE OR REFER TO TUBE SOCKET NOTATION?	1.5	5.6	.0	50.0	2.8	.0	.0	47.2
I	586	I3-37 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS?	3.0	8.1	.0	56.3	6.6	.0	.0	47.7
I	587	I3-38 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS?	.0	3.1	.0	18.8	3.8	.0	.0	45.5
I	588	I3-39 DO YOU USE OR REFER TO ELECTRON TUBE DIODES?	1.5	1.9	.0	12.5	2.8	.0	.0	36.4
J		ELECTRON TUBE AMPLIFIERS AND CIRCUITS (J1), SPECIAL PURPOSE ELECTRON TUBES (J2), HETERODYNING AND MODULATION - DEMODULATION (MODEMS) (J3)								
J	589	J1-1 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM J2-1; IF YES, CONTINUE.	1.5	3.1	.0	6.3	3.8	.0	.9	31.8
J	590	J1-2 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	.0	1.2	.0	.0	.9	.0	.0	15.9
J	591	J1-3 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.0	18.2
J	592	J1-4 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	.0	1.2	.0	.0	.9	.0	.0	27.3
J	593	J1-5 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.0	20.5
J	594	J1-6 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	.0	.6	.0	.0	.9	.0	.9	20.5
J	595	J1-7 DO YOU TROUBLESHOOT OR REPAIR - DON'T KNOW WHICH TYPE OF AMPLIFIER?	.0	1.2	.0	6.3	2.8	.0	.0	6.8
J	596	J2-1 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)?	1.5	2.5	.0	25.0	3.8	.0	.9	43.2
J	597	J2-2 DO YOU WORK WITH CATHODE-RAY TUBES (CRT)?	10.6	26.1	6.9	18.8	6.6	4.8	2.6	79.5
J	598	J2-3 DO YOU WORK WITH BEAM POWER TUBES?	1.5	1.2	.0	.0	1.9	.0	.0	38.6
J	599	J2-4 DO YOU WORK WITH THYRATRONS?	1.5	1.9	.0	6.3	.0	.0	.0	31.8
J	600	J2-5 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)?	4.5	13.7	.0	6.3	2.8	4.8	.9	50.0
J	601	J2-6 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	6.1	10.6	.0	18.8	1.9	.0	.9	52.3

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 30F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
J	602	J2-7 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	4.5	9.3	.0	6.3	1.9	.0	.9	38.6
J	603	J2-8 DO YOU USE OR REFER TO PHOSPHOR SCREENS CONCERNING CRT'S?	6.1	13.7	3.4	6.3	1.9	4.8	.0	72.7
J	604	J2-9 DO YOU USE OR REFER TO AQUADAG COATINGS CONCERNING CRT'S?	1.5	1.9	.0	.0	.9	.0	.0	29.5
J	605	J2-10 DO YOU USE OR REFER TO ELECTRON OPTICS CONCERNING CRT'S?	1.5	3.1	.0	6.3	1.9	.0	.0	38.6
J	606	J2-11 DO YOU USE OR REFER TO PERSISTENCE CONCERNING CRT'S?	1.5	1.9	.0	.0	2.8	.0	.0	25.0
J	607	J2-12 DO YOU USE OR REFER TO DECAY TIMES CONCERNING CRT'S?	.0	3.1	.0	.0	1.9	.0	.0	36.4
J	608	J2-13 DO YOU USE OR REFER TO FLOURESCENCE CONCERNING CRT'S?	1.5	5.0	3.4	6.3	1.9	.0	.0	56.8
J	609	J2-14 DO YOU USE OR REFER TO PHOSPHORESCENCE CONCERNING CRT'S?	3.0	5.6	.0	.0	1.9	.0	.0	54.5
J	610	J2-15 DO YOU USE OR REFER TO SHADOW MASK CONCERNING CRT'S?	1.5	3.1	.0	.0	1.9	.0	.0	25.0
J	611	J3-1 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K1-1; IF YES, CONTINUE.	72.7	36.0	10.3	.0	26.4	23.6	22.8	18.2
J	612	J3-2 DO YOU PERFORM TASKS ON FREQUENCY CONVERTER SYSTEMS STAGES?	16.7	9.3	3.4	.0	7.5	.0	.0	13.6
J	613	J3-3 DO YOU PERFORM TASKS ON FREQUENCY MIXER SYSTEMS STAGES?	13.6	3.1	3.4	.0	3.8	.0	.9	13.6
J	614	J3-4 DO YOU PERFORM TASKS ON MODEM SYSTEMS STAGES?	68.2	14.3	3.4	.0	15.1	.0	11.4	11.4
J	615	J3-5 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS?	6.1	.6	.0	.0	.9	.0	.0	11.4
J	616	J3-6 DO YOU PERFORM TASKS ON REACTANCE MODULATOR SYSTEM STAGES?	4.5	.0	3.4	.0	.9	.0	.0	11.4
J	617	J3-7 DO YOU PERFORM TASKS ON MODULATED OSCILLATOR SYSTEM STAGES?	27.3	1.9	3.4	.0	2.8	4.8	.0	13.6
K		AM SYSTEMS (K1), FM SYSTEMS (K2), NUMBERING SYSTEMS (K3)								
K	618	K1-1 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K2-1; IF YES, CONTINUE.	4.5	2.5	3.4	.0	1.9	.0	1.8	9.1
K	619	K1-2 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	3.4	.0	.9	.0	.9	9.1
K	620	K1-3 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.0	.0	.9	6.8
K	621	K1-4 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.9	9.1
K	622	K1-5 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	3.4	.0	.9	.0	.9	9.1
K	623	K1-6 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	.0	.0	.9	.0	.0	6.8
K	624	K1-7 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.9	9.1
K	625	K1-8 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	.0	.0	.9	.0	.0	6.8
K	626	K1-9 DO YOU PERFORM TASKS ON RF OSCILLATORS/SYNTHESIZERS?	1.5	.6	.0	.0	.9	.0	.0	6.8
K	627	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	1.5	.6	.0	.0	.9	.0	.0	9.1
K	628	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	1.5	1.2	.0	.0	.0	.0	.0	9.1
K	629	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	1.5	.6	.0	.0	.0	.0	.0	9.1

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
K 630	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS?	1.5	.6	.0	.0	.9	.0	.0	6.8
K 631	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	.0	.6	.0	.0	.0	.0	.0	6.8
K 632	K1-15 DO YOU PERFORM TASKS ON DETECTORS?	1.5	.6	.0	.0	.0	.0	.0	9.1
K 633	K1-16 DO YOU PERFORM TASKS ON MIXER AMPLIFIERS?	1.5	.6	.0	.0	.9	.0	.0	6.8
K 634	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS?	.0	1.9	.0	.0	1.9	.0	.9	6.8
K 635	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS?	.0	1.9	.0	.0	.9	.0	.0	6.8
K 636	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS?	.0	1.2	.0	.0	.9	.0	.0	6.8
K 637	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS?	1.5	1.9	.0	.0	.0	.0	.0	6.8
K 638	K2-1 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K3-1; IF YES, CONTINUE.	7.6	1.2	3.4	.0	3.8	.0	1.6	6.8
K 639	K2-2 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	3.4	.0	.9	.0	.9	9.1
K 640	K2-3 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	.0	.0	.9	.0	.9	6.8
K 641	K2-4 DO YOU ALIGN TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	.0	.0	.9	.0	.9	9.1
K 642	K2-5 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	3.4	.0	.9	.0	1.6	9.1
K 643	K2-6 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS?	1.5	.6	3.4	.0	.9	.0	.0	6.8
K 644	K2-7 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	.0	.0	.9	.0	.9	9.1
K 645	K2-8 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS?	3.0	.6	.0	.0	.9	.0	.0	6.8
K 646	K2-9 DO YOU PERFORM LINK PERFORMANCE ASSESSMENTS?	3.0	.6	.0	.0	.9	.0	.0	2.3
K 647	K2-10 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	4.5	.6	.0	.0	1.9	.0	.0	11.4
K 648	K2-11 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS?	4.5	.6	.0	.0	1.9	.0	.0	9.1
K 649	K2-12 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8
K 650	K2-13 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	4.5	.6	.0	.0	1.9	.0	.0	6.8
K 651	K2-14 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	9.1
K 652	K2-15 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8
K 653	K2-16 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	1.5	.6	.0	.0	1.9	.0	.0	6.8
K 654	K2-17 DO YOU PERFORM TASKS ON LIMITERS?	1.5	.6	.0	.0	.9	.0	.0	9.1
K 655	K2-18 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS?	1.5	.6	.0	.0	.9	.0	.9	6.8
K 656	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS?	3.0	.6	.0	.0	.9	.0	.9	9.1
K 657	K2-20 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS?	3.0	.6	.0	.0	1.9	.0	.9	9.1
K 658	K2-21 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSCEIVERS?	1.5	.6	.0	.0	.9	.0	.0	9.1
K 659	K2-22 DO YOU PLOT RECEIVE SIGNAL LEVEL CURVES (RSL)?	1.5	.6	.0	.0	.9	.0	.0	2.3
K 660	K3-1 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS?	31.9	6.8	44.8	50.0	4.7	.0	.9	40.9
K 661	K3-2 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS?	48.5	13.7	13.8	62.5	6.6	9.5	2.6	61.4
K 662	K3-3 DO YOU CONVERT DECIMAL NUMBERS TO HEXADECIMAL (BASE 16) NUMBERS?	18.7	5.6	3.4	50.0	5.7	.0	.9	36.4
K 663	K3-4 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS?	37.3	6.2	51.7	50.0	2.8	4.8	.9	40.9
K 664	K3-5 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS?	30.3	6.2	10.3	43.8	2.8	.0	.9	43.2

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
K	665	K3-6 DO YOU CONVERT OCTAL NUMBERS TO HEXADECIMAL NUMBERS?	12.1	5.0	.0	50.0	1.9	.0	.0	36.4
K	666	K3-7 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS?	53.0	13.7	6.9	56.3	7.5	4.8	1.8	59.1
K	667	K3-8 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS?	37.3	6.8	20.7	37.5	3.8	.0	.0	40.9
K	668	K3-9 DO YOU CONVERT BINARY NUMBERS TO HEXADECIMAL NUMBERS?	13.6	5.6	.0	62.5	4.7	.0	.0	38.6
K	669	K3-10 DO YOU CONVERT HEXADECIMAL NUMBERS TO DECIMAL NUMBERS?	15.2	5.6	3.4	62.5	3.8	.0	.0	38.6
K	670	K3-11 DO YOU CONVERT HEXADECIMAL NUMBERS TO OCTAL NUMBERS?	12.1	5.0	3.4	50.0	1.9	.0	.0	36.4
K	671	K3-12 DO YOU CONVERT HEXADECIMAL NUMBERS TO BINARY NUMBERS?	12.1	5.6	.0	62.5	5.7	.0	.0	38.6
K	672	K3-13 DO YOU ADD BINARY NUMBERS?	43.9	17.4	10.3	50.0	6.6	9.5	4.4	61.4
K	673	K3-14 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD?	27.3	11.8	.0	25.0	2.8	.0	1.8	45.5
K	674	K3-15 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD?	37.9	13.0	.0	43.8	3.8	4.8	4.4	50.0
K	675	K3-16 DO YOU ADD OCTAL NUMBERS?	22.7	6.8	24.1	31.3	1.9	.0	1.8	36.4
K	676	K3-17 DO YOU SUBTRACT OCTAL NUMBERS?	21.2	6.8	17.2	31.3	1.9	.0	1.8	36.4
K	677	K3-18 DO YOU ADD HEXADECIMAL NUMBERS?	12.1	5.6	.0	56.3	1.9	.0	1.8	36.4
K	678	K3-19 DO YOU SUBTRACT HEXADECIMAL NUMBERS?	10.6	5.6	.0	56.3	1.9	.0	.9	36.4
K	679	K3-20 DO YOU DIVIDE BINARY NUMBERS?	27.3	8.7	.0	25.0	2.8	4.8	4.4	36.4
K	680	K3-21 DO YOU MULTIPLY BINARY NUMBERS?	27.3	8.1	.0	31.3	2.8	4.8	4.4	36.4
K	681	K3-22 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	27.3	8.1	6.9	43.8	4.7	4.8	1.8	40.9
K	682	K3-23 DO YOU USE OR REFER TO GRAY CODE?	3.0	1.9	.0	6.3	1.9	.0	1.8	22.7
K	683	K3-24 DO YOU USE OR REFER TO ICAO CODE?	1.5	.6	.0	6.3	.0	.0	2.6	9.1
K	684	K3-25 DO YOU USE OR REFER TO EXCESS-3 CODE?	1.5	1.2	.0	.0	.9	.0	1.8	13.6
L		LOGIC FUNCTIONS (L1), BOOLEAN EQUATIONS (L2), COUNTERS (L3)								
L	685	L1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS? IF NO, GO TO ITEM L2-1; IF YES, CONTINUE.	66.4	34.8	37.9	43.8	2.8	14.3	1.8	77.3
L	686	L1-2 DO YOU CONSTRUCT TRUTH TABLES FOR "AND" LOGIC SYMBOLS OR GATES?	51.5	19.9	6.9	12.5	1.9	4.8	.0	75.0
L	687	L1-3 DO YOU CONSTRUCT TRUTH TABLES FOR "OR" LOGIC SYSMBOLS OR GATES?	50.0	19.3	6.9	12.5	1.9	4.8	.0	75.0
L	688	L1-4 DO YOU CONSTRUCT TRUTH TABLES FOR "AND" OR "OR" LOGIC SYMBOLS WITH STATE INDICATORS?	51.5	18.0	6.9	12.5	1.9	4.8	.0	72.7
L	689	L1-5 DO YOU CONSTRUCT TRUTH TABLES FOR "EXCLUSIVE OR" LOGIC SYMBOLS OR GATES?	51.5	17.4	6.9	12.5	.9	.0	.0	75.0
L	690	L1-6 DO YOU USE OR REFER TO TRUTH TABLES FOR "AND" LOGIC SYMBOLS OR GATES?	71.2	32.3	13.8	25.0	1.9	14.3	.0	75.0
L	691	L1-7 DO YOU USE OR REFER TO TRUTH TABLES FOR "OR" LOGIC SYMBOLS OR GATES?	71.2	32.3	13.8	25.0	1.9	14.3	.0	75.0
L	692	L1-8 DO YOU USE OR REFER TO TRUTH TABLES FOR "AND" OR "OR" LOGIC SYMBOLS WITH STATE INDICATORS?	69.7	30.4	13.8	25.0	1.9	14.3	.0	72.5
L	693	L1-9 DO YOU USE OR REFER TO TRUTH TABLES FOR "EXCLUSIVE OR" LOGIC SYMBOLS?	69.7	29.8	6.9	31.3	1.9	4.8	.0	75.0
L	694	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "AND" GATES?	83.3	35.4	37.9	43.8	1.9	14.3	.9	77.3
L	695	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "OR" GATES?	87.3	35.4	37.9	37.5	1.9	14.3	1.8	77.3

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
L	696	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'NAND' OR 'NOR' GATES?	83.3	35.4	34.5	37.5	1.9	14.3	.9	77.3
L	697	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'EXCLUSIVE OR' GATES?	81.8	32.3	20.7	31.3	1.9	14.3	.0	77.3
L	698	L1-14 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR INHIBITED 'AND' GATES?	78.8	34.2	24.1	31.3	.9	14.3	.0	75.0
L	699	L1-15 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "B" BARS?	60.6	4.3	.0	.0	1.9	.0	.0	13.6
L	700	L1-16 DO YOU USE OR REFER TO LOGIC SYMPOLS FOR "M" BARS?	60.6	3.1	.0	.0	.9	.0	.0	13.6
L	701	L1-17 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR COMBINERS?	68.2	8.7	.0	6.3	.9	.0	.0	25.0
L	702	L1-18 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS?	75.8	29.8	3.4	31.3	.9	19.0	.0	72.7
L	703	L1-19 DO YOU USE OR REFER TO ONE-SHOT MULTIVIBRATOR SYMBOLS?	71.2	22.4	3.4	18.8	.9	9.5	.0	70.5
L	704	L1-20 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT OR SCHEMATIC DIAGRAMS?	81.8	31.7	13.8	18.8	1.9	19.0	.9	72.7
L	705	L1-21 DO YOU USE OR REFER TO ONE-SHOT CIRCUIT OR SCHEMATIC DIAGRAMS?	71.2	21.7	10.3	18.8	.9	9.5	.0	70.5
L	706	L1-22 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES?	63.6	29.8	.0	18.8	1.9	14.3	.0	61.4
L	707	L1-23 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	45.5	17.4	.0	12.5	.0	.0	.0	45.5
L	708	L1-24 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS?	48.5	17.4	.0	12.5	.9	.0	.0	45.5
L	709	L1-25 DO YOU USE OR REFER TO NONCOMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	39.4	14.3	3.4	6.3	.9	.0	.0	43.2
L	710	L1-26 DO YOU CONSTRUCT TRUTH TABLES FOR "B" BARS?	25.8	1.2	.0	6.3	.9	.0	.0	9.1
L	711	L1-27 DO YOU CONSTURCT TRUTH TABLES FOR "M" BARS?	27.3	1.2	.0	6.3	.9	.0	.0	9.1
L	712	L1-28 DO YOU CONSTRUCT TRUTH TABLES FOR COMBINERS?	33.3	4.3	.0	6.3	.9	.0	.0	11.4
L	713	L1-29 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS?	57.6	19.9	.0	25.0	.9	4.8	.9	61.4
L	714	L1-30 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS?	54.5	19.9	.0	12.5	.9	.0	.9	47.7
L	715	L1-31 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	53.0	18.6	.0	12.5	.9	4.8	.9	45.5
L	716	L1-32 DO YOU TRACE DATA FLOW THROUGH NONCOMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	48.5	16.1	.0	12.5	.9	.0	.0	45.5
L	717	L1-33 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS?	47.0	16.1	.0	6.3	.9	.0	.0	45.5
L	718	L2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS? IF NO, GO TO ITEM L3-1; IF YES, CONTINUE.	47.0	16.1	6.9	18.8	2.8	.0	1.8	40.9
L	719	L2-2 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS?	7.6	5.0	.0	.0	.9	.0	.0	29.5
L	720	L2-3 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	7.6	5.0	.0	6.3	.9	.0	.0	15.9
L	721	L2-4 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS?	16.7	5.6	.0	.0	.9	.0	.0	27.3
L	722	L2-5 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES?	37.9	14.3	.0	18.8	1.9	.0	.0	45.5
L	723	L2-6 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS?	12.1	6.2	.0	.0	1.9	.0	.0	25.0

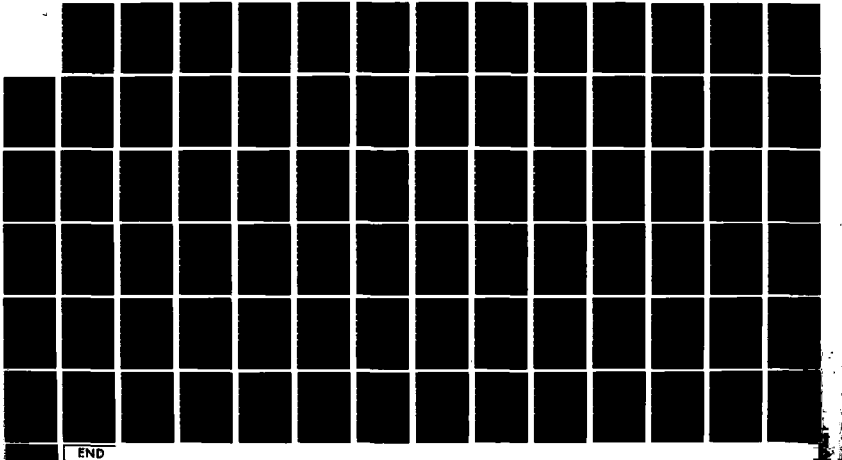
C	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
L	724	L2-7 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA?	15.2	5.6	.0	.0	2.8	.0	.0	27.3
L	725	L2-8 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES?	15.2	8.1	3.4	6.3	1.9	.0	.0	31.8
L	726	L2-9 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	7.6	5.6	.0	12.5	.9	.0	.0	20.5
L	727	L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE?	30.4	16.8	6.9	18.8	.9	.0	.0	45.5
L	728	L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS?	15.2	5.6	.0	.0	.9	.0	.0	22.7
L	729	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS?	22.7	8.7	.0	.0	.9	.0	.0	29.5
L	730	L3-1 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M1-1; IF YES, CONTINUE.	72.7	22.4	.0	25.0	4.7	9.5	.0	59.1
L	731	L3-2 DO YOU USE OR REFER TO UP-COUNTERS?	67.6	20.5	.0	25.0	4.7	14.3	.0	52.3
L	732	L3-3 DO YOU USE OR REFER TO DOWN-COUNTERS?	59.1	17.4	.0	18.8	1.9	9.5	.0	50.0
L	733	L3-4 DO YOU USE OR REFER TO SERIAL COUNTERS?	63.6	20.5	.0	6.3	1.9	9.5	.0	40.9
L	734	L3-5 DO YOU USE OR REFER TO PARALLEL COUNTERS?	54.5	16.1	.0	6.3	.9	9.5	.0	38.6
L	735	L3-6 DO YOU USE OR REFER TO RING COUNTERS?	34.8	10.6	3.4	6.3	1.9	.0	.0	31.8
L	736	L3-7 DO YOU USE OR REFER TO DECADE (MOD 10) COUNTERS?	21.2	8.7	.0	12.5	1.9	.0	.9	40.9
L	737	L3-8 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS?	42.4	13.7	3.4	12.5	.9	9.5	.9	45.5
L	738	L3-9 DO YOU USE OR REFER TO DOWN CLOCKS?	50.0	16.8	3.4	6.3	1.9	9.5	.0	52.3
L	739	L3-10 DO YOU USE OR REFER TO UP CLOCKS?	50.0	16.1	3.4	6.3	1.9	9.5	.0	54.5
L	740	L3-11 DO YOU USE OR REFER TO OTHER MODULOUS COUNTERS?	27.3	5.6	.0	6.3	.9	.0	.0	34.1
L	741	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS?	53.0	16.8	.0	12.5	.9	.0	.9	47.7
L	742	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS?	50.0	14.9	.0	12.5	.9	.0	.9	45.5
L	743	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-DOWN COUNTERS?	39.4	12.4	.0	12.5	.9	.0	.9	43.2
L	744	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS?	27.3	8.1	.0	6.3	.9	.0	.9	38.6
L	745	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS?	30.3	9.3	.0	6.3	.9	.0	.9	29.5
L	746	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF COUNTERS FEEDING STORAGE REGISTERS?	43.9	14.3	6.9	6.3	1.9	.0	.0	36.4
L	747	L3-18 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS?	60.6	14.9	3.4	6.3	1.9	.0	.0	38.6
L	748	L3-19 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS?	37.9	6.2	.0	.0	1.9	4.8	.0	27.3
L	749	L3-20 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS?	16.7	4.3	.0	6.3	.9	.0	.0	31.8
L	750	L3-21 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES?	34.8	11.2	.0	6.3	.9	.0	.0	31.8
L	751	L3-22 DO YOU DETERMINE THE APPROPRIATE 'AND' GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT?	51.5	13.7	.0	6.3	1.9	.0	.0	40.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	919 50 (M)
M		TIMING CIRCUITS (M1), USE OF SIGNAL GENERATORS (M2), MOTORS AND GENERATORS (M3)								
M	752	M1-1 DO YOU WORK WITH SAWTOOTH WAVE GENERATOR TIMING CIRCUITS?	42.4	12.4	.0	12.5	.0	.0	.0	75.0
M	753	M1-2 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATOR TIMING CIRCUITS?	15.2	5.6	.0	6.3	.9	.0	.0	54.5
M	754	M1-3 DO YOU WORK WITH PULSED OSCILLATOR TIMING CIRCUITS?	37.9	14.9	.0	12.5	1.9	4.8	.9	72.7
M	755	M1-4 DO YOU WORK WITH BLOCKING OSCILLATOR TIMING CIRCUITS?	15.2	5.6	.0	6.3	.9	.0	.0	38.6
M	756	M1-5 DO YOU WORK WITH MASTER STATION TIMING CIRCUITS?	37.9	6.2	.0	6.3	.9	9.5	.0	25.0
M	757	M1-6 DO YOU USE OR REFER TO RISE TIME?	33.3	14.9	.0	50.0	.9	.0	.0	68.2
M	758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	21.2	14.3	.0	50.0	.9	.0	.0	56.8
M	759	M1-8 DO YOU USE OR REFER TO SWEEP TIME?	39.4	19.3	.0	43.8	3.8	.0	.0	77.3
M	760	M1-9 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS?	16.7	11.2	.0	6.3	1.9	.0	.0	56.8
M	761	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS?	22.7	13.0	.0	12.5	1.9	.0	.0	56.8
M	762	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS?	16.7	7.5	.0	6.3	1.9	.0	.0	45.5
M	763	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS?	15.2	6.8	.0	6.3	1.9	.0	.0	43.2
M	764	M2-1 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M3-1; IF YES, CONTINUE.	28.8	59.0	.0	68.8	27.4	81.0	15.8	75.0
M	765	M2-2 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS?	22.7	55.3	.0	56.3	20.8	71.4	12.3	75.0
M	[illegible]	M2-3 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS?	21.2	47.2	.0	31.3	14.2	28.6	7.9	59.1
M	[illegible]	M2-4 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS?	19.7	44.7	.0	12.5	10.4	28.6	7.0	54.5
M	[illegible]	M2-5 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS?	18.2	32.3	.0	12.5	4.7	14.3	1.8	52.3
M	[illegible]	M2-6 DO YOU USE AUDIO SINE-WAVE GENERATORS?	18.2	8.7	.0	50.0	11.3	52.4	4.4	52.3
M	[illegible]	M2-7 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SAW-TOOTH WAVE, TRIANGLE, PULSE, OR SPIKE?	12.1	5.0	.0	31.3	.9	.0	.0	47.7
M	[illegible]	M2-8 DO YOU USE RF GENERATORS LESS THAN 1,000 MH?	4.5	5.0	.0	6.3	3.8	.0	.9	40.9
M	[illegible]	M2-9 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH?	4.5	1.2	.0	6.3	1.9	.0	.9	27.3
M	[illegible]	M2-10 DO YOU USE WHITE NOISE GENERATORS?	.0	.6	.0	.0	1.9	.0	.0	38.6
M	[illegible]	M2-11 DO YOU USE PATTERN GENERATORS?	4.5	37.9	.0	.0	2.8	4.8	.0	36.4
M	[illegible]	M2-12 DO YOU USE PSEUDO-RANDOM GENERATORS?	.0	5.0	.0	.0	1.9	.0	.0	11.4
M	[illegible]	M2-13 DO YOU USE TIME MARK GENERATORS?	.0	15.5	.0	6.3	1.9	.0	.0	54.5
M	[illegible]	M2-14 DO YOU USE SPECIAL PURPOSE OR MULTI-FUNCTION [illegible]	7.6	19.3	.0	25.0	8.5	9.5	.9	50.0
M	[illegible]	M3-1 DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS, GENERATORS OR ALTERNATORS? IF NO, GO TO ITEM [illegible]	72.7	77.0	51.7	25.0	19.8	19.0	10.5	88.6
M	[illegible]	[illegible]	72.7	79.5	44.8	25.0	18.9	9.5	6.1	90.9
M	[illegible]	[illegible] MOTORS?	74.2	76.4	13.8	25.0	18.9	9.5	3.5	90.9
M	[illegible]	[illegible]	66.7	72.0	44.8	25.0	18.9	4.8	5.3	90.9
M	[illegible]	[illegible] COMPLETE MOTORS?	74.2	77.0	.0	25.0	12.3	9.5	7.0	90.9

AD-A143 437 ELECTRONIC PRINCIPLES INVENTORY SHEPPARD TECHNICAL TRAINING CENTER AFPT 90-EPI-485(U) AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX JUN 84

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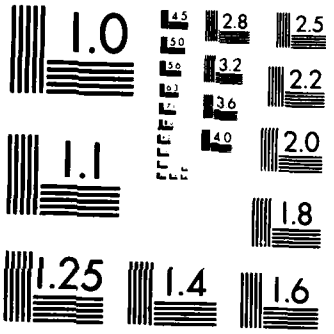
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
M	783	M3-6 DO YOU REMOVE OR REPLACE MOTOR PARTS?	48.5	73.3	.0	6.3	11.3	.0	.0	88.6
M	784	M3-7 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS?	65.2	73.9	24.1	18.8	15.1	4.8	7.9	90.9
M	785	M3-8 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS?	37.9	71.4	17.2	6.3	9.4	.0	.0	86.4
M	786	M3-9 DO YOU PERFORM TASKS ON MOTOR FIELD COILS?	19.7	52.2	.0	6.3	2.8	.0	.0	59.1
M	787	M3-10 DO YOU PERFORM ANY TASKS ON MOTOR ARMATURES?	28.8	66.5	3.4	.0	5.7	.0	.0	75.0
M	788	M3-11 DO YOU PERFORM ANY TASKS ON MOTOR ROTORS?	24.2	51.6	3.4	.0	4.7	.0	.0	63.6
M	789	M3-12 DO YOU PERFORM ANY TASKS ON MOTOR BRUSHES?	34.8	68.9	3.4	.0	10.4	.0	.0	86.4
M	790	M3-13 DO YOU PERFORM ANY TASKS ON MOTOR SLIP RINGS?	19.7	49.7	3.4	.0	5.7	.0	.0	45.5
M	791	M3-14 DO YOU PERFORM ANY TASKS ON MOTOR COMMUTATORS?	12.1	48.4	3.4	.0	6.6	.0	.0	52.3
M	792	M3-15 DO YOU PERFORM ANY TASKS ON MOTOR POLE PIECES?	12.1	39.8	3.4	6.3	4.7	.0	.0	34.1
M	793	M3-16 DO YOU DETERMINE OR MEASURE FORCE OR TORQUE CREATED BY A MOTOR?	7.6	21.7	.0	.0	1.9	.0	.0	18.2
M	794	M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR?	13.6	26.1	.0	6.3	2.8	.0	.0	40.9
M	795	M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS?	6.1	16.8	.0	.0	1.9	.0	.0	25.0
M	796	M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS?	25.8	73.9	3.4	6.3	8.5	.0	1.8	81.8
M	797	M3-20 DO YOU WORK WITH INDUCTION MOTORS?	18.2	10.6	.0	.0	7.5	.0	.9	79.5
M	798	M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS?	12.1	6.2	3.4	12.5	4.7	.0	.9	52.3
M	799	M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS?	22.7	11.8	10.3	12.5	11.3	4.8	.0	68.2
M	800	M3-23 DO YOU WORK WITH SERVOS OR SYNCHROS MOTORS?	9.1	13.0	3.4	6.3	5.7	.0	.0	72.7
M	801	M3-24 DO YOU WORK WITH SHADED-POLE MOTORS?	4.5	1.9	.0	.0	1.9	.0	.0	31.8
M	802	M3-25 DO YOU INSPECT GENERATORS OR ALTERNATORS?	60.6	8.1	34.5	.0	6.6	.0	.0	40.9
M	803	M3-26 DO YOU CLEAN OR LUBRICATE GENERATORS OR ALTERNATORS?	59.1	6.8	6.9	.0	6.6	.0	.0	40.9
M	804	M3-27 DO YOU OPERATE GENERATORS OR ALTERNATORS?	57.6	7.5	37.9	.0	7.5	.0	.0	40.9
M	805	M3-28 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS OR ALTERNATORS?	62.1	5.6	3.4	.0	3.8	.0	.0	31.8
M	806	M3-29 DO YOU REMOVE OR REPLACE GENERATOR, ALTERNATOR, OR PARTS?	40.9	6.2	3.4	.0	4.7	.0	.9	29.5
M	807	M3-30 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS OR ALTERNATORS?	50.0	5.6	20.7	.0	5.7	.0	.9	36.4
M	808	M3-31 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS OR ALTERNATORS?	30.3	5.0	17.2	.0	3.8	.0	.0	27.3
N		METER MOVEMENTS (N1), SATURABLE REACTORS AND MAGNETIC AMPLIFIERS (N2), WAVESHAPING CIRCUITS (N3)								
N	809	N1-1 DO YOU WORK WITH METERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N2-1; IF YES, CONTINUE.	69.2	73.3	86.2	75.0	67.0	66.7	62.3	88.6
N	810	N1-2 DO YOU CONSIDER THE FUNCTIONS OF PERMANENT MAGNET INTERNAL METER PARTS?	7.6	32.9	3.4	43.8	13.2	14.3	5.3	43.2
N	811	N1-3 DO YOU CONSIDER THE FUNCTIONS OF MOVING COIL INTERNAL METER PARTS?	13.6	31.7	3.4	18.8	17.9	9.5	4.4	45.5
N	812	N1-4 DO YOU CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS INTERNAL METER PARTS?	10.6	17.4	3.4	18.8	14.2	14.3	.9	43.2

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
N	813	N1-5 DO YOU READ METER SCALES?	68.2	76.4	86.2	75.0	66.0	66.7	59.6	88.6
N	814	N1-6 DO YOU EXTEND THE RANGE OF AMMETERS?	25.8	31.1	27.6	18.8	30.2	14.3	15.8	45.5
N	815	N1-7 DO YOU EXTEND THE RANGE OF VOLTMETERS?	37.9	39.8	41.4	25.0	36.8	23.8	24.6	52.3
N	816	N1-8 DO YOU ZERO OHMMETERS?	66.7	75.2	72.4	81.3	67.9	66.7	60.5	84.1
N	817	N1-9 DO YOU ZERO AMMETERS?	24.2	29.2	31.0	62.5	32.1	14.3	23.7	56.8
N	818	N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)?	33.3	36.0	24.1	50.0	22.6	23.8	18.4	54.5
N	819	N1-11 DO YOU CONSIDER BALLASTIC RESPONSE OF METER MOVEMENTS?	6.1	6.2	3.4	.0	7.5	.0	2.6	18.2
N	820	N1-12 DO YOU CONSIDER OTHER METER MOVEMENTS?	22.7	28.0	20.7	25.0	24.5	14.3	17.5	43.2
N	821	N2-1 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N3-1; IF YES, CONTINUE.	1.5	.6	.0	25.0	1.9	.0	.0	13.6
N	822	N2-2 DO YOU INSPECT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	12.5	1.9	.0	.0	9.1
N	823	N2-3 DO YOU CLEAN SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	12.5	1.9	.0	.0	6.8
N	824	N2-4 DO YOU ADJUST SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	6.3	1.9	.0	.0	6.8
N	825	N2-5 DO YOU TROUBLESHOOT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.6	.0	18.8	.9	.0	.0	9.1
N	826	N2-6 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS?	.0	.6	.0	18.8	.9	.0	.0	9.1
N	827	N2-7 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS?	.0	.6	.0	18.8	.0	.0	.0	6.8
N	828	N2-8 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS?	.0	.6	.0	.0	.9	.0	.0	4.5
N	829	N2-9 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	.0	1.2	.0	6.3	.9	.0	.0	6.8
N	830	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	1.5	.6	.0	12.5	.9	.0	.0	9.1
N	831	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS?	1.5	1.9	.0	6.3	.0	.0	.0	6.8
N	832	N2-12 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS?	1.5	1.9	.0	18.8	.0	.0	.0	9.1
N	833	N3-1 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM O1-1; IF YES, CONTINUE.	43.9	21.1	3.4	12.5	2.8	.0	1.8	68.2
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	31.8	15.5	.0	.0	1.9	.0	.0	59.1
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	34.8	16.8	.0	.0	2.8	.0	.0	63.6
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	19.7	11.8	.0	.0	2.8	.0	.0	54.5
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	18.2	9.3	3.4	.0	2.8	.0	.0	54.5
N	838	N3-6 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS?	28.8	7.5	.0	.0	1.9	.0	.0	59.1
N	839	N3-7 DO YOU USE OR REFER TO INTEGRATING CIRCUITS?	39.4	11.2	.0	6.3	1.9	.0	.0	63.6
N	840	N3-8 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT?	16.7	9.3	.0	6.3	.0	.0	.0	40.9

