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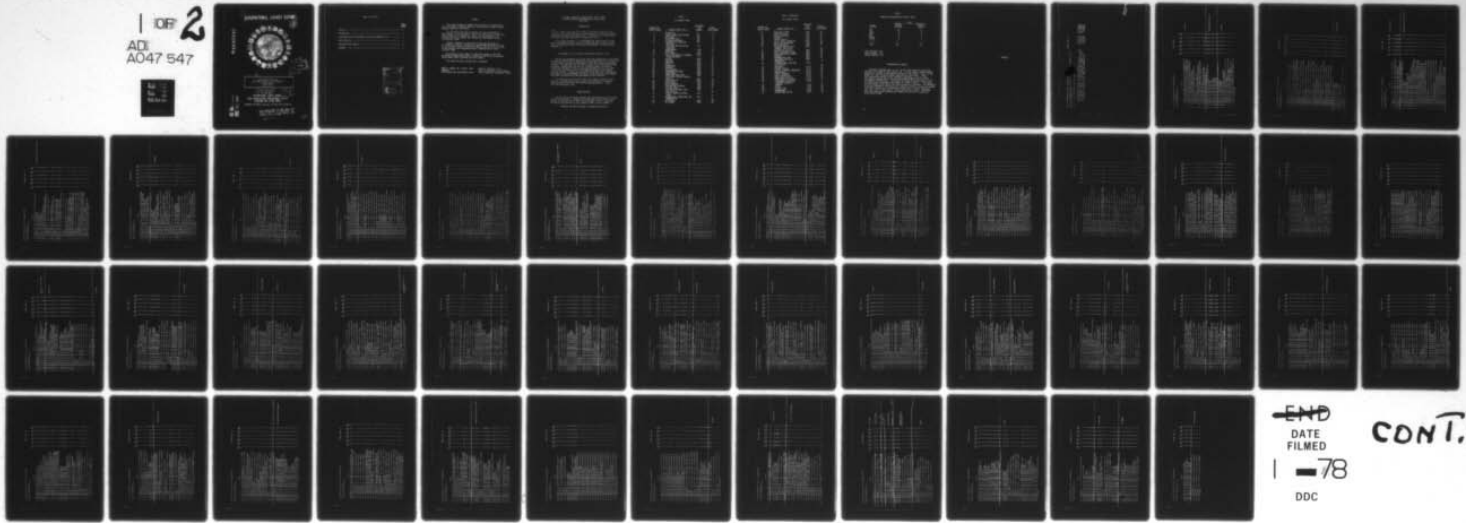
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OCCUPATIONAL SURVEY REPORT.

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ELECTRONIC PRINCIPLES
 ELECTRONIC WARFARE COUNTERMEASURES
 CAREER LADDER
 AFSC 276X1.

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OCCUPATIONAL SURVEY BRANCH
 USAF OCCUPATIONAL MEASUREMENT CENTER
 LACKLAND AFB TEXAS 78236

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PREFACE

This report presents a summary of the results of a detailed Air Force Electronic Principles Survey of the Electronic Warfare Countermeasures Specialty, AFSC 276X1.

The Electronic Principles Inventory (EPI) was developed by Major Thomas J. O'Connor and Mr. Hendrick W. Ruck and the survey data were analyzed by Mr. Reginald G. Nolte. All are members of the Occupational Survey Branch, USAF Occupational Measurement Center, Lackland AFB, Texas.

Computer programs for analyzing the data were designed by Dr. Raymond E. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Distribution of this report is made upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Lackland AFB, Texas 78236.

This report has been reviewed and is approved.

JAMES A. TURNER, JR., Colonel, USAF
Commander
USAF Occupational Measurement Center

WALTER E. DRISKILL, Ph.D.
Chief, Occupational Survey Branch
USAF Occupational Measurement Center

ELECTRONIC PRINCIPLES OCCUPATIONAL SURVEY REPORT
ELECTRONIC WARFARE COUNTERMEASURES CAREER LADDER
AFSC 276X1

INTRODUCTION

→ This report summarizes the results of the administration of the Electronic Principles Inventory to airmen assigned to Electronic Warfare Countermeasures Specialty (AFSC 276X1). The data for this report were collected during the period March through June 1977. ↷

This report describes: (1) development and administration of the survey instrument; and (2) electronic principles used by DAFSC 7-skill level personnel both CONUS and overseas and assigned to selected major commands. ←

DEVELOPMENT OF THE ELECTRONIC PRINCIPLES INVENTORY (EPI)

The EPI was developed by personnel from the Occupational Survey Branch who were well qualified in theoretical physics and electronics, as well as in task analysis and survey development. Over 300 maintenance personnel from SAC, TAC, ADC, MAC, and AFCS participated in the development of the inventory. Representing the five ATC training centers, electronics experts who averaged 12 years of maintenance experience and four years of electronic principles instruction experience spent several weeks refining the EPI. In addition, personnel at the Electrical Engineering Department of the USAF Academy and the Air Force Human Resources Laboratory were consulted during the development of the inventory.

The final version of the EPI used in this survey contained 1,257 items in 62 subject matter areas covering all electronic principles training given at the five ATC technical training centers. Table 1 lists the 62 subject areas.

ADMINISTRATION

The Electronic Principles Inventory was administered by mail to AFSC 276X1 airmen worldwide. Responses from 156 individuals represented 42 percent of the total of all AFSC 276X1 personnel. Table 2 shows the percentage distribution by major command of the survey incumbents.

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TABLE 1
EPI SUBJECT AREAS

<u>SEQUENCE OF SUBJECT AREAS</u>	<u>SUBJECT AREA TITLE</u>	<u>BEGINNING ITEM NUMBER</u>	<u>GPSUM PAGE NUMBER</u>
1	MATHEMATICS	A1	2
2	DIRECT CURRENT AND VOLTAGE	A15	2
3	RESISTANCE	A24	2
4	MULTIMETER USES	B52	3
5	ALTERNATING CURRENT	B61	4
6	INDUCTORS AND INDUCTIVE REACTANCE	B67	4
7	CAPACITORS AND CAPACITIVE REACTANCE	C92	5
8	TRANSFORMERS	C128	6
9	MAGNETISM	C171	7
10	RCL CIRCUITS	D185	8
11	SERIES AND PARALLEL RESONANCE (TIME CONSTANTS)	D229	10
12	FILTERS	D239	10
13	COUPLING	E261	11
14	SOLDERING	E273	11
15	RELAYS	E294	12
16	MICROPHONES	F314	12
17	SPEAKERS	F327	13
18	OSCILLOSCOPES	F342	13
19	SEMICONDUCTOR DIODES	G354	13
20	TRANSISTORS	G404	15
21	TRANSISTOR AMPLIFIERS	G428	16
22	SOLID-STATE SPECIAL PURPOSE DEVICES	H477	19
23	POWER SUPPLIES	H483	19
24	OSCILLATORS	H512	19
25	MULTIVIBRATORS	I539	20
26	LIMITERS AND CLAMPERS	I555	21
27	ELECTRON TUBES	I565	21
28	ELECTRON TUBE AMPLIFIERS AND CIRCUITS	J609	22
29	SPECIAL PURPOSE ELECTRON TUBES	J616	23
30	HETERODYNING, MODULATION, AND DEMODULATION	J632	23
31	AM SYSTEMS	K638	23
32	FM SYSTEMS	K666	24

TABLE 1 (CONTINUED)

EPI SUBJECT AREAS

<u>SEQUENCE OF SUBJECT AREAS</u>	<u>SUBJECT AREA TITLE</u>	<u>BEGINNING ITEM NUMBER</u>	<u>GPSUM PAGE NUMBER</u>
33	NUMBERING SYSTEMS	K685	25
34	LOGIC FUNCTIONS	L695	25
35	BOOLEAN EQUATIONS	L708	26
36	COUNTERS	L733	27
37	TIMING CIRCUITS	M757	27
38	USE OF SIGNAL GENERATORS	M769	28
39	MOTORS AND GENERATORS	M779	28
40	METER MOVEMENTS	N808	29
41	SATURABLE REACTORS AND MAGNETIC AMPLIFIERS	N818	29
42	WAVESHAPING CIRCUITS	N834	30
43	SINGLE SIDEBAND SYSTEMS	O845	30
44	PULSE MODULATION SYSTEMS	O875	31
45	ANTENNAS	O914	32
46	TRANSMISSION LINES	P953	34
47	WAVEGUIDES AND CAVITY RESONATORS	P984	35
48	MICROWAVE AMPLIFIERS AND OSCILLATORS	P1034	37
49	REGISTERS	Q1110	39
50	STORAGE DEVICES	Q1117	40
51	DIGITAL TO ANALOG CONVERTERS	Q1126	40
52	PHANTASTRONS	Q1140	41
53	SCHMITT TRIGGERS	R1141	41
54	CABLE FABRICATION	R1144	41
55	INPUT/OUTPUT DEVICES	S1146	41
56	PHOTO SENSITIVE DEVICES	S1149	41
57	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS)	S1150	41
58	INFRARED	T1159	41
59	LASERS	T1186	42
60	DISPLAY TUBES	T1220	43
61	PROGRAMMING	U1234	43
62	DB AND POWER RATIOS	U1255	44

TABLE 2
COMMAND REPRESENTATION OF SURVEY SAMPLE

COMMAND	276X1	
	PERCENT ASSIGNED	PERCENT OF SAMPLE
ADC	85	81
AFCS	6	6
USAFE	3	5
AAC	4	4
AFAFC	0	3
OTHERS	2	1
TOTAL	100	100

Total Assigned - 371
 Total Sampled - 156
 Percent Sampled - 42%

PRESENTATON OF RESULTS

Personnel responded "yes" or "no" to the 1,257 electronic principles questions as related to their present job. A Group Summary (GPSUM) computer printout is provided in the Appendix portion of this report. Page 1 of the GPSUM lists the 6 selected groups identified for this report. Pages 2-44 show the percentage of the incumbents responding to the EPI items. The computer program results display the percent members answering "yes" to the subject area questions. The reader can locate a specific subject area by referring to the Appendix page number as listed in Table 1. For example, the Transformers area results are given on page 6 of the GPSUM. The percentage of survey respondents indicating use of specific electronic principles ranged from high in areas such as Alternating Current (pp. 4) and Oscilloscopes (pp. 13) to low in areas such as Timing Circuits (pp. 27-28). Additional AFSC 276X1 data can be obtained upon request to the Chief, Occupational Survey Branch (OMY).

APPENDIX

PCT MEMS RESPONDING 'YES' BY SELECTED GROUPS

TABULATION OF ELECTRONIC PRINCIPLES UTILIZATION DATA FOR SELECTED GROUPS IN THE 270X1 CAREER FIELD.

