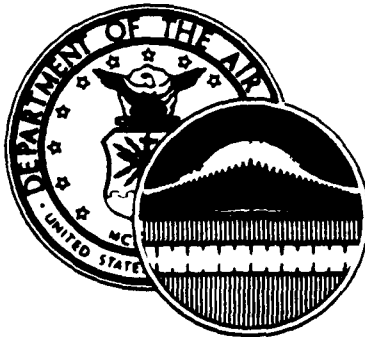




UNITED STATES AIR FORCE

2

AD-A204 751

OCCUPATIONAL SURVEY REPORT

DTIC
SELECTED
24 FEB 1989
S A

COMMUNICATIONS-COMPUTER SYSTEMS CONTROL

AFSC 493X0

AFPT 90-307-803

JANUARY 1989

Approved for Release
Distribution Unlimited

**OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150-5000**

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

39 2 22 052

DISTRIBUTION FOR
AFSC 493X0 OSR AND SUPPORTING DOCUMENTS

	<u>OSR</u>	<u>ANL EXT</u>	<u>TNG EXT</u>	<u>JOB INV</u>
AFHRL/MODS	2	1m	1m	1
AFHRL/ID	1	1m	1m/1h	1
AFMPC/DPMRPQ1	2			
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
DEFENSE TECHNICAL INFORMATION CENTER	2			
HQ AFCC/DOOSC (SCOTT AFB IL)	1		1	
HQ AFCC/DPATO	3		3	
HQ AFCC/TTGT	3		3	
HQ AFISC/DAP	2			
HQ ATC/TTOC	2		1	
HQ USAF/DPPE	1			
HQ USMC (CODE TPI)	1			
NODAC	1			
USAFOMC/OMDQ	1			
USAFOMC/OMYXL	10	2m	5	10
DET 3, USAFOMC (KEESLER AFB MS)	1	1	1	1
S73 NATIONAL SECURITY AGENCY (MAJ THOMAS WINTERS)				
FT MEADE MD 20755				
1872 SCHS/TU	2	1m	1m/2h	
3300 TCHTW/TTGXP (KEESLER AFB MS)	5	3	9	3
3300 TCHTW/TTS (KEESLER AFB MS)	1		1	
3507 ACS/DPKI	1			

m = microfiche only
h = hard copy only



2

A-1

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE	iii
SUMMARY OF RESULTS	iv
INTRODUCTION	1
Background	1
SURVEY METHODOLOGY	2
Inventory Development	2
Survey Administration	2
Survey Sample	3
Data Processing and Analysis	3
Task Factor Administration	3
SPECIALTY JOBS (Career Ladder Structure)	6
Overview of Specialty Jobs	7
Group Descriptions	8
Summary	27
ANALYSIS OF DAFSC GROUPS	27
Skill-Level Descriptions	28
Summary	33
ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS	33
TRAINING ANALYSIS	37
Training Emphasis (TE)	37
Task Difficulty (TD)	37
First-Enlistment Personnel	41
Specialty Training Standard (STS)	41
Plan of Instruction (POI)	46
ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS	52
JOB SATISFACTION	52
Comparison to Previous OSR	56
IMPLICATIONS	56
APPENDIX A	64

PREFACE

This report presents the results of an Air Force occupational survey of the Communications-Computer Systems Control career ladder (AFSC 493X0). This survey was requested by HQ USAF, Chief, Human Resources Division, ACS/System for Command, Control, Communication, and Computers. The objective of this survey is to provide data for updating career ladder documents (AFR 39-1, STS, POI, and CDCS). Authority for conducting occupational surveys is contained in AFR 35-2. Computer printouts from which this report was produced are available for use by operations and training officials upon request.

analysis, Personnel development, Skills, Air Force Training, Keywords: Job
The survey instrument was developed by Mr Roberto B. Salinas, Inventory Development Specialist. Dr David E. Williams, Occupational Analyst, analyzed the data and wrote the final report. Mr Wayne J. Fruge provided computer programming support for the project. Administrative support was provided by Ms Linda Sutton. This report has been reviewed and approved by Lieutenant Colonel Charles D. Gorman, Chief, Airman Analysis Branch, Occupational Analysis Division, USAF Occupational Measurement Center. *Air Force personnel.*