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
N	841	N3-9 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION?	15.2	5.0	.0	.0	.0	.0	.0	34.1
N	842	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATOR SOLID STATE CIRCUITS?	33.3	18.6	.0	6.3	.0	.0	.0	68.2
N	843	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATOR SOLID STATE CIRCUITS?	9.1	7.5	.0	.0	.0	.0	.0	52.3
N	844	N3-12 DO YOU WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATOR SOLID STATE CIRCUITS?	21.2	9.9	.0	6.3	.0	.0	.0	65.9
N	845	N3-13 DO YOU WORK WITH RAMP (TRAPEZOIDAL) GENERATOR SOLID STATE CIRCUITS?	7.6	7.5	.0	.0	.0	.0	.0	63.6
N	846	N3-14 DO YOU WORK WITH FUNCTION GENERATOR SOLID STATE CIRCUITS?	10.6	5.0	.0	.0	.0	.0	.0	69.2
N	847	N3-15 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS?	28.8	12.4	.0	6.3	.9	.0	.9	61.4
N	848	N3-16 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS?	21.2	10.6	.0	6.3	.9	.0	.9	61.4
N	849	N3-17 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS?	12.1	8.1	.0	.0	.0	.0	.9	61.4
N	850	N3-18 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS?	27.3	13.0	.0	6.3	.9	.0	.9	61.4
N	851	N3-19 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS?	30.3	10.6	.0	.0	.9	.0	.0	59.1
N	852	N3-20 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS?	28.8	9.9	.0	6.3	.9	.0	.9	59.1
N	853	N3-21 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS?	30.3	11.8	.0	.0	.9	.0	.9	61.4
O		SINGLE OR INDEPENDENT SIDEBAND SYSTEMS (01), PULSE MODULATION SYSTEMS (02), ANTENNAS (03)								
O	854	01-1 DO YOU WORK ON SINGLE OR INDEPENDENT SIDEBAND SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 02-1; IF YES, CONTINUE.	3.0	1.2	13.8	.0	1.9	4.8	.0	.0
O	855	01-2 DO YOU INSPECT SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	.6	6.9	.0	1.9	4.8	.0	.0
O	856	01-3 DO YOU CLEAN SINGLE SIDE BAND (SSB) OR INDEPENENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	.0	.0	1.9	4.8	.0	.0
O	857	01-4 DO YOU ALIGN SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	3.4	.0	1.9	4.8	.0	.0
O	858	01-5 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	1.5	1.2	10.3	.0	1.9	4.8	.0	.0
O	859	01-6 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	1.5	1.2	3.4	.0	.0	4.8	.0	.0
O	860	01-7 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	3.0	.6	3.4	.0	.9	4.8	.0	.0
O	861	01-8 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	3.0	.6	.0	.0	.9	4.8	.0	.0

C	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	919 50 (M)
0	862	01-9 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM AUDIO AMPLIFIER STAGE?	3.0	1.2	.0	.0	.9	.0	.0	.0
0	863	01-10 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM BALANCED MODULATOR STAGE?	1.5	1.2	.0	.0	.0	.0	.0	.0
0	864	01-11 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CARRIER OSCILLATOR STAGE?	1.5	1.2	.0	.0	.0	.0	.0	.0
0	865	01-12 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM LC FILTER STAGE?	1.5	.6	.0	.0	.0	.0	.0	.0
0	866	01-13 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CRYSTAL FILTER STAGE?	.0	.6	.0	.0	.9	.0	.0	.0
0	867	01-14 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MECHANICAL FILTER STAGE?	.0	.6	.0	.0	.9	.0	.0	.0
0	868	01-15 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM OSCILLATOR STAGE?	3.0	1.2	3.4	.0	.9	.0	.0	.0
0	869	01-16 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MIXER STAGE?	1.5	1.2	.0	.0	.9	.0	.0	.0
0	870	01-17 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DRIVER STAGE?	3.0	1.2	.0	.0	.0	.0	.0	.0
0	871	01-18 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM POWER AMPLIFIER STAGES?	1.5	1.2	6.9	.0	.0	.0	.0	.0
0	872	01-19 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM RF AMPLIFIER STAGE?	1.5	.6	3.4	.0	.0	.0	.0	.0
0	873	01-20 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM FREQUENCY CONVERTER STAGES?	.0	.6	3.4	.0	.9	.0	.0	.0
0	874	01-21 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM IF AMPLIFIER STAGE?	.0	1.2	.0	.0	.0	.0	.0	.0
0	875	01-22 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DEMODULATOR STAGE?	1.5	1.2	6.9	.0	.9	.0	.0	.0
0	876	01-23 DO YOU USE OR REFER TO SELECTIVE FADING WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	3.4	.0	.0	.0	.0	.0
0	877	01-24 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	3.4	.0	.0	.0	.0	.0
0	878	01-25 DO YOU USE OR REFER TO FREQUENCY STABILITY WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	.0
0	879	01-26 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.6	.0	.0	.0	.0	.0	.0
0	880	01-27 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB OR ISB TRANSMITTERS?	.0	.6	.0	.0	.0	.0	.0	.0
0	881	01-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB TRANSMITTER SCHEMATIC DIAGRAMS?	1.5	1.2	.0	.0	.0	.0	.0	.0
0	882	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB RECEIVER SCHEMATIC DIAGRAMS?	1.5	.6	.0	.0	.0	.0	.0	.0
0	883	01-30 DO YOU PERFORM AERONAUTIC STATION ASSESSMENT PROGRAMS (ASAP)?	.0	.6	.0	.0	.9	.0	.0	.0
0	884	02-1 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 03-1; IF YES, CONTINUE.	1.5	1.9	.0	.0	2.8	.0	2.6	13.6
0	885	02-2 DO YOU INSPECT PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	1.8	13.6
0	886	02-3 DO YOU CLEAN PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	1.8	13.6
0	887	02-4 DO YOU ALIGN PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	.9	13.6

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	888	02-5 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	2.6	13.6
0	889	02-6 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS?	1.5	1.2	.0	.0	.9	.0	1.8	13.6
0	890	02-7 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	2.8	.0	2.6	11.4
0	891	02-8 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS?	1.5	1.2	.0	.0	.0	.0	1.8	13.6
0	892	02-9 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) PULSE MODULATION SYSTEMS?	1.5	.0	.0	.0	1.9	.0	.0	15.9
0	893	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) PULSE MODULATION SYSTEMS?	3.0	.6	.0	.0	1.9	.0	1.8	15.9
0	894	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) PULSE MODULATION SYSTEMS?	1.5	.0	.0	.0	2.8	.0	.9	11.4
0	895	02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) PULSE MODULATION SYSTEMS?	4.5	.0	.0	.0	.9	.0	.9	11.4
0	896	02-13 DO YOU WORK ON LINE PULSING MODULATION PULSE MODULATION SYSTEMS?	3.0	.6	.0	.0	2.8	.0	1.8	11.4
0	897	02-14 DO YOU WORK ON TIME DIVISION MULTIPLEXING (TDM) PULSE MODULATION SYSTEMS?	4.5	.6	.0	.0	.9	.0	.0	13.6
0	898	02-15 DO YOU WORK ON - DON'T KNOW WHICH TYPE OF MODULATION SYSTEM?	3.0	.0	.0	.0	.9	.0	2.6	6.8
0	899	02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLY STAGE?	.0	.6	.0	.0	.9	.0	.0	15.9
0	900	02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODE STAGE?	.0	.0	.0	.0	.0	.0	.0	15.9
0	901	02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORK STAGE?	1.5	.6	.0	.0	2.8	.0	.9	15.9
0	902	02-19 DO YOU PERFORM TASKS ON PULSE MODULATIN SYSTEM TIMER STAGE?	1.5	.0	.0	.0	.9	.0	.0	15.9
0	903	02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRON STAGE?	.0	.0	.0	.0	.0	.0	.0	13.6
0	904	02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMER STAGE?	1.5	.0	.0	.0	.9	.0	.0	13.6
0	905	02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBE STAGE?	.0	.6	.0	.0	.9	.0	.0	11.4
0	906	02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIER STAGE?	1.5	.6	.0	.0	.0	.0	.0	13.6
0	907	02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTER STAGE?	1.5	.6	.0	.0	1.9	.0	.0	15.9
0	908	02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIER STAGE?	1.5	.6	.0	.0	1.9	.0	.0	13.6
0	909	02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTOR STAGE?	1.5	.6	.0	.0	.0	.0	.9	15.9
0	910	02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIER STAGE?	.0	1.2	.0	.0	.0	.0	.0	11.4
0	911	02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIER STAGE?	.0	.6	.0	.0	.9	.0	.0	6.8
0	912	02-29 DO YOU USE OR REFER TO PULSE RECURRANCE FREQUENCY (PRF) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	.6	.0	.0	.9	.0	.0	13.6

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	913	02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	.9	.0	.0	13.6
0	914	02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.9	.0	.0	.9	.0	.0	15.9
0	915	02-32 DO YOU USE OR REFER TO PULSE SHAPE WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	1.2	.0	.0	.0	.0	.0	15.9
0	916	02-33 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	13.6
0	917	02-34 DO YOU USE OR REFER TO AVEPAGE POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	.0	1.2	.0	.0	.0	.0	.0	11.4
0	918	02-35 DO YOU USE OR REFER TO DUTY CYCLE (DC) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	1.5	.6	.0	.0	.0	.0	.0	11.4
0	919	02-36 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	1.5	.6	.0	.0	.0	.0	.0	9.1
0	920	02-37 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	1.5	.6	.0	.0	.0	.0	.0	11.4
0	921	02-38 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS?	1.5	.0	.0	.0	.0	.0	.0	6.8
0	922	02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS?	1.5	1.2	.0	.0	.9	.0	1.8	13.6
0	923	02-40 DO YOU TRACE SIGNALS OR CUPRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS?	1.5	.6	.0	.0	.9	.0	.9	13.6
0	924	03-1 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P1-1; IF YES, CONTINUE.	1.5	5.6	20.7	.0	.9	.0	1.8	6.8
0	925	03-2 DO YOU INSPECT ANTENNAS?	1.5	4.3	17.2	.0	.0	.0	.9	6.8
0	926	03-3 DO YOU CLEAN ANTENNAS?	1.5	3.7	.0	.0	.0	.0	.0	2.3
0	927	03-4 DO YOU PHYSICALLY ALIGN ANTENNAS?	1.5	3.1	6.9	.0	.0	.0	.0	4.5
0	928	03-5 DO YOU ELECTRICALLY ALIGN ANTENNAS?	.0	2.5	3.4	.0	.0	.0	.0	2.3
0	929	03-6 DO YOU TROUBLESHOOT TO ANTENNAS?	1.5	3.1	24.1	.0	.0	.0	.0	4.5
0	930	03-7 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS?	.0	1.9	6.9	.0	.0	.0	.0	4.5
0	931	03-8 DO YOU REMOVE OR INSTALL ANTENNAS?	1.5	3.1	.0	.0	.0	.0	.0	4.5
0	932	03-9 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS?	.0	1.9	.0	.0	.0	.0	.0	4.5
0	933	03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES?	.0	2.5	.0	.0	.0	.0	.0	2.3
0	934	03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES?	.0	1.9	.0	.0	.0	.0	.0	2.3
0	935	03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS?	1.5	1.9	.0	.0	.0	.0	.0	2.3
0	936	03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS RESISTIVE LOADS TO THE GENERATOR?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	937	03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR?	3.0	.6	.0	.0	1.9	.0	1.8	2.3
0	938	03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR?	1.5	.6	.0	.0	.0	.0	.9	2.3
0	939	03-16 DO YOU WORK WITH HERTZ BASIC ANTENNAS?	.0	1.2	13.8	.0	.0	.0	.0	2.3
0	940	03-17 DO YOU WORK WITH MARCONI BASIC ANTENNAS?	.0	.6	3.4	.0	.0	.0	.0	.0

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
0	941	03-18 DO YOU WORK WITH RHOMBIC BASIC ANTENNAS?	.0	.6	.0	.0	.0	.0	.0	.0
0	942	03-19 DO YOU WORK WITH DIPOLE BASIC ANTENNAS?	.0	3.1	6.9	.0	.9	.0	.0	2.3
0	943	03-20 DO YOU WORK WITH SCIMITAR BASIC ANTENNAS?	.0	.0	.0	.0	.9	.0	.0	.0
0	944	03-21 DO YOU WORK WITH PARABOLIC BASIC ANTENNAS?	.0	3.1	.0	.0	.0	.0	.0	.0
0	945	03-22 DO YOU WORK WITH GROUND PLANE BASIC ANTENNAS?	.0	3.7	3.4	.0	.0	.0	.0	4.5
0	946	03-23 DO YOU WORK WITH FOLDED DIPOLE BASIC ANTENNAS?	.0	2.5	6.9	.0	.0	.0	.0	2.3
0	947	03-24 DO YOU WORK WITH BROADSIDE ARRAYS?	.0	1.2	.0	.0	.0	.0	.0	.0
0	948	03-25 DO YOU WORK WITH END-FIRE ARRAYS?	1.5	1.2	3.4	.0	.0	.0	.0	.0
0	949	03-26 DO YOU WORK WITH CARDIOID ARRAYS?	1.5	1.2	.0	.0	.0	.0	.0	.0
0	950	03-27 DO YOU WORK WITH COLLINEAR ARRAYS?	1.5	.6	.0	.0	.0	.0	.0	.0
0	951	03-28 DO YOU WORK WITH PHASE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0
0	952	03-29 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	4.5
0	953	03-30 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS?	.0	.6	.0	.0	.0	.0	.0	.0
0	954	03-31 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS?	.0	1.2	.0	.0	.0	.0	.0	4.5
0	955	03-32 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0
0	956	03-33 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	957	03-34 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	958	03-35 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED?	.0	1.2	.0	.0	.0	.0	.0	2.3
0	959	03-36 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED?	.0	.6	.0	.0	.0	.0	.0	.0
0	960	03-37 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON?	.0	.6	.0	.0	.0	.0	.0	2.3
0	961	03-38 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS?	.0	2.5	.0	.0	.0	.0	.0	2.3
0	962	03-39 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS?	.0	1.2	.0	.0	.0	.0	.0	.0
0	963	03-40 DO THE ANTENNA APRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS?	.0	1.2	.0	.0	.0	.0	.0	.0
0	964	03-41 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN - DON'T KNOW WHAT KIND OF ELEMENT?	.0	2.5	17.2	.0	.0	.0	.0	2.3
0	965	03-42 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS?	.0	3.7	6.9	.0	.0	.0	.0	.0
0	966	03-43 DO YOU WORK ON BIDIRECTIONAL ANTENNAS?	.0	3.7	3.4	.0	.0	.0	.0	.0
0	967	03-44 DO YOU WORK ON OMNIDIRECTIONAL ANTENNAS?	1.5	4.3	17.2	.0	.0	.0	.0	4.5
0	968	03-45 DO YOU WORK WITH ROTARY ANTENNA ARRAYS?	.0	2.5	3.4	.0	.0	.0	.0	.0

P TRANSMISSION LINES (P1), WAVEGUIDES AND CAVITY RESONATORS (P2), MICROWAVE AMPLIFIERS AND OSCILLATORS (P3)

ELECTRONIC PRINCIPLES INVENTORY DATA ON S-LEVELS

FCPRT6 PAGE 372

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P	969	P1-1 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES? (DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES.) IF NO, GO TO ITEM P2-1; IF YES, CONTINUE.	7.6	14.9	.0	.0	39.6	23.8	34.2	4.5
P	970	P1-2 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE COPPER LOSS OR 'I SUB 2 R' LOSS IN TRANSMISSION LINES?	1.5	1.9	.0	.0	5.7	4.8	1.8	2.3
P	971	P1-3 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES?	1.5	.6	.0	.0	6.6	.0	.9	2.3
P	972	P1-4 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE RADIATION LOSS?	3.0	3.1	.0	.0	4.7	.0	.0	2.3
P	973	P1-5 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE DIELECTRIC LOSS?	3.0	1.2	.0	.0	8.5	.0	.0	2.3
P	974	P1-6 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE LEAKAGE LOSSES?	4.5	5.0	.0	.0	10.4	.0	3.5	2.3
P	975	P1-7 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE FARADAY SHIELD?	1.5	2.5	.0	.0	3.8	.0	1.8	2.3
P	976	P1-8 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES?	3.0	10.6	.0	.0	36.8	23.8	26.3	.0
P	977	P1-9 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES?	1.5	8.1	.0	.0	16.0	4.8	14.0	2.3
P	978	P1-10 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES?	4.5	8.7	.0	.0	18.9	4.8	14.0	2.3
P	979	P1-11 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES?	6.1	11.8	.0	.0	11.3	.0	7.9	4.5
P	980	P1-12 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES?	3.0	5.6	.0	.0	5.7	.0	2.6	.0
P	981	P1-13 DO YOU TROUBLESHOOT TRANSMISSION LINES?	4.5	10.6	.0	.0	35.8	19.0	33.3	4.5
P	982	P1-14 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)?	3.0	8.7	.0	.0	22.6	4.8	7.0	2.3
P	983	P1-15 DO YOU SELECT APPROPRIATE TRANSMISSION LINE TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS?	3.0	1.9	.0	.0	5.7	.0	.0	4.5
P	984	P1-16 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS?	3.0	7.5	.0	.0	15.1	19.0	8.8	4.5
P	985	P1-17 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	.0	.6	.0	.0	1.9	.0	.0	2.3
P	986	P1-18 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	.0	.6	.0	.0	1.9	.0	.0	2.3
P	987	P1-19 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS?	.0	.6	.0	.0	1.9	.0	.0	2.3
P	988	P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS?	1.5	1.9	.0	.0	14.2	14.3	2.6	2.3
P	989	P1-21 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING?	.0	.0	.0	.0	1.9	.0	1.8	2.3
P	990	P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES?	.0	.0	.0	.0	5.7	9.5	.8	4.5
P	991	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES?	.0	.0	.0	.0	4.7	.0	.9	2.3

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P	992	P1-24 DO YOU USE OR REFER TO THE TERM CUT OFF FREQUENCY OF TRANSMISSION LINES?	.0	.0	.0	.0	4.7	.0	.0	2.3
P	993	P2-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES?	.0	.0	.0	.0	2.8	.0	.0	2.3
P	994	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES?	.0	1.2	.0	.0	2.8	.0	.9	2.3
P	995	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTHS FOR GIVEN FREQUENCIES?	.0	1.2	.0	.0	1.9	.0	.9	2.3
P	996	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES?	.0	1.9	.0	.0	5.7	.0	1.8	2.3
P	997	P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES?	1.5	1.9	.0	.0	5.7	.0	3.5	4.5
P	998	P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES?	1.5	.6	.0	.0	5.7	4.8	3.5	2.3
P	999	P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING?	1.5	.0	.0	.0	1.9	.0	.9	2.3
P	1000	P2-1 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P3-1; IF YES, CONTINUE.	.0	.0	.0	.0	.9	.0	.0	6.8
P	1001	P2-2 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	6.8
P	1002	P2-3 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	6.8
P	1003	P2-4 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P	1004	P2-5 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P	1005	P2-6 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS?	1.5	.0	.0	.0	.0	.0	.0	6.8
P	1006	P2-7 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES?	1.5	.0	.0	.0	.0	.0	.0	4.5
P	1007	P2-8 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P	1008	P2-9 DO YOU REMOVE OR INSTALL DUMMY LOADS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P	1009	P2-10 DO YOU REMOVE OR INSTALL E BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P	1010	P2-11 DO YOU REMOVE OR INSTALL H BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P	1011	P2-12 DO YOU REMOVE OR INSTALL OTHER BENDS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P	1012	P2-13 DO YOU REMOVE OR INSTALL CHOKE JOINTS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P	1013	P2-14 DO YOU REMOVE OR INSTALL ROTATING JOINTS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P	1014	P2-15 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P	1015	P2-16 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P	1016	P2-17 DO YOU REMOVE OR INSTALL DUPLEXERS OR MIXERS?	1.5	.0	.0	.0	.0	.0	.0	6.8
P	1017	P2-18 DO YOU REMOVE OR INSTALL WAVEGUIDE SHUTTERS?	1.5	.0	.0	.0	.0	.0	.0	4.5
P	1018	P2-19 DO YOU REMOVE OR INSTALL TRANSMIT (TR) OR ANTITRANSMIT (ATR) TUBES?	1.5	.0	.0	.0	.0	.0	.0	4.5
P	1019	P2-20 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	.0
P	1020	P2-21 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	.0
P	1021	P2-22 DO YOU USE OR REFER TO CUT OFF FREQUENCY OF WAVEGUIDES?	1.5	.0	.0	.0	.9	.0	.9	4.5
P	1022	P2-23 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	4.5
P	1023	P2-24 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	4.5
P	1024	P2-25 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	4.5

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1025	P2-26 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1026	P2-27 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.9	4.5
P1027	P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OR .7 WAVELENGTHS OF THE OPERATING FREQUENCY?	.0	.0	.0	.0	.0	.0	.9	.0
P1028	P2-29 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 AS AN AVERAGE?	.0	.0	.0	.0	.0	.0	.9	.0
P1029	P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION?	.0	.0	.0	.0	.0	.0	.0	.0
P1030	P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	2.6	.0
P1031	P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1032	P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.9	.0	.9	.0
P1033	P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.9	.0
P1034	P2-35 DO YOU WORK WITH HIGH POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1035	P2-36 DO YOU WORK WITH LOW POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1036	P2-37 DO YOU WORK WITH LOOP ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1037	P2-38 DO YOU WORK WITH APERTURES (WINDOWS OR IRISES) ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	2.3
P1038	P2-39 DO YOU WORK WITH CHOKE JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0
P1039	P2-40 DO YOU WORK WITH ROTATING JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	.0
P1040	P2-41 DO YOU WORK WITH JOINTS IN WAVEGUIDES OR CAVITY RESONATORS BUT DON'T KNOW WHICH KIND?	.0	.0	.0	.0	.0	.0	.0	6.8
P1041	P2-42 DO YOU TUNE CAVITY RESONATORS USING ELECTRICAL METHODS?	.0	.0	.0	.0	.0	.0	.0	6.8
P1042	P2-43 DO YOU TUNE CAVITY RESONATORS USING MECHANICAL METHODS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1043	P2-44 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	.0	4.5
P1044	P3-1 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS? IF NO, GO TO ITEM Q1-1; IF YES, CONTINUE.	.0	.6	.0	.0	.9	.0	.0	2.3
P1045	P3-2 DO YOU USE OR REFER TO INTEPELECTRODE CAPACITANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0

D TSK	TITLES	304 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1046	P3-3 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0
P1047	P3-4 DO YOU USE OR REFER TO LEAD INDUCTANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTINAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0
P1048	P3-5 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY FACTORS THAT CAUSE POOR OPERATION OF CONVENTICNAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0
P1049	P3-6 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION?	.0	.0	.0	.0	.9	.0	1.8	2.3
P1050	P3-7 DO YOU USE OR REFER TO ELECTRON BUNCHING?	.0	.0	.0	.0	.0	.0	.9	2.3
P1051	P3-8 DO YOU WORK WITH TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1052	P3-9 DO YOU WORK WITH THREE-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1053	P3-10 DO YOU WORK WITH REFLEX KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	2.3
P1054	P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0
P1055	P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1056	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1057	P3-14 DO YOU WORK WITH MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1058	P3-15 DO YOU WORK WITH BACKWARD WAVE OSCILLATORS (BWO)?	.0	.0	.0	.0	.0	.0	.0	.0
P1059	P3-16 DO YOU INSPECT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1060	P3-17 DO YOU CLEAN KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1061	P3-18 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1062	P3-19 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1063	P3-20 DO YOU PERFORM OPERATIONAL CHECKS ON KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1064	P3-21 DO YOU TROUBLESHOOT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	2.3
P1065	P3-22 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRONS OR TWT'S?	.0	.0	.0	.0	.0	.0	.0	2.3
P1066	P3-23 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1067	P3-24 DO YOU INSPECT PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1068	P3-25 DO YOU CLEAN PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0
P1069	P3-26 DO YOU ADJUST PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0
P1070	P3-27 DO YOU TUNE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.9	.0	.0	.0
P1071	P3-28 DO YOU PERFORM OPERATIONAL CHECKS ON PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1072	P3-29 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS?	.0			.0	.0	.0	.0	.0
P1073	P3-30 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIERS?	.0	.0	.	.0	.0	.0	.0	.0
P1074	P3-31 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1075	P3-32 DO YOU INSPECT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1076	P3-33 DO YOU CLEAN MAGNETRONS?	.0	.6	.0	.0	.0	.0	.0	.0
P1077	P3-34 DO YOU ADJUST MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1078	P3-35 DO YOU TUNE MAGNETRONS?	.0	.6	.0	.0	.0	.0	.0	.0
P1079	P3-36 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1080	P3-37 DO YOU TROUBLESHOOT MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0

ELECTRONIC PRINCIPLES INVENTORY DATA OF 5-LEVELS

REPORT PAGE 376

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1081	P3-38 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1082	P3-39 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1083	P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR PLATE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1084	P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1085	P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1086	P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FEEDBACK LOOP COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1087	P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF DRIFT SPACE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1088	P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1089	P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1090	P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CONTROL GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1091	P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1092	P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REPELLER (REFLECTOR) PLATE COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.0	.0	.0	2.3
P1093	P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	1.9	.0	1.8	2.3
P1094	P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID CAVITY GAP COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	1.9	.0	1.8	2.3
P1095	P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF RESONANT CAVITY COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3
P1096	P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETIC COUPLING LOOP COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	.0
P1097	P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3
P1098	P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3
P1099	P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF OUTPUT LEAD COMPONENTS OF REFLEX KLYSTRONS?	1.5	.0	.0	.0	.9	.0	1.8	2.3
P1100	P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1101	P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1102	P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MODULATOR GRID COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1103	P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ANODE COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1104	P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF HELIX COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1105	P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
P1106	P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNET COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1107	P3-64 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ATTENUATOR COMPONENTS OF TRAVELING-WAVE TUBES?	.0	.0	.0	.0	.0	.0	.0	.0
P1108	P3-65 DO YOU PERFORM TASKS ON FERRITE CIRCULATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.0	.0
P1109	P3-66 DO YOU PERFORM TASKS ON SIGNAL CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1110	P3-67 DO YOU PERFORM TASKS ON IDLER CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1111	P3-68 DO YOU PERFORM TASKS ON VARACTOR DIODE COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1112	P3-69 DO YOU PERFORM TASKS ON FERRITE ISOLATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1113	P3-70 DO YOU PERFORM TASKS ON REVERSE-BIAS BATTERY COMPONENTS OF PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	1.9	.0	.9	.0
P1114	P3-71 DO YOU PERFORM TASKS ON ANODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1115	P3-72 DO YOU PERFORM TASKS ON ANODE COOLING PIN COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1116	P3-73 DO YOU PERFORM TASKS ON COUPLING LOOP COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1117	P3-74 DO YOU PERFORM TASKS ON HEATER LEAD COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1118	P3-75 DO YOU PERFORM TASKS ON RESONANT CAVITY COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1119	P3-76 DO YOU PERFORM TASKS ON CATHRODE COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1120	P3-77 DO YOU PERFORM TASKS ON MAGNET COMPONENTS OF MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	
Q	REGISTERS (Q1), STORAGE DEVICES (Q2), DIGITAL-TO-ANALOG AND DIGITAL-TO-DIGITAL CONVERTERS (Q3)								
Q1121	Q1-1 DO YOU USE OR REFER TO STORAGE RESISTERS?	69.7	31.1	13.8	18.8	.0	.0		
Q1122	Q1-2 DO YOU USE OR REFER TO SHIFT REGISTERS?	77.3	34.8	.0	18.8	2.8	.0		
Q1123	Q1-3 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS?	72.7	33.5	3.4	18.8	1.9	.0		
Q1124	Q1-4 DO YOU USE OR REFER TO LOGIC SYMBOLS OR STORAGE REGISTERS?	66.7	30.4	3.4	18.8	1.9	.0		
Q1125	Q1-5 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTER CIRCUITS?	77.3	32.9	.0	18.8	.9	.0		
Q1126	Q1-6 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPES OF REGISTER CIRCUITS?	63.6	27.3	3.4	18.8	.9	.0		
Q1127	Q1-7 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED?	72.7	27.3	.0	12.5	1.9	.0		

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
Q1128	Q2-1 DO YOU WORK WITH STORAGE DEVICES IN YOUR PRESENT JOB? IF NO, GO TO ITEM Q3-1; IF YES, CONTINUE.	71.2	26.7	31.0	25.0	10.4	.0	.9	36.4
Q1129	Q2-2 DO YOU USE OR REFER TO DELAY LINES?	10.6	4.3	.0	.0	.9	.0	.0	13.6
Q1130	Q2-3 DO YOU USE OR REFER TO MAGNETIC CORES OR BIMAGS?	54.5	5.0	3.4	.0	1.9	.0	.0	11.4
Q1131	Q2-4 DO YOU USE OR REFER TO MAGNETIC DRUMS?	6.1	3.7	3.4	.0	2.8	.0	.0	11.4
Q1132	Q2-5 DO YOU USE OR REFER TO MAGNETIC TAPES?	6.1	15.5	3.4	.0	9.4	.0	.9	25.0
Q1133	Q2-6 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OF MEMORY SYSTEMS?	47.0	8.7	3.4	6.3	2.8	.0	.0	27.3
Q1134	Q2-7 DO YOU USE OR REFER TO STORAGE CAPACITY OF MEMORY SYSTEMS?	59.1	13.0	13.8	6.3	4.7	.0	.9	25.0
Q1135	Q2-8 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS?	28.8	8.1	3.4	6.3	2.8	.0	.9	25.0
Q1136	Q2-9 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES?	16.7	3.1	.0	.0	1.9	.0	.0	13.6
Q1137	Q2-10 DO YOU USE OR REFER TO MAGNETIC DISKS?	6.1	3.7	.0	18.8	1.9	.0	.0	20.5
Q1138	Q2-11 DO YOU USE OR REFER TO THIN FILMS?	3.0	3.1	.0	6.3	.9	.0	.0	18.2
Q1139	Q2-12 DO YOU USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED) CIRCUITS?	25.8	16.1	6.9	.0	3.8	.0	.9	38.6
Q1140	Q2-13 DO YOU USE OR REFER TO BUBBLE MEMORIES?	.0	2.5	3.4	6.3	1.9	.0	.0	11.4
Q1141	Q2-14 DO YOU USE OR REFER TO PUNCH CARDS?	59.1	5.6	3.4	.0	.9	.0	.0	20.5
Q1142	Q2-15 DO YOU USE OR REFER TO PAPER TAPES?	62.1	19.9	31.0	18.8	2.8	.0	.0	11
Q1143	Q2-16 DO YOU USE OR REFER TO RANDOM ACCESS MEMORIES (RAM)?	45.5	18.0	17.2	6.3	5.7	.0	.9	36.4
Q1144	Q2-17 DO YOU USE OR REFER TO READ ONLY MEMORIES (ROM)?	13.6	18.6	10.3	6.3	4.7	.0	.9	34.1
Q1145	Q2-18 DO YOU USE OR REFER TO PROGRAMMALBE READ ONLY MEMORIES (PROM)?	7.6	10.6	3.4	12.5	2.8	.0	.0	36.4
Q1146	Q2-19 DO YOU USE OR REFER TO TRANSFORMER READ ONLY STORAGES (TROS)?	.0	3.1	.0	.0	.9	.0	.0	9.1
Q1147	Q2-20 DO YOU USE OR REFER TO CAPACITY READ ONLY STORAGES (CROS)?	.0	2.5	.0	.0	.9	.0	.0	6.8
Q1148	Q2-21 DO YOU INSPECT STORAGE DEVICES?	56.1	22.4	13.8	18.8	8.5	.0	.9	34.1
Q1149	Q2-22 DO YOU CLEAN STORAGE DEVICES?	59.1	21.7	.0	12.5	9.4	.0	.9	25.0
Q1150	Q2-23 DO YOU ALIGN STORAGE DEVICES?	21.2	16.1	.0	6.3	3.8	.0	.0	20.5
Q1151	Q2-24 DO YOU ADJUST STORAGE DEVICES?	21.2	17.4	.0	12.5	3.8	.0	.0	22.7
Q1152	Q2-25 DO YOU TROUBLESHOOT MEMORY SYSTEM STORAGE DEVICES?	48.5	19.3	20.7	6.3	5.7	.0	.9	31.8
Q1153	Q2-26 DO YOU REMOVE OR REPLACE SUBASSEMBLIES OR COMPONENTS OF STORAGE DEVICES?	51.5	22.4	3.4	12.5	7.5	.0	.9	38.6
Q1154	Q2-27 DO YOU TRACE SIGNAL FLOW IN STORAGE DEVICES USING LOGIC DIAGRAMS OR SCHMATICS?	51.5	18.6	3.4	.0	1.9	.0	.0	29.5
Q1155	Q3-1 IN YOU PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS OR ANALOG-TO-DIGITAL (A/D) CONVERTERS? IF NO, GO TO ITEM R1-1; IF YES, CONTINUE.	45.5	7.5	.0	12.5	4.7	.0	.9	50.0
Q1156	Q3-2 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES?	16.7	1.9	.0	.0	.9	.0	.0	31.8
Q1157	Q3-3 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IS DETERMINED BY ADDING THE DENOMINATORS OF THE RESISTORS?	9.1	1.2	.0	.0	.9	.0	.0	22.7
Q1158	Q3-4 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS?	15.2	1.9	.0	.0	1.9	.0	.0	29.5
Q1159	Q3-5 DO YOU PERFORM TASKS ON SAMPLE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	7.6	1.9	.0	.0	1.9	.0	.0	38.6