REPORTS ON THE FOLLOWING GROUPS WERE REQUESTED

GROUP IDENTITY ■ SPLO01 ALL AIRMEN DAFSC 27671	CONTAINING	156 MEMBERS.
GROUP IDENTITY ■ SPLO02 ALL AIRMEN DAFSC 27671 STATIONED IN CONUS	CONTAINING	125 MEMBERS.
GROUP IDENTITY ■ SPLO03 ALL AIRMEN DAFSC 27671 STATIONED OVERSEAS	CONTAINING	128 MEMBERS.
GROUP IDENTITY ■ SPLO04 ALL AIRMEN DAFSC 27671 ASSIGNED TO ADC	CONTAINING	9 MEMBERS.
GROUP IDENTITY ■ SPLO05 ALL AMN DAFSC 27671 ASSIGNED TO AAC	CONTAINING	9 MEMBERS.
GROUP IDENTITY ■ SPLO06 ALL AMN DAFSC 27671 ASSIGNED TO AFCS	CONTAINING	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
		001	002	003	004	005	006		
A 34	A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE.	0	0	0	0	0	0	0	0
A 35	A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE.	0	0	0	0	0	0	0	0
A 36	A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW MANY MORE BATTERIES MUST BE CONNECTED TOGETHER TO REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES	3	2	6	2	17	0		
A 38	A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.	3	3	0	2	0	0		
A 39	A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.	3	3	0	2	0	0		
A 40	A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.	2	2	0	2	0	0		
A 41	A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.	3	3	0	2	0	0		
A 42	A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.	3	3	0	2	0	0		
A 43	A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.	3	3	0	2	0	0		
A 44	A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	2	2	0	2	0	0		
A 45	A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	2	2	0	2	0	0		
A 46	A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.	2	2	0	2	0	0		
A 47	A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.	3	3	0	2	0	0		
A 48	A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.	3	3	0	2	0	0		
A 49	A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.	2	2	0	2	0	0		
A 50	A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.	2	2	0	2	0	0		
A 51	A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.	2	2	0	2	0	0		
B 52	B1-01 DO YOU MEASURE RESISTANCE.	1	2	0	1	0	0		
B 53	B1-02 DO YOU REPAIR OHMMETERS.	0	0	0	0	0	0		
B 54	B1-03 DO YOU MEASURE VOLTAGE.	5	6	3	6	0	0		
B 55	B1-04 DO YOU REPAIR VOLTMETERS.	0	0	0	0	0	0		
B 56	B1-05 DO YOU REPAIR AMPMETERS.	0	0	0	0	0	0		
B 57	B1-06 DO YOU MEASURE CURRENT.	3	3	0	2	0	0		
B 58	B1-07 DO YOU USE MULTIMETERS.	3	4	0	3	0	0		
B 59	B1-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.	0	0	0	0	0	0		
B 60	B1-09 DO YOU READ SCHEMATICS.	13	6	32	9	33	44		

MULTIMETER USES

PCT MBS RESPONDING 'YES' BY SELECTED GRPS

GPSUMI PAGE 5

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	
		001	002	003	004	005	006	007	008	CAPACITORS AND CAPACITIVE REACTANCE
C 92	CI-01 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB.	4	3	6	2	17	0			
C 93	CI-02 DO YOU INSPECT CAPACITORS.	0	0	0	0	0	0			
C 94	CI-03 DO YOU CLEAN CAPACITORS.	0	0	0	0	0	0			
C 95	CI-04 DO YOU ADJUST CAPACITORS.	0	0	0	0	0	0			
C 96	CI-05 DO YOU TEST CAPACITORS.	0	0	0	0	0	0			
C 97	CI-06 DO YOU DISCHARGE CAPACITORS.	1	1	0	0	0	0			
C 98	CI-07 DO YOU REMOVE OR REPLACE CAPACITORS.	0	0	0	0	0	0			
C 99	CI-08 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE.	0	0	0	0	0	0			
C 100	CI-09 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC.	0	0	0	0	0	0			
C 101	CI-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS.	1	1	3	1	0	0			
C 102	CI-11 DO YOU USE OR REFER TO CAPACITANCE.	2	2	3	1	0	0			
C 103	CI-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT	0	0	0	0	0	0			
C 104	CI-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS	1	1	0	0	0	0			
C 105	CI-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE	1	1	3	1	0	0			
C 106	CI-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES	0	0	0	0	0	0			
C 107	CI-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS	2	2	3	1	0	0			
C 108	CI-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS	3	2	3	2	0	0			
C 109	CI-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC	1	1	3	1	0	0			
C 110	CI-19 DO YOU WORK WITH CAPACITORS IN BUILT REFERENCE CIRCUITS	1	1	0	0	0	0			
C 111	CI-20 DO YOU CALCULATE CAPACITANCE FOR PARTICULAR CAPACITORS USING FORMULAS	1	1	0	0	0	0			
C 112	CI-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO	1	1	0	1	0	0			
C 113	CI-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO IN SERIES	0	0	0	0	0	0			
C 114	CI-23 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL	0	0	0	0	0	0			
C 115	CI-24 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL CIRCUITS	0	0	0	0	0	0			
C 116	CI-25 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS	0	0	0	0	0	0			
C 117	CI-26 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO	1	1	3	2	0	0			
C 118	CI-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS	1	1	3	2	0	0			
C 119	CI-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO	1	1	3	2	0	0			
C 120	CI-29 DO YOU CALCULATE CAPACITIVE REACTANCE	0	0	0	0	0	0			

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
BY-TSK						
C 121 C1-30 DO YOU WORK WITH ROTOR-STATOR (VARIABLE) CAPACITORS	1	0	3	1	0	0
C 122 C1-31 DO YOU WORK WITH COMPRESSION (TRIMMER) CAPACITORS	0	0	0	0	0	0
C 123 C1-32 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS	0	0	0	0	0	0
C 124 C1-33 DO YOU WORK WITH PAPER (FIXED) CAPACITORS	0	0	0	0	0	0
C 125 C1-34 DO YOU WORK WITH MICA (FIXED) CAPACITORS	0	0	0	0	0	0
C 126 C1-35 DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS	1	1	0	0	0	0
C 127 C1-36 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF CAPACITORS	1	2	0	2	0	0
C 128 C2-01 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB	1	1	0	1	0	0
C 129 C2-02 DO YOU INSPECT TRANSFORMERS	0	0	0	0	0	0
C 130 C2-03 DO YOU CLEAN TRANSFORMERS	0	0	0	0	0	0
C 131 C2-04 DO YOU ADJUST TRANSFORMERS	0	0	0	0	0	0
C 132 C2-05 DO YOU TROUBLESHOOT TRANSFORMERS	0	0	0	0	0	0
C 133 C2-06 DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS	0	0	0	0	0	0
C 134 C2-07 DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING	0	0	0	0	0	0
C 135 C2-08 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)	0	0	0	0	0	0
C 136 C2-09 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M	0	0	0	0	0	0
C 137 C2-10 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS	0	0	0	0	0	0
C 138 C2-11 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS	0	0	0	0	0	0
C 139 C2-12 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS	0	0	0	0	0	0
C 140 C2-13 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS	0	0	0	0	0	0
C 141 C2-14 DO YOU WORK WITH AUTO TRANSFORMERS	0	0	0	0	0	0
C 142 C2-15 DO YOU WORK WITH POWER TRANSFORMERS	0	0	0	0	0	0
C 143 C2-16 DO YOU WORK WITH AUDIO TRANSFORMERS	0	0	0	0	0	0
C 144 C2-17 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS	0	0	0	0	0	0
C 145 C2-18 DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS	1	1	0	1	0	0
C 146 C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE	0	0	0	0	0	0
C 147 C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE	0	0	0	0	0	0
C 148 C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES	0	0	0	0	0	0
C 149 C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR	0	0	0	0	0	0
C 150 C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-	0	0	0	0	0	0
C 151 C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS	0	0	0	0	0	0

TRANSFORMERS

FCT MBRS RESPONDING YES BY SELECTED GNPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

MY-TASK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
C 152 C2-25 DO YOU REFER TO MULTIPLE SECONDARY WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS	0	0	0	0	0	0
C 153 C2-25 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	0	0	0	0	0	0
C 154 C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	0	0	0	0	0	0
C 155 C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	0	0	0	0	0	0
C 156 C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	0	0	0	0	0	0
C 157 C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS	0	0	0	0	0	0
C 158 C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING TRANSFORMERS YOU WORK WITH	0	0	0	0	0	0
C 160 C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO FOR TRANSFORMERS	0	0	0	0	0	0
C 162 C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS	0	0	0	0	0	0
C 163 C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS	0	0	0	0	0	0
C 164 C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS	0	0	0	0	0	0
C 165 C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS	0	0	0	0	0	0
C 166 C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS	0	0	0	0	0	0
C 167 C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS	0	0	0	0	0	0
C 168 C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS	0	0	0	0	0	0
C 169 C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS	0	0	0	0	0	0
C 170 C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS	2	2	3	2	0	0
C 171 C3-01 DO YOU USE OR REFER TO PERMANENT MAGNETS	1	1	0	1	0	0
C 172 C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS	1	1	0	1	0	0
C 173 C3-03 DO YOU USE OR REFER TO REVERSIBILITY OF MAGNETIC MATERIALS	0	0	0	0	0	0
C 174 C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS	1	1	0	1	0	0
C 175 C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS	1	1	0	1	0	0
C 176 C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM	5	5	6	6	17	0
C 177 C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX	1	1	0	1	0	0
C 178 C3-08 DO YOU USE OR REFER TO VEREY'S THEORY OF MAGNETISM	1	1	0	1	0	0

MAGNETISM

PCT YRS RESPONDING 'YES' BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	001	002	003	004	005	006	007	008	009
BY-TASK									
C 179 C3-09 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM	1	1	0	1	0	0	0	0	0
C 180 C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION	2	2	0	2	0	0	0	0	0
C 181 C3-11 DO YOU USE OR REFER TO FLUX DENSITY	2	2	0	2	0	0	0	0	0
C 182 C3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT	12	12	13	13	0	11			
C 183 C3-13 DO YOU USE THE LEFT-HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES	0	0	0	0	0	0	0	0	0
C 184 C3-14 DO YOU USE THE LEFT-HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT-CARRYING COIL	0	0	0	0	0	0	0	0	0
D 185 D1-01 DO YOU WORK WITH RCL, LR, RCL CIRCUITS IN YOUR PRESENT JOB	4	4	6	3	33	0			
D 186 D1-02 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS	1	1	0	1	0	0	0	0	0
D 187 D1-03 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0	0	0	0
D 188 D1-04 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS	1	0	3	0	17	0			
D 189 D1-05 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS	1	0	3	0	17	0			
D 190 D1-06 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0	0	0	0
D 191 D1-07 DO YOU USE OR REFER TO PANTS WHEN WORKING WITH RCL CIRCUITS	7	7	6	6	33	0			
D 192 D1-08 DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS	3	2	6	1	33	0			
D 193 D1-09 DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS	6	6	6	6	33	0			
D 194 D1-10 DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS	7	7	6	6	33	0			
D 195 D1-11 DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS	1	1	3	1	17	0			
D 196 D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS	1	1	3	1	17	0			
D 197 D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS	1	2	0	1	0	0			
D 198 D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS	7	7	6	6	33	0			
D 199 D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS	6	6	6	5	33	0			
D 200 D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS	5	5	6	4	33	0			
D 201 D1-17 DO YOU USE OR REFER TO HALF-POWER POINTS WHEN WORKING WITH RCL CIRCUITS	3	2	3	1	17	0			
D 202 D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS	4	4	3	2	17	0			
D 203 D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0			

PCB MANS RESPONDING YES BY SELECTED GMPs

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
0 204 01-20 DO YOU USE OR REFER TO TALK CIRCUITS WHEN WORKING WITH RCL CIRCUITS	1	1	0	0	0	0
0 205 01-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	0	0	0	0	0	0
0 206 01-22 DO YOU DRAIN VOLTAGE CURRENT OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	1	1	0	0	0	0
0 207 01-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	0	0	0	0	0	0
0 208 01-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	0	0	0	0	0	0
0 209 01-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS	0	0	0	0	0	0
0 210 01-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS	0	0	0	0	0	0
0 211 01-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS	0	0	0	0	0	0
0 212 01-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS	1	0	3	0	17	0
0 213 01-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS	0	0	0	0	0	0
0 214 01-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS	1	1	0	0	0	0
0 215 01-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS	0	0	0	0	0	0
0 216 01-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD	0	0	0	0	0	0
0 217 01-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW	1	1	0	0	0	0
0 218 01-34 DO YOU CHECK CAPACITORS USING OHMMETERS	0	0	0	0	0	0
0 219 01-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION	0	0	0	0	0	0
0 220 01-36 DO YOU CHECK INDUCTORS USING OHMMETERS	0	0	0	0	0	0
0 221 01-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION	0	0	0	0	0	0
0 222 01-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT THREE PERCENT IS ALLOWED FACTOR FOR RESONANT CIRCUITS	0	0	0	0	0	0
0 223 01-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS	0	0	0	0	0	0
0 224 01-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT	0	0	0	0	0	0
0 225 01-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT	0	0	0	0	0	0
0 226 01-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE	1	1	0	0	0	0
0 227 01-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q	1	1	0	1	0	0
0 228 01-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE	1	1	0	0	0	0