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Division (OMY), Randolph AFB, Texas 78150-5000. *(SDW)*

RONALD C. BAKER, Colonel, USAF
Commander
USAF Occupational Measurement
Center

JOSEPH S. TARTELL
Chief, Occupational Analysis Division
USAF Occupational Measurement
Center

SUMMARY OF RESULTS

1. Survey Coverage. A total of 1,595 members of the Communications-Computer Systems Control career ladder, representing 63 percent of the assigned strength, were surveyed worldwide and across all user commands. The sample included 3-, 5-, 7-, and 9-skill levels and CEM Code 49300 and was representative in terms of MAJCOMs and paygrade groups.

2. Specialty Jobs. AFSC 493X0 personnel were performing a wide variety of jobs. Twelve major job clusters, 6 job types, and 11 independent job types were identified in this analysis. These clusters and independent job types relate primarily to circuit monitoring and analysis, system maintenance, supervision, training, and administration.

3. Career Ladder Progression. The AFSC 493X0 career ladder follows the usual pattern of career progression. At the 3- and 5-skill levels, personnel are performing mostly technical tasks, while at the 7-skill level, personnel perform both technical and supervisory tasks. The 9-skill level and CEM code personnel are performing primarily management and supervisory functions. The AFR 39-1 Specialty Descriptions for the career ladder accurately reflect the jobs and tasks performed by personnel at each skill level.

4. Training Analysis. The STS for AFSC 493X0 provides appropriate support for the tasks and jobs performed. There are, however, some nonsupported paragraphs which need review. In addition, several tasks not referenced to the STS need review for possible inclusion. The POI for the basic E3ABR course is also providing training on those tasks which incumbents will perform in their initial assignments. However, several nonsupported objectives and unreferenced tasks were noted.

5. Comparison to Previous Survey. The results of this OSR were compared with those from the 1980 study. Results of both studies were similar, with only minor differences noted.

6. Implications. The AFSC 493X0 career ladder has remained relatively stable over the past several years as far as functional responsibilities are concerned. Personnel are relatively satisfied with their jobs and, for the most part, perceive their talents and training as being adequately utilized. Good career ladder progression is noted. Overseas personnel perform slightly broader jobs than CONUS personnel. The STS is basically supported, although some paragraphs, as well as a number of unreferenced tasks should be reviewed. The basic ABR course at Keesler AFB appears adequate in meeting training needs of first-enlistment personnel, although, as with the STS, a review is recommended.

OCCUPATIONAL SURVEY REPORT
COMMUNICATIONS-COMPUTER SYSTEMS CONTROL CAREER LADDER
(AFSC 493X0)

INTRODUCTION

This is a report of an occupational survey of the Communications-Computer Systems Control career ladder (AFSC 493X0). This survey was completed by the Occupational Analysis Division, USAF Occupational Measurement Center, in October 1988. This specialty was last surveyed in 1980. This survey was requested by HQ USAF, Chief, Human Resources Division, ACS/Systems for Command, Control, Communication, and Computers, to secure current job and task data to be used in updating career ladder documents (AFR 39-1 Specialty Descriptions, STS, POI, and CDCs).

Background

The 493X0 AFSC was created 30 April 1986 as part of a major realignment of the communications specialty career ladders. In this realignment, all former communications specialties were placed under the 49XXX career field. AFSC 307X0, Telecommunications Systems Control, was converted to AFSC 493X0 and retitled Communications-Computer Systems Control. Personnel and major functions did not change.

The primary responsibilities of Communications-Computer Systems Control Personnel, as described in AFR 39-1 Specialty Descriptions, are to "monitor, analyze, and control the performance of communication systems; coordinate operation of transmission media, networks, and circuits; correct conditions interfering with effectiveness; and direct and make operational adjustments to communications-computer systems equipment."

Entry into the career ladder is from Basic Military Training School (BMTS) through a Category A, 18.2-week course (E3ABR49330) conducted at Keesler AFB MS. Student flow is approximately 503 personnel per year. Once initial training is completed and AFSC 493X0 personnel are assigned to operating bases, they receive more job-related training through the OJT program, some localized training, and other advanced courses as needed.