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Q1160	Q3-6 DO YOU PERFORM TASKS ON HOLD FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	4.5	1.9	.0	.0	1.9	.0	.0	36.4
Q1161	Q3-7 DO YOU PERFORM TASKS ON COMPARE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	9.1	1.9	.0	.0	1.9	.0	.0	34.1
Q1162	Q3-8 DO YOU PERFORM TASKS ON DIGITIZE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	3.0	1.9	.0	.0	1.9	.0	.0	36.4
Q1163	Q3-9 DO YOU PERFORM TASKS ON PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS BUT DON'T KNOW WHICH FUNCTION?	16.7	2.5	.0	6.3	.9	.0	.0	9.1
Q1164	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS?	9.1	1.9	.0	.0	.9	.0	.0	36.4
Q1165	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS?	4.5	1.9	.0	.0	.9	.0	.0	38.6
Q1166	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS?	10.6	1.9	.0	.0	.9	.0	.0	34.1
Q1167	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS?	13.6	1.9	.0	.0	.9	.0	.0	38.6
Q1168	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS?	4.5	1.9	.0	.0	1.9	.0	.0	27.3
Q1169	Q3-15 DO YOU PERFORM ANY TASKS ON ELECTRONIC A/D CONVERTERS?	24.2	3.7	.0	.0	2.8	.0	.0	47.7
Q1170	Q3-16 DO YOU PERFORM ANY TASKS ON DIGITAL-TO-ANALOG (D/A) CONVERTERS?	24.2	4.3	.0	.0	2.8	.0	.0	45.5
Q1171	Q3-17 DO YOU OPERATE COMPUTER KEYBOARDS?	15.2	1.9	.0	12.5	3.8	.0	.0	29.5
Q1172	Q3-18 DO YOU WORK AT OR WITH COMPUTER TERMINALS?	19.7	3.7	.0	12.5	3.8	.0	.0	18.2
Q1173	Q3-19 HAVE YOU BEEN SENT TO FACTORY TRAINING OR TO ANY OTHER SCHOOL FOR THE SPECIFIC PURPOSE OF RECEIVING COMPUTER OR LOGIC CIRCUIT RELATED TRAINING?	24.2	3.1	.0	6.3	2.8	.0	.0	18.2
Q1174	Q3-20 DO YOU HAVE MICROPROCESSORS OR COMPUTER EQUIPMENT LOCATED AT YOUR WORK STATION WHICH IS OPERATED OR MAINTAINED BY CONTRACTOR PERSONNEL?	24.2	3.1	.0	6.3	1.9	.0	1.8	34.1
Q1175	Q3-21 WAS THE COMPUTER OR LOGIC CIRCUIT TRAINING YOU RECEIVED IN YOUR 3-LEVEL AWARDING COURSE ADEQUATE IN TERMS OF YOUR PRESENT DUTIES?	25.8	3.1	.0	.0	.9	.0	.0	9.1
Q1176	Q3-22 ARE YOU ASSIGNED AGAINST A POSITION WHICH REQUIRES A "D" PREFIX?	.0	.6	.0	.0	.9	.0	.0	.0
R	PHANTASTRONS (R1), SCHMITT TRIGGERS (R2), CABLE FABRICATION (R3)								
R1177	R1-1 DO YOU WORK WITH PHANTASTRON CIRCUITRY? IF NO, GO TO ITEM R2-1. IF YES, CONTINUE.	7.6	2.5	.0	.0	.9	.0	.0	2.3
R1178	R1-2 PHANTASTRON CIRCUITRY HAS VARIABLE-DELAY APPLICATIONS IN MY JOB.	4.5	.6	.0	.0	1.9	.0	.0	4.5
R1179	R1-3 PHANTASTRON CIRCUITRY HAS SEARCH-LOCK AUTOMATIC FREQUENCY CONTROLS (AFC) APPLICATIONS IN MY JOB.	1.5	.6	.0	.0	1.9	.0	.0	4.5
R1180	R1-4 PHANTASTRON CIRCUITRY HAS MONOSTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	7.6	2.5	.0	.0	1.9	.0	.0	4.5

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
R1181	R1-5 PHANTASTRON CIRCUITRY HAS BISTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	7.6	2.5	.0	.0	1.9	.0	.0	4.5
R1182	R1-6 PHANTASTRON CIRCUITRY HAS FREE-RUNNING MULTIVIBRATORS APPLICATIONS IN MY JOB.	6.1	1.9	.0	.0	1.9	.0	.0	4.5
R1183	R2-1 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS? IF NO, GO TO ITEM R3-1; IF YES, CONTINUE.	63.6	42.2	.0	18.8	3.8	4.8	.0	43.2
R1184	R2-2 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS?	62.1	39.8	.0	12.5	3.8	4.8	.0	40.9
R1185	R2-3 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS?	62.1	35.4	.0	12.5	3.8	4.8	.0	40.9
R1186	R3-1 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES?	6.1	21.1	.0	56.3	21.7	4.8	37.7	34.1
R1187	R3-2 DO YOU FABRICATE COAXIAL CABLES?	7.6	18.6	.0	37.5	11.3	.0	5.3	40.9
S	INPUT/OUTPUT (PERIPHERAL) DEVICES (S1), PHOTO SENSITIVE DEVICES (S2), SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) (S3)								
S1188	S1-1 DO YOU WORK WITH INPUT OR OUTPUT DEVICES ON YOUR PRESENT JOB? IF NO, GO TO ITEM S2-1; IF YES, CONTINUE.	80.3	76.4	51.7	43.8	23.6	14.3	7.9	47.7
S1189	S1-2 DO YOU USE OR REFER TO KEYBOARDS OR TELETYPEWRITERS?	68.2	78.9	6.9	43.8	19.8	4.8	1.8	31.8
S1190	S1-3 DO YOU USE OR REFER TO PRINTERS?	77.3	78.3	13.8	37.5	17.9	4.8	1.8	45.5
S1191	S1-4 DO YOU USE OR REFER TO TAPE DRIVES (UNITS)?	37.9	44.7	24.1	31.3	13.2	.0	.0	25.0
S1192	S1-5 DO YOU USE OR REFER TO CARD READERS/CARD PUNCHES?	74.2	13.0	6.9	.0	4.7	.0	1.8	18.2
S1193	S1-6 DO YOU USE OR REFER TO VIDEO DISPLAYS (CRT'S)?	7.6	33.5	.0	31.3	18.9	4.8	.9	45.5
S1194	S1-7 DO YOU USE OR REFER TO NIXIE LIGHTS (TUBES)?	6.1	18.6	.0	6.3	.9	.0	.0	27.3
S1195	S1-8 DO YOU USE OR REFER TO LED'S?	60.6	44.1	31.0	31.3	12.3	4.8	2.6	50.0
S1196	S1-9 DO YOU USE OR REFER TO LCD'S?	18.2	19.9	10.3	31.3	5.7	.0	.0	43.2
S1197	S1-10 DO YOU USE OR REFER TO INCANDESENT DISPLAYS?	22.7	11.8	13.8	18.8	3.8	4.8	.9	29.5
S1198	S1-11 DO YOU USE OR REFER TO TOGGLE OR PUSH BUTTON SWITCH INPUTS?	69.7	44.1	37.9	31.3	9.4	9.5	5.3	38.6
S1199	S1-12 DO YOU USE OR REFER TO INTERFACE ADAPTER UNITS?	39.4	30.4	10.3	37.5	6.6	4.8	1.8	29.5
S1200	S1-13 DO YOU USE OR REFER TO TAPE READERS?	83.3	65.2	48.3	37.5	3.8	.0	.0	18.2
S1201	S1-14 DO YOU USE OR REFER TO TAPE PUNCHES?	77.3	66.5	51.7	31.3	3.8	.0	.0	9.1
S1202	S2-1 DO YOU WORK WITH PHOTODIODE PHOTO SENSITIVE DEVICES?	60.6	13.0	.0	.0	1.9	.0	.0	79.5
S1203	S2-2 DO YOU WORK WITH PHOTOTRANSISTOR PHOTO SENSITIVE DEVICES?	36.4	10.6	.0	.0	1.9	.0	.0	54.5
S1204	S2-3 DO YOU WORK WITH PHOTOTUBE PHOTO SENSITIVE DEVICES?	6.1	2.5	.0	.0	1.9	.0	.0	70.5
S1205	S2-4 DO YOU WORK WITH PHOTO-SCR PHOTO SENSITIVE DEVICES?	7.6	3.1	.0	.0	1.9	.0	.0	22.7
S1206	S2-5 DO YOU WORK WITH PHOTOCELL (PHOTOCONDUCTIVE OR PHOTOVOLTAIC) PHOTO SENSITIVE DEVICES?	68.2	16.8	3.4	.0	1.9	.0	.0	79.5
S1207	S3-1 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS? IF NO, GO TO ITEM T1-1; IF YES, CONTINUE.	3.0	.6	3.4	.0	.9	.0	1.8	34.1
S1208	S3-2 DO YOU USE OR REFER TO EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.6	3.4	.0	1.9	.0	.0	20.5
S1209	S3-3 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	.0	.6	3.4	.0	1.9	.0	.0	22.7

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
S1210	S3-4 DO YOU MEASURE EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	18.2
S1211	S3-5 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	20.5
S1212	S3-6 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	.0	.0	.0	.0	.0	22.7
S1213	S3-7 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	3.4	.0	.0	.0	.0	22.7
S1214	S3-8 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.0	.0	.0	.0	.0	.0	25.0
S1215	S3-9 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	.0	.6	3.4	.0	.0	.0	.0	27.3
T	INFRARED (T1), LASERS (T2), DISPLAY TUBES (T3), TELEVISION (T4)								
T1216	T1-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS? IF NO, GO TO ITEM T2-1; IF YES, CONTINUE.	.0	.6	.0	43.8	.9	.0	.9	9.1
T1217	T1-2 DO YOU INSPECT INFRARED SYSTEMS?	.0	.0	.0	43.8	.0	.0	.0	9.1
T1218	T1-3 DO YOU CLEAN INFRARED SYSTEMS?	.0	.0	.0	43.8	.9	.0	.0	9.1
T1219	T1-4 DO YOU SERVICE INFRARED SYSTEMS?	.0	.6	.0	43.8	.9	.0	.0	9.1
T1220	T1-5 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1221	T1-6 DO YOU OPERATE INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	6.8
T1222	T1-7 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1223	T1-8 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1224	T1-9 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1225	T1-10 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	1.5	.6	.0	43.8	.0	.0	.0	9.1
T1226	T1-11 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS?	.0	.6	.0	43.8	.0	.0	.0	9.1
T1227	T1-12 DO YOU USE OR REFER TO FAR REGIONS?	.0	.0	.0	.0	.9	.0	.0	2.3
T1228	T1-13 DO YOU USE OR REFER TO INTERMEDIATE REGIONS?	1.5	.0	.0	.0	.9	.0	.0	2.3
T1229	T1-14 DO YOU USE OR REFER TO NEAR REGIONS?	1.5	.0	.0	.0	.9	.0	.0	2.3
T1230	T1-15 DO YOU USE OR REFER TO MICRONS (M)?	1.5	.0	.0	6.3	.0	.0	.0	2.3
T1231	T1-16 DO YOU USE OR REFER TO GRAY BODIES?	1.5	.0	.0	.0	.0	.0	.0	2.3
T1232	T1-17 DO YOU USE OR REFER TO BLACK BODIES?	1.5	.0	.0	.0	.0	.0	.0	2.3
T1233	T1-18 DO YOU USE OR REFER TO ABSORPTION?	1.5	.0	.0	12.5	.0	.0	.0	6.8
T1234	T1-19 DO YOU USE OR REFER TO SCATTERING?	1.5	.0	.0	.0	.0	.0	.0	6.8
T1235	T1-20 DO YOU USE OR REFER TO ABSOLUTE ZERO?	1.5	.0	.0	12.5	.0	.0	.0	4.5
T1236	T1-21 DO YOU PERFORM TASKS ON BLITZ?	.0	.0	.0	.0	.9	.0	.0	.0
T1237	T1-22 DO YOU PERFORM TASKS ON TARGET BUTTONS?	.0	.0	3.4	.0	.9	.0	.0	.0
T1238	T1-23 DO YOU PERFORM TASKS ON ERECTOR LENSES?	.0	.0	.0	.0	.9	.0	.0	.0
T1239	T1-24 DO YOU PERFORM TASKS ON OCULAR LENSES?	.0	.0	.0	.0	.9	.0	.0	6.8

D TSK	TITLES	306 51 (F)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
T1240	T1-25 DO YOU PERFORM TASKS ON CORRECTION LENSES?	.0	.0	.0	6.3	.9	.0	.0	2.3
T1241	T1-26 DO YOU PERFORM TASKS ON FILTERS?	.0	.0	.0	18.8	.9	.0	.0	6.8
T1242	T1-27 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS?	.0	.0	.0	6.3	.9	.0	.0	2.3
T1243	T1-28 DO YOU PERFORM TASKS ON PLANE MIRRORS?	.0	.0	.0	6.3	.9	.0	.0	4.5
T1244	T2-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS? IF NO, GO TO ITEM T3-1; IF YES, CONTINUE.	4.5	.0	.0	.0	1.9	.0	.9	11.4
T1245	T2-2 DO YOU INSPECT LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	11.4
T1246	T2-3 DO YOU CLEAN LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	6.8
T1247	T2-4 DO YOU SERVICE LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	4.5
T1248	T2-5 DO YOU OPERATE LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	6.8
T1249	T2-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS?	3.0	.0	.0	.0	.0	.0	.0	6.8
T1250	T2-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS?	1.5	.0	.0	.0	.0	.0	.0	6.8
T1251	T2-8 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS?	1.5	.0	.0	.0	.9	.0	.0	4.5
T1252	T2-9 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS?	3.0	.0	.0	.0	.9	.0	.0	4.5
T1253	T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS?	1.5	.0	.0	.0	.9	.0	.0	4.5
T1254	T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)?	.0	.0	.0	.0	.9	.0	.9	4.5
T1255	T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS?	.0	.0	.0	.0	1.9	.0	.9	4.5
T1256	T2-13 DO YOU USE OR REFER TO GROUND STATE?	.0	.0	.0	.0	1.9	.0	.9	4.5
T1257	T2-14 DO YOU USE OR REFER TO EXCITED STATE?	.0	.0	.0	.0	1.9	.0	.9	4.5
T1258	T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION?	.0	.0	.0	.0	1.9	.0	.9	4.5
T1259	T2-16 DO YOU USE OR REFER TO PHOTONS?	.0	.0	.0	.0	.9	.0	.9	4.5
T1260	T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSIONS?	.0	.0	.0	.0	.9	.0	.9	4.5
T1261	T2-18 DO YOU USE OR REFER TO STIMULATED EMISSIONS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1262	T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE?	.0	.0	.0	.0	.9	.0	.0	4.5
T1263	T2-20 DO YOU USE OR REFER TO INVERSION LEVELS?	.0	.0	.0	.0	.9	.0	.0	4.5
T1264	T2-21 DO YOU USE OR REFER TO MONOCHROMATIC?	.0	.0	.0	.0	.9	.0	.0	4.5
T1265	T2-22 DO YOU WORK WITH ACTIVE MATERIALS?	.0	.6	.0	.0	1.9	.0	.0	2.3
T1266	T2-23 DO YOU WORK WITH PUMPING SOURCES?	.0	.6	.0	.0	1.9	.0	.0	4.5
T1267	T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS?	1.5	.0	.0	.0	1.9	.0	.0	4.5
T1268	T2-25 DO YOU WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS?	1.5	.0	.0	.0	1.9	.0	.0	4.5
T1269	T2-26 DO YOU WORK WITH HELICAL FLASHTUBES?	1.5	.6	.0	.0	1.9	.0	.0	4.5
T1270	T2-27 DO YOU WORK WITH RUBY MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3
T1271	T2-28 DO YOU WORK WITH HELIUM-NEON MATERIALS?	1.5	.0	.0	.0	1.9	.0	.0	2.3
T1272	T2-29 DO YOU WORK WITH HELIUM-XENON MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3
T1273	T2-30 DO YOU WORK WITH XENON MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	4.5
T1274	T2-31 DO YOU WORK WITH CESIUM-HELIUM MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1275	T2-32 DO YOU WORK WITH ARGON MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3
T1276	T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1277	T2-34 DO YOU WORK WITH GALLIUM ARSENIDE MATERIALS?	.0	.0	.0	.0	1.9	.0	.0	2.3
T1278	T3-1 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE TUBES (DVST), MULTIPLE MODE STORAGE TUBES (MMST), OR SCAN CONVERTER TUBES (SCT)? IF NO, GO TO ITEM T4-1; IF YES, CONTINUE.	3.0	1.9	.0	.0	2.8	.0	.9	6.8
T1279	T3-2 DO YOU INSPECT DVST OR MMST?	1.5	1.2	.0	.0	.9	.0	.0	6.8

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 50 (M)
T1280	T3-3 DO YOU CLEAN DVST OR MMST?	1.5	1.2	.0	.0	.9	.0	.0	6.8
T1281	T3-4 DO YOU ADJUST OR CALIBRATE DVST OR MMST?	1.5	.6	.0	.0	.0	.0	.0	4.5
T1282	T3-5 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST?	1.5	.0	.0	.0	.0	.0	.0	4.5
T1283	T3-6 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS?	1.5	1.2	.0	.0	.0	.0	.0	4.5
T1284	T3-7 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS?	1.5	.0	.0	.0	.0	.0	.0	4.5
T1285	T3-8 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF DVST?	.0	.0	.0	.0	.0	.0	.9	.0
T1286	T3-9 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF MMST?	.0	.0	.0	.0	.0	.0	.9	.0
T1287	T3-10 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF SCT?	.0	.0	.0	.0	.0	.0	.9	2.3
T1288	T3-11 DO YOU PERFORM TASKS ON FLOOD GUNS?	.0	.0	.0	.0	.9	.0	.0	.0
T1289	T3-12 DO YOU PERFORM TASKS ON WRITE GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1290	T3-13 DO YOU PERFORM TASKS ON READ GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1291	T3-14 DO YOU PERFORM TASKS ON ATTACK GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1292	T3-15 DO YOU PERFORM TASKS ON ERASE GUNS?	.0	.0	.0	.0	1.9	.0	.0	.0
T1293	T3-16 DO YOU PERFORM TASKS ON STORAGE GRIDS?	.0	.6	.0	.0	1.9	.0	.0	2.3
T1294	T4-1 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS DEALING WITH TELEVISION SYSTEMS INCLUDING LOW LIGHT TELEVISION? IF NO, GO TO ITEM U1-1; IF YES, CONTINUE.	.0	1.2	17.2	6.3	.9	.0	.0	38.6
T1295	T4-2 DO YOU INSPECT TELEVISION SYSTEMS?	.0	1.2	10.3	.0	.9	.0	.0	40.9
T1296	T4-3 DO YOU CLEAN TELEVISION SYSTEMS?	.0	1.2	3.4	.0	.9	.0	.0	38.6
T1297	T4-4 DO YOU ADJUST OR CALIBRATE TELEVISION SYSTEMS?	.0	1.2	10.3	.0	.9	.0	.0	36.4
T1298	T4-5 DO YOU OPERATE TELEVISION SYSTEMS?	.0	1.2	17.2	6.3	.9	.0	.0	38.6
T1299	T4-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF TV SYSTEMS?	.0	1.2	6.9	.0	.9	.0	.0	40.9
T1300	T4-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF TV SYSTEMS?	.0	1.2	6.9	.0	.9	.0	.0	31.8
T1301	T4-8 DO YOU TROUBLESHOOT DOWN TO TV SYSTEM COMPONENT PARTS?	.0	1.2	3.4	.0	.9	.0	.0	29.5
T1302	T4-9 DO YOU REMOVE OR REPLACE TV SYSTEM MAJOR ASSEMBLIES?	.0	.6	.0	.0	.9	.0	.0	31.8
T1303	T4-10 DO YOU REMOVE OR REPLACE TV SYSTEM COMPONENT PARTS?	.0	.6	.0	.0	.9	.0	.0	29.5
U	COMPUTERS, MICROPROCESSORS, AND PROGRAMMING (U1), DB AND POWER RATIOS (U2)								
U1300	U1-1 IN YOUR PRESENT JOB, DO YOU PERFORM MAINTENANCE ROUTINES OR PROGRAMMING TASKS? IF NO, GO TO ITEM U2-1; IF YES, CONTINUE.	34.8	5.6	20.7	31.3	9.4	.0	2.6	29.5
U1305	U1-2 DO YOU USE OR REFER TO DECIMAL SYSTEMS?	21.2	1.9	10.3	6.3	4.7	.0	.0	25.0
U1306	U1-3 DO YOU USE OR REFER TO OCTAL SYSTEMS?	18.2	.0	17.2	.0	3.8	.0	.0	22.7
U1307	U1-4 DO YOU USE OR REFER TO PARITY DETECTORS/GENERATORS?	28.8	4.3	3.4	.0	3.8	.0	.0	15.9
U1308	U1-5 DO YOU USE OR REFER TO HEXADECIMAL SYSTEMS?	13.6	1.2	.0	25.0	3.8	.0	.0	25.0
U1309	U1-6 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS?	9.1	.6	6.9	.0	2.8	.0	.0	13.6
U1310	U1-7 DO YOU USE OR REFER TO FOUR SYSTEMS?	6.1	.0	.0	.0	.9	.0	.0	11.4
U1311	U1-8 DO YOU USE OR REFER TO BINARY SYSTEMS?	34.8	3.7	13.8	12.5	5.7	.0	.0	27.3
U1312	U1-9 DO YOU USE OR REFER TO TIME-SHARING (MULTI-SEQUENCING)?	9.1	1.2	.0	.0	2.8	.0	.9	15.9
U1313	U1-10 DO YOU USE OR REFER TO DATA WORDS?	22.7	4.3	6.9	12.5	5.7	.0	.0	15.9

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U1314	U1-11 DO YOU USE OR REFER TO ADDRESS WORDS?	16.7	4.3	3.4	12.5	7.5	.0	.0	15.9
U1315	U1-12 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS?	19.7	3.1	3.4	12.5	6.6	.0	.9	13.6
U1316	U1-13 DO YOU USE OR REFER TO STEERING/INFORMATION?	12.1	2.5	6.9	6.3	2.8	.0	.0	11.4
U1317	U1-14 DO YOU USE OR REFER TO INSTRUCTION WORDS?	10.6	3.1	6.9	6.3	6.6	.0	.0	15.9
U1318	U1-15 DO YOU USE OR REFER TO DAP-16?	.0	.0	.0	.0	.9	.0	.0	6.9
U1319	U1-16 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	16.7	1.9	10.3	6.3	2.8	.0	.0	22.7
U1320	U1-17 DO YOU USE OR REFER TO CONTROL WORDS?	9.1	4.3	.0	18.8	4.7	.0	.0	13.6
U1321	U1-18 DO YOU USE OR REFER TO RESPONSE WORDS?	7.6	2.5	.0	25.0	3.8	.0	.0	9.1
U1322	U1-19 DO YOU USE OR REFER TO WRAPAROUND WORDS?	.0	1.2	.0	.0	1.9	.0	.0	6.8
U1323	U1-20 DO YOU USE OR REFER TO TEST OR DIAGNOSTIC PROGRAMS?	18.2	3.1	6.9	25.0	7.5	.0	.9	22.7
U1324	U1-21 DO YOU USE OR REFER TO RELIABILITY PROGRAMS?	6.1	.6	3.4	18.8	.9	.0	.0	11.4
U1325	U1-22 DO YOU USE OR REFER TO COMPILERS?	.0	.0	.0	.0	.9	.0	.0	9.1
U1326	U1-23 DO YOU USE OR REFER TO ASSEMBLERS?	.0	.0	.0	.0	.9	.0	.0	9.1
U1327	U1-24 DO YOU USE OR REFER TO MACHINE LANGUAGE?	4.5	1.2	.0	6.3	4.7	.0	.0	15.9
U1328	U1-25 DO YOU USE OR REFER TO MNEMONICS?	18.2	1.2	.0	6.3	4.7	.0	.9	11.4
U1329	U1-26 DO YOU USE OR REFER TO ROUTINES OR SUBROUTINES?	13.6	1.2	3.4	.0	5.7	.0	.9	13.6
U1330	U1-27 DO YOU USE OR REFER TO FLOW CHARTS OR DIAGRAMS?	12.1	3.1	10.3	12.5	4.7	.0	.9	18.2
U1331	U1-28 DO YOU USE OR REFER TO 'ATLAS'?	.0	.0	.0	.0	.9	.0	.0	4.5
U1332	U1-29 DO YOU USE OR REFER TO 'ELAN'?	.0	.0	.0	.0	.9	.0	.0	4.5
U1333	U1-30 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING SYSTEMS?	4.5	.0	.0	.0	1.9	.0	.9	11.4
U1334	U1-31 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING SYSTEMS?	.0	.6	3.4	.0	2.8	.0	.9	6.8
U1335	U1-32 DO YOU WRITE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	.0	.0	.0	.0	2.8	.0	.9	.0
U1336	U1-33 DO YOU USE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS?	3.0	1.9	6.9	25.0	6.6	.0	1.8	18.2
U1337	U1-34 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER CONTROL SECTIONS?	27.3	2.5	6.9	6.3	5.7	.0	.0	22.7
U1338	U1-35 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT SECTIONS?	28.8	3.1	10.3	6.3	7.5	.0	.9	20.5
U1339	U1-36 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT SECTIONS?	30.3	3.1	10.3	6.3	6.6	.0	.9	20.5
U1340	U1-37 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR SECTIONS?	25.8	2.5	10.3	6.3	4.7	.0	.9	18.2
U1341	U1-38 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER TRANSMIT SECTIONS?	30.3	4.3	3.4	6.3	3.8	.0	.0	15.9
U1342	U1-39 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER RECEIVE SECTIONS?	28.8	5.0	3.4	6.3	3.8	.0	.0	13.6
U1343	U1-40 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER INPUT DEVICES?	30.3	3.7	6.9	6.3	7.5	.0	.0	25.0
U1344	U1-41 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER STORAGE DEVICES?	24.2	3.7	6.9	6.3	6.6	.0	.0	25.0
U1345	U1-42 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER OUTPUT DEVICES?	30.3	3.7	6.9	6.3	6.6	.0	.0	25.0
U1346	U1-43 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER POWER DEVICES?	25.8	3.7	3.4	6.3	5.7	.0	.0	25.0
U1347	U1-44 DO YOU PERFORM TASKS ON BASIC DIGITAL COMPUTER MONITOR DEVICES?	28.8	3.7	6.9	6.3	4.7	.0	.0	22.7

D TSK	TITLES	306 51 (M)	306 52 (M)	316 50F (M)	316 52F (M)	362 51 (M)	362 53 (M)	362 54 (M)	918 5C (M)
U1348	U1-45 DO YOU USE FORTRAN PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	2.3
U1349	U1-46 DO YOU USE COBOL PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	4.5
U1350	U1-47 DO YOU USE RPG PROGRAMMING LANGUAGE?	.0	.0	.0	.0	.9	.0	.9	2.3
U1351	U1-48 DO YOU USE OR PERFORM TASKS ON MICROPROCESSOR BASED EQUIPMENT?	6.1	2.5	3.4	.0	3.8	4.8	1.8	22.7
U1352	U1-49 DO YOU USE INPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	4.5	1.9	.0	.0	1.9	.0	.0	22.7
U1353	U1-50 DO YOU USE OUTPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	1.9	.0	.0	1.9	.0	.0	22.7
U1354	U1-51 DO YOU USE RAM MEMORY CIRCUITS (STATIC OR DYNAMIC) IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	4.3	3.4	.0	3.8	.0	.0	29.5
U1355	U1-52 DO YOU USE ROM MEMORY CIRCUITS (INCLUDES PROM, EPROM, ETC.) IN CONJUNCTION WITH THE MICROPROCESSOR?	3.0	3.7	.0	.0	3.8	.0	.0	29.5
U1356	U1-53 DO YOU USE TRI-STATE CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	1.5	.6	.0	.0	.9	.0	.0	22.7
U1357	U1-54 DO YOU USE CLOCK GENERATOR CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.6	3.1	3.4	.0	3.8	.0	.0	27.3
U1358	U1-55 DO YOU USE STATUS LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	4.5	1.9	.0	.0	1.9	.0	.9	20.5
U1359	U1-56 DO YOU USE BIDIRECTIONAL BUFFER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	6.1	1.2	.0	.0	3.8	.0	.9	20.5
U1360	U1-57 DO YOU USE ENCODER/DECODER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	6.1	1.9	.0	.0	2.8	4.8	.0	22.7
U1361	U2-1 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION?	15.2	9.9	.0	.0	47.2	71.4	15.8	38.6
U1362	U2-2 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS?	4.5	2.5	.0	.0	6.6	.0	.0	11.4
U1363	U2-3 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS?	3.0	2.5	.0	.0	5.7	.0	.9	11.4
U1364	U2-4 DO YOU USE VTVM (DB METERS) TO CHECK FOR NOISE OR SIGNAL LEVEL?	21.2	13.7	.0	6.3	54.7	76.2	17.5	31.8
U1365	U2-5 DO YOU USE VTVM (DB METERS) TO CHECK OR ADJUST AUDIO AMPLIFIERS?	16.7	6.2	.0	6.3	43.4	76.2	12.3	25.0
U1366	U2-6 DO YOU USE A HP3550 OR 344A TEST SET TO ALIGN AUDIO EQUIPMENT?	7.6	3.1	.0	.0	47.2	33.3	7.0	2.3

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USE OF EPI PRINTOUT: THE PERCENT OF VARIOUS CAREER LADDER GROUPS RESPONDING TO EPI QUESTIONS IS LISTED TO THE RIGHT OF EACH EPI ITEM. THUS, THE APPROPPRIATE SAMPLE CRITERION GROUPS CAN BE IDENTIFIED WITH THE COLUMN HEADINGS AT THE TOP RIGHT OF EACH PRINTOUT PAGE. THEN THE PERCENT OF THAT GROUP USING THE CONCEPT OF PIECE OF EQUIPMENT CAN BE IDENTIFIED.

USE OF EPI DATA. THESE DATA MAY BE USED IN HELPING TO IDENTIFY, DELINEATE, AND VALIDATE ELECTRONIC PRINCIPLES ITEMS IN THE STS. CRITERIA LISTED IN ATCR 52-22 FOR ABR TRAINING MAY BE USEFUL IN HELPING DEVELOP ENTRY-LEVEL ELECTRONIC PRINCIPLE COURSES. ALSO, CDC WRITERS MAY USE EPI DATA TO HELP DETERMINE AREAS TO EMPHASIZE IN 5- AND 7-SKILL LEVEL CDCS, CONSISTENT WITH STS CODES.

FOR ASSISTANCE IN USING PRINTOUTS PHONE USAFOMC/OMYO, AUTOVON 487-5811.

VECTOR TYPE CODES:

(T) = % TIME SPENT BY ALL MEMBERS
(M) = % MEMBERS PERFORMING
(F) = TASK FACTOR
(D) = DICHOTOMOUS SET
(B) = % TIME SPENT BY MEMBERS PERFORMING
(-) = PROGRAM GENERATED VECTOR

NO	TYPE	VECTOR	/MEMBERS/ MEAN	- SD	DESCRIPTION	FACTOR #
1	M	306 71	42		DAFSC 30671 AIRMEN	3
2	M	306 72	106		DAFSC 30672 AIRMEN	5
3	M	31670F	22		DAFSC 31670F AIRMEN	7
4	M	31672F	6		DAFSC 31672F AIRMEN	9
5	M	362 71	78		DAFSC 36271 AIRMEN	11
6	M	362 73	15		DAFSC 36273 AIRMEN	13
7	M	362 74	80		DAFSC 36274 AIRMEN	15
8	M	918 70	55		DAFSC 91870 AIRMEN	17

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FOR ASSISTANCE IN USING PRINTOUTS PHONE USAFOMC/OMYO, AUTOVON 487-5811.

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A		MATHEMATICS (A1), DIRECT CURRENT (A2), RESISTANCE AND RESISTIVE CIRCUITS (A3)								
A	1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10?	66.7	55.7	40.9	83.3	60.3	53.3	32.5	92.7
A	2	A1-2 DO YOU USE PUBLICATIONS, SUCH AS TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB?	52.4	30.2	18.2	66.7	37.2	26.7	26.2	60.0
A	3	A1-3 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS?	35.7	20.8	9.1	66.7	33.3	26.7	11.2	69.1
A	4	A1-4 DO YOU CALCULATE THE SQUARE ROOT OF A QUANITITY?	9.5	8.5	.0	33.3	6.4	.0	.0	27.3
A	5	A1-5 DO YOU SOLVE FOR UNKNOWN QUANTITIES SUCH AS SOLVING FOR X IN THE EQUATION X + 6 = 8?	28.6	17.0	4.5	50.0	25.6	20.0	7.5	60.0
A	6	A1-6 DO YOU USE LOGARITHM TABLES?	7.1	4.7	.0	.0	7.7	.0	.0	20.0
A	7	A1-7 DO YOU SOLVE QUADRATIC EQUATIONS SUCH AS SOLVING FOR X IN THE EQUATION X**2 + 4X + 4 =0?	11.9	2.8	4.5	.0	6.4	6.7	.0	14.5
A	8	A1-8 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES?	7.1	6.6	.0	.0	2.6	.0	.0	23.6
A	9	A1-9 DO YOU USE TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT?	2.4	3.8	.0	.0	6.4	.0	.0	16.4
A	10	A1-10 DO YOU SOLVE OR USE PROPORTIONS? AN EXAMPLE OF A PROPORTION IS 2 : 5 :: 4 : 10. ANOTHER WAY TO EXPRESS THE SAME RELATIONSHIP IS 2/5 = 4/10. SOMETIMES, ONE OF THE QUANTITIES IS UNKNOWN AND HAS TO BE SOLVED FOR, SUCH AS 2 : X :: 4 : 10 (X IN THIS CASE IS UNKNOWN).	21.4	13.2	13.6	33.3	10.3	13.3	5.0	49.1
A	11	A1-11 DO YOU USE MATHEMATICAL EXPONENTS OR SUBSCRIPTS IN OTHER THAN POWERS OF 10?	31.0	19.8	9.1	16.7	12.8	13.3	7.5	52.7
A	12	A2-1 DO YOU USE (PERHAPS IN TECHNICAL ORDERS) THE TERM VOLTAGE OR VOLT (V)?	88.1	85.8	90.9	100.0	93.6	86.7	82.5	100.0

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A	13	A2-2 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTROMOTIVE FORCE (EMF)?	31.0	42.5	13.6	33.3	52.6	13.3	23.7	70.9
A	14	A2-3 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM OHM?	83.3	83.0	86.4	100.0	91.0	80.0	76.7	98.2
A	15	A2-4 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ION?	9.5	11.3	13.6	83.3	3.8	.0	1.2	69.1
A	16	A2-5 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM DYNE?	2.4	7.5	.0	33.3	3.8	.0	2.5	25.5
A	17	A2-6 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM AMPERE?	83.3	82.1	63.6	83.3	84.6	66.7	78.7	100.0
A	18	A2-7 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM NEUTRON?	14.3	15.1	.0	33.3	15.4	6.7	7.5	56.4
A	19	A2-8 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM COULOMB?	14.3	11.3	.0	.0	7.7	.0	2.5	45.5
A	20	A2-9 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM PROTON?	14.3	17.0	.0	33.3	14.1	6.7	7.5	50.9
A	21	A2-10 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM ELECTRON?	54.8	41.5	13.6	83.3	44.9	20.0	16.2	65.5
A	22	A2-11 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM CURRENT?	85.7	87.7	63.6	100.0	89.7	66.7	81.3	100.0
A	23	A2-12 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	76.2	74.5	63.6	100.0	70.5	60.0	47.5	100.0
A	24	A2-13 DO YOU DETERMINE IF TWO OR MORE BATTERIES MUST BE CONNECTED IN SERIES OR PARALLEL TO ACHIEVE A SPECIFIC VOLTAGE AND/OR CURRENT?	28.6	37.7	18.2	83.3	57.7	40.0	25.0	83.6
A	25	A3-1 DO YOU WORK WITH RESISTORS OR RESISTIVE CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM B1-1; IF YES, CONTINUE.	66.7	59.4	9.1	66.7	64.1	60.0	31.3	81.8
A	26	A3-2 DO YOU INSPECT RESISTORS?	64.3	63.2	4.5	100.0	57.7	73.3	22.5	98.2
A	27	A3-3 DO YOU CLEAN RESISTORS?	50.0	43.4	.0	83.3	39.7	40.0	12.5	87.3