PCT MARS RESPONDING QUEST BY SELECTED GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
0 259 03-21 DO YOU REMEMBER WHICH TYPE OF BASIC CIRCUIT	0	0	0	0	0	0
0 260 03-22 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE	0	0	0	0	0	0
0 261 03-23 DO YOU KNOW HOW TO CALCULATE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC	0	0	0	0	0	0
0 262 01-22 DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB	0	0	0	0	0	0
0 263 01-23 DO YOU IDENTIFY OR SCHEMATIC DIAGRAMS AND RELATE TO	0	0	0	0	0	0
0 264 01-24 DO YOU IDENTIFY THE COMPONENTS ASSOCIATED WITH RC	0	0	0	0	0	0
0 265 01-25 DO YOU IDENTIFY OR SCHEMATIC DIAGRAMS AND RELATE TO	0	0	0	0	0	0
0 266 01-26 DO YOU IDENTIFY OR SCHEMATIC DIAGRAMS AND RELATE TO	0	0	0	0	0	0
0 267 01-27 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	0	0	0	0	0	0
0 268 01-28 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	0	0	0	0	0	0
0 269 01-29 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	0	0	0	0	0	0
0 270 01-30 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	0	0	0	0	0	0
0 271 01-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	0	0	0	0	0	0
0 272 01-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	0	0	0	0	0	0
0 273 01-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	0	0	0	0	0	0
0 274 02-02 DO YOU SELECT TYPE OF SOLDER TO USE	0	0	0	0	0	0
0 275 02-03 DO YOU ADD FLUX TO CONNECTIONS	0	0	0	0	0	0
0 276 02-04 DO YOU CLEAN CONNECTIONS USING SOLVENTS	0	0	0	0	0	0
0 277 02-05 DO YOU STRIP INSULATION FROM WIRES	0	0	0	0	0	0
0 278 02-06 DO YOU CONNECT OR DISCONNECT HEAT SINKS	0	0	0	0	0	0
0 279 02-07 DO YOU BEND OR SHAPE WIRES OR LEADS	0	0	0	0	0	0
0 280 02-08 DO YOU CUT WIRES	0	0	0	0	0	0
0 281 02-09 DO YOU FILE OR SHAPE SOLDERING IRON TIPS	0	0	0	0	0	0
0 282 02-10 DO YOU FILE SOLDERING IRON TIPS	0	0	0	0	0	0
0 283 02-11 DO YOU CLEAN SOLDERING IRON TIPS	0	0	0	0	0	0
0 284 02-12 DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS	0	0	0	0	0	0
0 285 02-13 DO YOU TIE OR PRETIN CONDUCTORS	0	0	0	0	0	0
0 286 02-14 DO YOU INSPECT SOLDERED CONNECTIONS	0	0	0	0	0	0
0 287 02-15 DO YOU RESOLDER CONNECTIONS BY PICKING	0	0	0	0	0	0
0 288 02-16 DO YOU RESOLDER CONNECTIONS USING VACUUM DESOLDERING	0	0	0	0	0	0
0 289 02-17 DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS	0	0	0	0	0	0
0 290 02-18 DO YOU CRIMP COMPONENTS FOR REPAIR	0	0	0	0	0	0

JRTSK

COUPLING

SOLDERING

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

SPL SPL SPL SPL SPL SPL
001 002 003 004 005 006

0Y-15K

Task ID	Description	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
E 291	E2-19 DO YOU MAKE HARDWIRE CONNECTIONS	0	0	0	0	0	0
E 292	E2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS	0	0	0	0	0	0
E 293	E2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS ON PRINTED CIRCUIT BOARDS	0	0	0	0	0	0
E 294	E2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS	0	0	0	0	0	0
E 295	E3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB	1	2	0	2	0	0
E 296	E3-02 DO YOU ADJUST RELAYS	0	0	0	0	0	0
E 297	E3-03 DO YOU CLEAN RELAYS	0	0	0	0	0	0
E 298	E3-04 DO YOU INSPECT RELAYS	0	0	0	0	0	0
E 299	E3-05 DO YOU REMOVE OR REPLACE COMPLETE RELAYS	0	0	0	0	0	0
E 300	E3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS	0	0	0	0	0	0
E 301	E3-07 DO YOU TROUBLESHOOT RELAYS	0	0	0	0	0	0
E 302	E3-08 DO YOU STRAIGHTEN RELAY CONTACTS	0	0	0	0	0	0
E 303	E3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS	0	0	0	0	0	0
E 304	E3-10 DO YOU PERFORM TASKS ON RELAY CORES	0	0	0	0	0	0
E 305	E3-11 DO YOU PERFORM TASKS ON RELAY COILS	0	0	0	0	0	0
E 306	E3-12 DO YOU PERFORM TASKS ON RELAY ARMATURES	0	0	0	0	0	0
E 307	E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS	0	0	0	0	0	0
E 308	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS	0	0	0	0	0	0
E 309	E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS	0	0	0	0	0	0
E 310	E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS	0	0	0	0	0	0
E 311	E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS	0	0	0	0	0	0
E 312	E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC SYMBOLS FOR RELAYS	0	0	0	0	0	0
E 313	E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE	0	0	0	0	0	0
F 314	F1-01 DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES	18	19	13	17	17	22
F 315	F1-02 DO YOU INSPECT MICROPHONES	6	8	0	7	0	0
F 316	F1-03 DO YOU CLEAN MICROPHONES	4	5	0	4	0	0
F 317	F1-04 DO YOU OPERATE MICROPHONES	20	22	13	20	17	22
F 318	F1-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	6	6	3	6	17	0
F 319	F1-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS	0	0	0	0	0	0
F 320	F1-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES	3	4	0	3	0	0
F 321	F1-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS	0	0	0	0	0	0
F 322	F1-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES	3	3	0	3	0	0
F 323	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES	1	2	0	2	0	0
F 324	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES	1	2	0	2	0	0
F 325	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES	1	2	0	2	0	0
F 326	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES	0	0	0	0	0	0

PCT MARS RESPONDING 'YES' BY SELECTED GMPs

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TASK

Task ID	Description	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
F 327	IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS	26	29	13	29	0	0
F 328	DO YOU INSPECT SPEAKERS	4	5	0	5	0	0
F 329	DO YOU CLEAN SPEAKERS	3	3	0	3	0	0
F 330	DO YOU OPERATE SPEAKERS	27	30	13	30	0	0
F 331	DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	6	7	3	6	0	0
F 332	DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS	0	0	0	0	0	0
F 333	DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS	2	2	0	2	0	0
F 334	DO YOU REMOVE OR REPLACE SPEAKER PARTS	0	0	0	0	0	0
F 335	DO YOU PERFORM ANY TASKS ON SPEAKER CONES	1	1	0	1	0	0
F 336	DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS	0	0	0	0	0	0
F 337	DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS	1	1	0	1	0	0
F 338	DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS	0	0	0	0	0	0
F 339	DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS	1	1	0	1	0	0
F 340	DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS	0	0	0	0	0	0
F 341	DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CORES	0	0	0	0	0	0
F 342	DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB	31	30	35	30	33	33
F 343	DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL CHECKS	30	29	35	29	33	33
F 344	DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR ADJUSTMENTS	23	23	23	23	0	33
F 345	DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC CIRCUITS	1	1	3	2	0	0
F 346	DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY	15	15	16	16	0	11
F 347	DO YOU USE OSCILLOSCOPES TO MEASURE TIME	14	14	16	14	0	11
F 348	DO YOU USE OSCILLOSCOPES TO OBSERVE DISJUNCT PATTERN	8	5	19	6	17	22
F 349	DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES	6	6	3	6	0	0
F 350	DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS	6	5	10	5	17	11
F 351	DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE	6	6	13	7	0	22
F 352	DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS	20	20	19	20	17	11
F 353	DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE	8	6	16	7	0	22
G 354	DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB	1	2	0	1	0	0
G 355	DO YOU INSPECT DIODES	0	0	0	0	0	0
G 356	DO YOU REMOVE OR REPLACE DIODES	0	0	0	0	0	0
G 357	DO YOU CHECK DIODES USING AN INSTRUMENT	0	0	0	0	0	0
G 358	DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES	0	0	0	0	0	0
G 359	DO YOU USE PIVOT ACTION DIODE CHARACTERISTIC CURVES, WITH PROBES OR PROBES OR FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES	0	0	0	0	0	0

SEMICONDUCTOR DIODES

OSCILLOSCOPES

PCT MBRS RESPONDING YES BY SELECTED GPPS

TASK GROUP SUMMARY
PERCENT MEMBERS RESPONDING

QY-TASK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
6 383 61-31 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0
6 384 61-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0
6 385 61-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0
6 386 61-33 DO YOU USE OR REFER TO ELECTRO-HOLE PAIR CREATED IN SEMICONDUCTORS	0	0	0	0	0	0
6 387 61-34 DO YOU USE OR REFER TO ELECTRO FLOW OR HOLE FLOW IN SEMICONDUCTORS	0	0	0	0	0	0
6 388 61-35 DO YOU USE OR REFER TO DONOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0	0
6 389 61-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0	0
6 390 61-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	0	0
6 391 61-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	0	0
6 392 61-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0	0
6 393 61-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0	0
6 394 61-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS	0	0	0	0	0	0
6 395 61-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS	0	0	0	0	0	0
6 396 61-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER HEIGHT AND DIFFERENCE OF POTENTIAL	0	0	0	0	0	0
6 397 61-44 DO YOU USE OR REFER TO THE I ² R BACK TO FRONT RESISTANCE RATIO FOR DIODES	0	0	0	0	0	0
6 398 61-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS	0	0	0	0	0	0
6 399 61-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION	0	0	0	0	0	0
6 400 61-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT RICE RATINGS	0	0	0	0	0	0
6 401 61-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT RICE RATINGS	0	0	0	0	0	0
6 402 61-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT RICE RATINGS	0	0	0	0	0	0
6 403 61-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE RICE RATINGS	0	0	0	0	0	0
6 404 62-01 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB?	1	1	0	1	0	0
6 405 62-02 DO YOU INSPECT TRANSISTORS	0	0	0	0	0	0
6 406 62-03 DO YOU REPLACE OR REPAIR TRANSISTORS	0	0	0	0	0	0
6 407 62-04 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT	0	0	0	0	0	0
6 408 62-05 DO YOU USE OR REFER TO BATTERY - BASE (LEFT) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	0	0	0	0	0	0
6 409 62-06 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	0	0	0	0	0	0

TRANSISTORS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
G 410 G2-07 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS	0	0	0	0	0	0
G 411 G2-08 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION	0	0	0	0	0	0
G 412 G2-09 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION	0	0	0	0	0	0
G 413 G2-10 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE AND EMITTER)	0	0	0	0	0	0
G 414 G2-11 DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A TRANSISTOR	0	0	0	0	0	0
G 415 G2-12 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS	0	0	0	0	0	0
G 416 G2-13 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, Q2, Q3, ETC	0	0	0	0	0	0
G 417 G2-14 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION	0	0	0	0	0	0
G 418 G2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT IB IS NORMALLY SIGNIFICANTLY	0	0	0	0	0	0
G 419 G2-16 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES	0	0	0	0	0	0
G 420 G2-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES	0	0	0	0	0	0
G 421 G2-18 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES	0	0	0	0	0	0
G 422 G2-19 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS	0	0	0	0	0	0
G 423 G2-20 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS	0	0	0	0	0	0
G 424 G2-21 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS	0	0	0	0	0	0
G 425 G2-22 DO YOU CALCULATE BETA TRANSISTOR GAINS	0	0	0	0	0	0
G 426 G2-23 DO YOU CALCULATE ALPHA TRANSISTOR GAINS	0	0	0	0	0	0
G 427 G2-24 DO YOU CALCULATE GAMMA TRANSISTOR GAINS	0	0	0	0	0	0
G 428 G3-01 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB	1	2	0	1	0	0
G 429 G3-02 DO YOU INSPECT TRANSISTOR AMPLIFIERS	0	0	0	0	0	0
G 430 G3-03 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS	0	0	0	0	0	0
G 431 G3-04 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL	0	0	0	0	0	0
G 432 G3-05 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS	0	0	0	0	0	0
G 433 G3-06 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER	0	0	0	0	0	0
G 434 G3-07 DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS	0	0	0	0	0	0
G 435 G3-08 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE	0	0	0	0	0	0
G 436 G3-09 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	0	0