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

SURVEY METHODOLOGY

Inventory Development

The data collection for this occupational survey was accomplished by using USAF Job Inventory AFPT 90-307-803, dated July 1987. A tentative task list was prepared after reviewing current career ladder documents, tasks from previous AFSC 307X0 job inventories, and data from the previous occupational survey report (OSR). The tentative task list was then validated through personal interviews with 59 subject-matter experts at 14 operational bases. A background section was constructed, containing questions regarding incumbents' grade, duty title, total time in the career field, time in present job, total active federal military service, job satisfaction data, and other career ladder-related items. Bases visited to validate the task list were determined primarily from recommendations by career ladder functional managers and training personnel. These locations were chosen to ensure that representative missions performed within the AFSC 493X0 career ladder were adequately covered. Bases visited were:

Hickman AFB HI	Major switching center for PACAF area
Randolph AFB TX	Base test facility function
Keesler AFB MS	Tech school location
Tinker AFB OK	Mobility functions
Cheyenne MT CO	High speed data functions
Onizuka AFS CA	Satellite functions
McClellan AFB CA	Technical control center functions
Andrews AFB MD	Major technical control facility; also has satellite, microwave, autodin, and primary control center functions
HQ DCA Wash DC	DCA functions
Fort Huachuca AZ	Computerized mobility functions
Shaw AFB SC	Air support operation center
Kelly AFB TX	ESC command and BCT facility
Torreon AB Spain	New concepts comm network
RAF Croughton UK	European technical control center and AUTODIN switching functions

A final inventory consisting of 634 tasks grouped under 11 duty headings was developed and validated for use in this survey.

Survey Administration

Consolidated Base Personnel Offices (CBPO) at operational bases worldwide administered the inventory to DAFSC 493X0 personnel holding 3-, 5-, 7-, and 9-skill levels and CEM Code 49300. Administration occurred from August 1987 to March 1988. Individuals were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL).

Survey Sample

Personnel were selected for this survey to ensure an accurate representation across major commands (MAJCOM) and paygrade groups. Of the 2,542 assigned personnel, 2,123 were mailed inventory booklets. Table 1 displays the percent of assigned distribution, by MAJCOM, of personnel in the career ladder as of November 1986. Also listed, by MAJCOM, is the percent distribution of the respondents in the final sample. The 1,595 respondents in the final sample represent 63 percent of the personnel assigned to the Communications-Computer Systems Control career ladder. Table 2 reflects the sample distribution by paygrade groups. From these tables, it can be seen that the final sample was representative of the career ladder.

Data Processing and Analysis

Once job inventories are returned from the field, the responses to both background and task information are checked for completeness and the data are then entered into the computer. Specialized computer analysis programs, called Comprehensive Occupational Data Analysis Programs (CODAP), are then applied to the data and various computer products are generated to aid in data analysis.

Computer-generated job descriptions are produced for groups of respondents, including DAFSC, Time in Service (TAFMS), Time in Career Field (TICF), MAJCOMs, and Conus/overseas groups, as well as Specialty Job groups. These descriptions include such information as percent members performing each task and the average percent time spent on each task.

Task Factor Administration

In addition to completing a job inventory, selected senior AFSC 493X0 personnel were asked to complete a second booklet for either training emphasis (TE) or task difficulty (TD). The TE and TD booklets are processed separately from the job inventories. Rating information is discussed in more detail in the training section of this report.

Task Difficulty (TD). Each person completing a TD booklet was asked to rate all inventory tasks on a 9-point scale (from extremely low to extremely high) as to the relative difficulty of those tasks. Difficulty is defined as the length of time required by an average incumbent to learn to do a particular task. Task difficulty data were independently collected from 57 senior-level AFSC 493X0 personnel stationed worldwide. Interrater reliability (as assessed through components of variance of standardized group means) was .93, which indicates high agreement among the 57 raters as to which tasks are the most difficult to learn to perform. Ratings are adjusted so tasks of average difficulty have ratings of 5.00, with a standard deviation of 1.00. The resulting data is essentially a rank ordering of tasks, indicating the relative degree of difficulty for each task in the inventory.