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A	28	A3-4 DO YOU ADJUST RESISTORS?	71.4	61.3	4.5	83.3	53.8	73.3	13.7	96.4
A	29	A3-5 DO YOU MEASURE RESISTORS?	69.0	66.0	9.1	100.0	61.5	66.7	25.0	98.2
A	30	A3-6 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASK YOU PERFORM?	28.6	17.0	.0	33.3	16.7	20.0	3.7	61.8
A	31	A3-7 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY CARBON?	54.8	38.7	4.5	66.7	41.0	53.3	11.2	89.1
A	32	A3-8 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED WIRE?	54.8	51.9	9.1	83.3	53.8	73.3	26.2	87.3
A	33	A3-9 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY SLIDE TAP?	38.1	39.6	.0	66.7	30.8	66.7	10.0	90.9
A	34	A3-10 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY RHEOSTAT?	54.8	57.5	9.1	83.3	57.7	73.3	26.2	94.5
A	35	A3-11 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY POTENTIOMETER?	71.4	60.4	9.1	83.3	57.7	80.0	30.0	96.4
A	36	A3-12 DO YOU USE OR REFER TO SYMBOLS THAT IDENTIFY OR CLASSIFY FIXED FILM?	26.2	17.9	4.5	66.7	19.2	40.0	3.7	69.1
A	37	A3-13 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE?	66.7	62.3	9.1	100.0	57.7	66.7	22.5	98.2
A	38	A3-14 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE?	66.7	53.8	9.1	83.3	53.8	46.7	13.7	96.4
A	39	A3-15 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE?	26.2	14.2	4.5	66.7	21.8	6.7	5.0	30.9
A	40	A3-16 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES?	73.8	66.0	13.6	100.0	64.1	80.0	42.5	92.7
A	41	A3-17 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	57.1	49.1	13.6	83.3	56.4	40.0	33.7	90.9
A	42	A3-18 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	57.1	47.2	13.6	83.3	51.3	40.0	31.3	87.3

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A	43	A3-19 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	52.4	48.1	13.6	83.3	47.4	46.7	27.5	96.4
A	44	A3-20 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE CIRCUITS?	50.0	33.0	4.5	66.7	41.0	20.0	16.2	76.4
A	45	A3-21 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	52.4	48.1	13.6	83.3	52.6	46.7	32.5	90.9
A	46	A3-22 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	52.4	47.2	13.6	83.3	46.2	40.0	28.7	89.1
A	47	A3-23 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.9	48.1	13.6	83.3	38.5	46.7	25.0	94.5
A	48	A3-24 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.9	45.3	13.6	83.3	39.7	26.7	22.5	90.9
A	49	A3-25 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR SERIES PARALLEL RESISTIVE CIRCUITS?	42.9	30.2	4.5	66.7	35.9	13.3	16.2	76.4
A	50	A3-26 DO YOU USE OR REFER TO TOTAL RESISTANCE PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	50.0	44.3	9.1	83.3	47.4	40.0	31.3	87.3
A	51	A3-27 DO YOU USE OR REFER TO TOTAL CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	50.0	41.5	13.6	83.3	46.2	33.3	28.7	85.5
A	52	A3-28 DO YOU USE OR REFER TO INDIVIDUAL VOLTAGE DROP PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	47.6	43.4	9.1	83.3	39.7	26.7	22.5	94.5
A	53	A3-29 DO YOU USE OR REFER TO INDIVIDUAL BRANCH CURRENT PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	47.6	41.5	13.6	83.3	39.7	26.7	21.2	87.3
A	54	A3-30 DO YOU USE OR REFER TO POWER DISSIPATION PARAMETERS FOR PARALLEL RESISTIVE CIRCUITS?	42.9	26.4	4.5	66.7	33.3	13.3	13.7	78.2
A	55	A3-31 DO YOU CALCULATE TOTAL RESISTANCE PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	50.0	34.9	9.1	83.3	44.9	33.3	22.5	83.6
A	56	A3-32 DO YOU CALCULATE TOTAL CURPENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	47.6	34.0	9.1	83.3	43.6	26.7	21.2	81.8

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
A	57	A3-33 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROP PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	45.2	35.8	9.1	83.3	34.6	20.0	17.5	90.9
A	58	A3-34 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENT PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	40.5	32.1	9.1	83.3	35.9	20.0	17.5	83.6
A	59	A3-35 DO YOU CALCULATE POWER DISSIPATION PARAMETERS FOR SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS?	38.1	23.6	4.5	66.7	29.5	13.3	11.2	72.7
B		METERS/MULTIMETERS (B1), ALTERNATING CURRENT (AC) (B2), INDUCTORS AND INDUCTIVE REACTANCE (B3)								
B	60	B1-1 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE RESISTANCE?	78.6	73.6	68.2	100.0	82.1	73.3	62.5	98.2
B	61	B1-2 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE VOLTAGE?	78.6	74.5	77.3	100.0	82.1	73.3	70.0	96.4
B	62	B1-3 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE CURRENT?	57.1	67.9	50.0	83.3	70.5	40.0	47.5	92.7
B	63	B1-4 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE POWER?	31.0	27.4	40.9	50.0	41.0	20.0	31.3	70.9
B	64	B1-5 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE FREQUENCY?	69.0	39.6	36.4	83.3	67.9	53.3	16.2	92.7
B	65	B1-6 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE TEMPERATURE?	26.2	3.8	50.0	83.3	30.8	6.7	2.5	81.8
B	66	B1-7 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE PRESSURE?	23.8	5.7	54.5	83.3	23.1	.0	3.7	72.7

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
B	67	B1-8 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE LIGHT LEVELS?	11.9	.9	4.5	33.3	5.1	.0	1.2	58.2
B	68	B2-1 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM EFFECTIVE VOLTAGE (RMS) IN YOUR PRESENT JOB?	64.3	47.2	9.1	66.7	35.9	66.7	13.7	89.1
B	69	B2-2 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PEAK TO PEAK VOLTAGE IN YOUR PRESENT JOB?	69.0	55.7	13.6	100.0	39.7	66.7	8.7	92.7
B	70	B2-3 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM AVERAGE VOLTAGE (DC) IN YOUR PRESENT JOB?	57.1	46.2	18.2	100.0	44.9	53.3	22.5	81.8
B	71	B2-4 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM WAVE LENGTH IN YOUR PRESENT JOB?	33.3	33.0	9.1	66.7	25.6	46.7	3.7	78.2
B	72	B2-5 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM FREQUENCY IN YOUR PRESENT JOB?	66.7	54.7	40.9	100.0	56.4	66.7	18.8	94.5
B	73	B2-6 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM INSTANTANEOUS VALUE IN YOUR PRESENT JOB?	14.3	12.3	.0	50.0	11.5	6.7	.0	47.3
B	74	B2-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	47.6	31.1	13.6	83.3	21.8	13.3	1.2	89.1
B	75	B3-1 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C1-1; IF YES, CONTINUE.	47.6	31.1	.0	83.3	29.5	20.0	13.7	60.0
B	76	B3-2 DO YOU INSPECT INDUCTORS?	47.6	34.9	.0	83.3	26.9	33.3	7.5	76.4
B	77	B3-3 DO YOU CLEAN INDUCTORS?	38.1	27.4	.0	66.7	17.9	26.7	5.0	58.2
B	78	B3-4 DO YOU ADJUST INDUCTORS?	28.6	18.9	.0	50.0	12.8	13.3	1.2	67.3
B	79	B3-5 DO YOU MEASURE INDUCTORS?	28.6	33.0	.0	66.7	20.5	13.3	2.5	49.1
B	80	B3-6 DO YOU USE OR REFER TO INDUCTANCE?	45.2	32.1	.0	83.3	28.2	20.0	11.2	60.0
B	81	B3-7 DO YOU USE OR REFER TO HENRIES?	35.7	21.7	.0	50.0	19.2	6.7	2.5	58.2
B	82	B3-8 DO YOU USE OR REFER TO INDUCTIVE REACTANCE?	31.0	23.6	.0	33.3	20.5	13.3	6.3	50.9
B	83	B3-9 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS?	7.1	6.6	.0	.0	10.3	.0	2.5	27.3
B	84	B3-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS?	7.1	10.4	.0	.0	5.1	.0	2.5	27.3
B	85	B3-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS?	4.8	11.3	.0	.0	5.1	.0	1.2	29.1

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
B	86	B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL?	2.4	10.4	.0	16.7	14.1	.0	5.0	27.3
B	87	B3-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE?	.0	7.5	.0	.0	11.5	.0	3.7	21.8
B	88	B3-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH?	2.4	9.4	.0	.0	9.0	.0	2.5	20.0
B	89	B3-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMABILITY OF THE CORE MATERIAL?	2.4	7.5	.0	.0	11.5	.0	2.5	16.4
B	90	B3-16 DO YOU CALCULATE INDUCTANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	7.1	11.3	.0	33.3	10.3	.0	2.5	27.3
B	91	B3-17 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS?	16.7	15.1	.0	50.0	20.5	.0	3.7	49.1
B	92	B3-18 DO YOU CALCULATE INDUCTIVE REACTANCE?	4.8	10.4	.0	16.7	11.5	.0	2.5	25.5
B	93	B3-19 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTAIONAL TO FREQUENCY?	16.7	11.3	.0	16.7	15.4	.0	2.5	38.2
B	94	B3-20 DO YOU WORK WITH POWER INDUCTORS?	40.5	20.8	.0	33.3	16.7	13.3	3.7	52.7
B	95	B3-21 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS?	28.6	8.5	.0	16.7	20.5	20.0	7.5	49.1
B	96	B3-22 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS?	28.6	9.4	.0	16.7	5.1	6.7	1.2	49.1

C CAPACITORS AND CAPACITIVE REACTANCE (C1), TRANSFORMERS (C2), MAGNETISM (C3)

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
C	97	C1-1 DO YOU WORK WITH CAPACITORS OR CICUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C2-1; IF YES, CONTINUE.	73.8	60.4	22.7	100.0	65.4	66.7	36.2	94.5
C	98	C1-2 DO YOU INSPECT CAPACITORS?	61.9	53.8	9.1	100.0	56.4	73.3	21.2	96.4
C	99	C1-3 DO YOU CLEAN CAPACITORS?	45.2	39.6	.0	83.3	38.5	46.7	8.7	63.6
C	100	C1-4 DO YOU ADJUST CAPACITORS?	26.2	18.9	.0	66.7	12.8	13.3	1.2	83.6
C	101	C1-5 DO YOU TEST CAPACITORS?	54.8	52.8	.0	66.7	55.1	66.7	18.8	89.1
C	102	C1-6 DO YOU DISCHARGE CAPACITORS?	69.0	52.8	4.5	66.7	50.0	66.7	20.0	94.5
C	103	C1-7 DO YOU MEASURE CAPACITORS?	33.3	48.1	9.1	66.7	38.5	26.7	12.5	74.5
C	104	C1-8 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE?	4.8	8.5	.0	66.7	20.5	.0	1.2	29.1
C	105	C1-9 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC?	2.4	4.7	.0	16.7	9.0	.0	.0	5.5
C	106	C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS?	64.3	52.8	.0	100.0	52.6	40.0	17.5	83.6
C	107	C1-11 DO YOU USE OR REFER TO CAPACITANCE?	64.3	49.1	4.5	100.0	55.1	46.7	27.5	87.3
C	108	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT?	7.1	11.3	.0	33.3	12.8	.0	2.5	23.6
C	109	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS?	57.1	42.5	9.1	83.3	39.7	60.0	16.2	89.1
C	110	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE?	28.6	20.8	.0	83.3	29.5	6.7	6.3	52.7
C	111	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES?	28.6	13.2	.0	66.7	26.9	6.7	6.3	36.4
C	112	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	78.6	63.2	9.1	100.0	65.4	73.3	28.7	96.4
C	113	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	78.6	58.5	9.1	100.0	39.7	53.3	28.7	96.4
C	114	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	64.3	52.8	13.6	100.0	43.6	60.0	26.2	96.4
C	115	C1-19 DO YOU CALCULATE CAPACITANCE IN ELECTRICAL/ELECTRONIC CIRCUITS?	16.7	8.5	.0	33.3	17.9	.0	6.3	30.9
C	116	C1-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT?	7.1	10.4	.0	33.3	14.1	.0	2.5	25.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
C	117	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS?	4.8	6.6	.0	16.7	10.3	.0	1.2	20.0
C	118	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO?	33.3	34.0	9.1	50.0	28.2	26.7	16.2	63.6
C	119	C1-23 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS?	21.4	18.9	4.5	33.3	17.9	6.7	7.5	54.5
C	120	C1-24 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY?	14.3	11.3	.0	16.7	16.7	.0	5.0	34.5
C	121	C1-25 DO YOU CALCULATE CAPACITIVE REACTANCE?	4.8	7.5	.0	16.7	10.3	.0	3.7	21.8
C	122	C1-26 DO YOU WORK WITH VARIABLE CAPACITORS?	31.0	22.6	4.5	66.7	19.2	13.3	5.0	81.8
C	123	C1-27 DO YOU WORK WITH TRIMMER CAPACITORS?	21.4	16.0	4.5	66.7	11.5	6.7	1.2	74.5
C	124	C1-28 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS?	73.8	54.7	13.6	100.0	53.6	60.0	22.5	96.4
C	125	C1-29 DO YOU WORK WITH OTHER FIXED CAPACITORS?	69.0	49.1	9.1	83.3	47.4	60.0	22.5	89.1
C	126	C2-1 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C3-1; IF YES, CONTINUE.	69.0	51.9	31.8	83.3	41.0	66.7	16.2	80.0
C	127	C2-2 DO YOU INSPECT TRANSFORMERS?	57.1	49.1	18.2	100.0	35.9	66.7	15.0	90.9
C	128	C2-3 DO YOU CLEAN TRANSFORMERS?	45.2	36.8	.0	83.3	28.2	40.0	7.5	65.5
C	129	C2-4 DO YOU ADJUST TRANSFORMERS?	7.1	17.9	.0	50.0	19.2	20.0	2.5	70.9
C	130	C2-5 DO YOU TROUBLESHOOT TRANSFORMERS?	57.1	44.3	18.2	83.3	25.6	60.0	11.2	85.5
C	131	C2-6 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)?	2.4	2.8	.0	.0	2.6	.0	2.5	21.8
C	132	C2-7 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M?	2.4	1.9	.0	.0	2.6	.0	2.5	20.0
C	133	C2-8 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS?	7.1	7.5	.0	16.7	5.1	.0	2.5	16.4
C	134	C2-9 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS?	11.9	10.4	4.5	33.3	6.4	13.3	2.5	54.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
C	135	C2-10 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS?	4.8	6.6	.0	.0	7.7	6.7	2.5	20.0
C	136	C2-11 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS?	.0	.9	.0	.0	5.1	.0	.0	7.3
C	137	C2-12 DO YOU WORK WITH AUTOTRANSFORMERS?	14.3	17.0	.0	16.7	9.0	6.7	1.2	87.3
C	138	C2-13 DO YOU WORK WITH POWER TRANSFORMERS?	61.9	48.1	27.3	100.0	32.1	46.7	18.8	90.9
C	139	C2-14 DO YOU WORK WITH AUDIO TRANSFORMERS?	28.6	13.2	4.5	16.7	24.4	46.7	12.5	65.5
C	140	C2-15 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS?	19.0	11.3	4.5	.0	7.7	.0	.0	56.4
C	141	C2-16 DO YOU WORK WITH SATURABLE CORE TRANSFORMERS?	7.1	1.9	.0	33.3	10.3	.0	.0	40.0
C	142	C2-17 DO YOU WORK WITH SENSING TRANSFORMERS?	4.8	2.8	4.5	33.3	6.4	.0	.0	43.6
C	143	C2-18 DO YOU WORK WITH CONTROL TRANSFORMERS?	11.9	7.5	9.1	50.0	11.5	.0	.0	63.6
C	144	C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE?	59.5	47.2	4.5	100.0	30.8	46.7	10.0	81.8
C	145	C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE?	54.8	45.3	4.5	100.0	28.2	33.3	10.0	76.4
C	146	C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES?	52.4	43.4	13.6	100.0	25.6	46.7	6.3	87.3
C	147	C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	11.9	22.6	.0	33.3	16.7	26.7	2.5	47.3
C	148	C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO?	21.4	35.8	4.5	50.0	21.8	20.0	3.7	76.4
C	149	C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS?	73.8	50.0	22.7	100.0	35.9	46.7	17.5	89.1
C	150	C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS?	69.0	45.3	9.1	100.0	26.9	46.7	8.7	85.5
C	151	C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	69.0	45.3	9.1	100.0	30.8	33.3	10.0	85.5
C	152	C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS?	73.8	50.0	4.5	100.0	32.1	46.7	12.5	89.1

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C	153	C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	38.1	19.8	4.5	66.7	20.5	20.0	10.0	65.5
C	154	C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS?	52.4	26.4	4.5	83.3	23.1	33.3	10.0	76.4
C	155	C2-30 DO YOU REFER TO VARIABLE TRANSFORMER SCHEMATIC SYMBOLS?	23.8	28.3	4.5	100.0	23.1	26.7	6.3	78.2
C	156	C2-31 DO YOU REFER TO COMBINATIONS OF SCHEMATIC SYMBOLS FOR TRANSFORMERS?	61.9	34.9	4.5	100.0	26.9	20.0	8.7	76.4
C	157	C2-32 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS?	28.6	17.0	9.1	50.0	15.4	6.7	3.7	65.5
C	158	C2-33 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH?	31.0	14.2	.0	66.7	15.4	13.3	6.3	30.9
C	159	C2-34 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO?	14.3	16.0	.0	33.3	14.1	6.7	2.5	54.5
C	160	C2-35 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS?	28.6	30.2	4.5	66.7	24.4	33.3	7.5	74.5
C	161	C2-36 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	9.5	11.3	.0	.0	9.0	13.3	1.2	41.8
C	162	C2-37 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS?	9.5	8.5	.0	.0	3.8	.0	1.2	29.1
C	163	C2-38 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS?	19.0	7.5	18.2	100.0	14.1	.0	1.2	78.2
C	164	C2-39 DO YOU INSPECT THREE PHASE TRANSFORMERS?	16.7	4.7	13.6	66.7	14.1	.0	.0	72.7
C	165	C2-40 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS?	14.3	4.7	.0	33.3	6.4	.0	.0	43.6
C	166	C2-41 DO YOU ADJUST THREE PHASE TRANSFORMERS?	7.1	3.8	4.5	16.7	7.7	6.7	.0	36.4
C	167	C2-42 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS?	19.0	4.7	18.2	100.0	12.8	6.7	.0	67.3
C	168	C3-1 DO YOU USE OR REFER TO PERMANENT MAGNETS?	31.0	37.7	4.5	50.0	28.2	6.7	27.5	61.8
C	169	C3-2 DO YOU USE OR REFER TO TEMPORARY MAGNETS?	33.3	33.0	4.5	33.3	38.5	6.7	7.5	45.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
C	170	C3-3 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS?	7.1	14.2	.0	.0	20.5	.0	2.5	25.5
C	171	C3-4 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS?	9.5	12.3	.0	.0	19.2	.0	2.5	23.6
C	172	C3-5 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS?	11.9	12.3	.0	16.7	15.4	.0	2.5	29.1
C	173	C3-6 DO YOU USE OR REFER TO RESIDUAL MAGNETISM?	19.0	27.4	.0	.0	61.5	13.3	1.2	29.1
C	174	C3-7 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX?	26.2	24.5	9.1	16.7	28.2	.0	12.5	40.0
C	175	C3-8 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM?	7.1	3.8	.0	.0	7.7	.0	1.2	18.2
C	176	C3-9 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM?	7.1	3.8	.0	.0	6.4	.0	1.2	16.4
C	177	C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION?	26.2	20.8	4.5	16.7	32.1	6.7	20.0	40.0
C	178	C3-11 DO YOU USE OR REFER TO FLUX DENSITY?	14.3	7.5	.0	16.7	10.3	.0	.0	27.3
C	179	C3-12 DO YOU USE OR REFER TO SATURABLE REACTANCE?	7.1	2.8	.0	33.3	10.3	.0	.0	20.0
D		RCL CIRCUITS (D1), TIME CONSTANTS (D2), FILTERS (D3)								
D	180	D1-1 DO YOU WORK WITH RC, LR, OR RCL CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM D2-1; IF YES, CONTINUE.	47.6	17.0	4.5	33.3	17.9	6.7	6.3	67.3
D	181	D1-2 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS?	9.5	6.6	.0	.0	2.6	.0	.0	25.5
D	182	D1-3 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS?	9.5	7.5	.0	.0	2.6	.0	.0	16.4
D	183	D1-4 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS?	9.5	5.7	.0	.0	5.1	13.3	.0	14.5
D	184	D1-5 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS?	11.9	4.7	.0	.0	3.8	13.3	.0	12.7

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
D	185	D1-6 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS?	11.9	5.7	.0	.0	3.8	6.7	.0	12.7
D	186	D1-7 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS?	19.0	7.5	.0	.0	16.7	6.7	3.7	56.4
D	187	D1-8 DO YOU USE OR REFER TO TRUE POWER (P SUB T) WHEN WORKING WITH RCL CIRCUITS?	7.1	8.5	.0	16.7	6.4	6.7	1.2	32.7
D	188	D1-9 DO YOU USE OR REFER TO MAXIMUM POWER (P SUB M) WHEN WORKING WITH RCL CIRCUITS?	9.5	7.5	.0	16.7	5.1	6.7	1.2	32.7
D	189	D1-10 DO YOU USE OR REFER TO AVERAGE POWER (P SUB AVE) WHEN WORKING WITH RCL CIRCUITS?	11.9	6.6	.0	16.7	7.7	.0	1.2	30.9
D	190	D1-11 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) WHEN WORKING WITH RCL CIRCUITS?	4.8	6.6	.0	16.7	3.8	.0	1.2	23.6
D	191	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS?	9.5	7.5	.0	16.7	5.1	.0	1.2	27.3
D	192	D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	21.4	7.5	.0	16.7	10.3	6.7	1.2	49.1
D	193	D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS?	21.4	8.5	.0	16.7	7.7	6.7	1.2	47.3
D	194	D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS?	16.7	8.5	.0	16.7	7.7	6.7	.0	38.2
D	195	D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS?	16.7	8.5	.0	16.7	7.7	6.7	.0	54.5
D	196	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS?	4.8	5.7	.0	16.7	2.6	6.7	.0	27.3
D	197	D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS?	21.4	6.6	.0	16.7	6.4	.0	.0	38.2
D	198	D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS?	9.5	5.7	.0	.0	5.1	.0	.0	23.6
D	199	D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS?	33.3	11.3	.0	16.7	7.7	6.7	1.2	50.9

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
D	200	D1-21 DO YOU DETERMINE VALUES OR TRIGONOMETRIC FUNCTIONS USING FORMULAS SUCH AS: SINE OF AN ANGLE = OPPOSITE SIDE/ HYPOTENUSE?	9.5	3.8	.0	.0	2.6	.0	1.2	10.9
D	201	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS?	11.9	5.7	.0	.0	5.1	.0	.0	18.2
D	202	D1-23 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS?	16.7	7.5	.0	16.7	9.0	6.7	2.5	21.8
D	203	D1-24 DO YOU USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS?	11.9	5.7	.0	16.7	3.8	.0	2.5	21.8
D	204	D1-25 DO YOU USE OR REFER TO TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS?	14.3	7.5	.0	16.7	7.7	.0	1.2	23.6
D	205	D1-26 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS?	7.1	5.7	.0	.0	2.6	.0	.0	14.5
D	206	D1-27 DO YOU USE OR REFER TO APPARENT POWER (P SUB A) FOR SERIES RCL CIRCUITS?	7.1	6.6	.0	.0	3.8	.0	.0	21.8
D	207	D1-28 DO YOU USE OR REFER TO TRUE POWER (P SUB T) FOR SERIES RCL CIRCUITS?	7.1	7.5	.0	.0	5.1	6.7	.0	27.3
D	208	D1-29 DO YOU USE OR REFER TO POWER FACTORS (PF) FOR SERIES RCL CIRCUITS?	7.1	6.6	.0	.0	5.1	.0	1.2	21.8
D	209	D1-30 DO YOU USE OR REFER TO TOTAL CURRENT FOR PARALLEL RCL CIRCUITS?	16.7	8.5	.0	33.3	9.0	6.7	1.2	30.9
D	210	D1-31 DO YOU USE OR REFER TO IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS?	7.1	6.6	.0	16.7	1.3	.0	1.2	12.7
D	211	D1-32 DO YOU USE THE ASSUMED VOLTAGE METHOD FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	14.3	2.8	.0	16.7	.0	6.7	1.2	16.4
D	212	D1-33 DO YOU USE OHM'S LAW FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS?	16.7	7.5	.0	33.3	14.1	6.7	1.2	32.7
D	213	D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS?	45.2	18.9	.0	50.0	16.7	13.3	5.0	67.3
D	214	D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION?	23.8	6.6	.0	16.7	10.3	6.7	1.2	52.7
D	215	D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS?	40.5	17.9	.0	50.0	15.4	13.3	2.5	58.2

D	TSK	TITLES	306 71 (%)	306 72 (%)	316 70F (%)	316 72F (%)	362 71 (%)	362 73 (%)	362 74 (%)	918 70 (%)
D	216	D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION?	23.8	6.6	.0	16.7	10.3	.0	1.2	43.6
D	217	D1-38 DO YOU CHECK RESISTORS USING OHMMETERS?	42.9	20.8	.0	66.7	16.7	13.3	5.0	69.1
D	218	D1-39 DO YOU CHECK RESISTORS USING SUBSTITUTION?	23.8	7.5	.0	16.7	10.3	6.7	1.2	49.1
D	219	D1-40 DO YOU USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (P SUB A) = TRUE POWER (P SUB T) FOR RESONANT CIRCUITS?	2.4	5.7	.0	.0	1.3	.0	1.2	14.5
D	220	D1-41 DO YOU USE OR REFER TO RESONANT FREQUENCIES FOR RCL CIRCUITS?	14.3	8.5	.0	.0	6.4	20.0	1.2	40.0
D	221	D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS?	14.3	5.7	.0	.0	7.7	.0	1.2	27.3
D	222	D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS?	14.3	7.5	.0	.0	6.4	.0	1.2	23.6
D	223	D1-44 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 OF THE PEAK CURRENT VALUE?	7.1	3.8	.0	.0	5.1	.0	1.2	30.9
D	224	D1-45 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE COIL (Q)?	9.5	4.7	.0	.0	3.8	.0	2.5	14.5
D	225	D1-46 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS?	14.3	5.7	.0	.0	2.6	.0	1.2	25.5
D	226	D2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS? IF NO, GO TO ITEM D3-1; IF YES, CONTINUE.	26.2	7.5	4.5	.0	2.6	.0	.0	38.2
D	227	D2-2 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)?	21.4	6.6	.0	16.7	2.6	.0	.0	25.5
D	228	D2-3 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS?	9.5	5.7	.0	.0	2.6	.0	.0	12.7

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 77 (M)
D	229	D2-4 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS?	9.5	7.5	.0	16.7	1.3	.0	.0	18.2
D	230	D2-5 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS?	7.1	6.6	.0	16.7	2.6	6.7	.0	14.5
D	231	D2-6 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES?	4.8	4.7	.0	16.7	1.3	.0	.0	18.2
D	232	D2-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS?	7.1	5.7	.0	16.7	1.3	.0	.0	16.4
D	233	D3-1 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM E1-1; IF YES, CONTINUE.	64.3	27.4	9.1	50.0	17.9	60.0	13.7	65.5
D	234	D3-2 DO YOU INSPECT FILTER CIRCUITS?	52.4	24.5	.0	50.0	11.5	53.3	7.5	63.6
D	235	D3-3 DO YOU CLEAN FILTER CIRCUITS?	47.6	16.0	.0	33.3	10.3	33.3	3.7	36.4
D	236	D3-4 DO YOU ALIGN OR ADJUST FILTER CIRCUITS?	21.4	10.4	.0	33.3	10.3	13.3	2.5	54.5
D	237	D3-5 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL?	47.6	21.7	4.5	50.0	12.8	40.0	6.3	60.0
D	238	D3-6 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF FILTER CIRCUITS?	45.2	19.8	.0	50.0	9.0	33.3	3.7	61.8
D	239	D3-7 DO YOU WORK WITH LOW PASS FILTERS?	52.4	15.1	.0	50.0	11.5	46.7	3.7	63.6
D	240	D3-8 DO YOU WORK WITH HIGH PASS FILTERS?	45.2	9.4	.0	50.0	11.5	46.7	1.2	63.6
D	241	D3-9 DO YOU WORK WITH BANDPASS FILTERS?	38.1	9.4	.0	16.7	10.3	13.3	3.7	58.2
D	242	D3-10 DO YOU WORK WITH BAND-REJECT FILTERS?	28.6	4.7	.0	16.7	6.4	.0	1.2	40.0
D	243	D3-11 DO YOU WORK WITH FILTERS BUT DON'T REMEMBER WHICH TYPE?	14.3	6.6	4.5	16.7	3.8	6.7	6.3	20.0
D	244	D3-12 DO YOU WORK WITH L-SECTION FILTER CONFIGURATIONS?	42.9	12.3	4.5	16.7	7.7	.0	2.5	47.3
D	245	D3-13 DO YOU WORK WITH T-SECTION FILTER CONFIGURATIONS?	42.9	10.4	.0	16.7	7.7	13.3	1.2	43.6
D	246	D3-14 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATIONS?	40.5	11.3	.0	16.7	6.4	6.7	2.5	49.1

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
D	247	D3-15 DO YOU WORK WITH YTTRIUM IRON GARNET (YIG) FILTERS?	7.1	.0	.0	.0	.0	6.7	.0	.0
D	248	D3-16 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS?	7.1	1.9	.0	.0	2.6	.0	1.2	9.1
E		COUPLING (E1), SOLDERING OR SOLDERLESS CONNECTIONS(E2), RELAYS (E3)								
E	249	E1-1 DO YOU WORK WITH COUPLING DEVICES OR CIRCUITRY IN YOUR PRESENT JOB? IF NO, GO TO ITEM E2-1; IF YES, CONTINUE.	52.4	21.7	9.1	16.7	14.1	26.7	7.5	69.1
E	250	E1-2 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING?	45.2	17.9	4.5	33.3	11.5	6.7	3.7	78.2
E	251	E1-3 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING (MATCHING)?	38.1	15.1	4.5	16.7	12.8	26.7	7.5	69.1
E	252	E1-4 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH OPTICAL COUPLING?	19.0	11.3	.0	16.7	1.3	.0	.0	60.0
E	253	E1-5 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING?	35.7	16.0	.0	33.3	14.1	13.3	6.3	74.5
E	254	E1-6 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING?	42.9	13.2	4.5	16.7	11.5	13.3	3.7	78.2
E	255	E1-7 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING?	38.1	10.4	4.5	16.7	14.1	33.3	7.5	69.1
E	256	E1-8 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING?	31.0	11.3	.0	33.3	14.1	13.3	7.5	74.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
E	257	E1-9 DO YOU WORK WITH DIRECT COUPLED CIRCUITS?	42.9	19.8	.0	33.3	15.4	13.3	3.7	78.2
E	258	E1-10 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS?	42.9	17.9	4.5	33.3	11.5	6.7	2.5	76.4
E	259	E1-11 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS?	28.6	12.3	4.5	.0	12.8	6.7	2.5	70.9
E	260	E1-12 DO YOU WORK WITH OPTICAL COUPLING?	16.7	9.4	.0	.0	1.3	.0	.0	60.0
E	261	E1-13 DO YOU WORK WITH OPTICAL COUPLING CIRCUITS?	16.7	9.4	.0	.0	1.3	.0	.0	61.8
E	262	E1-14 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS?	31.0	16.0	.0	33.3	14.1	13.3	6.3	74.5
E	263	E2-1 IN YOUR PRESENT JOB, DO YOU CONNECT ELECTRONIC CIRCUITS USING SOLDERLESS CONNECTIONS OR SOLDERING TECHNIQUES? IF NO, GO TO ITEM E3-1; IF YES, CONTINUE.	66.7	58.5	18.2	83.3	74.4	66.7	47.5	90.9
E	264	E2-2 DO YOU SOLDER CONNECTIONS?	66.7	61.3	4.5	83.3	79.5	66.7	56.3	92.7
E	265	E2-3 DO YOU DESOLDER CONNECTIONS?	66.7	60.4	4.5	83.3	79.5	66.7	56.3	92.7
E	266	E2-4 DO YOU PERFORM HIGH RELIABILITY SOLDERING?	64.3	48.1	.0	66.7	53.8	26.7	22.5	70.9
E	267	E2-5 DO YOU INSPECT SOLDERED CONNECTIONS?	66.7	60.4	4.5	83.3	78.2	66.7	55.0	92.7
E	268	E2-6 DO YOU CLEAN OR TIN CONNECTIONS?	66.7	61.3	4.5	83.3	76.9	66.7	47.5	92.7
E	269	E2-7 DO YOU MAKE HARDWIRE CONNECTIONS?	64.3	59.4	4.5	83.3	75.6	60.0	56.3	90.9
E	270	E2-8 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS?	64.3	55.7	9.1	83.3	52.6	60.0	17.5	92.7
E	271	E2-9 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS?	64.3	59.4	4.5	83.3	66.7	66.7	17.5	92.7
E	272	E2-10 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS?	64.3	58.5	4.5	83.3	55.1	53.3	12.5	92.7
E	273	E2-11 DO YOU SOLDER ACTIVE COMPONENTS, SUCH AS INTEGRATED CIRCUITS?	64.3	41.5	4.5	33.3	32.1	6.7	7.5	89.1
E	274	E2-12 DO YOU PERFORM WIRE WRAPPING IN LIEU OF SOLDERING?	57.1	19.8	4.5	33.3	75.6	33.3	53.7	40.0
E	275	E2-13 DO YOU PERFORM CRIMPING IN LIEU OF SOLDERING?	57.1	39.6	9.1	83.3	38.5	20.0	38.7	74.5
E	276	E2-14 DO YOU PERFORM WIRE CONNECTIONS USING A 714 PUNCH-ON TOOL IN LIEU OF SOLDERING?	16.7	7.5	.0	.0	41.0	6.7	58.7	14.5
E	277	E3-1 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB? IF NO, GO TO ITEM F1-1; IF YES, CONTINUE.	59.5	38.7	45.5	100.0	78.2	80.0	55.0	92.7

C	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
E	278	E3-2 DO YOU ADJUST RELAYS?	26.2	22.6	4.5	66.7	76.9	66.7	47.5	78.2
E	279	E3-3 DO YOU CLEAN RELAYS?	45.2	31.1	4.5	83.3	76.9	73.3	58.7	89.1
E	280	E3-4 DO YOU INSPECT RELAYS?	52.4	34.9	18.2	100.0	75.6	73.3	60.0	96.4
E	281	E3-5 DO YOU TROUBLESHOOT RELAYS?	52.4	33.0	45.5	100.0	76.9	66.7	61.2	94.5
E	282	E3-6 DO YOU MONITOR BIAS OUTPUT ON RELAYS?	14.3	14.2	9.1	50.0	26.9	20.0	12.5	27.3
E	283	E3-7 DO YOU REMOVE OR REPLACE RELAYS?	54.8	37.7	9.1	83.3	71.8	73.3	48.7	94.5
E	284	E3-8 DO YOU PERFORM TASKS ON CONTACTS OF RELAYS?	50.0	28.3	13.6	100.0	76.9	73.3	52.5	92.7
E	285	E3-9 DO YOU PERFORM TASKS ON CORES OF RELAYS?	7.1	16.0	4.5	16.7	56.4	33.3	10.0	52.7
E	286	E3-10 DO YOU PERFORM TASKS ON COILS OF RELAYS?	19.0	17.9	4.5	16.7	65.4	33.3	11.2	72.7
E	287	E3-11 DO YOU PERFORM TASKS ON ARMATURES OF RELAYS?	33.3	31.1	4.5	50.0	75.6	53.3	26.2	63.6
E	288	E3-12 DO YOU PERFORM TASKS ON SPRINGS OF RELAYS?	31.0	28.3	4.5	50.0	78.2	46.7	38.7	83.6
E	289	E3-13 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS?	54.8	33.0	40.9	100.0	59.0	60.0	48.7	94.5
E	290	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS?	54.8	33.0	40.9	100.0	59.0	60.0	48.7	94.5
E	291	E3-15 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS?	52.4	28.3	36.4	100.0	55.1	53.3	45.0	94.5
E	292	E3-16 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS?	52.4	26.4	36.4	100.0	53.8	53.3	42.5	94.5
E	293	E3-17 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS?	57.1	28.3	36.4	83.3	67.9	40.0	45.0	94.5
E	294	E3-18 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE?	50.0	37.7	9.1	100.0	70.5	53.3	36.2	87.3