TRANSISTOR AMPLIFIERS

TRK GROUP SUMMARY
 REPLY CHARACTERS REPRESENTING

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
6 437 63-10 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE	0	0	0	0	0	0
6 438 63-11 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	1	1	0	0	0	0
6 439 63-12 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	1	1	0	0	0	0
6 440 63-13 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	1	1	0	0	0	0
6 441 63-14 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A	0	0	0	0	0	0
6 442 63-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	0	0	0	0	0	0
6 443 63-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR	0	0	0	0	0	0
6 444 63-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	0	0	0	0	0
6 445 63-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	0	0	0	0	0
6 446 63-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	0	0	0	0	0
6 447 63-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE	0	0	0	0	0	0
6 448 63-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE	0	0	0	0	0	0
6 449 63-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE	0	0	0	0	0	0
6 450 63-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE	0	0	0	0	0	0
6 451 63-24 DO YOU COMPUTE THE STATIC OPERATING POINT Q OF A TRANSISTOR AT DIFFERENT TEMPERATURES	0	0	0	0	0	0
6 452 63-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	0	0	0	0
6 453 63-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-	0	0	0	0	0	0

PCT MBRS RESPONDING 'YES' BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
M 513	M3-02 DO YOU INSPECT OSCILLATORS	0	0	0	0	0	0
M 514	M3-03 DO YOU ALIGN OR ADJUST OSCILLATORS	3	4	0	4	0	0
M 515	M3-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS	0	0	0	0	0	0
M 516	M3-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS	0	0	0	0	0	0
M 517	M3-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL	0	0	0	0	0	0
M 518	M3-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS	0	0	0	0	0	0
M 519	M3-08 DO YOU USE OR REFER TO FEEDBACK	4	4	3	5	0	0
M 520	M3-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)	7	8	3	7	0	0
M 521	M3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY	5	6	3	4	0	0
M 522	M3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY	8	10	3	9	0	0
M 523	M3-12 DO YOU USE OR REFER TO DAMPING	2	2	3	2	0	0
M 524	M3-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK	3	2	3	2	0	0
M 525	M3-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT	1	1	0	1	0	0
M 526	M3-15 DO YOU USE OR REFER TO CRITICAL DAMPING	1	1	0	1	0	0
M 527	M3-16 DO YOU USE OR REFER TO UNDER DAMPING	1	1	3	2	0	0
M 528	M3-17 DO YOU USE OR REFER TO OVER DAMPING	1	1	3	2	0	0
M 529	M3-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK CIRCUITS AS FDD	3	2	3	3	0	0
M 530	M3-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS FDD	3	2	3	3	0	0
M 531	M3-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS FDD	5	6	3	6	0	0
M 532	M3-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER WHICH TYPE OF FDD	1	2	0	2	0	0
M 533	M3-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS	2	2	3	2	0	0
M 534	M3-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS	2	2	3	2	0	0
M 535	M3-24 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS	1	1	3	2	0	0
M 536	M3-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS	0	0	0	0	0	0
M 537	M3-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS	0	0	0	0	0	0
M 538	M3-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF OSCILLATORS	2	2	0	2	0	0
I 539	I1-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB	1	0	3	1	0	0
I 540	I1-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS	0	0	0	0	0	0
I 541	I1-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS	0	0	0	0	0	0
I 542	I1-04 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS	0	0	0	0	0	0
I 543	I1-05 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS	0	0	0	0	0	0
I 544	I1-06 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS	0	0	0	0	0	0
I 545	I1-07 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS	0	0	0	0	0	0
I 546	I1-08 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS	0	0	0	0	0	0
I 547	I1-09 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS	1	0	3	1	0	0

MULTIVIBRATORS

PCT MBRS RESPONDING *YES* BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	001	002	003	004	005	006	007	008	009	010	011	012
I 598 11-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS	1	0	3	1	0	0						
I 599 11-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS	1	0	3	1	0	0						
I 590 11-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T REMEMBER WHICH TYPE OF PFD	0	0	0	0	0	0						
I 551 11-13 DO YOU WORK WITH INSTABLE MULTIVIBRATORS	1	0	3	1	0	0						
I 552 11-14 DO YOU WORK WITH UNSTABLE MULTIVIBRATORS	1	0	3	1	0	0						
I 553 11-15 DO YOU WORK WITH BISTABLE MULTIVIBRATORS	1	0	3	1	0	0						
I 554 11-16 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE MULTIVIBRATORS	0	0	0	0	0	0						
I 555 12-01 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB	2	2	0	2	0	0						
I 556 12-02 DO YOU WORK WITH SERIES DIODE LIMITERS	0	0	0	0	0	0						
I 557 12-03 DO YOU WORK WITH SHUNT DIODE LIMITERS	0	0	0	0	0	0						
I 558 12-04 DO YOU WORK WITH LIMITERS WITH BIAS	0	0	0	0	0	0						
I 559 12-05 DO YOU WORK WITH ZENER DIODE LIMITERS	0	0	0	0	0	0						
I 560 12-06 DO YOU WORK WITH TRANSISTOR LIMITERS	0	0	0	0	0	0						
I 561 12-07 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF LIMITERS	1	1	0	1	0	0						
I 562 12-08 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS	0	0	0	0	0	0						
I 563 12-09 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS	0	0	0	0	0	0						
I 564 12-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING CIRCUITS	0	0	0	0	0	0						
I 565 12-01 IN YOUR PRESENT JOB DO YOU WORK ON EQUIPMENT WHICH CONTAINS ELECTRON TUBES	4	3	6	2	0	0						
I 566 12-02 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD	1	1	0	0	0	0						
I 567 12-03 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES	0	0	0	0	0	0						
I 568 12-04 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES	1	1	0	0	0	0						
I 569 12-05 DO YOU USE SCOPES TO CHECK ELECTRON TUBES	1	1	0	0	0	0						
I 570 12-06 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES	0	0	0	0	0	0						
I 571 12-07 DO YOU USE OR REFER TO CUTOFF	0	0	0	0	0	0						
I 572 12-08 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING	0	0	0	0	0	0						
I 573 12-09 DO YOU USE OR REFER TO PEAK CURRENT RATING	0	0	0	0	0	0						
I 574 12-10 DO YOU USE OR REFER TO TRANSIT TIME	0	0	0	0	0	0						
I 575 12-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING	0	0	0	0	0	0						
I 576 12-12 DO YOU USE OR REFER TO SATURATION	0	0	0	0	0	0						
I 577 12-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE	1	2	0	1	0	0						
I 578 12-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE RESISTANCE FOR ELECTRON TUBES	1	1	0	1	0	0						
I 579 12-15 DO YOU USE OR REFER TO PLATE VOLTAGE	1	1	0	1	0	0						
I 580 12-16 DO YOU USE OR REFER TO PLATE CURRENT	1	1	0	1	0	0						
I 581 12-17 DO YOU USE OR REFER TO GRID VOLTAGE	1	1	0	1	0	0						
I 582 12-18 DO YOU USE OR REFER TO GRID CURRENT	1	1	0	1	0	0						
I 583 12-19 DO YOU USE OR REFER TO CATHODE VOLTAGE	1	1	0	1	0	0						
I 584 12-20 DO YOU USE OR REFER TO CATHODE CURRENT	1	1	0	1	0	0						
I 585 12-21 DO YOU USE OR REFER TO THE PRICE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRODES IS DEFINED AS	1	0	0	1	0	0						

LIMITERS AND CLAMPERS

ELECTRON TUBES

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TASK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
I 586 13-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE AMPLIFICATION FACTORS	0	0	0	0	0	0
I 587 13-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS	0	0	0	0	0	0
I 588 13-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G _m) WHICH IS MEASURED IN MMOS	0	0	0	0	0	0
I 589 13-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSCONDUCTANCES	0	0	0	0	0	0
I 590 13-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE	0	0	0	0	0	0
I 591 13-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE	0	0	0	0	0	0
I 592 13-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE	0	0	0	0	0	0
I 593 13-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES	0	0	0	0	0	0
I 594 13-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS	0	0	0	0	0	0
I 595 13-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS	0	0	0	0	0	0
I 596 13-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF	1	1	0	0	0	0
I 597 13-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION	0	0	0	0	0	0
I 598 13-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN EFFICIENCY	2	1	6	0	0	0
I 599 13-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER TUBE AMPLIFIER GAIN	1	0	3	0	0	0
I 600 13-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	0	0	0	0	0
I 601 13-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	1	0	0	0	0
I 602 13-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	1	0	0	0	0
I 603 13-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	0	0	0	0	0
I 604 13-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE	0	0	0	0	0	0
I 605 13-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION	0	0	0	0	0	0
I 606 13-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS	0	0	0	0	0	0
I 607 13-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE EMITTING SURFACE IN THE	0	0	0	0	0	0
I 608 13-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS	0	0	0	0	0	0
J 609 J1-1 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB	1	2	0	2	0	0
J 610 J1-2 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER	0	0	0	0	0	0

ELECTRON TUBE AMPLIFIERS AND CIRCUITS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

Task ID	Description	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
		001	002	003	004	005	006	007	008	009	010	011	012
J 611	J1-03 DO YOU TROUBLESHOOT OR REPAIR PARAMPASE AMPLIFIERS	0	0	0	0	0	0	0	0	0	0	0	0
J 612	J1-04 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	0	0	0	0	0	0	0	0	0	0	0	0
J 613	J1-05 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CO-CONNECTED AMPLIFIERS	0	0	0	0	0	0	0	0	0	0	0	0
J 614	J1-06 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	0	0	0	0	0	0	0	0	0	0	0	0
J 615	J1-07 DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER	0	0	0	0	0	0	0	0	0	0	0	0
J 616	J2-01 DO YOU WORK WITH GAS TUBES (NOT CATHODE OR COLD CATHODE)	3	4	0	0	3	0	0	0	0	0	0	0
J 617	J2-02 DO YOU WORK WITH CATHODE-RAY TUBES	13	14	10	13	17	0	0	0	0	0	0	0
J 618	J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES	1	1	0	1	0	0	0	0	0	0	0	0
J 619	J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED	0	0	0	0	0	0	0	0	0	0	0	0
J 620	J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THERMAYONS	3	2	6	1	17	0	0	0	0	0	0	0
J 621	J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THERMAYONS ARE USED	0	0	0	0	0	0	0	0	0	0	0	0
J 622	J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)	8	8	6	7	0	0	0	0	0	0	0	0
J 623	J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	5	6	3	6	0	0	0	0	0	0	0	0
J 624	J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	5	6	3	6	0	0	0	0	0	0	0	0
J 625	J2-10 DO YOU USE OR REFER TO PROSPOR SCREENS	8	8	6	8	0	0	0	0	0	0	0	0
J 626	J2-11 DO YOU USE OR REFER TO AQUADAG COATINGS	3	4	0	4	0	0	0	0	0	0	0	0
J 627	J2-12 DO YOU USE OR REFER TO ELECTRO-OPTICS	0	0	0	0	0	0	0	0	0	0	0	0
J 628	J2-13 DO YOU USE OR REFER TO PERSISTENCE	6	6	10	6	0	0	0	0	0	0	0	0
J 629	J2-14 DO YOU USE OR REFER TO DECAY TIMES	3	2	3	2	0	0	0	0	0	0	0	0
J 630	J2-15 DO YOU USE OR REFER TO FLUORESCENCE	6	7	0	6	0	0	0	0	0	0	0	0
J 631	J2-16 DO YOU USE OR REFER TO PHOSPHORESCENCE	6	7	3	6	0	0	0	0	0	0	0	0
J 632	J3-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	6	4	16	4	17	22	0	0	0	0	0	0
J 633	J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	1	1	0	1	0	0	0	0	0	0	0	0
J 634	J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS	4	1	0	1	0	0	0	0	0	0	0	0
J 635	J3-04 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS	4	2	13	2	0	22	0	0	0	0	0	0
J 636	J3-05 DO YOU PERFORM TASKS ON REACTANCE MODULATORS	1	1	3	1	0	11	0	0	0	0	0	0
J 637	J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS	1	1	3	1	0	11	0	0	0	0	0	0
K 638	K1-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	3	2	3	2	0	0	0	0	0	0	0	0
K 639	K1-02 DO YOU INSPECT AN TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0	0	0	0	0	0	0
K 640	K1-03 DO YOU CLEAN AN TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0	0	0	0	0	0	0
K 641	K1-04 DO YOU ALIGN OR ADJUST AN TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0	0	0	0	0	0	0