TABLE 1
COMMAND REPRESENTATION OF SURVEY SAMPLE

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AFCC	86	86
USAFE	2	2
TAC	3	2
AF ELEMENT EUR	2	2
AF ELEMENT OTHER	3	3
ATC	2	2
OTHERS	2	3

TOTAL PERSONNEL ASSIGNED: 2,542
 TOTAL PERSONNEL ELIGIBLE FOR SURVEY: 2,133
 TOTAL PERSONNEL IN SAMPLE: 1,595
 PERCENT OF ASSIGNED IN SAMPLE: 63%
 PERCENT OF ELIGIBLE IN SAMPLE: 75%

TABLE 2
PAYGRADE REPRESENTATION OF SURVEY SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF SAMPLE</u>	<u>PERCENT OF ASSIGNED</u>
AIRMEN	13	14
E-4	11	10
E-5	29	29
E-6	22	21
E-7	17	17
E-8	5	5
E-9	3	4

As of 8 Jul 87

Training Emphasis (TE). Another group of 56 senior technicians was selected to complete a TE booklet. This involved rating the inventory tasks on a 10-point scale from 0 (no training required) to 9 (extremely high training emphasis). The interrater reliability (as assessed through components of variance of standardized group means) for the 56 raters surveyed was .94, indicating a high level of agreement among raters as to which tasks require some form of structured training and the relative amount of emphasis that should be placed on those tasks. Training emphasis is a rating of which tasks, in the opinion of the raters, require structured training for first-term personnel. Structured training is defined as training provided at the resident technical school, field training detachment (FTD), mobile training teams, formal OJT, or any other organized training methods.

When used in conjunction with other factors, such as percent members performing and TD ratings, TE data provide insight into what the training requirements of the career field are. For the AFSC 493X0 career ladder, the average TE rating is 2.29, and the standard deviation is 2.17. Tasks rated 4.46 or higher are considered the primary tasks for first-term training programs within the career ladder.

SPECIALTY JOBS (Career Ladder Structure)

An important part of each occupational survey is to examine the overall job structure that exists within a career ladder, as well as how these jobs relate to each other. This is accomplished by examining what job incumbents indicate they are actually doing, rather than what the official career field documents dictate they should be doing. The automated job clustering program inherent in the CODAP system plays an integral part in the analysis of the actual job structure for a career ladder. Job groups are formed based on similarity of tasks performed and relative time spent performing those tasks. Starting with career ladder structure data, a thorough examination of the accuracy and completeness of career ladder documents (AFR 39-1 Specialty Descriptions and Specialty Training Standards) is conducted and an understanding of current utilization patterns is formulated.

The occupational analysis process consists of determining the functional job structure of career ladder personnel in terms of clusters, job types, and independent job types. A job type is a group of individuals who perform many of the same tasks and also spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as clusters. Finally, there are often cases of specialized job types that are too dissimilar to be grouped into any cluster. These unique groups are called independent job types.

Overview of Specialty Jobs

The job structure of the Communications-Computer Systems Control career ladder was determined by a job type analysis of survey data from 1,595 respondents. This analysis identified 12 clusters, 6 job types, and 11 independent job types. These jobs are illustrated in Figure 1 and listed below. The stage (STG) number shown beside each title is a reference to computer-printed information. The number of personnel in each job group (N) is also shown.