F MICROPHONES AND SENSING DEVICES (F1), SPEAKERS (F2), OSCILLOSCOPES (F3)

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
F	295	F1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES OR OTHER SENSING DEVICES SUCH AS TRANSDUCERS? IF NO, GO TO ITEM F2-1; IF YES, CONTINUE.	7.1	5.7	45.5	33.3	19.2	66.7	11.2	61.8
F	296	F1-2 DO YOU INSPECT MICROPHONES?	2.4	3.8	18.2	.0	12.8	66.7	6.3	38.2
F	297	F1-3 DO YOU CLEAN MICROPHONES?	.0	1.9	13.6	.0	11.5	40.0	3.7	30.9
F	298	F1-4 DO YOU OPERATE MICROPHONES?	4.8	1.9	45.5	.0	14.1	53.3	10.0	32.7
F	299	F1-5 DO YOU TROUBLESHOOT MICROPHONES WIRE CONNECTIONS?	2.4	2.8	4.5	.0	15.4	53.3	7.5	38.2
F	300	F1-6 DO YOU TROUBLESHOOT MICROPHONE COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	.0	2.8	4.5	.0	9.0	26.7	1.2	32.7
F	301	F1-7 DO YOU REMOVE AND REPLACE COMPLETE MICROPHONES?	2.4	1.9	13.6	.0	16.7	53.3	8.7	40.0
F	302	F1-8 DO YOU REMOVE OR REPLACE MICROPHONE COMPONENT PARTS?	.0	2.8	.0	.0	9.0	26.7	2.5	29.1
F	303	F1-9 DO YOU PERFORM TASKS ON CARBON MICROPHONES?	4.8	2.8	18.2	.0	14.1	60.0	10.0	23.6
F	304	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES?	.0	2.8	4.5	.0	5.1	13.3	2.5	16.4
F	305	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES?	2.4	1.9	9.1	.0	5.1	.0	2.5	25.5
F	306	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES?	4.8	1.9	18.2	.0	7.7	20.0	5.0	21.8
F	307	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES?	.0	1.9	4.5	.0	2.6	.0	.0	3.6
F	308	F1-14 DO YOU PERFORM TASKS ON TRANSDUCERS?	2.4	.0	9.1	33.3	5.1	6.7	2.5	63.6
F	309	F2-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS? IF NO, GO TO ITEM F3-1; IF YES, CONTINUE.	21.4	7.5	36.4	16.7	20.5	60.0	33.7	63.6
F	310	F2-2 DO YOU INSPECT SPEAKERS?	21.4	4.7	18.2	16.7	16.7	53.3	32.5	65.5
F	311	F2-3 DO YOU CLEAN SPEAKERS?	16.7	2.8	9.1	16.7	15.4	46.7	21.2	50.9
F	312	F2-4 DO YOU OPERATE SPEAKERS?	21.4	3.8	45.5	16.7	17.9	40.0	28.7	58.2
F	313	F2-5 DO YOU TROUBLESHOOT SPEAKER WIRE CONNECTIONS?	16.7	3.8	13.6	16.7	17.9	53.3	32.5	67.3
F	314	F2-6 DO YOU TROUBLESHOOT SPEAKER COMPONENT PARTS OTHER THAN WIRE CONNECTIONS?	4.8	1.9	13.6	.0	11.5	40.0	13.7	50.9
F	315	F2-7 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS?	19.0	3.8	.0	16.7	16.7	46.7	32.5	67.3
F	316	F2-8 DO YOU REMOVE OR REPLACE SPEAKER PARTS?	2.4	.9	.0	.0	7.7	33.3	7.5	27.3
F	317	F2-9 DO YOU PERFORM ANY TASKS ON CONE SPEAKER PARTS?	.0	.9	.0	.0	2.6	.0	2.5	5.5
F	318	F2-10 DO YOU PERFORM ANY TASKS ON SPIDER SPEAKER PARTS?	.0	.0	.0	.0	2.6	.0	1.2	5.5
F	319	F2-11 DO YOU PERFORM ANY TASKS ON FIELD COIL SPEAKER PARTS?	.0	.9	.0	.0	3.8	6.7	2.5	14.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
F	320	F2-12 DO YOU PERFORM ANY TASKS ON VOICE COIL SPEAKER PARTS?	.0	.9	.0	.0	3.8	6.7	2.5	10.9
F	321	F2-13 DO YOU PERFORM ANY TASKS ON PERMANENT MAGNET SPEAKER PARTS?	.0	1.9	.0	.0	3.8	13.3	2.5	12.7
F	322	F2-14 DO YOU PERFORM ANY TASKS ON ELECTROMAGNET SPEAKER PARTS?	.0	1.9	.0	.0	3.8	13.3	2.5	10.9
F	323	F2-15 DO YOU PERFORM ANY TASKS ON SOFT IRON CORE SPEAKER PARTS?	.0	.9	.0	.0	2.6	.0	2.5	7.3
F	324	F3-1 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G1-1; IF YES, CONTINUE.	81.0	64.2	.0	100.0	41.0	66.7	6.3	94.5
F	325	F3-2 DO YOU PERFORM OPERATIONAL CHECKS USING OSCILLOSCOPES?	71.4	56.6	.0	100.0	34.6	66.7	3.7	92.7
F	326	F3-3 DO YOU PERFORM ALIGNMENTS OR ADJUSTMENTS USING OSCILLOSCOPES?	64.3	56.6	.0	100.0	33.3	66.7	5.0	92.7
F	327	F3-4 DO YOU TROUBLESHOOT ELECTRONIC CIRCUITS USING OSCILLOSCOPES?	69.0	58.5	.0	66.7	34.6	66.7	3.7	94.5
F	328	F3-5 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCIES?	42.9	35.8	.0	100.0	30.8	60.0	3.7	92.7
F	329	F3-6 DO YOU USE OSCILLOSCOPES TO MEASURE TIME?	52.4	32.1	.0	83.3	19.2	60.0	1.2	90.9
F	330	F3-7 DO YOU USE OSCILLOSCOPES TO OBSERVE LISSAJOUS PATTERNS?	52.4	10.4	.0	50.0	2.6	.0	.0	32.7
F	331	F3-8 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES.	69.0	34.0	.0	66.7	28.2	13.3	1.2	90.9
F	332	F3-9 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS?	23.8	17.9	.0	66.7	12.8	6.7	.0	58.2
F	333	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGES?	69.0	54.7	.0	100.0	29.5	60.0	3.7	94.5
F	334	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGES?	71.4	60.4	.0	100.0	32.1	53.3	3.7	94.5
F	335	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS?	42.9	38.7	.0	100.0	17.9	40.0	2.5	87.3
F	336	F3-13 DO YOU USE OSCILLOSCOPES TO OBSERVE DATA PATTERNS?	73.8	55.7	.0	66.7	24.4	13.3	1.2	60.0
F	337	F3-14 DO YOU USE OSCILLOSCOPES TO MEASURE RIPPLE VOLTAGES?	73.8	37.7	.0	100.0	20.5	46.7	1.2	80.0
F	338	F3-15 DO YOU USE OSCILLOSCOPES TO MEASURE PHASE JITTERS?	14.3	9.4	.0	50.0	14.1	.0	1.2	38.2

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
F	339	F3-16 DO YOU USE OSCILLOSCOPES TO DISPLAY SWEEP GENERATOR PATTERNS?	26.2	33.0	.0	50.0	11.5	26.7	.0	70.9
F	340	F3-17 DO YOU USE OSCILLOSCOPES TO OBSERVE PHASE RELATIONSHIPS?	50.0	29.2	.0	66.7	17.9	26.7	1.2	83.6
F	341	F3-18 DO YOU USE OSCILLOSCOPES TO OBSERVE SAMPLING DISPLAYS?	35.7	28.3	.0	66.7	17.9	20.0	.0	67.3
G		SEMICONDUCTOR DIODES (G1), TRANSISTORS (G2), TRANSISTOR AMPLIFIERS (G3)								
G	342	G1-1 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB? IF NO, GO TO ITEM G2-1; IF YES, CONTINUE.	73.8	54.7	9.1	100.0	52.6	66.7	10.0	96.4
G	343	G1-2 DO YOU INSPECT DIODES?	64.3	49.1	4.5	100.0	46.2	66.7	7.5	96.4
G	344	G1-3 DO YOU CHECK DIODES?	64.3	50.9	4.5	100.0	46.2	66.7	8.7	89.1
G	345	G1-4 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES?	4.8	4.7	4.5	16.7	2.6	6.7	1.2	21.8
G	346	G1-5 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE?	9.5	12.3	.0	.0	7.7	6.7	3.7	34.5
G	347	G1-6 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES?	9.5	10.4	.0	33.3	7.7	6.7	3.7	34.5
G	348	G1-7 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES?	52.4	29.2	.0	33.3	28.2	13.3	5.0	76.4
G	349	G1-8 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE?	69.0	47.2	.0	50.0	43.6	53.3	10.0	94.5
G	350	G1-9 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW?	4.8	8.5	.0	16.7	5.1	.0	1.2	25.5

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G	351	G1-10 DO YOU MEASURE FORWARD BIAS RESISTANCE?	52.4	32.1	.0	100.0	16.7	33.3	2.5	76.4
G	352	G1-11 DO YOU MEASURE REVERSE BIAS RESISTANCE?	50.0	31.1	.0	100.0	15.4	33.3	2.5	76.4
G	353	G1-12 DO YOU READ DIODE COLOR CODING?	33.3	19.8	.0	33.3	14.1	13.3	3.7	29.1
G	354	G1-13 DO YOU READ DIODE NUMBERING SYSTEM, SUCH AS IN 538?	59.5	40.6	.0	66.7	28.2	46.7	7.5	94.5
G	355	G1-14 DO YOU USE THE SYMBOL ON DIODE WHICH INDICATES THE CATHODE END?	73.8	50.9	4.5	83.3	42.3	53.3	7.5	96.4
G	356	G1-15 DO YOU DETERMINE DIRECTION OF CURRENT THROUGH A DIODE?	69.0	51.9	4.5	83.3	44.9	60.0	10.0	90.9
G	357	G1-16 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON?	14.3	10.4	.0	50.0	5.1	.0	2.5	58.2
G	358	G1-17 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OR RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)?	28.6	17.0	.0	16.7	11.5	.0	.0	61.8
G	359	G1-18 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)?	16.7	16.0	.0	16.7	6.4	.0	1.2	45.5
G	360	G1-19 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS?	64.3	38.7	4.5	50.0	24.4	70.0	10.0	90.9
G	761	G1-20 DO YOU NEED AN UNDERSTANDING OF VALENCE BAND IN SEMICONDUCTOR MATERIALS?	7.1	13.2	.0	.0	7.7	6.7	.0	32.7
G	362	G1-21 DO YOU NEED AN UNDERSTANDING OF FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS?	4.8	9.4	.0	.0	5.1	6.7	.0	25.5
G	363	G1-22 DO YOU NEED AN UNDERSTANDING OF CONDUCTION BAND IN SEMICONDUCTOR MATERIALS?	14.3	11.3	.0	.0	6.4	6.7	.0	34.5
G	364	G1-23 DO YOU NEED AN UNDERSTANDING OF CONVALENT BONDING IN SEMICONDUCTOR MATERIALS?	7.1	10.4	.0	.0	7.7	6.7	.0	27.3
G	365	G1-24 DO YOU NEED AN UNDERSTANDING OF ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS?	11.9	12.3	.0	.0	10.3	6.7	.0	30.9

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G	366	G1-25 DO YOU NEED AN UNDERSTANDING OF ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS?	31.0	20.8	.0	16.7	15.4	6.7	1.2	54.5
G	367	G1-26 DO YOU NEED AN UNDERSTANDING OF DONOR IMPURITY IN SEMICONDUCTORS?	9.5	10.4	.0	16.7	9.0	6.7	.0	30.9
G	368	G1-27 DO YOU NEED AN UNDERSTANDING OF ACCEPTOR IMPURITY IN SEMICONDUCTORS?	9.5	10.4	.0	16.7	7.7	6.7	.0	29.1
G	369	G1-28 DO YOU NEED AN UNDERSTANDING OF P-TYPE SEMICONDUCTOR MATERIAL?	38.1	23.6	.0	50.0	17.9	13.3	3.7	70.9
G	370	G1-29 DO YOU NEED AN UNDERSTANDING OF N-TYPE SEMICONDUCTOR MATERIAL?	38.1	23.6	.0	50.0	17.9	13.3	3.7	72.7
G	371	G1-30 DO YOU NEED AN UNDERSTANDING OF MAJORITY CARRIERS IN SEMICONDUCTORS?	9.5	11.3	.0	16.7	10.3	6.7	.0	38.2
G	372	G1-31 DO YOU NEED AN UNDERSTANDING OF MINORITY CARRIERS IN SEMICONDUCTORS?	9.5	11.3	.0	16.7	10.3	6.7	.0	36.4
G	373	G1-32 DO YOU NEED AN UNDERSTANDING OF JUNCTION RECOMBINATION IN SEMICONDUCTORS?	9.5	12.3	.0	16.7	9.0	6.7	1.2	36.4
G	374	G1-33 DO YOU NEED AN UNDERSTANDING OF DEPLETION REGION IN SEMICONDUCTORS?	14.3	12.3	.0	16.7	7.7	6.7	2.5	47.3
G	375	G1-34 DO YOU NEED AN UNDERSTANDING OF RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL?	14.3	10.4	.0	.0	6.4	6.7	.0	36.4
G	376	G1-35 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES?	54.8	17.9	.0	33.3	11.5	26.7	2.5	67.3
G	377	G1-36 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS?	11.9	6.6	.0	16.7	3.8	.0	.0	20.0
G	378	G1-37 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION?	38.1	25.5	.0	16.7	15.4	20.0	1.2	85.5
G	379	G1-38 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS?	11.9	12.3	.0	16.7	3.8	13.3	.0	70.9
G	380	G1-39 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS?	4.8	10.4	.0	16.7	3.8	13.3	.0	56.4

C	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
G	381	G1-40 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS?	14.3	12.3	.0	16.7	5.1	13.3	.0	70.9
G	382	G1-41 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS?	23.8	12.3	.0	33.3	6.4	20.0	1.2	83.6
G	383	G2-1 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM G3-1; IF YES, CONTINUE.	73.8	60.4	9.1	83.3	42.3	66.7	18.8	96.4
G	384	G2-2 DO YOU INSPECT TRANSISTORS?	66.7	55.7	4.5	100.0	33.3	66.7	15.0	96.4
G	385	G2-3 DO YOU CHECK TRANSISTORS?	66.7	56.6	4.5	100.0	38.5	60.0	12.5	89.1
G	386	G2-4 DO YOU NEED AN UNDERSTANDING OF EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS?	64.3	54.7	.0	66.7	33.3	40.0	11.2	92.7
G	387	G2-5 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND RESISTANCE MEASUREMENTS?	64.3	54.7	.0	100.0	29.5	33.3	10.0	87.3
G	388	G2-6 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS?	64.3	53.8	.0	100.0	29.5	33.3	10.0	87.3
G	389	G2-7 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION?	23.8	33.0	.0	50.0	16.7	13.3	5.0	63.6
G	390	G2-8 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION?	23.8	31.1	.0	50.0	14.1	6.7	6.3	63.6
G	391	G2-9 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE, AND EMITTER)?	42.9	30.2	.0	83.3	20.5	40.0	7.5	61.8
G	392	G2-10 DO YOU USE OR REFER TO LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR?	14.3	20.8	.0	33.3	9.0	6.7	3.7	50.9
G	393	G2-11 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS?	73.8	58.5	9.1	100.0	35.9	60.0	16.2	94.5
G	394	G2-12 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, A2, A3, ETC.?	76.2	54.7	4.5	100.0	32.1	60.0	16.2	92.7
G	395	G2-13 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION?	50.0	44.3	.0	50.0	17.9	33.3	7.5	94.5

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G	396	G2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT I(SUB B) IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT I(SUB E) USUALLY I(SUB B) BEING 2 TO 8 PERCENT OF I(SUB E)?	33.3	27.4	.0	50.0	10.3	6.7	7.5	70.9
G	397	G2-15 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS?	61.9	37.7	.0	66.7	16.7	33.3	10.0	83.6
G	398	G2-16 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (I SUB CBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES?	19.0	15.1	.0	50.0	10.3	.0	3.7	38.2
G	399	G2-17 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES?	9.5	11.3	.0	16.7	5.1	.0	1.2	29.1
G	400	G2-18 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS?	9.5	9.4	.0	.0	5.1	.0	1.2	21.8
G	401	G2-19 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS?	7.1	7.5	.0	.0	5.1	.0	1.2	20.0
G	402	G2-20 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS?	7.1	6.6	.0	.0	5.1	.0	1.2	20.0
G	403	G2-21 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCB/VBE)?	2.4	6.6	.0	16.7	3.8	.0	2.5	21.8
G	404	G2-22 DO YOU USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)?	4.8	5.7	.0	16.7	2.6	.0	2.5	20.0
G	405	G2-23 DO YOU USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRNSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI X AV)?	2.4	5.7	.0	16.7	1.3	.0	3.7	25.5
G	406	G2-24 DO YOU PERFORM TRANSISTOR MATCHING THROUGH THE USE OF CURVE TRACING?	4.8	2.8	.0	.0	1.3	.0	.0	12.7
G	407	G3-1 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM H1-1; IF YES, CONTINUE.	47.6	23.6	4.5	66.7	29.5	53.3	11.2	87.3
G	408	G3-2 DO YOU INSPECT TRANSISTOR AMPLIFIERS?	47.6	17.9	4.5	66.7	20.5	60.0	8.7	85.5
G	409	G3-3 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS?	31.0	8.5	.0	50.0	21.8	53.3	6.3	81.8

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
G	410	G3-4 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL?	50.0	17.9	4.5	66.7	16.7	60.0	3.7	87.3
G	411	G3-5 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS?	50.0	17.0	4.5	66.7	14.1	46.7	2.5	85.5
C	412	G3-6 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER?	38.1	13.2	.0	50.0	23.1	60.0	10.0	61.8
G	413	G3-7 DO YOU REMOVE OR REPLACE AMPLIFIER CIRCUIT COMPONENTS?	45.2	18.9	.0	33.3	10.3	40.0	6.3	83.6
G	414	G3-8 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR CURRENT RESULTS FROM A CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	40.5	13.2	.0	33.3	5.1	6.7	5.0	58.2
G	415	G3-9 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO SPECIFIC CHANGE IN BASE CURRENT CONCERNING TRANSISTOR AMPLIFIERS?	4.8	4.7	.0	16.7	1.3	6.7	2.5	29.1
G	416	G3-10 DO YOU USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE RESULTS FROM A CHANGE IN BASE CURRENT?	38.1	14.2	.0	50.0	3.8	6.7	3.7	60.0
C	417	G3-11 DO YOU USE OR REFER TO THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	35.7	14.2	.0	50.0	6.4	13.3	3.7	60.0
C	418	G3-12 DO YOU USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE; THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL CONCERNING TRANSISTOR AMPLIFIERS?	9.5	7.5	.0	16.7	2.6	6.7	2.5	32.7
G	419	G3-13 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)?	2.4	6.6	.0	16.7	1.3	6.7	.0	9.1
G	420	G3-14 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR?	26.2	8.5	4.5	16.7	2.6	.0	1.2	38.2
G	421	G3-15 DO YOU MEASURE VOLTAGE GAIN CONCERNING TRANSISTOR AMPLIFIERS?	38.1	15.1	.0	33.3	15.4	60.0	3.7	69.1
C	422	G3-16 DO YOU MEASURE CURRENT GAIN CONCERNING TRANSISTOR AMPLIFIERS?	28.6	13.2	.0	.0	12.8	20.0	3.7	60.0
G	423	G3-17 DO YOU MEASURE POWER GAIN CONCERNING TRANSISTOR AMPLIFIERS?	23.8	10.4	.0	.0	12.8	26.7	5.0	50.9

C	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
G	424	G3-18 DO YOU USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE CHANGE OF THE BASE COLLECTOR VOLTAGE?	7.1	7.5	.0	.0	6.4	.0	.0	32.7
G	425	G3-19 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION?	28.6	12.3	.0	16.7	7.7	6.7	.0	36.4
G	426	G3-20 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION?	26.2	11.3	.0	16.7	6.4	.0	.0	38.2
G	427	G3-21 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION?	26.2	9.4	.0	16.7	5.1	.0	.0	32.7
G	428	G3-22 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION?	26.2	12.3	.0	16.7	6.4	.0	1.2	40.0
G	429	G3-23 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION?	23.8	13.2	.0	16.7	6.4	.0	1.2	40.0
G	430	G3-24 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION?	11.9	11.3	.0	16.7	3.8	.0	.0	34.5
G	431	G3-25 DO YOU IDENTIFY OR TROUBLESHOOT AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS?	26.2	7.5	.0	16.7	9.0	46.7	1.2	56.4
G	432	G3-26 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS?	16.7	6.6	.0	16.7	7.7	40.0	1.2	52.7
G	433	G3-27 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS?	14.3	7.5	.0	16.7	9.0	13.3	.0	49.1
G	434	G3-28 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS?	14.3	5.7	.0	16.7	5.1	6.7	.0	30.9

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
G	435	G3-29 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	9.5	11.3	.0	33.3	10.3	13.3	.0	34.5
G	436	G3-30 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	11.9	6.6	.0	.0	2.6	.0	.0	41.8
G	437	G3-31 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	35.7	12.3	.0	50.0	11.5	26.7	1.2	76.4
G	438	G3-32 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS?	19.0	6.6	4.5	16.7	3.8	.0	.0	41.8
G	439	G3-33 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	16.7	3.8	4.5	16.7	3.8	6.7	.0	50.9
G	440	G3-34 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	26.2	9.4	.0	16.7	5.1	6.7	.0	60.0
G	441	G3-35 DO YOU TROUBLESHOOT OR REPAIR VOLTAGE MULTIPLIERS (DOUBLERS/TRIPLERS)?	26.2	12.3	.0	66.7	7.7	20.0	1.2	74.5
G	442	G3-36 DO YOU TROUBLESHOOT OR REPAIR RF AMPLIFIERS?	14.3	4.7	4.5	33.3	6.4	6.7	.0	60.0
G	443	G3-37 DO YOU TROUBLESHOOT OR REPAIR WIDEBAND AMPLIFIERS (VIDEO AMPS)?	9.5	4.7	4.5	.0	.0	.0	.0	50.9
G	444	G3-38 DO YOU TROUBLESHOOT OR REPAIR AUDIO AMPLIFIERS?	16.7	6.6	4.5	33.3	16.7	60.0	5.0	67.3
G	445	G3-39 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER AMPLIFIERS?	38.1	11.3	4.5	50.0	11.5	33.3	.0	76.4
G	446	G3-40 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	11.9	4.7	.0	.0	1.3	.0	.0	38.2
G	447	G3-41 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY AMPLIFIERS?	16.7	3.8	.0	.0	1.3	.0	.0	41.8
G	448	G3-42 DO YOU TROUBLESHOOT OR REPAIR IF AMPLIFIERS?	11.9	2.8	.0	16.7	3.8	.0	.0	56.4
G	449	G3-43 DO YOU TROUBLESHOOT OR REPAIR DIFFERENTIATING AMPLIFIERS (DIFF AMPS)?	28.6	3.8	.0	16.7	1.3	6.7	.0	78.2
G	450	G3-44 DO YOU TROUBLESHOOT OR REPAIR OPERATIONAL AMPLIFIERS (OP AMPS)?	28.6	6.6	4.5	16.7	2.6	13.3	.0	83.6
G	451	G3-45 DO YOU TROUBLESHOOT OR REPAIR INTEGRATING AMPLIFIERS?	19.0	7.5	4.5	33.3	3.8	6.7	1.2	69.1
G	452	G3-46 DO YOU TROUBLESHOOT OR REPAIR SUMMING AMPLIFIERS?	7.1	3.8	.0	.0	.0	.0	.0	49.1

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
H		SOLID-STATE SPECIAL PURPOSE DEVICES (H1), POWER SUPPLIES (H2), OSCILLATORS (H3)								
H	453	H1-1 DO YOU USE OR REFER TO VARACTORS/VARICAP COMPONENTS?	19.0	14.2	.0	16.7	7.7	13.3	.0	60.0
H	454	H1-2 DO YOU USE OR REFER TO TUNNEL DIODE COMPONENTS?	40.5	15.1	.0	16.7	7.7	13.3	.0	72.7
H	455	H1-3 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTOR COMPONENTS?	42.9	29.2	.0	33.3	14.1	6.7	.0	92.7
H	456	H1-4 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTOR COMPONENTS?	50.0	35.8	.0	33.3	9.0	6.7	.0	96.4
H	457	H1-5 DO YOU USE OR REFER TO ZENER DIODE COMPONENTS?	73.8	65.1	9.1	100.0	26.9	60.0	10.8	98.2
H	458	H1-6 DO YOU USE OR REFER TO INTEGRATED CIRCUIT COMPONENTS?	71.4	63.2	9.1	100.0	26.9	40.0	25.0	94.5
H	459	H1-7 DO YOU USE OR REFER TO PIN DIODE COMPONENTS?	14.3	14.2	9.1	.0	11.5	.0	1.2	41.8
H	460	H1-8 DO YOU USE OR REFER TO LED'S/LCD'S COMPONENTS?	71.4	53.8	27.3	100.0	30.8	6.7	17.5	96.4
H	461	H1-9 DO YOU USE OR REFER TO FANTAIL TRANSISTOR COMPONENTS?	11.9	7.5	4.5	.0	1.3	6.7	.0	36.4
H	462	H1-10 DO YOU USE OR REFER TO SILICON CONTROL RECTIFIER (SCR) COMPONENTS?	76.2	32.1	9.1	100.0	17.9	13.3	3.7	98.2
H	463	H1-11 DO YOU USE OR REFER TO TRIAC COMPONENTS?	28.6	30.2	4.5	33.3	5.1	.0	.0	98.2
H	464	H1-12 DO YOU USE OR REFER TO PROGRAMMABLE UNIJUNCTION TRANSISTOR (PUT) COMPONENTS?	9.5	4.7	.0	.0	2.6	.0	.0	89.1
H	465	H1-13 DO YOU USE OR REFER TO SILICON CONTROLLED SWITCH (SCS) COMPONENTS?	16.7	11.3	.0	33.3	2.6	.0	2.5	80.0
H	466	H1-14 DO YOU USE OR REFER TO SILICON UNILATERAL SWITCH (SUS) COMPONENTS?	4.8	4.7	.0	.0	1.3	.0	.0	81.8
H	467	H2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES? IF NO, GO TO ITEM H3-1; IF YES, CONTINUE.	76.2	66.0	68.2	100.0	61.5	80.0	63.7	94.5
H	468	H2-2 DO YOU INSPECT POWER SUPPLIES?	66.7	62.3	40.9	100.0	53.8	66.7	62.5	94.5
H	469	H2-3 DO YOU CLEAN POWER SUPPLIES?	61.9	52.8	9.1	83.3	50.0	60.0	47.5	74.5
H	470	H2-4 DO YOU ALIGN OR ADJUST POWER SUPPLIES?	69.0	50.0	50.0	83.3	52.6	66.7	13.7	92.7
H	471	H2-5 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL?	66.7	53.8	40.9	66.7	47.4	53.3	45.0	94.5
H	472	H2-6 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS?	66.7	52.8	40.9	66.7	38.5	53.3	31.3	92.7
H	473	H2-7 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES?	52.4	55.7	.0	66.7	43.6	66.7	60.0	92.7
H	474	H2-8 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS?	64.3	48.1	.0	66.7	37.2	46.7	28.7	92.7
H	475	H2-9 DO YOU INSPECT OR SERVICE COOLANT LEVELS?	4.8	6.6	13.6	16.7	6.4	.0	2.5	34.5
H	476	H2-10 DO YOU WORK WITH HALF-WAVE RECTIFIERS?	59.5	46.2	4.5	83.3	25.6	40.0	7.5	90.9
H	477	H2-11 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS?	66.7	49.1	4.5	100.0	32.1	40.0	10.0	90.9
H	478	H2-12 DO YOU WORK WITH BRIDGE RECTIFIERS?	69.0	52.8	13.6	83.3	34.6	33.3	13.7	92.7
H	479	H2-13 DO YOU WORK WITH THREE-PHASE RECTIFIERS?	23.8	12.3	18.2	66.7	28.2	6.7	5.0	63.6
H	480	H2-14 DO YOU USE OR REFER TO INPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	69.0	59.4	45.5	100.0	53.8	66.7	22.5	94.5
H	481	H2-15 DO YOU USE OR REFER TO INPUT FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	38.1	23.6	13.6	50.0	33.3	33.3	7.5	78.2
H	482	H2-16 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	52.4	46.2	18.2	83.3	39.7	60.0	8.7	83.6
H	483	H2-17 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	61.9	46.2	27.3	83.3	43.6	33.3	17.5	87.3
H	484	H2-18 DO YOU USE OR REFER TO RIPPLE AMPLITUDE IN YOUR WORK WITH RECTIFIERS?	57.1	29.2	.0	50.0	15.4	60.0	2.5	78.2
H	485	H2-19 DO YOU USE OR REFER TO RIPPLE FREQUENCIES IN YOUR WORK WITH RECTIFIERS?	35.7	17.9	.0	50.0	10.3	13.3	2.5	72.7

C	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
H	488	H2-20 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGES IN YOUR WORK WITH RECTIFIERS?	21.4	14.2	.0	50.0	10.3	13.3	3.7	63.6
H	487	H2-21 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS IN YOUR WORK WITH RECTIFIERS?	46.2	40.6	.0	50.0	12.8	53.3	2.5	85.5
H	488	H2-22 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGES IN YOUR WORK WITH RECTIFIERS?	50.0	43.4	4.5	83.3	23.1	46.7	13.7	89.1
H	489	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS?	66.7	46.2	9.1	50.0	26.9	53.3	12.5	90.9
H	490	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS?	46.2	28.3	9.1	50.0	19.2	33.3	13.7	80.0
H	491	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS?	47.6	19.8	4.5	16.7	14.1	13.3	3.7	69.1
H	492	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS?	33.3	17.9	4.5	33.3	12.8	13.3	3.7	67.3
H	493	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS?	33.3	12.3	4.5	.0	6.4	13.3	6.3	67.3
H	494	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS?	45.2	11.3	4.5	.0	7.7	13.3	5.0	72.7
H	495	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER?	4.8	7.5	.0	.0	.0	.0	.0	16.4
H	496	H2-30 DO YOU WORK WITH POWER SUPPLY REGULATOR CIRCUITS OTHER THAN SOLID-STATE?	14.3	12.3	4.5	16.7	19.2	6.7	3.7	45.5
H	497	H2-31 DO YOU WORK WITH SOLID-STATE POWER SUPPLY REGULATOR CIRCUITS?	69.0	46.2	13.6	66.7	29.5	46.7	10.0	89.1
H	498	H3-1 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM II-1; IF YES, CONTINUE.	61.9	19.8	.0	16.7	41.0	66.7	6.3	63.6
H	499	H3-2 DO YOU INSPECT OSCILLATORS?	52.4	13.2	.0	.0	29.5	53.3	3.7	61.8
H	500	H3-3 DO YOU ALIGN OR ADJUST OSCILLATORS?	52.4	9.4	.0	16.7	26.9	46.7	3.7	63.6
H	501	H3-4 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS?	54.8	10.4	.0	.0	24.4	40.0	1.2	58.2
H	502	H3-5 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS?	40.5	10.4	.0	.0	7.7	13.3	.0	58.2
H	503	H3-6 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL?	57.1	11.3	.0	.0	19.2	33.3	1.2	60.0
H	504	H3-7 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS?	40.5	9.4	.0	.0	5.1	13.3	.0	60.0
H	505	H3-8 DO YOU USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)?	31.0	11.3	.0	.0	3.8	26.7	1.2	60.0
H	506	H3-9 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)?	35.7	9.4	.0	.0	6.4	13.3	1.2	54.5
H	507	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY?	33.3	9.4	.0	.0	10.3	20.0	1.2	41.8
H	508	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY?	42.9	10.4	.0	16.7	14.1	20.0	1.2	52.7
H	509	H3-12 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT (CRYSTAL OSCILLATIONS)?	35.7	9.4	.0	.0	2.6	.0	1.2	56.4
H	510	H3-13 DO YOU USE OR REFER TO HARMONIC DISTORTION?	28.6	8.5	.0	16.7	10.3	.0	1.2	49.1
H	511	H3-14 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS?	35.7	9.4	.0	16.7	5.1	6.7	.0	65.5
H	512	H3-15 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS?	35.7	11.3	.0	16.7	5.1	13.3	1.2	67.6
H	513	H3-16 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN CRYSTALS?	50.0	13.2	.0	16.7	5.1	.0	1.2	61.8
H	514	H3-17 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN PHASE LOCK LOOPS (PLL)?	14.3	6.6	.0	.0	2.6	.0	.0	38.2