SPECIAL PURPOSE ELECTRON TUBES

HETERODYNING, MODULATION, AND DEMODULATION

AM SYSTEMS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TSK

		SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
		001	002	003	004	005	006	007	008
K 642	K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0	0	0
K 643	K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0	0	0
K 644	K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0	0	0
K 645	K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0	0	0
K 646	K1-09 DO YOU PERFORM TASKS ON RF OSCILLATORS	1	1	0	1	0	0	0	0
K 647	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS	1	2	0	2	0	0	0	0
K 648	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	1	1	0	1	0	0	0	0
K 649	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	1	1	0	1	0	0	0	0
K 650	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS	1	2	0	2	0	0	0	0
K 651	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS	1	2	0	2	0	0	0	0
K 652	K1-15 DO YOU PERFORM TASKS ON DETECTORS	2	2	3	2	0	0	0	0
K 653	K1-16 DO YOU PERFORM TASKS ON DON'T REMEMBER WHICH AM STAGE	0	0	0	0	0	0	0	0
K 654	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS	1	1	3	1	0	1	0	1
K 655	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS	1	1	3	1	0	1	0	1
K 656	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS	4	3	6	3	0	1	0	1
K 657	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS	4	3	6	3	0	1	0	1
K 658	K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION	1	1	3	1	0	1	0	1
K 659	K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION	1	1	0	1	0	0	0	0
K 660	K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION	0	0	0	0	0	0	0	0
K 661	K1-24 DO YOU USE OR REFER TO CO-CHANNEL INTERFERENCE	3	3	0	3	0	0	0	0
K 662	K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS	3	2	6	2	0	1	0	1
K 663	K1-26 DO YOU USE OR REFER TO SIGNAL TO IMAGE RATIOS OR IMAGE REJECTION RATIOS	3	3	3	3	0	0	0	0
K 664	K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS	1	1	0	1	0	0	0	0
K 665	K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS	1	1	0	1	0	0	0	0
K 666	K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	5	4	10	4	0	0	0	22
K 667	K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0	0	0
K 668	K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0	0	0
K 669	K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0	0	0
K 670	K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS	1	0	3	0	0	0	0	0
K 671	K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0	0	0
K 672	K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0	0	0
K 673	K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0	0	0
K 674	K2-09 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	1	1	0	1	0	0	0	0
K 675	K2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS	1	1	0	1	0	0	0	0

FM SYSTEMS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
K 676 K2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	0	0	0	0	0	0
K 677 K2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	0	0	0	0	0	0
K 678 K2-13 DO YOU PERFORM TASKS ON RF AMPLIFIERS	1	2	0	2	0	0
K 679 K2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	0	0	0	0	0	0
K 680 K2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS	1	2	0	2	0	0
K 681 K2-16 DO YOU PERFORM TASKS ON LIMITERS	1	2	0	2	0	0
K 682 K2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS	1	2	0	2	0	0
K 683 K2-18 DO YOU TRACE SIGNALS OF CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	3	1	10	1	0	22
K 684 K2-19 DO YOU TRACE SIGNALS OF CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	3	1	10	1	0	22
K 685 K3-01 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS	4	5	3	5	0	0
K 686 K3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS	12	14	0	13	0	0
K 687 K3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS	4	4	3	4	0	0
K 688 K3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS	4	6	0	6	0	0
K 689 K3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	10	13	0	12	0	0
K 690 K3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS	5	6	0	6	0	0
K 691 K3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM	7	9	0	8	0	0
K 692 K3-08 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD	4	5	0	5	0	0
K 693 K3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD	4	6	0	6	0	0
K 694 K3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM	4	5	3	5	0	0
L 695 L1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS	4	3	10	3	0	22
L 696 L1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	1	1	0	1	0	0
L 697 L1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	1	1	0	1	0	0
L 698 L1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR DR LOGIC SYMBOLS WITH STATE INDICATORS	1	1	0	1	0	0
L 699 L1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES	0	0	0	0	0	0
L 700 L1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	2	2	3	2	0	11
L 701 K1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	2	2	3	2	0	11
L 702 K1-08 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR DR LOGIC SYMBOLS WITH STATE INDICATORS	1	1	3	1	0	11
L 703 L1-09 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS	1	2	0	2	0	0
L 704 L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES	3	2	6	2	0	22
L 705 L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES	3	2	6	2	0	22
L 706 L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND OR DR GATES	1	1	0	1	0	0

NUMBERING SYSTEMS

LOGIC FUNCTIONS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	001	002	003	004	005	006	007	008	009
L 707 L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES	0	2	0	2	0	0	0	0	0
L 708 L2-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC	0	0	0	0	0	0	0	0	0
L 709 L2-02 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS	0	0	0	0	0	0	0	0	0
L 710 L2-03 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	0	0	0	0	0	0	0	0	0
L 711 L2-04 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS	0	0	0	0	0	0	0	0	0
L 712 L2-05 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES	0	0	0	0	0	0	0	0	0
L 713 L2-06 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS	0	0	0	0	0	0	0	0	0
L 714 L2-07 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA	0	0	0	0	0	0	0	0	0
L 715 L2-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES	0	0	0	0	0	0	0	0	0
L 716 L2-09 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	0	0	0	0	0	0	0	0	0
L 717 L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE	0	0	0	0	0	0	0	0	0
L 718 L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0	0	0	0
L 719 L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0	0	0	0
L 720 L2-13 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS	0	0	0	0	0	0	0	0	0
L 721 L2-14 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS	0	0	0	0	0	0	0	0	0
L 722 L2-15 DO YOU WORK WITH MONOSTABLE (ONE-SHOT) MULTIVIBRATORS	0	0	0	0	0	0	0	0	0
L 723 L2-16 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS	0	0	0	0	0	0	0	0	0
L 724 L2-17 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR SYMBOLS	0	0	0	0	0	0	0	0	0
L 725 L2-18 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS	0	0	0	0	0	0	0	0	0
L 726 L2-19 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES	0	0	0	0	0	0	0	0	0
L 727 L2-20 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	0	0	0	0	0	0	0	0	0
L 728 L2-21 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS	0	0	0	0	0	0	0	0	0
L 729 L2-22 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS	0	0	0	0	0	0	0	0	0
L 730 L2-23 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS	0	0	0	0	0	0	0	0	0
L 731 L2-24 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS	0	0	0	0	0	0	0	0	0
L 732 L2-25 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS	0	0	0	0	0	0	0	0	0

BOOLEAN EQUATIONS

PCT MBRS RESPONDING YES BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

SY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
L 733 L3-01 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB	24	28	6	28	0	11
L 734 L3-02 DO YOU USE OR REFER TO UP-COUNTERS	17	21	3	21	0	0
L 735 L3-03 DO YOU USE OR REFER TO DOWN-COUNTERS	4	5	3	5	0	0
L 736 L3-04 DO YOU USE OR REFER TO SERIAL COUNTERS	5	6	0	6	0	0
L 737 L3-05 DO YOU USE OR REFER TO PARALLEL COUNTERS	2	2	0	2	0	0
L 738 L3-06 DO YOU USE OR REFER TO RING COUNTERS	1	2	0	2	0	0
L 739 L3-07 DO YOU USE OR REFER TO DECADE COUNTERS	3	3	0	3	0	0
L 740 L3-08 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS	3	3	0	3	0	0
L 741 L3-09 DO YOU USE OR REFER TO UP CLOCKS	1	2	0	2	0	0
L 742 L3-10 DO YOU USE OR REFER TO DOWN CLOCKS	4	5	0	5	0	0
L 743 L3-11 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	0	0	0	0	0	0
L 744 L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-FLOPS	1	1	0	1	0	0
L 745 L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS	1	1	0	1	0	0
L 746 L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	0	0	0	0	0	0
L 747 L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	0	0	0	0	0	0
L 748 L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	0	0	0	0	0	0
L 749 L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	1	2	0	2	0	0
L 750 L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	0	0	0	0	0	0
L 751 L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	0	0	0	0	0	0
L 752 L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	1	1	0	1	0	0
L 753 L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS	0	0	0	0	0	0
L 754 L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	0	0	0	0	0	0
L 755 L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	0	0	0	0	0	0
L 756 L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT	0	0	0	0	0	0
L 757 L3-01 DO YOU WORK WITH SARTOUTH WAVE GENERATORS	3	3	0	2	0	0
L 758 L3-02 DO YOU WORK WITH TRIANGULAR WAVE GENERATORS	3	3	0	2	0	0
L 759 L3-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK	3	3	3	4	0	0
L 760 L3-04 DO YOU WORK WITH PULSED OSCILLATORS WITH-OUT REGENERATIVE FEEDBACK	3	3	0	3	0	0

TIMING CIRCUITS

PCT HRS RESPONDING 'YES' BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

TASK	SPL 001				SPL 002				SPL 003				SPL 004				SPL 005				SPL 006			
M 761 M1-05 DC YOU WORK WITH BLOCKING OSCILLATORS	4	5	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 762 M1-06 DC YOU USE OR REFER TO RISE TIME	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 763 M1-07 DC YOU USE OR REFER TO FALL OR FLYBACK TIME	2	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 764 M1-08 DC YOU USE OR REFER TO SLEEP TIME	12	13	6	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 765 M1-09 DC YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS	3	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 766 M1-10 DC YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 767 M1-11 DC YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS	3	2	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 768 M1-12 DC YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 769 M2-01 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB	15	17	6	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 770 M2-02 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS	13	14	6	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 771 M2-03 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS	9	11	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 772 M2-04 DC YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 773 M2-05 DC YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 774 M2-06 DO YOU USE AUDIO SINE-WAVE GENERATORS	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 775 M2-07 DC YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE	3	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 776 M2-08 DC YOU USE RF GENERATORS LESS THAN 1,000 MH	4	6	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 777 M2-09 DC YOU USE RF GENERATORS GREATER THAN 1,000 MH	6	6	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 778 M2-10 DC YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS	10	13	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 779 M3-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 780 M3-02 DC YOU INSPECT MOTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 781 M3-03 DO YOU CLEAN OR LUBRICATE MOTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 782 M3-04 DO YOU OPERATE MOTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 783 M3-05 DO YOU REMOVE OR REPLACE COMPLETE MOTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 784 M3-06 DO YOU REMOVE OR REPLACE MOTOR PARTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 785 M3-07 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 786 M3-08 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 787 M3-09 DC YOU PERFORM ANY TASKS ON FIELD COILS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 788 M3-10 DC YOU PERFORM ANY TASKS ON ARMATURES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 789 M3-11 DC YOU PERFORM ANY TASKS ON ROTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 790 M3-12 DO YOU PERFORM ANY TASKS ON BRUSHES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 791 M3-13 DO YOU PERFORM ANY TASKS ON SLIP RINGS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 792 M3-14 DO YOU PERFORM ANY TASKS ON COMMUTATORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M 793 M3-15 DC YOU PERFORM ANY TASKS ON POLE PIECES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