- I. SYSTEMS TEST AND EVALUATION TEAM PERSONNEL CLUSTER (STG044, N=28)
- II. TELECOMMUNICATION SERVICE SYSTEMS ANALYSIS PERSONNEL CLUSTER (STG150, N=11)
- III. SHIFT LEADERS AND SUPERVISORS CLUSTER (STG143, N=34)
- IV. NETWORK CONTROLLERS CLUSTER (STG239, N=40)
- V. AUTODIN SWITCHING CENTER PERSONNEL CLUSTER (STG282, N=32)
- VI. SHIFT SUPERVISORS AND NCOIC INDEPENDENT JOB TYPE (STG308, N=20)
- VII. CRITICOMM CONTROLLERS IJT (STG375, N=5)
- VIII. OVERSEAS DCS TECHNICAL CONTROLLERS CLUSTER (STG130, N=28)
- IX. DCS AUTOMATED TECHNICAL CONTROL IJT (STG158, N=14)
- X. COMMUNICATIONS SYSTEMS TECHNICAL CONTROL PERSONNEL CLUSTER (STG125, N=541)
- XI. CIRCUIT ACTIONS PERSONNEL CLUSTER (STG190, N=84)
- XII. CONTROL TEST FACILITY CABLE REPAIR PERSONNEL IJT (STG200, N=5)
- XIII. COMBAT COMMUNICATIONS SYSTEMS PERSONNEL IJT (STG238, N=117)
- XIV. COMMUNICATIONS SYSTEMS CONTROL SUPERVISORY PERSONNEL CLUSTER (STG072, N=247)
- XV. TRAINING NCOs IJT (STG847, N=17)
- XVI. BASE CONTROL TEST FACILITY PERSONNEL IJT (STG169, N=10)
- XVII. TRAINING INSTRUCTORS (TECHNICAL SCHOOL) IJT (STG111, N=24)
- XVIII. MOBILITY/CONTINGENCY PERSONNEL CLUSTER (STG052, N=17)
- XIX. PERFORMANCE MONITORS AND EVALUATION PERSONNEL CLUSTER (STG037, N=52)

COMMUNICATION-COMPUTER SYSTEMS CONTROL SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

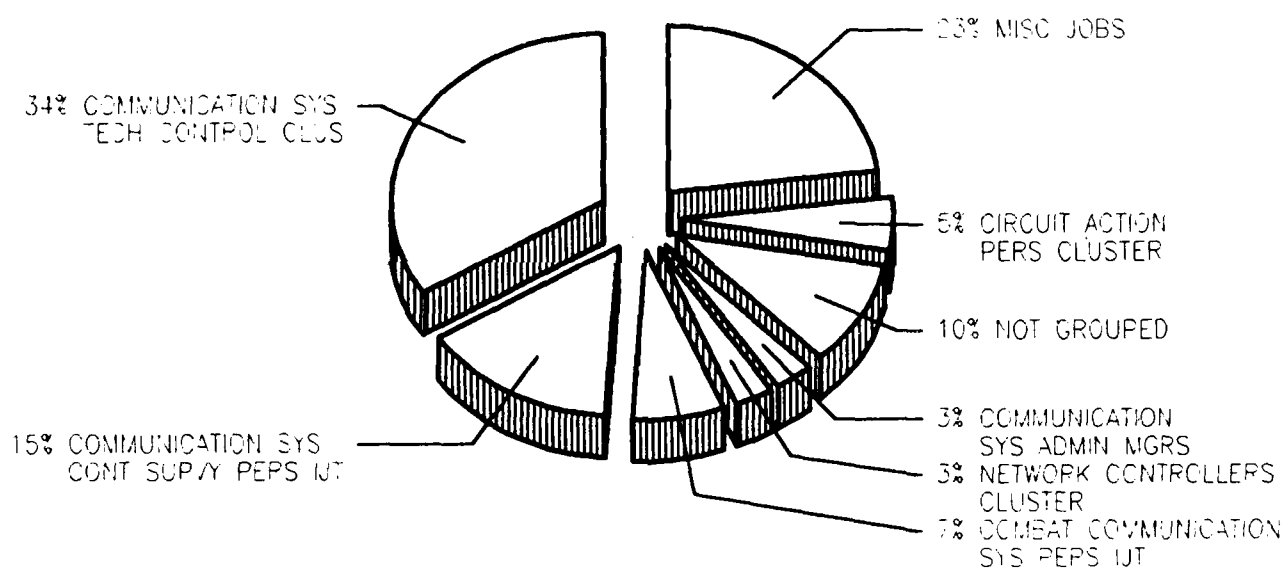


FIGURE 1

- XX. PRIMARY CONTROL CENTER/SATELLITE SYSTEMS PERSONNEL IJT
(STG211, N=9)
- XXI. COMPUTER OPERATORS/ADMINISTRATIVE TECHNICIANS
CLUSTER (STG079, N=38)
- XXII. COMMUNICATION SYSTEMS ADMINISTRATION MANAGERS IJT (STG133, N=36)
- XXIII. SYSTEMS EVALUATORS/QUALITY ASSURANCE PERSONNEL IJT
(STG187, N=13)

The respondents forming these groups account for 90 percent of the survey sample. The remaining 10 percent, though reporting similar job titles, are personnel whose responsibilities differ enough that they do not group with any of the identified specialty jobs.