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
H	515	H3-18 DO YOU WORK WITH OSCILLATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	7.1	3.8	.0	.0	19.2	20.0	1.2	18.2
H	516	H3-19 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS?	16.7	6.6	.0	16.7	1.3	13.3	.0	47.3
H	517	H3-20 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS?	21.4	6.6	.0	16.7	1.3	13.3	.0	45.5
H	518	H3-21 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS?	28.6	4.7	.0	16.7	1.3	.0	.0	34.5
H	519	H3-22 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS?	9.5	3.8	.0	.0	.0	.0	.0	25.5
H	520	H3-23 DO YOU WORK WITH VOLTAGE CONTROL SINUSOIDAL OSCILLATO	28.2	3.8	.0	16.7	1.3	.0	.0	45.5
H	521	H3-24 DO YOU WORK WITH CRYSTAL SINUSOIDAL OSCILLATORS?	50.0	10.4	.0	16.7	2.6	.0	.0	54.5
H	522	H3-25 DO YOU WORK WITH VOLTAGE CONTROL OSCILLATORS (VCO) SINUSOIDAL OSCILLATORS?	26.2	4.7	.0	16.7	2.6	.0	1.2	43.6
H	523	H3-26 DO YOU WORK WITH WIEN BRIDGE OSCILLATORS SINUSOIDAL OSCILLATORS?	7.1	8.5	.0	.0	2.6	6.7	.0	47.3
H	524	H3-27 DO YOU WORK WITH - DON'T KNOW WHICH TYPE OF SINUSOIDAL OSCILLATOR?	16.7	9.4	.0	.0	25.6	20.0	3.7	20.0
H	525	H3-28 DO YOU WORK WITH PULSE GENERATING CIRCUITS?	35.7	8.5	.0	16.7	12.8	13.3	.0	60.0
H	526	H3-29 DO YOU WORK WITH BLOCKING OSCILLATORS?	16.7	2.8	.0	.0	1.3	.0	.0	47.3
H	527	H3-30 DO YOU WORK WITH BURST GENERATORS?	7.1	.9	.0	.0	.0	.0	.0	36.4
H	528	H3-31 DO YOU WORK WITH BLOCKED OSCILLATORS?	7.1	1.9	.0	.0	.0	6.7	.0	30.9
I		MULTIVIBRATORS (I1), LIMITERS AND CLAMPERS (I2), ELECTRON TUBES (I3)								
I	529	I1-1 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I2-1; IF YES, CONTINUE.	69.0	23.6	.0	.0	2.6	20.0	1.2	69.1
I	530	I1-2 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUIT FREQUENCY DETERMINING DEVICES (FDD)?	23.8	12.3	.0	.0	2.6	20.0	.0	61.8
I	531	I1-3 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORK FREQUENCY DETERMINING DEVICES (FDD)?	42.9	17.0	.0	.0	2.6	20.0	.0	65.5
I	532	I1-4 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTAL FREQUENCY DETERMINING DEVICES (FDD)?	28.6	15.1	.0	.0	2.6	6.7	.0	58.2
I	533	I1-5 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN - DON'T KNOW WHICH TYPE OF FDD?	11.9	6.6	.0	.0	1.3	6.7	1.2	16.4
I	534	I1-6 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS?	61.9	17.9	.0	.0	1.3	20.0	1.2	69.1
I	535	I1-7 DO YOU WORK WITH MONOSTABLE (ONE SHOT) MULTIVIBRATORS?	69.0	19.8	.0	.0	1.3	13.3	1.2	70.9
I	536	I1-8 DO YOU WORK WITH BISTABLE (FLIP FLOP) MULTIVIBRATORS?	71.4	20.8	.0	.0	1.3	20.0	1.2	70.9
I	537	I1-9 DO YOU WORK WITH R-S FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	28.6	8.5	.0	.0	.0	13.3	.0	52.7
I	538	I1-10 DO YOU WORK WITH J-K FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	73.8	19.8	.0	.0	.0	6.7	.0	58.0
I	539	I1-11 DO YOU WORK WITH "D" FLIP-FLOP INTEGRATED CIRCUIT REGULATORS?	33.3	5.7	.0	.0	1.3	.0	.0	41.8
I	540	I2-1 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM I3-1; IF YES, CONTINUE.	45.2	15.1	.0	.0	2.6	6.7	.0	61.8
I	541	I2-2 DO YOU WORK WITH SERIES DIODE LIMITERS?	31.0	11.3	.0	.0	1.3	6.7	.0	54.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
I	542	I2-3 DO YOU WORK WITH SHUNT DIODE LIMITERS?	31.0	10.4	.0	.0	.0	6.7	.0	54.5
I	543	I2-4 DO YOU WORK WITH LIMITERS WITH BIAS?	10.0	4.7	.0	.0	.0	6.7	.0	41.8
I	544	I2-5 DO YOU WORK WITH ZENER DIODE LIMITERS?	40.5	13.2	.0	.0	1.3	6.7	.0	61.8
I	545	I2-6 DO YOU WORK WITH TRANSISTOR LIMITERS?	38.1	11.3	.0	.0	2.6	6.7	.0	54.5
I	546	I2-7 DO YOU WORK WITH TRIODE LIMITERS?	11.9	1.9	.0	.0	.0	.0	.0	34.5
I	547	I2-8 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS?	33.3	7.5	.0	.0	.0	.0	.0	60.0
I	548	I2-9 DO YOU WORK WITH BIAS DIODE CLAMPING CIRCUITS?	26.2	4.7	.0	.0	1.3	.0	.0	40.0
I	549	I2-10 DO YOU WORK WITH DC RESTORERS?	16.7	.9	.0	.0	.0	.0	.0	25.5
I	550	I3-1 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS BASIC ELECTRON TUBES (FOR PURPOSES OF THIS QUESTION DO NOT CONSIDER HIGH-FREQUENCY DEVICES SUCH AS KLYSTRONS, TRAVELING WAVE TUBES, BACKWARD WAVE OSCILLATORS, OR MAGNETRONS AS ELECTRON TUBES)? IF NO, GO TO ITEM J1-1; IF YES, CONTINUE.	7.1	13.2	4.5	66.7	16.7	13.3	.0	47.3
I	551	I3-2 DO YOU CHECK THE CONDITION OF ELECTRON TUBES?	7.1	11.3	.0	66.7	15.4	.0	.0	45.5
I	552	I3-3 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES?	7.1	6.6	.0	33.3	11.5	.0	.0	32.7
I	553	I3-4 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES?	7.1	8.5	.0	66.7	7.7	6.7	.0	43.6
I	554	I3-5 DO YOU USE SCOPES TO CHECK ELECTRON TUBES?	7.1	8.5	.0	16.7	1.3	6.7	.0	41.8
I	555	I3-6 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES?	7.1	10.4	.0	50.0	9.0	.0	.0	40.0
I	556	I3-7 DO YOU USE OR REFER TO CUTOFF?	7.1	7.5	.0	33.3	1.3	.0	.0	32.7
I	557	I3-8 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING?	7.1	1.9	.0	.0	.0	.0	.0	18.2
I	558	I3-9 DO YOU USE OR REFER TO PEAK CURRENT RATING?	7.1	3.8	.0	.0	.0	.0	.0	21.8
I	559	I3-10 DO YOU USE OR REFER TO TRANSIT TIME?	2.4	4.7	.0	.0	.0	.0	.0	14.5
I	560	I3-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING?	2.4	3.8	.0	.0	.0	.0	.0	18.2
I	561	I3-12 DO YOU USE OR REFER TO SATURATION?	7.1	8.5	.0	16.7	1.3	6.7	.0	36.4
I	562	I3-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE?	4.8	4.7	.0	.0	2.6	.0	.0	29.1
I	563	I3-14 DO YOU USE OR REFER TO PLATE VOLTAGE?	7.1	11.3	4.5	33.3	5.1	.0	.0	45.5
I	564	I3-15 DO YOU USE OR REFER TO PLATE CURRENT?	7.1	8.5	.0	16.7	3.8	.0	.0	38.2
I	565	I3-16 DO YOU USE OR REFER TO GRID VOLTAGE?	7.1	10.4	.0	66.7	5.1	.0	.0	43.6
I	566	I3-17 DO YOU USE OR REFER TO GRID CURRENT?	7.1	9.4	.0	33.3	3.8	.0	.0	36.4
I	567	I3-18 DO YOU USE OR REFER TO CATHODE VOLTAGE?	7.1	10.4	.0	66.7	5.1	.0	.0	45.5
I	568	I3-19 DO YOU USE OR REFER TO CATHODE CURRENT?	7.1	8.5	.0	33.3	3.8	.0	.0	34.5
I	569	I3-20 DO YOU USE OR REER TO FILAMENT VOLTAGE?	7.1	11.3	.0	50.0	5.1	.0	.0	47.3
I	570	I3-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODE IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)?	4.8	5.7	.0	.0	.0	.0	.0	18.2
I	571	I3-22 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC.) AMPLIFICATION FACTORS?	9.5	7.5	.0	16.7	3.8	.0	.0	20.0
I	572	I3-23 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)?	9.5	1.9	.0	.0	2.6	.0	1.2	12.7
I	573	I3-24 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE?	11.9	.9	.0	.0	2.6	.0	.0	20.0
I	574	I3-25 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE?	11.9	1.9	.0	.0	3.8	.0	.0	16.4
I	575	I3-26 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES?	11.9	.9	.0	.0	2.6	.0	.0	9.1
I	576	I3-27 DO YOU USE OR REFER TO PLATE VOLTAGE FOR A SPECIFIED BIAS?	2.4	3.8	.0	33.3	1.3	.0	.0	25.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
I	577	I3-28 DO YOU USE OR REFER TO PLATE CURRENT FOR A SPECIFIED BIAS?	4.8	3.8	.0	16.7	1.3	.0	.0	23.6
I	578	I3-29 DO YOU USE OR REFER TO BIAS REQUIRED FOR CUTOFF?	4.8	4.7	.0	33.3	2.6	.0	.0	34.5
I	579	I3-30 DO YOU USE OR REFER TO BIAS REQUIRED FOR SATURATION?	2.4	3.8	.0	33.3	2.6	.0	.0	34.5
I	580	I3-31 DO YOU USE OR REFER TO GAIN?	4.8	5.7	.0	50.0	1.3	.0	.0	34.5
I	581	I3-32 DO YOU USE OR REFER TO EFFICIENCY?	2.4	3.8	.0	16.7	2.6	.0	.0	16.4
I	582	I3-33 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	4.8	3.8	.0	50.0	3.8	.0	.0	36.4
I	583	I3-34 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	4.8	2.8	.0	33.3	1.3	.0	.0	40.0
I	584	I3-35 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN?	4.8	.9	.0	.0	.0	.0	.0	5.5
I	585	I3-36 DO YOU USE OR REFER TO TUBE SOCKET NOTATION?	7.1	9.4	.0	66.7	9.0	.0	.0	49.1
I	586	I3-37 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS?	7.1	10.4	.0	66.7	10.3	.0	.0	49.1
I	587	I3-38 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS?	7.1	7.5	.0	16.7	9.0	.0	.0	45.5
I	588	I3-39 DO YOU USE OR REFER TO ELECTRON TUBE DIODES?	4.8	6.6	.0	16.7	2.6	.0	.0	43.6
J		ELECTRON TUBE AMPLIFIERS AND CIRCUITS (J1), SPECIAL PURPOSE ELECTRON TUBES (J2), HETERODYNING AND MODULATION - DEMODULATION (MODEMS) (J3)								
J	589	J1-1 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM J2-1; IF YES, CONTINUE.	9.5	6.6	.0	16.7	7.7	.0	.0	40.0
J	590	J1-2 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS?	7.1	.9	.0	.0	1.3	.0	.0	16.4
J	591	J1-3 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS?	2.4	.9	.0	.0	1.3	.0	.0	12.7
J	592	J1-4 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS?	4.8	3.8	.0	.0	1.3	.0	.0	25.5
J	593	J1-5 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS?	4.8	.9	.0	.0	1.3	.0	.0	16.4
J	594	J1-6 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS?	4.8	.0	.0	.0	1.3	.0	.0	16.4
J	595	J1-7 DO YOU TROUBLESHOOT OR REPAIR - DON'T KNOW WHICH TYPE OF AMPLIFIER?	.0	1.9	.0	16.7	3.8	.0	.0	10.9
J	596	J2-1 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)?	2.4	7.5	.0	50.0	2.6	.0	.0	52.7
J	597	J2-2 DO YOU WORK WITH CATHODE-RAY TUBES (CRT)?	19.0	26.4	.0	16.7	11.5	13.3	2.5	87.3
J	598	J2-3 DO YOU WORK WITH BEAM POWER TUBES?	2.4	.9	.0	.0	1.3	.0	.0	36.4
J	599	J2-4 DO YOU WORK WITH THYRATRONS?	4.8	1.9	.0	.0	.0	.0	1.2	41.8
J	600	J2-5 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)?	14.3	18.9	.0	16.7	3.8	.0	.0	72.7
J	601	J2-6 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	16.7	15.1	.0	16.7	3.8	.0	1.2	76.4

D TSK	TITLES	306 71 (M)	306 72 (M)	316 7DF (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
J 602	J2-7 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)?	16.7	14.2	.0	.0	3.8	.0	1.2	69.1
J 603	J2-8 DO YOU USE OR REFER TO PHOSPHOR SCREENS CONCERNING CRT'S?	16.7	17.0	.0	.0	2.6	.0	.0	72.7
J 604	J2-9 DO YOU USE OR REFER TO AQUADAG COATINGS CONCERNING CRT'S?	7.1	3.8	.0	.0	2.6	.0	.0	32.7
J 605	J2-10 DO YOU USE OR REFER TO ELECTRON OPTICS CONCERNING CRT'S?	7.1	1.9	.0	.0	1.3	.0	.0	43.6
J 606	J2-11 DO YOU USE OR REFER TO PERSISTENCE CONCERNING CRT'S?	9.5	3.8	.0	.0	2.6	.0	.0	36.4
J 607	J2-12 DO YOU USE OR REFER TO DECAY TIMES CONCERNING CRT'S?	11.9	2.8	.0	.0	2.6	.0	.0	38.2
J 608	J2-13 DO YOU USE OR REFER TO FLOURESCENCE CONCERNING CRT'S?	9.5	5.7	.0	.0	2.6	.0	.0	60.0
J 609	J2-14 DO YOU USE OR REFER TO PHOSPHORESCENCE CONCERNING CRT'S?	7.1	8.5	.0	.0	3.8	.0	.0	56.4
J 610	J2-15 DO YOU USE OR REFER TO SHADOW MASK CONCERNING CRT'S?	7.1	1.9	.0	.0	1.3	.0	.0	27.3
J 611	J3-1 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K1-1; IF YES, CONTINUE.	61.9	25.5	9.1	.0	17.9	13.3	12.5	18.7
J 612	J3-2 DO YOU PERFORM TASKS ON FREQUENCY CONVERTER SYSTEMS STAGES?	23.8	8.5	9.1	.0	5.1	.0	.0	12.7
J 613	J3-3 DO YOU PERFORM TASKS ON FREQUENCY MIXER SYSTEMS STAGES?	14.3	5.7	9.1	.0	3.8	.0	.0	12.7
J 614	J3-4 DO YOU PERFORM TASKS ON MODEM SYSTEMS STAGES?	59.5	15.1	4.5	.0	16.7	.0	7.5	7.3
J 615	J3-5 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS?	14.3	1.9	.0	.0	1.3	.0	1.2	7.3
J 616	J3-6 DO YOU PERFORM TASKS ON REACTANCE MODULATOR SYSTEM STAGES?	9.5	1.9	.0	.0	1.3	.0	1.2	7.3
J 617	J3-7 DO YOU PERFORM TASKS ON MODULATED OSCILLATOR SYSTEM STAGES?	35.7	3.8	.0	.0	3.8	.0	1.2	10.9
K	AM SYSTEMS (K1), FM SYSTEMS (K2), NUMBERING SYSTEMS (K3)								
K 618	K1-1 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K2-1; IF YES, CONTINUE.	7.1	2.8	9.1	.0	2.6	6.7	1.2	9.1
K 619	K1-2 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	9.1	.0	2.6	6.7	.0	5.5
K 620	K1-3 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	4.5	.0	1.3	6.7	.0	5.5
K 621	K1-4 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	4.5	.0	2.6	6.7	.0	5.5
K 622	K1-5 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	4.5	.0	3.8	6.7	.0	5.5
K 623	K1-6 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS?	2.4	.0	4.5	.0	2.6	.0	.0	5.5
K 624	K1-7 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS?	2.4	.9	.0	.0	2.6	6.7	.0	5.5
K 625	K1-8 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS?	2.4	.9	.0	.0	2.6	.0	.0	5.5
K 626	K1-9 DO YOU PERFORM TASKS ON RF OSCILLATORS/SYNTHESIZERS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K 627	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K 628	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	2.4	.9	.0	.0	1.3	6.7	.0	5.5
K 629	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	2.4	.0	.0	.0	1.3	6.7	.0	5.5

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
K 630	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K 631	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K 632	K1-15 DO YOU PERFORM TASKS ON DETECTORS?	2.4	.0	.0	.0	1.3	6.7	.0	5.5
K 633	K1-16 DO YOU PERFORM TASKS ON MIXER AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	5.5
K 634	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS?	2.4	.9	.0	.0	2.6	.0	.0	5.5
K 635	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS?	2.4	1.9	.0	.0	3.8	.0	1.2	5.5
K 636	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS?	2.4	1.9	.0	.0	2.6	.0	1.2	5.5
K 637	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS?	2.4	.9	4.5	.0	3.8	.0	1.2	5.5
K 638	K2-1 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM K3-1; IF YES, CONTINUE.	14.3	3.8	13.6	.0	6.4	6.7	3.7	10.9
K 639	K2-2 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS?	7.1	1.9	13.6	.0	2.6	.0	.0	5.5
K 640	K2-3 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS?	7.1	.9	4.5	.0	.0	.0	.0	5.5
K 641	K2-4 DO YOU ALIGN TRANSMIT OR RECEIVE SYSTEMS?	9.5	.9	4.5	.0	1.3	.0	.0	5.5
K 642	K2-5 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS?	9.5	.9	9.1	.0	3.8	.0	.0	3.6
K 643	K2-6 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS?	9.5	.0	9.1	.0	1.3	.0	.0	3.6
K 644	K2-7 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS?	4.8	.9	.0	.0	1.3	.0	.0	3.6
K 645	K2-8 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS?	4.8	.0	.0	.0	1.3	.0	.0	5.5
K 646	K2-9 DO YOU PERFORM LINK PERFORMANCE ASSESSMENTS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
K 647	K2-10 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS?	9.5	.0	4.5	.0	1.3	.0	.0	3.6
K 648	K2-11 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K 649	K2-12 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K 650	K2-13 DO YOU PERFORM TASKS ON POWER AMPLIFIERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K 651	K2-14 DO YOU PERFORM TASKS ON RF AMPLIFIERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K 652	K2-15 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS?	4.8	.0	4.5	.0	1.3	.0	.0	3.6
K 653	K2-16 DO YOU PERFORM TASKS ON IF AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
K 654	K2-17 DO YOU PERFORM TASKS ON LIMITERS?	2.4	.0	.0	.0	1.3	.0	.0	3.6
K 655	K2-18 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS?	9.5	.0	.0	.0	1.3	.0	.0	3.6
K 656	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS?	4.8	.9	.0	.0	1.3	.0	.0	3.6
K 657	K2-20 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS?	4.8	.9	.0	.0	1.3	.0	.0	3.6
K 658	K2-21 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSCEIVERS?	7.1	.0	.0	.0	1.3	.0	.0	3.6
K 659	K2-22 DO YOU PLOT RECEIVE SIGNAL LEVEL CURVES (RSL)?	.0	.0	.0	.0	1.3	.0	.0	3.6
K 660	K3-1 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS?	38.1	10.4	27.3	33.3	9.0	.0	1.2	40.0
K 661	K3-2 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS?	45.2	16.0	22.7	33.3	14.1	.0	2.5	49.1
K 662	K3-3 DO YOU CONVERT DECIMAL NUMBERS TO HEXADECIMAL (BASE 16) NUMBERS?	14.3	3.8	.0	50.0	15.4	.0	2.5	30.9
K 663	K3-4 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS?	35.7	8.5	36.4	33.3	10.3	.0	2.5	41.8
K 664	K3-5 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS?	40.5	8.5	13.6	33.3	10.3	.0	2.5	41.8

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
K	665	K3-6 DO YOU CONVERT OCTAL NUMBERS TO HEXADECIMAL NUMBERS?	11.9	4.7	.0	33.3	6.4	.0	1.2	30.9
K	666	K3-7 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS?	45.2	17.0	18.2	33.3	11.5	.0	1.2	49.1
K	667	K3-8 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS?	38.1	7.5	4.5	33.3	6.4	.0	1.2	38.2
K	668	K3-9 DO YOU CONVERT BINARY NUMBERS TO HEXADECIMAL NUMBERS?	11.9	5.7	4.5	33.3	10.3	.0	1.2	30.9
K	669	K3-10 DO YOU CONVERT HEXADECIMAL NUMBERS TO DECIMAL NUMBERS?	11.9	5.7	4.5	50.0	11.5	.0	1.2	30.9
K	670	K3-11 DO YOU CONVERT HEXADECIMAL NUMBERS TO OCTAL NUMBERS?	11.9	3.8	4.5	33.3	6.4	.0	1.2	30.9
K	671	K3-12 DO YOU CONVERT HEXADECIMAL NUMBERS TO BINARY NUMBERS?	11.9	5.7	.0	33.3	10.3	.0	1.2	30.9
K	672	K3-13 DO YOU ADD BINARY NUMBERS?	47.6	19.8	9.1	33.3	9.0	.0	5.0	47.3
K	673	K3-14 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD?	31.0	9.4	.0	16.7	5.1	.0	1.2	38.2
K	674	K3-15 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD?	35.7	12.3	.0	33.3	7.7	.0	5.0	38.2
K	675	K3-16 DO YOU ADD OCTAL NUMBERS?	28.6	5.7	.0	16.7	5.1	.0	1.2	34.5
K	676	K3-17 DO YOU SUBTRACT OCTAL NUMBERS?	28.6	5.7	4.5	16.7	5.1	.0	1.2	34.5
K	677	K3-18 DO YOU ADD HEXADECIMAL NUMBERS?	11.9	4.7	.0	33.3	7.7	.0	1.2	29.1
K	678	K3-19 DO YOU SUBTRACT HEXADECIMAL NUMBERS?	11.9	3.8	.0	33.3	7.7	.0	1.2	29.1
K	679	K3-20 DO YOU DIVIDE BINARY NUMBERS?	31.0	7.5	.0	16.7	2.6	.0	5.0	34.5
K	680	K3-21 DO YOU MULTIPLY BINARY NUMBERS?	31.0	7.5	.0	16.7	2.6	.0	5.0	34.5
K	681	K3-22 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	23.8	8.5	9.1	16.7	7.7	.0	1.2	50.9
K	682	K3-23 DO YOU USE OR REFER TO GRAY CODE?	11.9	2.8	4.5	.0	3.8	.0	2.5	20.0
K	683	K3-24 DO YOU USE OR REFER TO ICAO CODE?	9.5	.9	.0	.0	2.6	.0	2.5	7.3
K	684	K3-25 DO YOU USE OR REFER TO EXCESS-3 CODE?	9.5	1.9	.0	.0	3.8	.0	2.5	14.5
L		LOGIC FUNCTIONS (L1), BOOLEAN EQUATIONS (L2), COUNTERS (L3)								
L	685	L1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS? IF NO, GO TO ITEM L2-1; IF YES, CONTINUE.	71.4	29.2	31.8	50.0	7.7	20.0	.0	76.4
L	686	L1-2 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	50.0	17.0	9.1	.0	3.8	6.7	.0	56.4
L	687	L1-3 DO YOU CONSTRUCT TRUTH TABLES FOR 'OR' LOGIC SYSMBOLS OR GATES?	50.0	17.0	9.1	.0	3.8	6.7	.0	54.5
L	688	L1-4 DO YOU CONSTRUCT TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	50.0	16.0	9.1	.0	3.8	.0	.0	54.5
L	689	L1-5 DO YOU CONSTRUCT TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS OR GATES?	52.4	16.0	9.1	.0	2.6	.0	.0	52.7
L	690	L1-6 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' LOGIC SYMBOLS OR GATES?	66.7	28.3	18.2	.0	6.4	.0	.0	74.5
L	691	L1-7 DO YOU USE OR REFER TO TRUTH TABLES FOR 'OR' LOGIC SYMBOLS OR GATES?	66.7	28.3	18.2	.0	6.4	.0	.0	74.5
L	692	L1-8 DO YOU USE OR REFER TO TRUTH TABLES FOR 'AND' OR 'OR' LOGIC SYMBOLS WITH STATE INDICATORS?	66.7	24.5	13.6	.0	5.1	.0	.0	72.7
L	693	L1-9 DO YOU USE OR REFER TO TRUTH TABLES FOR 'EXCLUSIVE OR' LOGIC SYMBOLS?	66.7	25.5	13.6	.0	5.1	.0	.0	70.9
L	694	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'AND' GATES?	73.8	29.2	27.3	50.0	7.7	13.3	.0	81.8
L	695	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'OR' GATES?	73.8	30.2	27.3	50.0	7.7	13.3	.0	81.8

EPI INVENTORY DATA FOR 7-SKILL LEVELS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
L	696	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'NAND' OR 'NOR' GATES?	73.8	29.2	22.7	50.0	6.4	13.3	.0	81.8
L	697	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR 'EXCLUSIVE OR' GATES?	73.8	27.4	18.2	33.3	5.1	6.7	.0	80.0
L	698	L1-14 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR INHIBITED 'AND' GATES?	66.7	26.4	18.2	50.0	3.8	6.7	.0	81.8
L	699	L1-15 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "B" BARS?	47.6	3.8	.0	.0	.0	.0	.0	14.5
L	700	L1-16 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR "M" BARS?	47.6	3.8	.0	.0	.0	.0	.0	14.5
L	701	L1-17 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR COMBINERS?	50.0	9.4	4.5	16.7	.0	.0	.0	20.0
L	702	L1-18 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS?	73.8	22.6	.0	33.3	3.8	20.0	.0	67.3
L	703	L1-19 DO YOU USE OR REFER TO ONE-SHOT MULTIVIBRATOR SYMBOLS?	71.4	19.8	.0	33.3	1.3	13.3	.0	63.6
L	704	L1-20 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT OR SCHEMATIC DIAGRAMS?	73.8	24.5	18.2	33.3	5.1	20.0	.0	67.3
L	705	L1-21 DO YOU USE OR REFER TO ONE-SHOT CIRCUIT OR SCHEMATIC DIAGRAMS?	66.7	21.7	18.2	16.7	2.6	6.7	.0	61.8
L	706	L1-22 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES?	59.5	19.8	.0	.0	2.6	.0	.0	54.5
L	707	L1-23 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	40.5	12.3	.0	16.7	3.8	.0	.0	47.3
L	708	L1-24 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS?	40.5	11.3	.0	16.7	3.8	.0	.0	47.3
L	709	L1-25 DO YOU USE OR REFER TO NONCOMPLEMENTED FLIP-FLOP LOGIC SYMBOLS?	40.5	6.6	.0	16.7	2.6	.0	.0	41.8
L	710	L1-26 DO YOU CONSTRUCT TRUTH TABLES FOR "B" BARS?	26.2	1.9	.0	.0	.0	.0	.0	9.1
L	711	L1-27 DO YOU CONSTURCT TRUTH TABLES FOR "M" BARS?	26.2	1.9	.0	.0	.0	.0	.0	9.1
L	712	L1-28 DO YOU CONSTRUCT TRUTH TABLES FOR COMBINERS?	31.0	2.8	.0	.0	.0	.0	.0	12.7
L	713	L1-29 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS?	61.9	15.1	.0	16.7	1.3	6.7	.0	60.0
L	714	L1-30 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS?	47.6	12.3	4.5	16.7	1.3	6.7	.0	56.4
L	715	L1-31 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	47.6	12.3	.0	16.7	1.3	6.7	.0	54.5
L	716	L1-32 DO YOU TRACE DATA FLOW THROUGH NONCOMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS?	40.5	9.4	4.5	16.7	1.3	6.7	.0	54.5
L	717	L1-33 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS?	45.2	13.2	.0	.0	1.3	.0	.0	45.5
L	718	L2-1 IN YOUR PRESENT JOE, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS? IF NO, GO TO ITEM L3-1; IF YES, CONTINUE.	52.4	16.0	.0	.0	9.0	.0	1.2	43.6
L	719	L2-2 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS?	23.8	5.7	.0	.0	.0	.0	.0	21.8
L	720	L2-3 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	11.9	4.7	.0	.0	.0	.0	.0	12.7
L	721	L2-4 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS?	19.0	8.5	.0	.0	.0	.0	.0	14.5
L	722	L2-5 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES?	47.6	12.3	.0	.0	1.3	.0	.0	49.1
L	723	L2-6 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS?	23.8	5.7	.0	.0	1.3	.0	.0	18.2

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
L	724	L2-7 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA?	26.?	6.6	.0	.0	.0	.0	.0	18.2
L	725	L2-8 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES?	2?.6	8.5	.0	.0	.0	.0	.0	36.4
L	726	L2-9 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS?	?.5	5.7	.0	.0	.0	.0	.0	16.4
L	727	L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE?	47.6	15.1	.0	.0	2.6	.0	.0	45.5
L	728	L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS?	26.2	4.7	.0	.0	.0	.0	.0	16.4
L	729	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS?	35.7	6.6	.0	.0	.0	.0	.0	20.0
L	730	L3-1 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M1-1; IF YES, CONTINUE.	61.9	15.1	9.1	50.0	3.8	13.3	.0	50.9
L	731	L3-2 DO YOU USE OR REFER TO UP-COUNTERS?	57.1	15.1	9.1	33.3	1.3	.0	.0	49.1
L	732	L3-3 DO YOU USE OR REFER TO DOWN-COUNTERS?	50.0	15.1	4.5	33.3	1.3	.0	.0	47.3
L	733	L3-4 DO YOU USE OR REFER TO SERIAL COUNTERS?	64.3	15.1	.0	33.3	1.3	.0	.0	41.8
L	734	L3-5 DO YOU USE OR REFER TO PARALLEL COUNTERS?	64.3	14.2	.0	16.7	.0	.0	.0	32.7
L	735	L3-6 DO YOU USE OR REFER TO RING COUNTERS?	35.7	7.5	4.5	16.7	.0	.0	.0	32.7
L	736	L3-7 DO YOU USE OR REFER TO DECADE (MOD 10) COUNTERS?	2?.6	8.5	.0	.0	.0	6.7	.0	41.8
L	737	L3-8 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS?	50.0	10.4	4.5	16.7	.0	.0	.0	36.4
L	738	L3-9 DO YOU USE OR REFER TO DOWN CLOCKS?	47.6	12.3	4.5	16.7	1.3	.0	.0	45.5
L	739	L3-10 DO YOU USE OR REFER TO UP CLOCKS?	50.0	13.2	4.5	16.7	1.3	.0	.0	45.5
L	740	L3-11 DO YOU USE OR REFER TO OTHER MODULOUS COUNTERS?	26.2	6.6	4.5	16.7	1.3	6.7	.0	38.2
L	741	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS?	50.0	15.1	4.5	.0	2.6	.0	.0	41.8
L	742	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS?	45.2	15.1	4.5	.0	2.6	.0	.0	41.8
L	743	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-DOWN COUNTERS?	40.5	13.2	.0	.0	1.3	.0	.0	32.7
L	744	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS?	40.5	8.5	.0	.0	1.3	.0	.0	32.7
L	745	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS?	33.3	7.5	.0	.0	1.3	.0	.0	25.5
L	746	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF COUNTERS FEEDING STORAGE REGISTERS?	59.5	12.3	.0	.0	2.6	.0	.0	36.4
L	747	L3-18 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS?	64.3	15.1	.0	.0	2.6	.0	.0	34.5
L	748	L3-19 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS?	50.0	7.5	.0	.0	2.6	.0	.0	27.3
L	749	L3-20 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS?	23.8	5.7	.0	.0	2.6	.0	.0	20.0
L	750	L3-21 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES?	33.3	8.5	.0	.0	1.3	.0	.0	25.5
L	751	L3-22 DO YOU DETERMINE THE APPROPRIATE 'AND' GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT?	50.0	10.4	.0	16.7	1.3	.0	.0	29.1

C	TSK	TITLES	306 71 (M)	306 72 (M)	316 7CF (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
M		TIMING CIRCUITS (M1), USE OF SIGNAL GENERATORS (M2), MOTORS AND GENERATORS (M3)								
M	752	M1-1 DO YOU WORK WITH SAWTOOTH WAVE GENERATOR TIMING CIRCUITS?	35.7	13.2	.0	33.3	3.8	6.7	1.2	80.0
M	753	M1-2 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATOR TIMING CIRCUITS?	7.1	3.8	.0	.0	.0	.0	.0	60.0
M	754	M1-3 DO YOU WORK WITH PULSED OSCILLATOR TIMING CIRCUITS?	28.6	9.4	.0	33.3	5.1	20.0	.0	63.6
M	755	M1-4 DO YOU WORK WITH BLOCKING OSCILLATOR TIMING CIRCUITS?	14.3	2.8	.0	.0	1.3	.0	.0	54.5
M	756	M1-5 DO YOU WORK WITH MASTER STATION TIMING CIRCUITS?	42.9	4.7	.0	.0	6.4	6.7	2.5	34.5
M	757	M1-6 DO YOU USE OR REFER TO RISE TIME?	45.2	12.3	.0	50.0	2.6	6.7	.0	78.2
M	758	M1-7 DO YOU USE OR REFER TO FALL OR FLYBACK TIME?	42.9	8.5	.0	50.0	2.6	.0	.0	63.6
M	759	M1-8 DO YOU USE OR REFER TO SWEEP TIME?	45.2	12.3	.0	83.3	3.8	13.3	.0	83.6
M	760	M1-9 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS?	21.4	8.5	.0	33.3	2.6	6.7	.0	67.3
M	761	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS?	21.4	9.4	.0	33.3	2.6	6.7	.0	58.2
M	762	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS?	19.0	5.7	.0	16.7	2.6	6.7	.0	49.1
M	763	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS?	21.4	5.7	.0	.0	.0	.0	.0	56.4
M	764	M2-1 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM M3-1; IF YES, CONTINUE.	35.7	47.2	13.6	83.3	39.7	80.0	16.2	74.5
M	765	M2-2 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS?	28.6	45.3	9.1	83.3	37.2	73.3	12.5	74.5
M	766	M2-3 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS?	16.7	37.7	4.5	66.7	33.3	33.3	7.5	72.7
M	767	M2-4 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS?	19.0	36.8	9.1	33.3	24.4	33.3	7.5	67.3
M	768	M2-5 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS?	16.7	31.1	.0	.0	11.5	20.0	1.2	61.8
M	769	M2-6 DO YOU USE AUDIO SINE-WAVE GENERATORS?	26.2	11.3	.0	66.7	19.2	73.3	6.3	52.7
M	770	M2-7 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE?	23.8	13.2	.0	66.7	1.3	6.7	2.5	52.7
M	771	M2-8 DO YOU USE RF GENERATORS LESS THAN 1,000 MH?	9.5	6.6	.0	16.7	2.6	6.7	1.2	29.1
M	772	M2-9 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH?	2.4	2.8	.0	16.7	1.3	.0	1.2	25.5
M	773	M2-10 DO YOU USE WHITE NOISE GENERATORS?	2.4	1.9	.0	.0	1.3	.0	.0	27.3
M	774	M2-11 DO YOU USE PATTERN GENERATORS?	14.3	37.7	4.5	16.7	2.6	.0	.0	40.0
M	775	M2-12 DO YOU USE PSEUDO-RANDOM GENERATORS?	4.8	7.5	.0	.0	1.3	.0	.0	7.3
M	776	M2-13 DO YOU USE TIME MARK GENERATORS?	7.1	17.0	4.5	16.7	.0	.0	.0	50.9
M	777	M2-14 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS?	4.8	17.0	4.5	16.7	10.3	.0	1.2	38.2
M	778	M3-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS, GENERATORS (SERVO), OR ALTERNATORS? IF NO, GO TO ITEM M1-1; IF YES, CONTINUE.	64.3	59.4	59.1	66.7	24.4	13.3	6.3	83.6
M	779	M3-2 DO YOU INSPECT MOTORS?	54.8	57.5	45.5	66.7	23.1	13.3	5.0	87.3
M	780	M3-3 DO YOU CLEAN OR LUBRICATE MOTORS?	52.4	53.8	9.1	33.3	23.1	13.3	.0	85.5
M	781	M3-4 DO YOU OPERATE MOTORS?	54.8	51.9	50.0	50.0	19.2	13.3	2.5	85.5
M	782	M3-5 DO YOU REMOVE OR REPLACE COMPLETE MOTORS?	54.8	55.7	.0	50.0	20.5	13.3	6.3	85.5