USE OF SIGNAL GENERATORS

MOTORS AND GENERATORS

PCT MBRS RESPONDING 'YES' BY SELECTED GPPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TSK

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	001	002	003	004	005	006	007	008	009	010	011	012
M 794 M3-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	0	0	0	0	0	0	0
M 795 M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	0	0	0	0	0	0	0
M 796 M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS	0	0	0	0	0	0	0	0	0	0	0	0
M 797 M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS	0	0	0	0	0	0	0	0	0	0	0	0
M 798 M3-20 DO YOU WORK WITH INDUCTION MOTORS	0	0	0	0	0	0	0	0	0	0	0	0
M 799 M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS	0	0	0	0	0	0	0	0	0	0	0	0
M 800 M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS	0	0	0	0	0	0	0	0	0	0	0	0
M 801 M3-23 DO YOU INSPECT GENERATORS	0	0	0	0	0	0	0	0	0	0	0	0
M 802 M3-24 DO YOU CLEAN OR LUBRICATE GENERATORS	0	0	0	0	0	0	0	0	0	0	0	0
M 803 M3-25 DO YOU OPERATE GENERATORS	1	1	0	1	0	0	0	0	0	0	0	0
M 804 M3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS	0	0	0	0	0	0	0	0	0	0	0	0
M 805 M3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS	0	0	0	0	0	0	0	0	0	0	0	0
M 806 M3-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS	0	0	0	0	0	0	0	0	0	0	0	0
M 807 M3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS	0	0	0	0	0	0	0	0	0	0	0	0
M 808 M1-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB	11	11	10	11	17	11						
M 809 M1-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	0	0	0	0	0	0						
M 810 M1-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS	0	0	0	0	0	0						
M 811 M1-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	1	1	0	1	0	0						
M 812 M1-05 DO YOU READ METER SCALES	12	12	10	12	17	11						
M 813 M1-06 DO YOU EXTEND THE RANGE OF AMMETERS	1	1	0	1	0	0						
M 814 M1-07 DO YOU ZERO OHMMETERS	1	1	0	1	0	0						
M 815 M1-08 DO YOU ZERO AMMETERS	1	2	0	2	0	0						
M 816 M1-09 DO YOU EXTEND THE RANGE OF VOLTMETERS	1	2	0	2	0	0						
M 817 M1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY EXPRESSED IN UNITS OF OHMS PER VOLT	4	5	0	5	0	0						
M 818 M2-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB	0	0	0	0	0	0						
M 819 M2-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0						
M 820 M2-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0						
M 821 M2-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0						
M 822 M2-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0						
M 823 M2-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0						
M 824 M2-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS	0	0	0	0	0	0						

METER MOVEMENTS

SATURABLE REACTORS AND MAGNETIC AMPLIFIERS

PCT MBRS RESPONDING 'YES' BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TSK

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	001	002	003	004	005	006				
N 825 N2-08 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS	0	0	0	0	0	0				
N 826 N2-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT	0	0	0	0	0	0				
N 827 N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR	0	0	0	0	0	0				
N 828 N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT	1	1	0	1	0	0				
N 829 N2-12 DO YOU USE OR REFER TO COERCIVE FORCE IN SATURABLE REACTORS	0	0	0	0	0	0				
N 830 N2-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN SATURABLE REACTORS	0	0	0	0	0	0				
N 831 N2-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE REACTORS	0	0	0	0	0	0				
N 832 N2-15 DO YOU USE OR REFER TO POINT OF SATURATION IN SATURABLE REACTORS	0	0	0	0	0	0				
N 833 N2-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS	0	0	0	0	0	0				
N 834 N3-01 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB	44	48	29	45	33	33				
N 835 N3-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS	17	17	16	15	17	22				
N 836 N3-03 DO YOU USE OR REFER TO PULSE WIDTH (PW)	51	53	42	52	50	44				
N 837 N3-04 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	51	53	42	52	50	44				
N 838 N3-05 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	51	54	42	52	50	44				
N 839 N3-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS	28	29	26	25	50	33				
N 840 N3-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS	34	36	26	33	50	33				
N 841 N3-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT	37	38	32	37	50	22				
N 842 N3-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT	2	2	0	2	0	0				
N 843 N3-10 DO YOU WORK WITH SQUARE WAVE GENERATORS	3	3	0	2	0	0				
N 844 N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS	1	2	0	2	0	0				
O 845 O1-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR PRESENT JOB	1	1	0	1	0	0				
O 846 O1-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0				
O 847 O1-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0				
O 848 O1-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0				
O 849 O1-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0				
O 850 O1-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0				
O 851 O1-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0				
O 852 O1-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0				

WAVESHAPING CIRCUITS

SINGLE SIDEBAND SYSTEMS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

Task ID	Task Description	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
0 853	01-09 DO YOU PERFORM TASKS ON SSB AUTO AMPLIFIERS	0	0	0	0	0	0
0 854	01-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS	0	0	0	0	0	0
0 855	01-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS	1	1	0	1	0	0
0 856	01-12 DO YOU PERFORM TASKS ON SSB LC FILTERS	0	0	0	0	0	0
0 857	01-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS	1	1	0	1	0	0
0 858	01-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS	1	1	0	1	0	0
0 859	01-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS	1	1	0	1	0	0
0 860	01-16 DO YOU PERFORM TASKS ON SSB MIXERS	1	1	0	1	0	0
0 861	01-17 DO YOU PERFORM TASKS ON SSB DRIVERS	1	1	0	1	0	0
0 862	01-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS	1	1	0	1	0	0
0 863	01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS	1	1	0	1	0	0
0 864	01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS	1	1	0	1	0	0
0 865	01-21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS	1	1	0	1	0	0
0 866	01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS	1	1	0	1	0	0
0 867	01-23 DO YOU PERFORM TASKS ON SSB DON'T REMEMBER WHICH SSB	0	0	0	0	0	0
SYSTEM STAGES							
0 868	01-24 DO YOU USE OR REFER TO SELECTIVE FADING	0	0	0	0	0	0
0 869	01-25 DO YOU USE OR REFER TO PEAK POWER	1	1	0	1	0	0
0 870	01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY	1	1	0	1	0	0
0 871	01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS	1	1	0	1	0	0
0 872	01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB	1	1	0	1	0	0
FRAGMENTED							
0 873	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB	1	1	0	1	0	0
0 874	01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB	1	1	0	1	0	0
RECEIVER SCHEMATIC DIAGRAMS							
0 875	02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB	11	7	26	9	17	22
0 876	02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 877	02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 878	02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 879	02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 880	02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS COMPONENTS	1	0	3	0	0	0
0 881	02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 882	02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS COMPONENTS	0	0	0	0	0	0
0 883	02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) SYSTEMS	1	1	0	1	0	0
0 884	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) SYSTEMS	1	0	3	1	0	0
0 885	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) SYSTEMS	0	0	0	0	0	0
0 886	02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS	1	2	0	1	0	0
0 887	02-13 DO YOU WORK ON LINE PULSING MODULATION SYSTEMS	0	0	0	0	0	0
0 888	02-14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF MODULATION SYSTEM	1	1	0	1	0	0

PULSE MODULATION SYSTEMS

PCT MEMBERS RESPONDING YES BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
0 889 02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLIES	0	0	0	0	0	0
0 890 02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CIRCUITS AND CHARGING DIODES	0	0	0	0	0	0
0 891 02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORKS	0	0	0	0	0	0
0 892 02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMERS	0	0	0	0	0	0
0 893 02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRONS	0	0	0	0	0	0
0 894 02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMERS	0	0	0	0	0	0
0 895 02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBES	0	0	0	0	0	0
0 896 02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIERS	2	2	0	2	0	0
0 897 02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTERS	1	2	0	2	0	0
0 898 02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIERS	2	2	0	2	0	0
0 899 02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTORS	3	2	3	2	0	0
0 900 02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIERS	3	2	3	2	0	0
0 901 02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIERS	1	1	3	1	0	0
0 902 02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES (PRF)	0	0	0	0	0	0
0 903 02-29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	12	9	26	10	17	22
0 904 02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	12	9	26	10	17	22
0 905 02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)	12	9	26	10	17	22
0 906 02-32 DO YOU USE OR REFER TO PULSE SHAPE	12	8	26	10	17	22
0 907 02-33 DO YOU USE OR REFER TO PEAK POWER	12	9	26	10	17	22
0 908 02-34 DO YOU USE OR REFER TO AVERAGE POWER	11	8	23	10	17	22
0 909 02-35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	7	5	16	5	17	22
0 910 02-36 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	6	4	16	5	17	11
0 911 02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS	6	5	10	5	17	0
0 912 02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS	4	2	13	2	0	11
0 913 02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS	4	1	16	2	0	22
0 914 03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB	24	22	32	21	17	44
0 915 03-02 DO YOU INSPECT ANTENNAS	1	1	0	1	0	0

ANTENNAS

PCT HRS RESPONDING *YES* BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
0 916 03-03 DO YOU CLEAN ANTENNAS	0	0	0	0	0	0
0 917 03-04 DO YOU PHYSICALLY ALIGN ANTENNAS	1	1	0	1	0	0
0 918 03-05 DO YOU ELECTRICALLY ALIGN ANTENNAS	1	1	0	1	0	0
0 919 03-06 DO YOU TROUBLESHOOT TO ANTENNAS	0	0	0	0	0	0
0 920 03-07 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS	0	0	0	0	0	0
0 921 03-08 DO YOU REMOVE OR INSTALL ANTENNAS	0	0	0	0	0	0
0 922 03-09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS	0	0	0	0	0	0
0 923 03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES	13	10	23	10	33	33
0 924 03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES	13	10	23	10	33	33
0 925 03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS	7	6	10	6	17	0
0 926 03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS	5	5	6	5	33	0
0 927 03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS	4	4	3	4	17	0
0 928 03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS	3	3	3	3	17	0
0 929 03-16 DO YOU WORK WITH HERTZ ANTENNAS	5	6	0	6	0	0
0 930 03-17 DO YOU WORK WITH MARCONI ANTENNAS	2	2	0	2	0	0
0 931 03-18 DO YOU WORK WITH BROADSIDE ARRAYS	2	2	3	2	17	0
0 932 03-19 DO YOU WORK WITH END-FIRE ARRAYS	1	1	0	1	0	0
0 933 03-20 DO YOU WORK WITH CARDIOD ARRAYS	0	0	0	0	0	0
0 934 03-21 DO YOU WORK WITH COLLINEAR ARRAYS	3	3	0	3	0	0
0 935 03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS	5	6	3	6	17	0
0 936 03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS	1	1	0	1	0	0
0 937 03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS	10	10	6	10	33	0
0 938 03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS	0	0	0	0	0	0
0 939 03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	4	3	6	2	0	11
0 940 03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	3	2	3	2	17	0
0 941 03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED	21	19	29	19	17	33
0 942 03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED	19	18	26	18	17	33
0 943 03-30 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON	9	8	13	9	17	11
0 944 03-31 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT, ANTENNAS OF CORRECT LENGTH FOR	0	0	0	0	0	0

UY-TSK

FCT MRS RESPONDING 'YES' BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY=75K