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
M	783	M3-6 DO YOU REMOVE OR REPLACE MOTOR PARTS?	42.9	50.9	.0	50.0	9.0	.0	.0	85.5
M	784	M3-7 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS?	54.8	50.9	40.9	66.7	23.1	13.3	3.7	87.3
M	785	M3-8 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS?	31.0	51.9	4.5	33.3	9.0	.0	1.2	83.6
M	786	M3-9 DO YOU PERFORM TASKS ON MOTOR FIELD COILS?	16.7	40.6	.0	16.7	6.4	.0	.0	58.2
M	787	M3-10 DO YOU PERFORM ANY TASKS ON MOTOR ARMATURES?	28.6	47.2	.0	16.7	9.0	.0	.0	67.3
M	788	M3-11 DO YOU PERFORM ANY TASKS ON MOTOR ROTORS?	21.4	34.9	.0	16.7	9.0	.0	.0	69.1
M	789	M3-12 DO YOU PERFORM ANY TASKS ON MOTOR BRUSHES?	26.2	47.2	.0	16.7	12.8	.0	.0	85.5
M	790	M3-13 DO YOU PERFORM ANY TASKS ON MOTOR SLIP RINGS?	19.0	43.4	.0	16.7	6.4	.0	.0	61.8
M	791	M3-14 DO YOU PERFORM ANY TASKS ON MOTOR COMMUTATORS?	19.0	43.4	.0	16.7	7.7	.0	.0	61.8
M	792	M3-15 DO YOU PERFORM ANY TASKS ON MOTOR POLE PIECES?	14.3	30.2	.0	16.7	5.1	.0	.0	40.0
M	793	M3-16 DO YOU DETERMINE OR MEASURE FORCE OR TORQUE CREATED BY A MOTOR?	2.4	11.3	.0	16.7	.0	.0	.0	16.4
M	794	M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR?	9.5	17.9	4.5	16.7	.0	.0	.0	32.7
M	795	M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS?	2.4	3.8	.0	16.7	.0	.0	.0	21.8
M	796	M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS?	28.6	54.7	9.1	50.0	10.3	6.7	.0	78.2
M	797	M3-20 DO YOU WORK WITH INDUCTION MOTORS?	23.8	13.2	13.6	50.0	10.3	6.7	.0	80.0
M	798	M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS?	9.5	3.8	18.2	16.7	7.7	6.7	.0	50.9
M	799	M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS?	19.0	15.1	13.6	.0	10.3	.0	1.2	78.2
M	800	M3-23 DO YOU WORK WITH SERVOS OR SYNCHROS MOTORS?	11.9	17.9	9.1	16.7	5.1	13.3	.0	65.5
M	801	M3-24 DO YOU WORK WITH SHADED-POLE MOTORS?	4.8	1.9	.0	.0	3.8	.0	1.2	30.9
M	802	M3-25 DO YOU INSPECT GENERATORS OR ALTERNATORS?	47.6	4.7	36.4	16.7	6.4	.0	.0	43.6
M	803	M3-26 DO YOU CLEAN OR LUBRICATE GENERATORS OR ALTERNATORS?	45.2	3.8	9.1	.0	6.4	.0	.0	41.8
M	804	M3-27 DO YOU OPERATE GENERATORS OR ALTERNATORS?	45.2	3.8	50.0	16.7	7.7	.0	.0	43.6
M	805	M3-28 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS OR ALTERNATORS?	47.6	3.8	.0	.0	5.1	.0	.0	32.7
M	806	M3-29 DO YOU REMOVE OR REPLACE GENERATOR, ALTERNATOR, OR PARTS?	40.5	3.8	.0	.0	2.6	.0	.0	32.7
M	807	M3-30 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS OR ALTERNATORS?	45.2	3.8	27.3	16.7	7.7	.0	.0	40.0
M	808	M3-31 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS OR ALTERNATORS?	31.0	3.8	13.6	16.7	3.8	.0	.0	32.7
		N METER MOVEMENTS (N1), SATURABLE REACTORS AND MAGNETIC AMPLIFIERS (N2), WAVESHAPING CIRCUITS (N3)								
N	809	N1-1 DO YOU WORK WITH METERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N2-1; IF YES, CONTINUE.	57.1	58.5	63.6	100.0	73.1	73.3	41.2	87.3
N	810	N1-2 DO YOU CONSIDER THE FUNCTIONS OF PERMANENT MAGNET INTERNAL METER PARTS?	16.7	27.4	9.1	16.7	14.1	6.7	5.0	45.5
N	811	N1-3 DO YOU CONSIDER THE FUNCTIONS OF MOVING COIL INTERNAL METER PARTS?	16.7	29.2	9.1	.0	14.1	20.0	6.3	49.1
N	812	N1-4 DO YOU CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS INTERNAL METER PARTS?	11.9	13.2	9.1	.0	14.1	.0	5.0	41.8

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
N	813	N1-5 DO YOU READ METER SCALES?	57.1	59.4	63.6	100.0	70.5	66.7	43.8	89.1
N	814	N1-6 DO YOU EXTEND THE RANGE OF AMMETERS?	21.4	17.0	31.8	33.3	26.9	6.7	12.5	61.8
N	815	N1-7 DO YOU EXTEND THE RANGE OF VOLTMETERS?	23.8	22.6	31.8	50.0	35.9	6.7	17.5	65.5
N	816	N1-8 DO YOU ZERO OHMMETERS?	59.5	57.5	59.1	100.0	69.2	73.3	43.8	87.3
N	817	N1-9 DO YOU ZERO AMMETERS?	23.8	21.7	22.7	50.0	29.5	13.3	10.0	69.1
N	818	N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)?	40.5	32.1	18.2	66.7	26.9	40.0	21.2	65.5
N	819	N1-11 DO YOU CONSIDER BALLASTIC RESPONSE OF METER MOVEMENTS?	7.1	3.8	.0	16.7	2.6	.0	1.2	18.2
N	820	N1-12 DO YOU CONSIDER OTHER METER MOVEMENTS?	14.3	18.9	4.5	33.3	21.8	20.0	11.2	58.2
N	821	N2-1 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N3-1; IF YES, CONTINUE.	7.1	1.9	4.5	.0	1.3	.0	.0	12.7
N	822	N2-2 DO YOU INSPECT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	2.4	.0	.0	.0	.0	.0	.0	9.1
N	823	N2-3 DO YOU CLEAN SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	9.1
N	824	N2-4 DO YOU ADJUST SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	7.3
N	825	N2-5 DO YOU TROUBLESHOOT SATURABLE REACTORS OR MAGNETIC AMPLIFIERS?	2.4	.0	.0	.0	.0	.0	.0	9.1
N	826	N2-6 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS?	2.4	.0	.0	.0	.0	.0	.0	9.1
N	827	N2-7 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS?	.0	.9	.0	.0	.0	.0	.0	9.1
N	828	N2-8 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS?	4.8	.9	.0	.0	.0	.0	.0	7.3
N	829	N2-9 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	2.4	1.9	.0	.0	.0	.0	.0	10.9
N	830	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS?	2.4	.9	.0	.0	.0	.0	.0	10.9
N	831	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS?	.0	.9	.0	.0	.0	.0	.0	7.3
N	832	N2-12 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS?	2.4	.0	.0	.0	.0	.0	.0	12.7
N	833	N3-1 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 01-1; IF YES, CONTINUE.	35.7	17.9	4.5	.0	6.4	13.3	1.2	67.3
N	834	N3-2 DO YOU USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)?	26.2	12.3	.0	.0	1.3	6.7	.0	63.6
N	835	N3-3 DO YOU USE OR REFER TO PULSE WIDTH (PW)?	26.2	11.3	.0	.0	1.3	6.7	.0	67.3
N	836	N3-4 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)?	23.8	8.5	.0	.0	1.3	6.7	.0	58.2
N	837	N3-5 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)?	19.0	6.6	.0	.0	1.3	6.7	.0	60.0
N	838	N3-6 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS?	31.0	6.6	.0	.0	.0	.0	.0	63.6
N	839	N3-7 DO YOU USE OR REFER TO INTEGRATING CIRCUITS?	28.6	12.3	.0	.0	.0	.0	.0	60.0
N	840	N3-8 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT?	23.8	8.5	.0	.0	1.3	.0	.0	38.2

O	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
N	841	N3-9 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION?	11.9	7.5	.0	.0	.0	.0	.0	21.8
N	842	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATOR SOLID STATE CIRCUITS?	28.6	13.2	.0	.0	1.3	6.7	.0	69.1
N	843	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATOR SOLID STATE CIRCUITS?	14.7	8.5	.0	.0	.0	.0	.0	60.0
N	844	N3-12 DO YOU WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATOR SOLID STATE CIRCUITS?	16.7	5.7	.0	.0	1.3	6.7	.0	69.1
N	845	N3-13 DO YOU WORK WITH RAMP (TRAPEZOIDAL) GENERATOR SOLID STATE CIRCUITS?	9.5	6.6	.0	.0	1.3	.0	.0	63.6
N	846	N3-14 DO YOU WORK WITH FUNCTION GENERATOR SOLID STATE CIRCUITS?	11.9	5.7	.0	.0	.0	.0	.0	67.3
N	847	N3-15 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS?	21.4	8.5	.0	.0	.0	.0	.0	60.0
N	848	N3-16 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS?	14.3	9.4	.0	.0	1.3	.0	.0	60.0
N	849	N3-17 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS?	14.3	7.5	.0	.0	1.3	.0	.0	60.0
N	850	N3-18 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS?	28.6	10.4	.0	.0	.0	.0	.0	61.8
N	851	N3-19 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS?	26.2	10.4	.0	.0	1.3	.0	.0	60.0
N	852	N3-20 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS?	26.2	8.5	.0	.0	3.8	.0	.0	50.9
N	853	N3-21 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS?	23.8	7.5	.0	.0	1.3	.0	.0	58.2
O		SINGLE OR INDEPENDENT SIDEBAND SYSTEMS (01), PULSE MODULATION SYSTEMS (02), ANTENNAS (03)								
O	854	01-1 DO YOU WORK ON SINGLE OR INDEPENDENT SIDEBAND SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 02-1; IF YES, CONTINUE.	.0	1.9	18.2	.0	.0	.0	.0	3.6
O	855	01-2 DO YOU INSPECT SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	1.9	18.2	.0	.0	.0	.0	1.8
O	856	01-3 DO YOU CLEAN SINGLE SIDE BAND (SSB) OR INDEPENENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	.9	.0	.0	1.3	.0	1.2	1.8
O	857	01-4 DO YOU ALIGN SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	1.9	.0	.0	1.3	.0	1.2	1.8
O	858	01-5 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	1.9	18.2	.0	1.3	.0	1.2	1.8
O	859	01-6 DO YOU TROUBLESHOOT TO SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	.0	1.9	13.6	.0	.0	.0	1.2	1.8
O	860	01-7 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE SYSTEMS?	.0	1.9	4.5	.0	1.3	.0	1.2	1.8
O	861	01-8 DO YOU REMOVE OR REPLACE SINGLE SIDE BAND (SSB) OR INDEPENDENT SIDEBAND (ISB) TRANSMIT OR RECEIVE COMPONENTS?	.0	1.9	4.5	.0	1.3	.0	1.2	1.8

O	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
O	P62	01-9 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM AUDIO AMPLIFIER STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
O	863	01-10 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM BALANCED MODULATOR STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
O	864	01-11 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CARRIER OSCILLATOR STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
O	865	01-12 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM LC FILTER STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
O	866	01-13 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM CRYSTAL FILTER STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
O	867	01-14 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MECHANICAL FILTER STAGE?	.0	.0	.0	.0	1.3	6.7	.0	1.8
O	868	01-15 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM OSCILLATOR STAGE?	.0	.0	.0	.0	1.3	.0	.0	1.8
O	869	01-16 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM MIXER STAGE?	.0	.0	.0	.0	1.3	.0	.0	1.8
O	870	01-17 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DRIVER STAGE?	.0	.0	.0	.0	1.3	.0	.0	1.8
O	871	01-18 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM POWER AMPLIFIER STAGES?	.0	.9	.0	.0	1.3	.0	.0	1.8
O	872	01-19 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM RF AMPLIFIER STAGE?	.0	.0	4.5	.0	.0	.0	.0	1.8
O	873	01-20 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM FREQUENCY CONVERTER STAGES?	.0	.0	4.5	.0	1.3	.0	.0	1.8
O	874	01-21 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM IF AMPLIFIER STAGE?	.0	.0	.0	.0	.0	.0	.0	1.8
O	875	01-22 DO YOU PERFORM TASKS ON SSB OR ISB TRANSMIT OR RECEIVE SYSTEM DEMODULATOR STAGE?	.0	.0	4.5	.0	.0	.0	.0	1.8
O	876	01-23 DO YOU USE OR REFER TO SELECTIVE FADING WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	1.8
O	877	01-24 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	6.7	.0	1.8
O	878	01-25 DO YOU USE OR REFER TO FREQUENCY STABILITY WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	1.8
O	879	01-26 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS WHEN WORKING WITH SSB TRANSMIT OR RECEIVE SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	1.8
O	880	01-27 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB OR ISB TRANSMITTERS?	.0	.0	.0	.0	.0	.0	.0	1.8
O	881	01-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB TRANSMITTER SCHEMATIC DIAGRAMS?	.0	.0	.0	.0	.0	.0	.0	1.8
O	882	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB OR ISB RECEIVER SCHEMATIC DIAGRAMS?	.0	.0	.0	.0	.0	.0	.0	1.8
O	883	01-30 DO YOU PERFORM AERONAUTIC STATION ASSESSMENT PROGRAMS (ASAP)?	.0	.0	.0	.0	.0	.0	.0	1.8
O	884	02-1 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB? IF NO, GO TO ITEM 03-1; IF YES, CONTINUE.	9.5	4.7	.0	.0	3.8	.0	1.2	12.7
O	885	02-2 DO YOU INSPECT PULSE MODULATION SYSTEMS?	4.8	1.9	.0	.0	2.6	.0	.0	12.7
O	886	02-3 DO YOU CLEAN PULSE MODULATION SYSTEMS?	2.4	.9	.0	.0	2.6	.0	.0	10.9
O	887	02-4 DO YOU ALIGN PULSE MODULATION SYSTEMS?	2.4	.9	.0	.0	1.3	.0	.0	12.7

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
0	888	02-5 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS?	4.8	.9	.0	.0	2.6	.0	.0	12.7
0	889	02-6 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS?	4.8	.0	.0	.0	.0	.0	.0	12.7
0	890	02-7 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS?	2.4	.9	.0	.0	1.3	.0	.0	12.7
0	891	02-8 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS?	2.4	.0	.0	.0	1.3	.0	.0	12.7
0	892	02-9 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	1.3	.0	.0	10.9
0	893	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) PULSE MODULATION SYSTEMS?	4.8	.9	.0	.0	.0	.0	.0	10.9
0	894	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	.0	.0	.0	9.1
0	895	02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) PULSE MODULATION SYSTEMS?	4.8	.9	.0	.0	1.3	.0	.0	7.3
0	896	02-13 DO YOU WORK ON LINE PULSING MODULATION PULSE MODULATION SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	10.9
0	897	02-14 DO YOU WORK ON TIME DIVISION MULTIPLEXING (TDM) PULSE MODULATION SYSTEMS?	7.1	.0	.0	.0	2.6	.0	.0	5.5
0	898	02-15 DO YOU WORK ON - DON'T KNOW WHICH TYPE OF MODULATION SYSTEM?	.0	.0	.0	.0	.0	.0	.0	3.6
0	899	02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLY STAGE?	4.8	.9	.0	.0	.0	.0	.0	12.7
0	900	02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODE STAGE?	.0	.0	.0	.0	1.3	.0	.0	9.1
0	901	02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORK STAGE?	7.1	.9	.0	.0	1.3	.0	.0	12.7
0	902	02-19 DO YOU PERFORM TASKS ON PULSE MODULATIN SYSTEM TIMER STAGE?	7.1	.0	.0	.0	.0	.0	.0	12.7
0	903	02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRON STAGE?	4.8	.0	.0	.0	.0	.0	.0	7.3
0	904	02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMER STAGE?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	905	02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBE STAGE?	4.8	.0	.0	.0	.0	.0	.0	5.5
0	906	02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIER STAGE?	7.1	.0	.0	.0	.0	.0	.0	7.3
0	907	02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTER STAGE?	7.1	.0	.0	.0	.0	.0	.0	10.9
0	908	02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIER STAGE?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	909	02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTOR STAGE?	7.1	.0	.0	.0	.0	.0	.0	10.9
0	910	02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIER STAGE?	4.8	.0	.0	.0	.0	.0	.0	9.1
0	911	02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIER STAGE?	4.8	.0	.0	.0	.0	.0	.0	9.1
0	912	02-29 DO YOU USE OF REFER TO PULSE RECURRANCE FREQUENCY (PRF) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	1.3	.0	.0	10.9

D	TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
0	917	02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	1.3	.0	.0	10.9
0	918	02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	7.1	.9	.0	.0	2.6	.0	.0	12.7
0	919	02-32 DO YOU USE OR REFER TO PULSE SHAPE WHEN WORKING WITH PULSE MODULATION SYSTEMS?	7.1	.9	.0	.0	.0	.0	.0	12.7
0	920	02-33 DO YOU USE OR REFER TO PEAK POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	917	02-34 DO YOU USE OR REFER TO AVERAGE POWER WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.0	.0	.0	.0	.0	.0	12.7
0	918	02-35 DO YOU USE OR REFER TO DUTY CYCLE (DC) WHEN WORKING WITH PULSE MODULATION SYSTEMS?	4.8	.9	.0	.0	1.3	.0	.0	12.7
0	919	02-36 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	4.8	.0	.0	.0	.0	.0	.0	7.3
0	921	02-37 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)?	4.8	.0	.0	.0	.0	.0	.0	9.1
0	921	02-38 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS?	4.8	.0	.0	.0	.0	.0	.0	3.6
0	922	02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	923	02-40 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS?	4.8	.0	.0	.0	.0	.0	.0	10.9
0	924	03-1 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P1-1; IF YES, CONTINUE.	4.8	3.8	22.7	16.7	.0	.0	1.2	3.6
0	925	03-2 DO YOU INSPECT ANTENNAS?	4.8	2.8	18.2	16.7	.0	.0	1.2	1.8
0	926	03-3 DO YOU CLEAN ANTENNAS?	2.4	.9	.0	.0	.0	.0	.0	1.8
0	927	03-4 DO YOU PHYSICALLY ALIGN ANTENNAS?	2.4	.9	4.5	.0	.0	.0	.0	1.8
0	928	03-5 DO YOU ELECTRICALLY ALIGN ANTENNAS?	.0	.9	9.1	.0	.0	.0	.0	1.8
0	929	03-6 DO YOU TROUBLESHOOT TO ANTENNAS?	4.8	.9	18.2	16.7	.0	.0	.0	3.6
0	930	03-7 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS?	2.4	.9	13.6	.0	.0	.0	.0	1.8
0	931	03-8 DO YOU REMOVE OR INSTALL ANTENNAS?	2.4	1.9	.0	.0	.0	.0	.0	1.8
0	932	03-9 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS?	.0	.9	.0	.0	.0	.0	.0	1.8
0	933	03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES?	2.4	.0	.0	.0	.0	.0	.0	1.8
0	934	03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES?	2.4	.0	.0	.0	.0	.0	.0	1.8
0	935	03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES OF RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0
0	936	03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS RESISTIVE LOADS TO THE GENERATOR?	2.4	.0	.0	.0	.0	.0	.0	1.8
0	937	03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR?	9.5	1.9	.0	.0	1.3	.0	.0	1.8
0	938	03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR?	4.8	.9	.0	.0	.0	.0	.0	.0
0	939	03-16 DO YOU WORK WITH HERTZ BASIC ANTENNAS?	.0	.9	18.2	.0	.0	.0	1.2	.0
0	940	03-17 DO YOU WORK WITH MARCONI BASIC ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0

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0	941	03-18 DO YOU WORK WITH RHOMBIC BASIC ANTENNAS?	2.4	.9	.0	.0	.0	.0	.0	.0
0	942	03-19 DO YOU WORK WITH DIPOLE BASIC ANTENNAS?	2.4	.9	18.2	.0	.0	.0	1.2	.0
0	943	03-20 DO YOU WORK WITH SCIMITAR BASIC ANTENNAS?	.0	.0	.0	.0	.0	.0	.0	.0
0	944	03-21 DO YOU WORK WITH PARABOLIC BASIC ANTENNAS?	2.4	.9	4.5	.0	.0	.0	.0	.0
0	945	03-22 DO YOU WORK WITH GROUND PLANE BASIC ANTENNAS?	4.8	.9	9.1	.0	.0	.0	1.2	.0
0	946	03-23 DO YOU WORK WITH FOLDED DIPOLE BASIC ANTENNAS?	2.4	.9	9.1	.0	.0	.0	.0	.0
0	947	03-24 DO YOU WORK WITH BROADSIDE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0
0	948	03-25 DO YOU WORK WITH END-FIRE ARRAYS?	.0	.0	.0	.0	.0	.0	.0	.0
0	949	03-26 DO YOU WORK WITH CARDIOID ARRAYS?	.0	.0	4.5	.0	.0	.0	.0	.0
0	950	03-27 DO YOU WORK WITH COLLINEAR ARRAYS?	.0	.0	4.5	.0	.0	.0	.0	.0
0	951	03-28 DO YOU WORK WITH PHASE ARRAYS?	2.4	.0	.0	.0	.0	.0	.0	.0
0	952	03-29 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS?	2.4	.0	.0	16.7	.0	.0	.0	.0
0	953	03-30 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS?	2.4	.0	.0	.0	.0	.0	.0	.0
0	954	03-31 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS?	2.4	.0	.0	16.7	.0	.0	.0	.0
0	955	03-32 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS?	2.4	.0	.0	.0	.0	.0	.0	.0
0	956	03-33 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION?	2.4	.0	.0	.0	.0	.0	.0	.0
0	957	03-34 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD?	2.4	.0	.0	.0	.0	.0	.0	.0
0	958	03-35 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED?	2.4	.0	4.5	16.7	.0	.0	.0	.0
0	959	03-36 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED?	2.4	.0	9.1	.0	.0	.0	.0	.0
0	960	03-37 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON?	2.4	.0	.0	.0	.0	.0	.0	.0
0	961	03-38 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS?	.0	.9	4.5	.0	.0	.0	.0	.0
0	962	03-39 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS?	.0	.0	4.5	.0	.0	.0	.0	.0
0	963	03-40 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS?	2.4	.0	4.5	.0	1.3	.0	.0	.0
0	964	03-41 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN - DON'T KNOW WHAT KIND OF ELEMENT?	7.1	.9	9.1	16.7	1.3	.0	.0	.0
0	965	03-42 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS?	2.4	.9	4.5	16.7	.0	.0	.0	.0
0	966	03-43 DO YOU WORK ON BIDIRECTIONAL ANTENNAS?	.0	.9	9.1	.0	.0	.0	.0	.0
0	967	03-44 DO YOU WORK ON OMNIDIRECTIONAL ANTENNAS?	4.8	.9	18.2	16.7	.0	.0	1.2	.0
0	968	03-45 DO YOU WORK WITH ROTARY ANTENNA ARRAYS?	2.4	.0	.0	.0	.0	.0	1.2	.0

P TRANSMISSION LINES (P1), WAVEGUIDES AND CAVITY RESONATORS (P2), MICROWAVE AMPLIFIERS AND OSCILLATORS (P3)

D TSK	TITLES	306 71 (P)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P 969	P1-1 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES? (DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES.) IF NO, GO TO ITEM P2-1; IF YES, CONTINUE.	14.3	11.3	.0	.0	42.3	20.0	30.8	3.6
P 970	P1-2 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE COPPER LOSS OR 'I SUB 2 R' LOSS IN TRANSMISSION LINES?	2.4	.9	.0	.0	11.5	.0	3.7	.0
P 971	P1-3 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES?	2.4	.9	.0	.0	6.4	.0	.0	.0
P 972	P1-4 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE RADIATION LOSS?	2.4	.9	.0	.0	5.1	.0	1.2	.0
P 973	P1-5 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE DIELECTRIC LOSS?	2.4	.9	.0	.0	7.7	.0	5.0	.0
P 974	P1-6 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE LEAKAGE LOSSES?	4.8	.9	.0	.0	15.4	.0	5.0	.0
P 975	P1-7 WHEN WORKING WITH TRANSMISSION LINES DO YOU REFER TO OR USE FARADAY SHIELD?	2.4	.9	.0	.0	2.6	.0	1.2	.0
P 976	P1-8 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES?	14.3	11.3	.0	.0	76.5	20.0	26.2	.0
P 977	P1-9 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES?	9.5	6.6	.0	.0	25.6	20.0	12.5	.0
P 978	P1-10 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES?	7.1	4.7	.0	.0	24.4	13.3	10.0	.0
P 979	P1-11 DO YOU WORK WITH FLEXIPLE COAXIAL CABLE TRANSMISSION LINES?	9.5	4.7	.0	.0	11.5	6.7	8.7	1.8
P 980	P1-12 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES?	7.1	.0	.0	.0	6.4	.0	3.7	.0
P 981	P1-13 DO YOU TROUBLESHOOT TRANSMISSION LINES?	11.9	8.5	.0	.0	38.5	20.0	23.7	.0
P 982	P1-14 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)?	4.8	7.5	.0	.0	17.9	13.3	13.7	1.8
P 983	P1-15 DO YOU SELECT APPROPRIATE TRANSMISSION LINE TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS?	7.1	1.9	.0	.0	10.3	.0	5.0	.0
P 984	P1-16 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS?	9.5	4.7	.0	.0	23.1	13.3	11.2	.0
P 985	P1-17 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	2.4	.0	.0	.0	.0	.0	1.2	.0
P 986	P1-18 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES?	2.4	.0	.0	.0	.0	.0	1.2	.0
P 987	P1-19 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS?	2.4	.0	.0	.0	1.3	0.0	1.2	.0
P 988	P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS?	7.1	2.8	.0	.0	1.3	6.7	1.2	.0
P 989	P1-21 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING?	.0	.0	.0	.0	2.6	.0	2.5	.0
P 990	P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES?	4.8	.0	.0	.0	11.5	.0	3.7	.0
P 991	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES?	.0	.0	.0	.0	5.1	.0	1.2	.0

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P 992	P1-24 DO YOU USE OR REFER TO THE TERM CUT OFF FREQUENCY OF TRANSMISSION LINES?	2.4	1.9	.0	.0	6.4	.0	1.2	.0
P 993	P2-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES?	2.4	.0	.0	.0	.0	.0	1.2	.0
P 994	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES?	2.4	.9	.0	.0	2.6	.0	.0	.0
P 995	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTHS FOR GIVEN FREQUENCIES?	2.4	.0	.0	.0	1.3	.0	2.5	.0
P 996	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES?	4.8	.0	.0	.0	7.7	6.7	2.5	.0
P 997	P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES?	4.8	1.9	.0	.0	16.7	6.7	5.0	.0
P 998	P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES?	4.8	2.8	.0	.0	12.8	6.7	2.5	.0
P 999	P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING?	2.4	1.9	.0	.0	7.7	6.7	6.3	.0
P1000	P2-1 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P3-1; IF YES, CONTINUE.	2.4	.0	.0	.0	1.3	.0	2.5	1.8
P1001	P2-2 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	1.2	1.8
P1002	P2-3 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	.0	.0	1.2	1.8
P1003	P2-4 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1004	P2-5 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1005	P2-6 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P1006	P2-7 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	1.8
P1007	P2-8 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS?	.0	.0	.0	.0	.0	.0	.0	1.8
P1008	P2-9 DO YOU REMOVE OR INSTALL DUMMY LOADS?	.0	.0	.0	.0	.0	.0	.0	1.8
P1009	P2-10 DO YOU REMOVE OR INSTALL E BENDS?	.0	.9	.0	.0	.0	.0	.0	.0
P1010	P2-11 DO YOU REMOVE OR INSTALL H BENDS?	.0	.0	.0	.0	.0	.0	.0	.0
P1011	P2-12 DO YOU REMOVE OR INSTALL OTHER BENDS?	.0	.0	.0	.0	.0	.0	.0	.0
P1012	P2-13 DO YOU REMOVE OR INSTALL CHOKE JOINTS?	.0	.9	.0	.0	.0	.0	.0	1.8
P1013	P2-14 DO YOU REMOVE OR INSTALL ROTATING JOINTS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P1014	P2-15 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS?	.0	.0	.0	.0	.0	.0	1.2	1.8
P1015	P2-16 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS?	.0	.0	.0	.0	.0	.0	1.2	1.8
P1016	P2-17 DO YOU REMOVE OR INSTALL DUPLEXERS OR MIXERS?	.0	.0	.0	.0	1.3	.0	1.2	1.8
P1017	P2-18 DO YOU REMOVE OR INSTALL WAVEGUIDE SHUTTERS?	.0	.9	.0	.0	1.3	.0	.0	1.8
P1018	P2-19 DO YOU REMOVE OR INSTALL TRANSMIT (TR) OR ANTITRANSMIT (ATR) TUBES?	.0	.0	.0	.0	1.3	.0	.0	.0
P1019	P2-20 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES?	2.4	.0	.0	.0	1.3	6.7	.0	.0
P1020	P2-21 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES?	2.4	.0	.0	.0	1.3	6.7	1.2	.0
P1021	P2-22 DO YOU USE OR REFER TO CUT OFF FREQUENCY OF WAVEGUIDES?	4.8	.0	.0	.0	.0	6.7	1.2	1.8
P1022	P2-23 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	1.8
P1023	P2-24 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1024	P2-25 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS?	2.4	.0	.0	.0	.0	.0	.0	.0

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P1025	P2-26 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1026	P2-27 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1027	P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OR .7 WAVELENGTHS OF THE OPERATING FREQUENCY?	.0	.0	.0	.0	.0	.0	.0	.0
P1028	P2-29 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 AS AN AVERAGE?	.0	.0	.0	.0	.0	.0	.0	.0
P1029	P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION?	.0	.0	.0	.0	.0	.0	.0	.0
P1030	P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1031	P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1032	P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1033	P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES?	.0	.0	.0	.0	.0	.0	.0	.0
P1034	P2-35 DO YOU WORK WITH HIGH POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	1.3	.0	.0	1.8
P1035	P2-36 DO YOU WORK WITH LOW POWER PROBE ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	1.3	.0	.0	1.8
P1036	P2-37 DO YOU WORK WITH LOOP ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	1.3	.0	.0	1.8
P1037	P2-38 DO YOU WORK WITH APERTURES (WINDOWS OR IRISES) ENERGY COUPLING DEVICES ON WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	1.3	.0	.0	1.8
P1038	P2-39 DO YOU WORK WITH CHOKE JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	.0	.0	.0	.0	1.3	.0	.0	1.8
P1039	P2-40 DO YOU WORK WITH ROTATING JOINTS IN WAVEGUIDES OR CAVITY RESONATORS?	2.4	.0	.0	.0	1.3	.0	.0	1.8
P1040	P2-41 DO YOU WORK WITH JOINTS IN WAVEGUIDES OR CAVITY RESONATORS BUT DON'T KNOW WHICH KIND?	.0	.0	.0	.0	1.3	.0	.0	1.8
P1041	P2-42 DO YOU TUNE CAVITY RESONATORS USING ELECTRICAL METHODS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P1042	P2-43 DO YOU TUNE CAVITY RESONATORS USING MECHANICAL METHODS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P1043	P2-44 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS?	2.4	.0	.0	.0	.0	.0	1.8	1.8
P1044	P3-1 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS? IF NO, GO TO ITEM Q1-1; IF YES, CONTINUE.	2.4	.0	.0	.0	.0	.0	.0	.0
P1045	P3-2 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.0	.0	.0	.0	.0	.0	.0

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P1046	P3-3 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	.0	.9	.0	.0	.0	6.7	1.2	1.8
P1047	P3-4 DO YOU USE OR REFER TO LEAD INDUCTANCE FACTORS THAT CAUSE POOR OPERATION OF CONVENTINAL ELECTRON TUBES AT HIGH FREQUENCIES?	2.4	.9	.0	.0	.0	6.7	.0	1.8
P1048	P3-5 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY FACTORS THAT CAUSE POOR OPERATION OF CONVENTIONAL ELECTRON TUBES AT HIGH FREQUENCIES?	2.4	.9	.0	.0	.0	6.7	1.2	1.8
P1049	P3-6 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION?	2.4	1.9	.0	.0	1.3	.0	.0	1.8
P1050	P3-7 DO YOU USE OR REFER TO ELECTRON BUNCHING?	7.1	1.9	.0	.0	1.3	.0	1.2	.0
P1051	P3-8 DO YOU WORK WITH TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	6.7	.0	.0
P1052	P3-9 DO YOU WORK WITH THREE-CAVITY KLYSTRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1053	P3-10 DO YOU WORK WITH REFLEX KLYSTRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1054	P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)?	2.4	.0	.0	.0	.0	.0	.0	.0
P1055	P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1056	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	.0	.0	.0	.0
P1057	P3-14 DO YOU WORK WITH MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	1.8
P1058	P3-15 DO YOU WORK WITH BACKWARD WAVE OSCILLATORS (BWO)?	.0	.0	.0	.0	.0	.0	.0	.0
P1059	P3-16 DO YOU INSPECT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	2.4	.0	.0	.0	.0	.0	.0	.0
P1060	P3-17 DO YOU CLEAN KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	.0	.0	.0	.0	.0	.0	.0	.0
P1061	P3-18 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1062	P3-19 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY?	.0	.0	.0	.0	.0	.0	.0	.0
P1063	P3-20 DO YOU PERFORM OPERATIONAL CHECKS ON KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	2.4	.0	.0	.0	.0	.0	.0	.0
P1064	P3-21 DO YOU TROUBLESHOOT KLYSTRONS OR TRAVELING WAVE TUBES (TWT)?	4.8	.0	.0	.0	.0	.0	.0	.0
P1065	P3-22 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRONS OR TWT'S?	.0	.0	.0	.0	.0	.0	.0	.0
P1066	P3-23 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	.0
P1067	P3-24 DO YOU INSPECT PARAMETRIC AMPLIFIERS?	7.1	.9	.0	.0	.0	.0	.0	.0
P1068	P3-25 DO YOU CLEAN PARAMETRIC AMPLIFIERS?	7.1	.9	.0	.0	1.3	.0	2.5	.0
P1069	P3-26 DO YOU ADJUST PARAMETRIC AMPLIFIERS?	7.1	.9	.0	.0	1.3	.0	2.5	.0
P1070	P3-27 DO YOU TUNE PARAMETRIC AMPLIFIERS?	7.1	.9	.0	.0	1.3	.0	2.5	.0
P1071	P3-28 DO YOU PERFORM OPERATIONAL CHECKS ON PARAMETRIC AMPLIFIERS?	2.4	.9	.0	.0	2.6	.0	1.2	.0
P1072	P3-29 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	2.5	.0
P1073	P3-30 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIERS?	.0	.0	.0	.0	2.6	.0	1.2	.0
P1074	P3-31 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS?	.0	.0	.0	.0	2.6	.0	1.2	.0
P1075	P3-32 DO YOU INSPECT MAGNETRONS?	2.4	.9	.0	.0	.0	.0	.0	1.8
P1076	P3-33 DO YOU CLEAN MAGNETRONS?	2.4	1.9	.0	.0	.0	.0	.0	.0
P1077	P3-34 DO YOU ADJUST MAGNETRONS?	2.4	1.9	.0	.0	.0	.0	1.2	.0
P1078	P3-35 DO YOU TUNE MAGNETRONS?	2.4	1.9	.0	.0	.0	.0	.0	.0
P1079	P3-36 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS?	4.8	1.9	.0	.0	.0	.0	.0	1.8
P1080	P3-37 DO YOU TROUBLESHOOT MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	1.8

EPI INVENTORY DATA FOR 7-SKILL LEVELS

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P1081	P3-38 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRONS?	.0	.0	.0	.0	.0	.0	.0	1.8
P1082	P3-39 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS?	.0	.0	.0	.0	.0	.0	.0	1.8
P1083	P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR PLATE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1084	P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	.0	.0	.0	.0
P1085	P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1086	P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FEEDBACK LOOP COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	.0	.0
P1087	P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF DRIFT SPACE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	1.2	.0
P1088	P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	2.4	.0	.0	.0	1.3	.0	1.2	.0
P1089	P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER CAVITY COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	1.2	.0
P1090	P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CONTROL GRID COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	1.2	.0
P1091	P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TWO-CAVITY KLYSTRONS?	.0	.0	.0	.0	1.3	.0	1.2	.0
P1092	P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REPELLER (REFLECTOR) PLATE COMPONENTS OF REFLEX KLYSTRONS?	2.4	.0	.0	.0	1.3	[illegible]	.0	.0
P1093	P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID COMPONENTS OF REFLEX KLYSTRONS?	4.8	.0	.0	.0	1.3	[illegible]	.0	.0
P1094	P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF GRID CAVITY GAP COMPONENTS OF REFLEX KLYSTRONS?	4.8	.0	.0	.0	1.3	[illegible]	.0	.0
P1095	P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF RESONANT CAVITY COMPONENTS OF REFLEX KLYSTRONS?	4.8	.0	.0	.0	1.3	.0	.0	.0
P1096	P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETIC COUPLING LOOP COMPONENTS OF REFLEX KLYSTRONS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1097	P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF REFLEX KLYSTRONS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1098	P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF REFLEX KLYSTRONS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1099	P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF OUTPUT LEAD COMPONENTS OF REFLEX KLYSTRONS?	2.4	.9	.0	.0	1.3	.0	.0	.0
P1100	P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENT COMPONENTS OF TRAVELING-WAVE TUBES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1101	P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODE COMPONENTS OF TRAVELING-WAVE TUBES?	4.8	.0	.0	.0	.0	.0	.0	.0
P1102	P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MODULATOR GRID COMPONENTS OF TRAVELING-WAVE TUBES?	4.8	.0	.0	.0	.0	.0	.0	.0
P1103	P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ANODE COMPONENTS OF TRAVELING-WAVE TUBES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1104	P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF HELIX COMPONENTS OF TRAVELING-WAVE TUBES?	4.8	.0	.0	.0	.0	.0	.0	.0
P1105	P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR COMPONENTS OF TRAVELING-WAVE TUBES?	4.8	.0	.0	.0	.0	.0	.0	.0

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Q TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P1106	P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNET COMPONENTS OF TRAVELING-WAVE TUBES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1107	P3-64 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF ATTENUATOR COMPONENTS OF TRAVELING-WAVE TUBES?	2.4	.0	.0	.0	.0	.0	.0	.0
P1108	P3-65 DO YOU PERFORM TASKS ON FERRITE CIRCULATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1109	P3-66 DO YOU PERFORM TASKS ON SIGNAL CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1110	P3-67 DO YOU PERFORM TASKS ON IDLER CAVITY COMPONENTS OF PARAMETRIC AMPLIFIERS?	7.1	.0	.0	.0	1.3	.0	.0	.0
P1111	P3-68 DO YOU PERFORM TASKS ON VARACTOR DIODE COMPONENTS OF PARAMETRIC AMPLIFIERS?	4.8	.0	.0	.0	1.3	.0	.0	.0
P1112	P3-69 DO YOU PERFORM TASKS ON FERRITE ISOLATOR COMPONENTS OF PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	.0	.0
P1113	P3-70 DO YOU PERFORM TASKS ON REVERSE-BIAS BATTERY COMPONENTS OF PARAMETRIC AMPLIFIERS?	2.4	.0	.0	.0	1.3	.0	1.2	.0
P1114	P3-71 DO YOU PERFORM TASKS ON ANODE COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1115	P3-72 DO YOU PERFORM TASKS ON ANODE COOLING PIN COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1116	P3-73 DO YOU PERFORM TASKS ON COUPLING LOOP COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1117	P3-74 DO YOU PERFORM TASKS ON HEATER LEAD COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1118	P3-75 DO YOU PERFORM TASKS ON RESONANT CAVITY COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1119	P3-76 DO YOU PERFORM TASKS ON CATHRODE COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
P1120	P3-77 DO YOU PERFORM TASKS ON MAGNET COMPONENTS OF MAGNETRONS?	2.4	.0	.0	.0	.0	.0	.0	.0
Q	REGISTERS (Q1), STORAGE DEVICES (Q2), DIGITAL-TO-ANALOG AND DIGITAL-TO-DIGITAL CONVERTERS (Q3)								
Q1121	Q1-1 DO YOU USE OR REFER TO STORAGE RESISTERS?	69.0	32.1	9.1	33.3	9.0	.0	1.2	50.9
Q1122	Q1-2 DO YOU USE OR REFER TO SHIFT REGISTERS?	69.0	34.9	.0	33.3	3.8	.0	.0	52.7
Q1123	Q1-3 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS?	66.7	34.0	.0	33.3	3.8	.0	.0	58.2
Q1124	Q1-4 DO YOU USE OR REFER TO LOGIC SYMBOLS OR STORAGE REGISTERS?	66.7	31.1	.0	33.3	3.8	.0	.0	58.2
Q1125	Q1-5 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTER CIRCUITS?	66.7	29.2	.0	33.3	2.6	.0	1.2	52.7
Q1126	Q1-6 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPES OF REGISTER CIRCUITS?	61.9	25.5	.0	33.3	2.6	6.7	1.2	50.9
Q1127	Q1-7 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED?	59.5	28.3	.0	33.3	2.6	6.7	1.2	49.1

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
Q1128	Q2-1 DO YOU WORK WITH STORAGE DEVICES IN YOUR PRESENT JOB? IF NO, GO TO ITEM Q3-1; IF YES, CONTINUE.	64.3	27.4	22.7	66.7	19.2	6.7	3.7	23.6
Q1129	Q2-2 DO YOU USE OR REFER TO DELAY LINES?	14.7	7.5	.0	.0	1.3	.0	.0	5.5
Q1130	Q2-3 DO YOU USE OR REFER TO MAGNETIC CORES OR PIMAGS?	57.1	6.6	4.5	16.7	1.3	.0	.0	1.8
Q1131	Q2-4 DO YOU USE OR REFER TO MAGNETIC DRUMS?	7.1	5.7	4.5	33.3	5.1	.0	.0	3.6
Q1132	Q2-5 DO YOU USE OR REFER TO MAGNETIC TAPES?	9.5	17.9	13.6	16.7	15.4	.0	1.2	9.1
Q1133	Q2-6 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OF MEMORY SYSTEMS?	37.7	9.4	4.5	33.3	9.0	.0	1.2	10.9
Q1134	Q2-7 DO YOU USE OR REFER TO STORAGE CAPACITY OF MEMORY SYSTEMS?	45.2	18.9	9.1	33.3	14.1	.0	.0	12.7
Q1135	Q2-8 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS?	28.6	10.4	4.5	16.7	7.7	.0	.0	7.3
Q1136	Q2-9 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES?	14.7	8.5	.0	16.7	1.3	.0	.0	5.1
Q1137	Q2-10 DO YOU USE OR REFER TO MAGNETIC DISKS?	9.5	9.5	4.5	66.7	3.8	.0	.0	9.1
Q1138	Q2-11 DO YOU USE OR REFER TO THIN FILMS?	.0	.0	.0	.0	.0	.0	.0	3.6
Q1139	Q2-12 DO YOU USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED) CIRCUITS?	31.0	17.0	9.1	33.3	7.7	.0	.0	14.2
Q1140	Q2-13 DO YOU USE OR REFER TO BUBBLE MEMORIES?	.0	.9	4.5	16.7	1.3	.0	.0	1.8
Q1141	Q2-14 DO YOU USE OR REFER TO PUNCH CARDS?	47.6	11.3	.0	16.7	1.3	.0	1.2	4.5
Q1142	Q2-15 DO YOU USE OR REFER TO PAPER TAPES?	50.0	19.3	9.1	66.7	2.6	.0	1.2	10.9
Q1147	Q2-16 DO YOU USE OR REFER TO RANDOM ACCESS MEMORIES (RAM)?	35.7	24.5	9.1	33.3	14.1	.0	.0	9.1
Q1144	Q2-17 DO YOU USE OR REFER TO READ ONLY MEMORIES (ROM)?	19.0	13.6	9.1	16.7	14.1	.0	.0	14.5
Q1145	Q2-18 DO YOU USE OR REFER TO PROGRAMMABLE READ ONLY MEMORIES (PROM)?	16.7	15.1	4.5	.0	11.5	.0	.0	10.0
Q1146	Q2-19 DO YOU USE OR REFER TO TRANSFORMER READ ONLY STORAGES (TROS)?	.0	1.9	.0	.0	.0	.0	.0	1.8
Q1147	Q2-20 DO YOU USE OR REFER TO CAPACITY READ ONLY STORAGES (CROS)?	.0	1.9	.0	.0	.0	.0	.0	.0
Q1148	Q2-21 DO YOU INSPECT STORAGE DEVICES?	50.0	16.0	9.1	33.3	3.8	.0	.0	5.5
Q1149	Q2-22 DO YOU CLEAN STORAGE DEVICES?	42.9	14.2	4.5	16.7	1.3	.0	.0	1.8
Q1150	Q2-23 DO YOU ALIGN STORAGE DEVICES?	11.9	7.5	4.5	16.7	1.3	.0	.0	.0
Q1151	Q2-24 DO YOU ADJUST STORAGE DEVICES?	11.9	6.6	.0	16.7	2.6	.0	.0	.0
Q1152	Q2-25 DO YOU TROUBLESHOOT MEMORY SYSTEM STORAGE DEVICES?	54.8	14.2	4.5	16.7	5.1	.0	.0	.0
Q1153	Q2-26 DO YOU REMOVE OR REPLACE SUBASSEMBLIES OR COMPONENTS OF STORAGE DEVICES?	38.1	15.1	.0	33.3	1.3	.0	.0	.0
Q1154	Q2-27 DO YOU TRACE SIGNAL FLOW IN STORAGE DEVICES USING LOGIC DIAGRAMS OR SCHMATICS?	47.6	17.1	.0	33.3	.0	.0	.0	.0
Q1155	Q3-1 DO YOU INSPECT, MAINTAIN, OR REPAIR EQUIPMENT WHICH CONVERTS DIGITAL-FORMATTED (D/A) CONVERTERS? IF NO, GO TO ITEM A1-1; IF YES, CONTINUE.	26.2	7.5	.0	.0	.0	.0	.0	.0
Q1156	Q3-2 DO YOU USE OR REFER TO OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES?	9.5	1.9	.0	.0	.0	.0	.0	.0
Q1157	Q3-3 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE LOWEST SIGNIFICANT ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IS DETERMINED BY ARBITRARY DENOMINATION OF THE RESISTORS?	.0	.0	.0	.0	.0	.0	.0	.0
Q1158	Q3-4 DO YOU COMPARE OUTPUT VOLTAGES FOR TWO BINARY BYTES IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS?	.0	.0	.0	.0	.0	.0	.0	.0
Q1159	Q3-5 DO YOU PERFORM REPAIR OR ADJUST FUNCTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	7.1	.0	.0	.0	.0	.0	.0	.0

D TSK	TITLES	30F 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
Q1160	Q3-6 DO YOU PERFORM TASKS ON HOLD FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	7.1	.9	.0	.0	2.6	.0	.0	25.5
Q1161	Q3-7 DO YOU PERFORM TASKS ON COMPARE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	11.9	.9	.0	.0	3.8	.0	.0	23.6
Q1162	Q3-8 DO YOU PERFORM TASKS ON DIGITIZE FUNCTION PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS?	14.3	.9	.0	.0	3.8	.0	.0	21.8
Q1163	Q3-9 DO YOU PERFORM TASKS ON PORTIONS OF ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS BUT DON'T KNOW WHICH FUNCTION?	2.4	.0	.0	.0	5.1	.0	1.2	10.9
Q1164	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS?	7.1	1.9	.0	.0	1.3	.0	.0	27.3
Q1165	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS?	9.5	.9	.0	.0	1.3	.0	.0	27.3
Q1166	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS?	14.3	.9	.0	.0	1.3	.0	.0	25.5
Q1167	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS?	16.7	1.9	.0	.0	2.6	.0	.0	29.1
Q1168	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS?	.0	.9	.0	.0	.0	.0	.0	21.8
Q1169	Q3-15 DO YOU PERFORM ANY TASKS ON ELECTRONIC A/D CONVERTERS?	19.0	2.8	.0	.0	5.1	.0	1.2	30.9
Q1170	Q3-16 DO YOU PERFORM ANY TASKS ON DIGITAL-TO-ANALOG (D/A) CONVERTERS?	19.0	3.8	.0	.0	6.4	.0	1.2	29.1
Q1171	Q3-17 DO YOU OPERATE COMPUTER KEYBOARDS?	11.9	1.9	.0	.0	12.8	.0	.0	21.8
Q1172	Q3-18 DO YOU WORK AT OR WITH COMPUTER TERMINALS?	14.3	1.9	.0	.0	11.5	.0	1.2	14.5
Q1173	Q3-19 HAVE YOU BEEN SENT TO FACTORY TRAINING OR TO ANY OTHER SCHOOL FOR THE SPECIFIC PURPOSE OF RECEIVING COMPUTER OR LOGIC CIRCUIT RELATED TRAINING?	11.9	3.8	.0	.0	10.3	.0	1.2	20.0
Q1174	Q3-20 DO YOU HAVE MICROPROCESSORS OR COMPUTER EQUIPMENT LOCATED AT YOUR WORK STATION WHICH IS OPERATED OR MAINTAINED BY CONTRACTOR PERSONNEL?	16.7	4.7	.0	.0	7.7	6.7	2.5	27.3
Q1175	Q3-21 WAS THE COMPUTER OR LOGIC CIRCUIT TRAINING YOU RECEIVED IN YOUR 3-LEVEL AWARDING COURSE ADEQUATE IN TERMS OF YOUR PRESENT DUTIES?	11.9	.9	.0	.0	1.3	.0	1.2	7.3
Q1176	Q3-22 ARE YOU ASSIGNED AGAINST A POSITION WHICH REQUIRES A "D" PREFIX?	.0	.0	.0	.0	.0	.0	.0	1.8

P	PHANTASTRONS (R1), SCHMITT TRIGGERS (R2), CABLE FABRICATION (R3)								

R1177	R1-1 DO YOU WORK WITH PHANTASTRON CIRCUITRY? IF NO, GO TO ITEM R2-1. IF YES, CONTINUE.	2.4	.0	.0	.0	.0	6.7	.0	9.1
R1178	R1-2 PHANTASTRON CIRCUITRY HAS VARIABLE-DELAY APPLICATIONS IN MY JOB.	2.4	.0	.0	.0	.0	6.7	.0	5.5
R1179	R1-3 PHANTASTRON CIRCUITRY HAS SEARCH-LOCK AUTOMATIC FREQUENCY CONTROLS (AFC) APPLICATIONS IN MY JOB.	.0	.0	.0	.0	.0	.0	.0	5.5
R1180	R1-4 PHANTASTRON CIRCUITRY HAS MONOSTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	2.4	.0	.0	.0	.0	6.7	.0	7.3

I TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
P1181	P1-5 PHANTASTRON CIRCUITRY HAS BISTABLE MULTIVIBRATORS APPLICATIONS IN MY JOB.	4.8	.0	.0	.0	.0	6.7	.0	7.3
P1182	P1-6 PHANTASTRON CIRCUITRY HAS FREE-RUNNING MULTIVIBRATORS APPLICATIONS IN MY JOB.	4.8	.0	.0	.0	.0	6.7	.0	7.3
P1183	P2-1 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS? IF NO, GO TO ITEM P3-1; IF YES, CONTINUE.	59.5	26.4	.0	16.7	1.3	13.3	.0	49.1
P1184	P2-2 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS?	57.1	21.7	.0	16.7	1.3	6.7	.0	45.5
P1185	P2-3 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS?	57.1	23.6	.0	16.7	1.3	6.7	.0	49.1
P1186	P3-1 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES?	19.0	32.6	.0	33.3	25.6	13.3	25.7	49.1
P1187	P3-2 DO YOU FABRICATE COAXIAL CABLES?	19.0	10.4	.0	16.7	1.3	6.7	5.7	50.9
S	INPUT/OUTPUT (ELECTROMECHANICAL) DEVICES (S1), PHOTO SENSITIVE DEVICES (S2), SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) (S3)								
S1161	S1-1 DO YOU WORK WITH INPUT OR OUTPUT DEVICES ON YOUR PRESENT JOB? IF NO, GO TO ITEM S2-1; IF YES, CONTINUE.	57.9	46.4	9.5	66.7	5.3	6.7	7.4	56.3
S1162	S1-2 DO YOU [illegible] TO REPAIR OR ADJUST ELECTROMECHANICAL	63.2	42.3	27.7	83.3	21.1	6.7	14.8	7.3
S1163	S1-3 DO YOU [illegible] TO INTERFACE	73.4	61.3	31.9	83.3	39.5	[illegible]	29.6	14.5
S1164	S1-4 DO YOU USE [illegible] TO TRACE DRIVER CIRCUITS?	47.4	27.4	21.4	83.3	7.9	[illegible]	[illegible]	[illegible]
S1165	S1-5 DO YOU [illegible] TO TRACE SPARK/ARC PROCESS	47.4	17.4	9.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S1166	S1-6 DO YOU [illegible] WIRES OR CABLES FOR TYPICAL	63.2	34.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S1167	S1-7 DO YOU [illegible] TO SOLVE LIGHT [illegible]	31.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S1168	S1-8 DO YOU [illegible] TO TEST?	26.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S1169	S1-9 DO YOU [illegible]	26.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S1170	S1-10 [illegible] INCREASE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	S1-11 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	INPUTS?								
[illegible]	S1-12 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	S1-13 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	S1-14 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	DEVICES?								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	PHOTOSENSITIVE [illegible] DEVICES								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	IF NO, GO TO ITEM S3-1; IF YES, CONTINUE.								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	COIL [illegible]								
	S3-2 DO YOU [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	RELATION HIS CHOPPER COIL ITEMS?								

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
S1210	S3-4 DO YOU MEASURE EXCITATION FREQUENCY CHOPPER COIL ITEMS?	.0	.0	.0	.0	.0	.0	.0	7.3
S1211	S3-5 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIP CHOPPER COIL ITEMS?	2.4	.0	.0	.0	.0	6.7	.0	7.3
S1212	S3-6 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	4.8	.0	.0	.0	.0	6.7	.0	9.1
S1213	S3-7 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	2.4	.0	.0	.0	.0	6.7	.0	12.7
S1214	S3-8 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	4.8	.0	.0	.0	.0	.0	.0	12.7
S1215	S3-9 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION?	4.8	.0	.0	.0	.0	.0	.0	10.9
	INFRARED (T1), LASERS (T2), DISPLAY TUBES (T3), TELEVISION (T4)								
T1216	T1-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS? IF NO, GO TO ITEM T2-1; IF YES, CONTINUE.	7.1	.0	.0	16.7	1.3	.0	.0	12.7
T1217	T1-2 DO YOU INSPECT INFRARED SYSTEMS?	4.8	.0	.0	16.7	.0	.0	.0	12.7
T1218	T1-3 DO YOU CLEAN INFRARED SYSTEMS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1219	T1-4 DO YOU SERVICE INFRARED SYSTEMS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1220	T1-5 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1221	T1-6 DO YOU OPERATE INFRARED SYSTEMS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1222	T1-7 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS?	4.8	.0	.0	16.7	.0	.0	.0	12.7
T1223	T1-8 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	4.8	.0	.0	16.7	.0	.0	.0	12.7
T1224	T1-9 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1225	T1-10 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS?	4.8	.0	.0	16.7	.0	.0	.0	12.7
T1226	T1-11 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS?	2.4	.0	.0	16.7	.0	.0	.0	12.7
T1227	T1-12 DO YOU USE OR REFER TO FAR REGIONS?	2.4	.0	.0	.0	.0	.0	.0	5.5
T1228	T1-13 DO YOU USE OR REFER TO INTERMEDIATE REGIONS?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1229	T1-14 DO YOU USE OR REFER TO NEAR REGIONS?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1230	T1-15 DO YOU USE OR REFER TO MICRONS (M)?	2.4	.0	.0	.0	.0	.0	.0	7.3
T1231	T1-16 DO YOU USE OR REFER TO GRAY BODIES?	.0	.0	.0	.0	.0	.0	.0	5.5
T1232	T1-17 DO YOU USE OR REFER TO BLACK BODIES?	2.4	.0	.0	.0	.0	.0	.0	5.5
T1233	T1-18 DO YOU USE OR REFER TO ABSORPTION?	2.4	.0	.0	.0	.0	.0	.0	9.1
T1234	T1-19 DO YOU USE OR REFER TO SCATTERING?	2.4	.0	.0	.0	.0	.0	.0	9.1
T1235	T1-20 DO YOU USE OR REFER TO ABSOLUTE ZERO?	2.4	.0	.0	.0	.0	.0	.0	9.1
T1236	T1-21 DO YOU PERFORM TASKS ON GLITZ?	2.4	.0	.0	.0	1.3	.0	.0	1.8
T1237	T1-22 DO YOU PERFORM TASKS ON TARGET BUTTONS?	4.8	.0	.0	.0	1.3	.0	.0	3.6
T1238	T1-23 DO YOU PERFORM TASKS ON ERECTOR LENSES?	2.4	.0	.0	.0	1.3	.0	.0	5.5
T1239	T1-24 DO YOU PERFORM TASKS ON OCULAR LENSES?	2.4	.0	.0	.0	.0	6.7	.0	9.1

D TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
T1240	T1-25 DO YOU PERFORM TASKS ON CORRECTION LENSES?	2.4	.0	.0	.0	.0	6.7	1.2	7.7
T1241	T1-26 DO YOU PERFORM TASKS ON FILTERS?	2.4	.0	.0	.0	.0	6.7	1.2	7.1
T1242	T1-27 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS?	2.4	.0	.0	.0	.0	.0	1.2	3.1
T1243	T1-28 DO YOU PERFORM TASKS ON PLANE MIRRORS?	2.4	.0	.0	.0	.0	.0	.0	7.2
T1244	T2-1 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS? IF NO, GO TO ITEM T3-1; IF YES, CONTINUE.	7.1	.0	.0	.0	2.6	.0	.0	12.9
T1245	T2-2 DO YOU INSPECT LASER SYSTEMS?	2.4	.9	.0	.0	.0	.0	.0	5.5
T1246	T2-3 DO YOU CLEAN LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	3.6
T1247	T2-4 DO YOU SERVICE LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	.9
T1248	T2-5 DO YOU OPERATE LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1249	T2-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1250	T2-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1251	T2-8 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	7.7
T1252	T2-9 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1253	T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS?	.0	.0	.0	.0	.0	.0	.0	7.7
T1254	T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1255	T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS?	4.8	.0	.0	.0	.0	.0	.0	7.7
T1256	T2-13 DO YOU USE OR REFER TO GROUND STATE?	2.4	.0	.0	.0	1.3	.0	.0	7.7
T1257	T2-14 DO YOU USE OR REFER TO EXCITED STATE?	2.4	.0	.0	.0	1.3	.0	.0	7.7
T1258	T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1259	T2-16 DO YOU USE OR REFER TO PHOTONS?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1260	T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSION?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1261	T2-18 DO YOU USE OR REFER TO STIMULATED EMISSION?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1262	T2-19 DO YOU USE OR REFER TO POPULATION INVERSION?	.0	.0	.0	.0	.0	.0	.0	7.7
T1263	T2-20 DO YOU USE OR REFER TO METASTABLE LEVELS?	.0	.0	.0	.0	.0	.0	.0	7.7
T1264	T2-21 DO YOU USE OR REFER TO OPTICAL CAVITY?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1265	T2-22 DO YOU USE OR REFER TO SPECTRAL?	2.4	.0	.0	.0	.0	.0	.0	7.7
T1266	T2-23 DO YOU USE OR REFER TO [illegible]	2.4	.0	.0	.0	.0	.0	.0	7.7
T1267	T2-24 DO YOU USE OR REFER TO [illegible]	.0	.0	.0	.0	.0	.0	.0	7.7
T1268	T3-1 DO YOU PERFORM TASKS ON CORRECTION LENSES?	.0	.0	.0	.0	.0	.0	.0	7.7

C TSK	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
T1280	T3-3 DO YOU CLEAN DVST OR MMST?	.0	.9	.0	.0	.0	.0	.0	3.6
T1281	T3-4 DO YOU ADJUST OR CALIBRATE DVST OR MMST?	.0	.9	.0	.0	.0	.0	.0	3.6
T1282	T3-5 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST?	.0	.9	.0	.0	1.3	.0	.0	3.6
T1283	T3-6 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS?	.0	.9	.0	.0	1.3	.0	.0	3.6
T1284	T3-7 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS?	.0	.9	.0	.0	1.3	.0	.0	3.6
T1285	T3-8 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF DVST?	2.4	.0	.0	.0	.0	.0	1.2	3.6
T1286	T3-9 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF MMST?	2.4	.0	.0	.0	.0	.0	1.2	3.6
T1287	T3-10 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF SCT?	4.8	.0	.0	.0	.0	.0	1.2	3.6
T1288	T3-11 DO YOU PERFORM TASKS ON FLOOD GUNS?	.0	.0	.0	.0	.0	.0	.0	1.8
T1289	T3-12 DO YOU PERFORM TASKS ON WRITE GUNS?	.0	.0	.0	.0	1.3	.0	1.2	1.8
T1290	T3-13 DO YOU PERFORM TASKS ON READ GUNS?	.0	.0	.0	.0	1.3	.0	1.2	1.8
T1291	T3-14 DO YOU PERFORM TASKS ON ATTACK GUNS?	.0	.0	.0	.0	1.3	.0	.0	1.8
T1292	T3-15 DO YOU PERFORM TASKS ON ERASE GUNS?	.0	.0	.0	.0	.0	.0	.0	1.8
T1293	T3-16 DO YOU PERFORM TASKS ON STORAGE GRIDS?	.0	.0	.0	.0	.0	.0	.0	1.8
T1294	T4-1 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS DEALING WITH TELEVISION SYSTEMS INCLUDING LOW LIGHT TELEVISION? IF NO, GO TO ITEM U1-1; IF YES, CONTINUE.	2.4	1.9	31.8	.0	.0	.0	.0	47.3
T1295	T4-2 DO YOU INSPECT TELEVISION SYSTEMS?	2.4	.9	13.6	.0	.0	.0	.0	45.5
T1296	T4-3 DO YOU CLEAN TELEVISION SYSTEMS?	.0	1.9	.0	.0	.0	.0	.0	41.8
T1297	T4-4 DO YOU ADJUST OR CALIBRATE TELEVISION SYSTEMS?	.0	1.9	22.7	.0	.0	.0	.0	41.8
T1298	T4-5 DO YOU OPERATE TELEVISION SYSTEMS?	.0	2.8	31.8	.0	1.3	.0	.0	41.8
T1299	T4-6 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF TV SYSTEMS?	2.4	1.9	18.2	.0	1.3	.0	.0	43.6
T1300	T4-7 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF TV SYSTEMS?	2.4	1.9	13.6	.0	1.3	.0	.0	43.6
T1301	T4-8 DO YOU TROUBLESHOOT DOWN TO TV SYSTEM COMPONENT PARTS?	.0	.9	.0	.0	1.3	.0	.0	40.0
T1302	T4-9 DO YOU REMOVE OR REPLACE TV SYSTEM MAJOR ASSEMBLIES?	2.4	1.9	4.5	.0	.0	.0	1.2	40.0
T1303	T4-10 DO YOU REMOVE OR REPLACE TV SYSTEM COMPONENT PARTS?	.0	.0	.0	.0	.0	.0	1.2	40.0
U	COMPUTERS, MICROPROCESSORS, AND PROGRAMMING (U1), DB AND POWER RATIOS (U2)								
U1304	U1-1 IN YOUR PRESENT JOB, DO YOU PERFORM MAINTENANCE ROUTINES OR PROGRAMMING TASKS? IF NO, GO TO ITEM U2-1; IF YES, CONTINUE.	31.0	10.4	22.7	33.3	15.4	6.7	3.7	16.4
U1305	U1-2 DO YOU USE OR REFER TO DECIMAL SYSTEMS?	19.0	6.6	4.5	.0	9.0	6.7	1.2	16.4
U1306	U1-3 DO YOU USE OR REFER TO OCTAL SYSTEMS?	19.0	5.7	9.1	.0	3.8	6.7	1.2	12.7
U1307	U1-4 DO YOU USE OR REFER TO PARITY DETECTORS/GENERATORS?	19.0	4.7	.0	.0	6.4	.0	1.2	10.9
U1308	U1-5 DO YOU USE OR REFER TO HEXADECIMAL SYSTEMS?	11.9	1.9	.0	33.3	9.0	6.7	1.2	14.5
U1309	U1-6 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS?	7.1	2.8	.0	.0	6.4	.0	1.2	7.3
U1310	U1-7 DO YOU USE OR REFER TO FOUR SYSTEMS?	4.8	.0	.0	.0	2.6	.0	.0	3.6
U1311	U1-8 DO YOU USE OR REFER TO BINARY SYSTEMS?	23.8	7.5	18.2	.0	7.7	6.7	.0	16.4
U1312	U1-9 DO YOU USE OR REFER TO TIME-SHARING (MULTI-SEQUENCING)?	14.3	.0	.0	.0	6.4	6.7	.0	7.3
U1313	U1-10 DO YOU USE OR REFER TO DATA WORDS?	21.4	7.8	.0	16.7	7.7	6.7	.0	12.7

APT INVENTORY DATA FOR 7-SKILL LEVELS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

D TSK	TITLES	306 7I (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
013I4	01-11 DO YOU USE OR REFER TO ADDRESS WORDS?	23.8	4.7	.0	16.7	6.4	6.7	.0	12.7
013I5	01-12 DO YOU USE OR REFER TO ALPHABETICS/ALPHABETICALS?	16.7	.9	.0	.0	6.4	6.7	.0	6.6
013I6	01-13 DO YOU USE OR REFER TO BIT-INF/INFORMATION?	9.5	.9	4.5	.0	2.6	.0	.0	5.6
013I7	01-14 DO YOU USE OR REFER TO INSTRUCTION WORDS?	14.7	1.9	.0	16.7	6.4	6.7	.0	10.7
013I8	01-15 DO YOU USE OR REFER TO JAP-16?	2.4	.0	.0	.0	.0	.0	.0	1.6
013I9	01-16 DO YOU USE OR REFER TO BINARY CODED DECIMAL (BCD)?	14.7	3.8	.0	16.7	6.4	.0	.0	10.4
013J0	01-17 DO YOU USE OR REFER TO CONTROL WORDS?	16.7	1.9	.0	16.7	10.3	6.7	.0	10.3
013J1	01-18 DO YOU USE OR REFER TO OPERATE WORDS?	14.3	.9	.3	33.3	10.3	6.7	.0	9.3
013J2	01-19 DO YOU USE OR REFER TO MEANINGLESS WORDS?	7.1	.0	.0	.0	1.3	.0	.0	3.6
013J3	01-20 DO YOU USE OR REFER TO TEST OR DIAGNOSTIC PROGRAMS?	21.4	1.9	9.1	16.7	10.9	.0	.0	10.7
013J4	01-21 DO YOU USE OR REFER TO RELIABILITY PROGRAMS?	14.3	.0	4.5	16.7	7.6	.0	.0	10.0
013J5	01-22 DO YOU USE OR REFER TO COMPILERS?	9.5	.0	4.5	.0	2.6	.0	.0	7.1
013J6	01-23 DO YOU USE OR REFER TO ASSEMBLERS?	9.5	.0	4.5	.0	2.6	.0	.0	6.2
013J7	01-24 DO YOU USE OR REFER TO MACHINE LANGUAGE?	16.7	2.8	.0	.0	3.9	.0	.0	11.7
013J8	01-25 DO YOU USE OR REFER TO MNEMONICS?	21.4	.9	.0	.0	5.1	6.7	.0	8.5
013J9	01-26 DO YOU USE OR REFER TO ROUTINES OR SUBROUTINES?	19.0	2.8	9.1	.0	3.9	6.7	.0	9.1
013K0	01-27 DO YOU USE OR REFER TO FLOW CHARTS OR DIAGRAMS?	27.0	4.7	13.6	.0	15.4	6.7	.0	14.7
013K1	01-28 DO YOU USE OR REFER TO ATLAS*?	2.4	.0	.0	.0	.0	.0	.0	.0
013K2	01-29 DO YOU USE OR REFER TO SOLAR*?	4.8	.0	.0	.0	.0	.0	.0	.0
013K3	01-30 DO YOU [illegible] PROBLEM ORIENTED OR SIMILAR LEVEL PROGRAMMING SYSTEMS?	7.1	.0	.0	.0	1.3	.0	.0	.0
013K4	01-31 [illegible] DESIGN OF MULTI-LEVEL PROGRAMMING SYSTEMS?	2.4	.0	.0	.0	2.6	.0	.0	1.6
013K5	01-32 [illegible] PROGRAMMING OF SPECIFIC CIRCUITS?	4.8	.0	.0	.0	1.3	.0	.0	.0
	[illegible] MODIFICATION OF SPECIFIC CIRCUITS?	11.9	.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible] [illegible] COMPUTER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]

E-1 INVENTORY DATA FOR 7-SKILL LEVELS

ITEM	TITLES	306 71 (M)	306 72 (M)	316 70F (M)	316 72F (M)	362 71 (M)	362 73 (M)	362 74 (M)	918 70 (M)
U1348	U1-45 DO YOU USE FORTRAN PROGRAMMING LANGUAGE?	4.8	.0	.0	.0	.0	.0	.0	1.8
U1349	U1-46 DO YOU USE COBOL PROGRAMMING LANGUAGE?	4.8	1.9	.0	.0	.0	6.7	.0	1.8
U1350	U1-47 DO YOU USE SPS PROGRAMMING LANGUAGE?	4.8	1.9	.0	.0	.0	.0	.0	1.8
U1351	U1-48 DO YOU USE OR PERFORM TASKS ON MICROPROCESSOR BASED EQUIPMENT?	16.7	6.6	.0	.0	5.1	.0	.0	7.3
U1352	U1-49 DO YOU USE INPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.1	1.9	.0	.0	3.8	.0	.0	9.1
U1353	U1-50 DO YOU USE OUTPUT PORT LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.1	1.9	.0	.0	3.8	.0	.0	9.1
U1354	U1-51 DO YOU USE RAM MEMORY CIRCUITS (STATIC OR DYNAMIC) IN CONJUNCTION WITH THE MICROPROCESSOR?	11.9	4.7	.0	.0	6.4	.0	.0	14.5
U1355	U1-52 DO YOU USE ROM MEMORY CIRCUITS (INCLUDES PROM, EPROM, ETC.) IN CONJUNCTION WITH THE MICROPROCESSOR?	14.3	5.7	.0	.0	6.4	.0	.0	14.5
U1356	U1-53 DO YOU USE TRI-STATE CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	2.4	.0	.0	.0	1.3	.0	.0	10.9
U1357	U1-54 DO YOU USE CLOCK GENERATOR CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	11.9	3.8	4.5	.0	3.8	.0	.0	12.7
U1358	U1-55 DO YOU USE STATUS LATCH CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	7.1	1.9	.0	.0	2.6	.0	.0	7.3
U1359	U1-56 DO YOU USE BIDIRECTIONAL BUFFER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	11.9	2.8	.0	.0	3.8	.0	.0	9.1
U1360	U1-57 DO YOU USE ENCODER/DECODER CIRCUITS IN CONJUNCTION WITH THE MICROPROCESSOR?	14.3	4.7	.0	.0	3.8	.0	.0	12.7
U1361	U2-1 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION?	40.5	14.2	9.1	.0	57.7	73.3	18.8	38.2
U1362	U2-2 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS?	7.1	1.9	.0	.0	1.3	6.7	.0	9.1
U1363	U2-3 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS?	4.8	1.9	.0	.0	2.6	6.7	.0	7.3
U1364	U2-4 DO YOU USE VTVM (DB METERS) TO CHECK FOR NOISE OR SIGNAL LEVEL?	47.6	10.4	.0	16.7	57.7	66.7	22.5	38.2
U1365	U2-5 DO YOU USE VTVM (DB METERS) TO CHECK OR ADJUST AUDIO AMPLIFIERS?	33.3	6.6	.0	.0	50.0	73.3	16.2	30.9
U1366	U2-6 DO YOU USE A HP350 OR 344A TEST SET TO ALIGN AUDIO EQUIPMENT?	26.2	4.7	.0	.0	53.8	26.7	10.0	3.6

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