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
0 945 03-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS	2	2	0	2	0	0
0 946 03-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS	1	1	0	1	0	0
0 947 03-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS	2	1	6	1	0	11
0 948 03-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DONUT ELEMENTS	6	7	3	7	0	0
0 949 03-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS	13	13	16	11	17	22
0 950 03-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS	6	6	3	6	0	0
0 951 03-38 DO YOU WORK ON DONUT REMEMBER THE DIRECTIONALITY	3	3	0	3	0	0
0 952 03-39 DO YOU WORK WITH ROTAR ANTENNA ARRAYS	10	8	19	8	17	22
P 953 PI-01 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS TO YOU REFER TO OR USE COPPER LOSS OR IZR LOSS IN TRANSMISSION LINES)	5	6	0	6	0	0
P 954 PI-02 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES	0	0	0	0	0	0
P 955 PI-03 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES	0	0	0	0	0	0
P 956 PI-04 DO YOU REFER TO OR USE DIELECTRIC LOSS IN TRANSMISSION LINES	0	0	0	0	0	0
P 957 PI-05 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES	1	1	0	1	0	0
P 958 PI-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES	1	1	0	1	0	0
P 959 PI-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES	1	2	0	2	0	0
P 960 PI-08 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES	0	0	0	0	0	0
P 961 PI-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES	1	2	0	1	0	0
P 962 PI-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES	2	2	0	2	0	0
P 963 PI-11 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES	2	2	0	2	0	0
P 964 PI-12 DO YOU TROUBLESHOOT TRANSMISSION LINES	1	2	0	2	0	0
P 965 PI-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION	0	0	0	0	0	0
P 966 PI-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS	0	0	0	0	0	0
P 967 PI-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS	1	1	0	1	0	0
P 968 PI-16 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0	0
P 969 PI-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	1	1	0	1	0	0
P 970 PI-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH	0	0	0	0	0	0

TRANSMISSION LINES

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	001	002	003	004	005	006	007	008	009
P 971 P1-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS	1	1	0	1	0	0	0	0	0
P 972 P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING	0	0	0	0	0	0	0	0	0
P 973 P1-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA	3	4	0	3	0	0	0	0	0
P 974 P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES	1	1	0	1	0	0	0	0	0
P 975 P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES	1	1	0	1	0	0	0	0	0
P 976 P1-24 DO YOU USE OR REFER TO THE TERM CUTOFF FREQUENCY OF TRANSMISSION LINES	1	1	0	1	0	0	0	0	0
P 977 P1-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES	1	1	0	1	0	0	0	0	0
P 979 P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES	1	1	0	1	0	0	0	0	0
P 979 P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES	0	0	0	0	0	0	0	0	0
P 980 P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 981 P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 982 P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 983 P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING	0	0	0	0	0	0	0	0	0
P 984 P2-01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB	2	2	0	2	0	0	0	0	0
P 985 P2-02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS	0	0	0	0	0	0	0	0	0
P 986 P2-03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS	0	0	0	0	0	0	0	0	0
P 987 P2-04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS	0	0	0	0	0	0	0	0	0
P 988 P2-05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS	0	0	0	0	0	0	0	0	0
P 989 P2-06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS	0	0	0	0	0	0	0	0	0
P 990 P2-07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS	0	0	0	0	0	0	0	0	0
P 991 P2-08 DO YOU TROUGH-ESHOT WAVEGUIDES OR CAVITY RESONATORS	0	0	0	0	0	0	0	0	0
P 992 P2-09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES	0	0	0	0	0	0	0	0	0
P 993 P2-10 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS	0	0	0	0	0	0	0	0	0
P 994 P2-11 DO YOU REMOVE OR INSTALL DUMMY LOADS	0	0	0	0	0	0	0	0	0
P 995 P2-12 DO YOU REMOVE OR INSTALL E BENDS	0	0	0	0	0	0	0	0	0
P 996 P2-13 DO YOU REMOVE OR INSTALL H BENDS	0	0	0	0	0	0	0	0	0
P 997 P2-14 DO YOU REMOVE OR INSTALL OTHER BENDS	0	0	0	0	0	0	0	0	0
P 998 P2-15 DO YOU REMOVE OR INSTALL CHOKE JOINTS	0	0	0	0	0	0	0	0	0
P 999 P2-16 DO YOU REMOVE OR INSTALL ROTATING JOINTS	0	0	0	0	0	0	0	0	0
P1000 P2-17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS	0	0	0	0	0	0	0	0	0
P1001 P2-18 DO YOU REMOVE OR INSTALL BI-DIRECTIONAL COUPLERS	0	0	0	0	0	0	0	0	0
P1002 P2-19 DO YOU USE OR REFER TO THE TERM "HALL OF WAVEGUIDES"	0	0	0	0	0	0	0	0	0

WAVEGUIDES AND CAVITY RESONATORS

PCT MBR'S RESPONDING "YES" BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

UY-TSK

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
P1025 P2-42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO P1026 P2-43 ARE CHOKE JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0	0
P1027 P2-44 ARE ROTATING JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0	0
P1028 P2-45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	2	2	0	2	0	0
P1029 P2-46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING	0	0	0	0	0	0
P1030 P2-47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING	0	0	0	0	0	0
P1031 P2-48 DO YOU TUNE CAVITY RESONATORS USING VOLUME TUNING	0	0	0	0	0	0
P1032 P2-49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER THE METHOD OF TUNING	1	1	0	1	0	0
P1033 P2-50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS	0	0	0	0	0	0
P1034 P3-01 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR P1035 P3-02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE P1036 P3-03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME P1037 P3-04 DO YOU USE OR REFER TO LEAD INDUCTANCE P1038 P3-05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY	13	14	13	14	0	22
P1039 P3-06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION	2	2	3	2	0	0
P1040 P3-07 DO YOU USE OR REFER TO ELECTRON BUNCHING	2	3	3	2	0	0
P1041 P3-08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS	4	3	6	3	0	22
P1042 P3-09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS	5	5	6	5	0	22
P1043 P3-10 DO YOU WORK WITH REFLEX KLYSTRONS	4	5	3	4	0	0
P1044 P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)	9	9	10	10	0	22
P1045 P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS	1	2	0	2	0	0
P1046 P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS	1	2	0	2	0	0
P1047 P3-14 DO YOU WORK WITH MAGNETRONS	12	11	16	12	0	33
P1048 P3-15 DO YOU INSPECT KLYSTRONS OR TWT	0	0	0	0	0	0
P1049 P3-16 DO YOU CLEAN KLYSTRONS OR TWT	0	0	0	0	0	0
P1050 P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY	1	1	0	1	0	0
P1051 P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY	0	0	0	0	0	0
P1052 P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT	2	2	3	2	0	11
P1053 P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT	0	0	0	0	0	0
P1054 P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	0	0	0	0	0	0
P1055 P3-22 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS	0	0	0	0	0	0
P1056 P3-23 DO YOU INSPECT PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1057 P3-24 DO YOU CLEAN PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1058 P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS	0	0	0	0	0	0

MICROWAVE AMPLIFIERS AND OSCILLATORS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

JY-TSK

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
P1059 P3-26 DO YOU TUNE PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1060 P3-27 DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1061 P3-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1062 P3-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIER	0	0	0	0	0	0
P1063 P3-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS	0	0	0	0	0	0
P1064 P3-31 DO YOU INSPECT MAGNETRONS	0	0	0	0	0	0
P1065 P3-32 DO YOU CLEAN MAGNETRONS	0	0	0	0	0	0
P1066 P3-33 DO YOU ADJUST MAGNETRONS	1	1	0	0	0	0
P1067 P3-34 DO YOU TUNE MAGNETRONS	1	1	0	1	0	0
P1068 P3-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS	1	1	3	1	0	0
P1069 P3-36 DO YOU TROUBLESHOOT MAGNETRONS	0	0	0	0	0	0
P1070 P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON	0	0	0	0	0	0
P1071 P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS	0	0	0	0	0	0
P1072 P3-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TAO-CAVITY KLYSTRONS COLLECTOR PLATES	1	1	3	2	0	0
P1073 P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TAO-CAVITY KLYSTRONS CATCHER CAVITIES	1	1	3	2	0	0
P1074 P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TAO-CAVITY KLYSTRONS CATCHER GRIDS	1	1	3	2	0	0
P1075 P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TAO-CAVITY KLYSTRONS FEEDBACK LOOPS	0	0	3	7	0	0
P1076 P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TAO-CAVITY KLYSTRONS DRIFT SPACES	1	1	3	2	0	0
P1077 P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TAO-CAVITY KLYSTRONS BUNCHER GRIDS	1	0	3	1	0	0
P1078 P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TAO-CAVITY KLYSTRONS BUNCHER CAVITIES	1	0	3	1	0	0
P1079 P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TAO-CAVITY KLYSTRONS CONTROL GRIDS	2	2	3	2	0	0
P1080 P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TAO-CAVITY KLYSTRONS CATHODES	4	5	3	6	0	0
P1081 P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON REPELLER (REFLECTOR) PLATES	1	1	3	2	0	0
P1082 P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS	2	2	0	2	0	0
P1083 P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS	1	1	3	2	0	0
P1084 P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES	2	2	3	2	0	0
P1085 P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS	1	1	3	2	0	0
P1086 P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS	1	1	3	2	0	0
P1087 P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES	4	5	3	6	0	0

PC1 MBRS RESPONDING YES BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

TASK	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
001	002	003	004	005	006	007	008	009	010
P1088 P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS	2	2	3	2	0	0	0	0	0
P1089 P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS	2	2	3	2	0	0	0	0	0
P1090 P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES	4	4	3	5	0	0	0	0	0
P1091 P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS	2	2	3	2	0	0	0	0	0
P1092 P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES	2	2	3	2	0	0	0	0	0
P1093 P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELIXES	1	1	3	2	0	0	0	0	0
P1094 P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS	2	2	3	2	0	0	0	0	0
P1095 P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS	2	2	3	2	0	0	0	0	0
P1096 P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENUATORS	5	6	3	6	0	0	0	0	0
P1097 P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS	0	0	0	0	0	0	0	0	0
P1098 P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES	0	0	0	0	0	0	0	0	0
P1099 P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER ISOLER CAVITIES	0	0	0	0	0	0	0	0	0
P1100 P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES	0	0	0	0	0	0	0	0	0
P1101 P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS	0	0	0	0	0	0	0	0	0
P1102 P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE-BIAS BATTERIES	0	0	0	0	0	0	0	0	0
P1103 P3-70 DO YOU PERFORM TASKS ON ANODES	1	1	0	1	0	0	0	0	0
P1104 P3-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS	1	1	0	1	0	0	0	0	0
P1105 P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS	1	1	0	1	0	0	0	0	0
P1106 P3-73 DO YOU PERFORM TASKS ON HEATER LEADS	1	1	0	1	0	0	0	0	0
P1107 P3-74 DO YOU PERFORM TASKS ON RESONANT CAVITIES	1	1	0	1	0	0	0	0	0
P1108 P3-75 DO YOU PERFORM TASKS ON CATHODES	3	3	0	3	0	0	0	0	0
P1109 P3-75 DO YOU PERFORM TASKS ON MAGNETS	1	1	0	1	0	0	0	0	0
G1101 P1-01 DO YOU USE OR REFER TO STORAGE REGISTERS	11	14	0	13	0	0	0	0	0
G1111 P1-02 DO YOU USE OR REFER TO SHIFT REGISTERS	13	16	0	15	0	0	0	0	0
G1112 P1-03 DO YOU USE OR REFER TO LOGIC SYMBOLS OF S-SHIFT REGISTERS	4	5	0	4	0	0	0	0	0
G1113 P1-04 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS	4	5	0	4	0	0	0	0	0
G1114 P1-05 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF S-SHIFT REGISTERS	1	1	0	1	0	0	0	0	0
G1115 P1-06 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS	1	1	0	1	0	0	0	0	0

REGISTERS

ACT MEMS RESPONDING 'YES' BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

Task ID	Description	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
Q1116	DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES	1	1	0	1	0	0	0	0	0	0	0	0
Q1117	DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES	29	33	13	31	17	0	0	0	0	0	0	0
Q1118	DO YOU USE OR REFER TO DELAY LINES	25	30	3	28	0	0	0	0	0	0	0	0
Q1119	DO YOU USE OR REFER TO MAGNETIC CORES	21	26	3	25	0	0	0	0	0	0	0	0
Q1120	DO YOU USE OR REFER TO MAGNETIC DRUMS	25	30	6	28	0	0	0	0	0	0	0	0
Q1121	DO YOU USE OR REFER TO MAGNETIC TAPES	19	21	10	20	17	0	0	0	0	0	0	0
Q1122	DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS	22	26	6	25	0	0	0	0	0	0	0	0
Q1123	DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS	25	30	6	29	0	0	0	0	0	0	0	0
Q1124	DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS	6	8	0	7	0	0	0	0	0	0	0	0
Q1125	DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	5	6	0	5	0	0	0	0	0	0	0	0
Q1126	DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D) CONVERTERS, ANALOG (D/A) CONVERTERS FOR GIVEN INPUT, DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT, COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS, IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	1	2	0	2	0	0	0	0	0	0	0	0
Q1127	DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS	1	2	0	2	0	0	0	0	0	0	0	0
Q1128	DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	1	2	0	2	0	0	0	0	0	0	0	0
Q1129	DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	1	2	0	2	0	0	0	0	0	0	0	0
Q1130	DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	1	0	3	0	0	0	0	0	0	0	0	0
Q1131	DO YOU PERFORM HOLD FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0	0	0	0	0	0	0
Q1132	DO YOU PERFORM COMPARE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	1	1	3	1	0	0	0	0	0	0	0	0
Q1133	DO YOU PERFORM DIGITIZE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	1	1	3	0	0	0	0	0	0	0	0	0
Q1134	DO YOU PERFORM DON'T REMEMBER WHICH FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	1	1	0	1	0	0	0	0	0	0	0	0
Q1135	DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0	0	0	0	0	0	0
Q1136	DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0	0	0	0	0	0	0
Q1137	DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS	1	1	3	1	0	0	0	0	0	0	0	0
Q1138	DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS	1	0	3	0	0	0	0	0	0	0	0	0
Q1139	DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS	0	0	0	0	0	0	0	0	0	0	0	0

DIGITAL TO ANALOG CONVERTERS

PCT MBRS RESPONDING 'YES' BY SELECTED GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TSK

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006	PHANTASTRONS
K1140 R1-01 DO YOU WORK WITH PHANTASTRON CIRCUITRY IN YOUR PRESENT JOB	0	0	0	0	0	0	
R1141 R2-01 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS	0	0	0	0	0	0	SCHMITT TRIGGERS
R1142 R2-02 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS	0	0	0	0	0	0	
R1143 R2-03 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS	0	0	0	0	0	0	
R1144 R3-01 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES	0	0	0	0	0	0	CABLE FABRICATION
R1145 R3-02 DO YOU FABRICATE COAXIAL CABLES	0	0	0	0	0	0	
S1146 S1-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS ON VISUAL READOUT SYSTEMS	28	31	13	29	0	11	
S1147 S1-02 DO YOU PERFORM ANY TASKS ON NIXIE LIGHTS OR NIXIE LIGHT DECODER SYSTEMS	1	1	3	1	0	0	INPUT/OUTPUT DEVICES
S1148 S1-03 DO YOU ANALYZE NIXIE LIGHT DECODER SYSTEMS USING BOOLEAN ALGEBRA	0	0	0	0	0	0	
S1149 S2-01 DO YOU WORK WITH PHOTO TUBES IN YOUR PRESENT JOB	4	6	0	5	0	0	PHOTO SENSITIVE DEVICES
S1150 S3-01 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS	0	0	0	0	0	0	
S1151 S3-02 DO YOU MEASURE EXCITATION FREQUENCIES	0	0	0	0	0	0	
S1152 S3-03 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIPS	0	0	0	0	0	0	
S1153 S3-04 DO YOU USE OR REFER TO EXCITATION FREQUENCIES	0	0	0	0	0	0	
S1154 S3-05 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIPS	0	0	0	0	0	0	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS)
S1155 S3-06 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	0	0	0	0	
S1156 S3-07 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	0	0	0	0	
S1157 S3-08 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	0	0	0	0	
S1158 S3-09 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	0	0	0	0	
T1159 T1-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS	0	0	0	0	0	0	
T1160 T1-02 DO YOU INSPECT INFRARED SYSTEMS	0	0	0	0	0	0	
T1161 T1-03 DO YOU CLEAN INFRARED SYSTEMS	0	0	0	0	0	0	
T1162 T1-04 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS	0	0	0	0	0	0	
T1163 T1-05 DO YOU OPERATE INFRARED SYSTEMS	0	0	0	0	0	0	
T1164 T1-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS	0	0	0	0	0	0	INFRARED
T1165 T1-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS	0	0	0	0	0	0	
T1166 T1-08 DO YOU TROUBLESHOOT GOA TO INFRARED SYSTEM COMPONENT PARTS	0	0	0	0	0	0	
T1167 T1-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS	0	0	0	0	0	0	
T1168 T1-10 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS	0	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DI-TSK	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	001	002	003	004	005	006	007	008	009
T120 T2-25 DO YOU WORK WITH HALF SILVERED (928 REFLECTIVE) MIRRORS	0	0	0	0	0	0	0	0	0
T121 T2-26 DO YOU WORK WITH HELICAL FLASHTUBES	0	0	0	0	0	0	0	0	0
T122 T2-27 DO YOU WORK WITH RUBY	0	0	0	0	0	0	0	0	0
T123 T2-28 DO YOU WORK WITH HELIUM-NEON	0	0	0	0	0	0	0	0	0
T124 T2-29 DO YOU WORK WITH HELIUM-NEON	0	0	0	0	0	0	0	0	0
T125 T2-30 DO YOU WORK WITH XENON	0	0	0	0	0	0	0	0	0
T126 T2-31 DO YOU WORK WITH CESIUM-HELIUM	0	0	0	0	0	0	0	0	0
T127 T2-32 DO YOU WORK WITH ARGON	0	0	0	0	0	0	0	0	0
T128 T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS	0	0	0	0	0	0	0	0	0
T129 T2-34 DO YOU WORK WITH GALLIUM ARSENIDE	0	0	0	0	0	0	0	0	0
T130 T3-01 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE (DVST) OR MULTIPLE HOPE	3	4	0	0	4	0	0	0	0
T131 T3-02 DO YOU INSPECT DVST OR HMST	0	0	0	0	0	0	0	0	0
T132 T3-03 DO YOU CLEAN DVST OR HMST	0	0	0	0	0	0	0	0	0
T133 T3-04 DO YOU ADJUST OR CALIBRATE DVST OR HMST	1	2	0	0	2	0	0	0	0
T134 T3-05 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR HMST	3	4	0	4	0	0	0	0	0
T135 T3-06 DO YOU TROUBLESHOOT DVST OR HMST CIRCUITS	0	0	0	0	0	0	0	0	0
T136 T3-07 DO YOU REMOVE OR REPLACE DVST OR HMST TUBES FROM MAJOR ASSEMBLIES OR UNITS	0	0	0	0	0	0	0	0	0
T137 T3-08 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF DVST	0	0	0	0	0	0	0	0	0
T138 T3-09 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF HMST	0	0	0	0	0	0	0	0	0
T139 T3-10 DO YOU PERFORM TASKS ON FLOOD GUNS	0	0	0	0	0	0	0	0	0
T140 T3-11 DO YOU PERFORM TASKS ON WRITE GUNS	0	0	0	0	0	0	0	0	0
T141 T3-12 DO YOU PERFORM TASKS ON ATTACK GUNS	0	0	0	0	0	0	0	0	0
T142 T3-13 DO YOU PERFORM TASKS ON ERASE GUNS	0	0	0	0	0	0	0	0	0
T143 T3-14 DO YOU PERFORM TASKS ON STORAGE GRIDS	0	0	0	0	0	0	0	0	0
T144 U1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY PROGRAMMING TASKS	3	3	3	3	4	0	0	0	0
U127 U1-02 DO YOU USE OR REFER TO DECIMAL SYSTEMS	4	3	6	4	4	0	0	0	0
U128 U1-03 DO YOU USE OR REFER TO PROGRAMS	3	2	6	3	0	0	0	0	0
U129 U1-04 DO YOU USE OR REFER TO HEXIDECIMAL SYSTEMS	1	0	3	0	0	0	0	0	0
U130 U1-05 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS	1	0	3	0	0	0	0	0	0
U131 U1-06 DO YOU USE OR REFER TO FOUR SYSTEMS	1	0	3	0	0	0	0	0	0
U132 U1-07 DO YOU USE OR REFER TO BINARY SYSTEMS	3	2	6	4	0	0	0	0	0
U133 U1-08 DO YOU USE OR REFER TO TIME-SHARING	3	2	6	3	0	0	0	0	0
U134 U1-09 DO YOU USE OR REFER TO DATA WORDS	3	2	6	3	0	0	0	0	0
U135 U1-10 DO YOU USE OR REFER TO ADDRESS WORDS	3	2	6	2	0	0	0	0	0
U136 U1-11 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS	3	2	6	2	0	0	0	0	0
U137 U1-12 DO YOU USE OR REFER TO STEERING/INFORMATION	3	2	6	2	0	0	0	0	0
U138 U1-13 DO YOU USE OR REFER TO INFORMATION WORDS	3	2	6	2	0	0	0	0	0
U139 U1-14 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING	1	1	3	1	1	0	0	0	0
U140 U1-15 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING	1	1	3	1	1	0	0	0	0

DISPLAY TUBES

PROGRAMMING

PCT MEMS RESPONDING 'YES' BY SELECTED GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	SPL 006
NY-TSA						
U1249 J1-16 DO YOU PERFORM TASKS ON INPUT DEVICES	2	2	3	2	0	0
U1250 J1-17 DO YOU PERFORM TASKS ON STORAGE DEVICES	3	2	3	2	0	0
U1251 J1-18 DO YOU PERFORM TASKS ON ARITHMETIC SECTIONS	2	2	0	2	0	0
U1252 J1-19 DO YOU PERFORM TASKS ON CONTROL SECTIONS	2	2	0	2	0	0
U1253 J1-20 DO YOU PERFORM TASKS ON OUTPUT DEVICES	2	2	0	2	0	0
U1254 J1-21 DO YOU PERFORM TASKS ON POWER SUPPLIES	1	1	0	1	0	0
U1255 J2-71 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION	62	58	74	60	67	69
U1256 J2-82 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS	7	7	6	8	0	0
U1257 J2-83 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS	8	8	6	9	0	0
U1258 J2-84 DUMMY TASK TO IDENTIFY INCUMBENTS WHO PERFORMED NC TASKS	6	7	3	8	0	0

DB AND POWER RATIOS

AD-A047 547

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ELECTRONIC PRINCIPLES ELECTRONIC WARFARE COUNTERMEASURES CAREER--ETC(U)
JUL 77 T J O'CONNOR, R G NOLTE

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report summarizes the results of the administration of the Electronic Principles Inventory to airmen assigned to Electronic Warfare Countermeasures Specialty (AFSC 276X1). The report gives a detailed listing of the technical tasks and knowledge needed to perform the jobs within the specialty or career ladder. <i>(Handwritten mark)</i> CONTINUED		



This specialty has the following functions:

Performs technical electronic warfare counter measures functions; and supervises electronic warfare countermeasures activities. Analyzes electronic warfare activities or abnormal external influences. Supervises electronic warfare countermeasures personnel.



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