Group Descriptions

The following paragraphs contain brief descriptions of the clusters, job types, and independent job types identified within the AFSC 493X0 career ladder. Relative percent time spent on duties for each group is presented in Table 4, while Table 3 reflects selected background data for each group. The discussion presented is limited to a brief description of the respondents who comprise the jobs and examples of tasks performed. Extensive lists of representative tasks performed by each specialty job discussed below are provided in Appendix A.

I. SYSTEMS TEST AND EVALUATION TEAM PERSONNEL CLUSTER (STG044, N=28). This cluster of 28 members is primarily involved with systems test and evaluation. They are members of a test and evaluation team and, as such, travel to and from various locations where problems exist. Their main tasks are to identify and correct problems or recommend corrective action to other responsible parties. These personnel spend a majority of their time (76 percent) on tasks related to three broad duty categories--performing circuit monitoring and analysis, performing wideband systems performance monitoring and analysis, and maintaining telecommunications service. Thirty-two percent of these personnel are assigned overseas. They perform an average of 40 tasks. Common tasks include:

- perform manual idle channel noise tests
- perform manual impulse noise tests
- perform manual amplitude vs frequency tests (frequency response test)
- perform manual envelope delay distortion tests
- perform manual phase jitter tests
- perform maximum change in audio frequency tests
- perform automated amplitude vs frequency tests (frequency response tests)

TABLE 3

SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS AND SUBCLUSTERS

	SYS TEST & EVAL TEAM PERS (STG044)	TELECOM SYS ANLYS SVS PERSONNEL (STG150)	SHIFT LDR/ SUPVRS (STG143)	NETWORK CONTROLLERS (STG239)	AUTODIN SWITCHING CTR PERS (STG282)	SHIFT SUPVRS & NCOICs (STG308)
NUMBER IN GROUP	28	11	34	40	32	20
PERCENT OF SAMPLE	2%	1%	2%	3%	2%	1%
PERCENT OVERSEAS	32%	82%	0%	5%	31%	10%
DAFSC DISTRIBUTION:						
49330	7%	45%	24%	25%	19%	5%
49350	25%	45%	71%	65%	72%	70%
49370	68%	9%	5%	10%	9%	25%
49390	0%	0%	0%	0%	0%	0%
49300	0%	0%	0%	0%	0%	0%
AVERAGE TICF (MONTHS)	107	35	44	50	35	53
AVERAGE TAFMS (MONTHS)	135	52	65	67	57	95
PERCENT IN FIRST ENLISTMENT	7%	64%	53%	45%	44%	0%
AVERAGE NUMBER OF TASKS PERFORMED	40	34	31	55	58	65
AVERAGE NUMBER SUPERVISED	2	7	2	2	2	3

* Less than 1 percent

TABLE 3 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS AND SUBCLUSTERS

	CRITICOMM CONTROL PERSONNEL (STG375)	OVERSEAS DCS TECH CONTROL (STG130)	DCS AUTO TECH CONTR PERSONNEL (STG158)	COMM SYS TECH CONTR PERSONNEL (STG125)	CIRCUIT ACTIONS PERSONNEL (STG190)	CONT TEST FACILITY CABLE REPR (STG200)
NUMBER IN GROUP	5	28	14	541	84	5
PERCENT OF SAMPLE	*	2%	1%	34%	5%	*
PERCENT OVERSEAS	44%	86%	64%	70%	44%	0%
DAFSC DISTRIBUTION:						
49330	20%	21%	36%	26%	7%	0%
49350	80%	68%	64%	65%	61%	80%
49370	0%	11%	0%	9%	31%	20%
49390	0%	0%	0%	0%	1%	0%
49300	0%	0%	0%	0%	0%	0%
AVERAGE T1CF (MONTHS)	19	49	31	38	70	95
AVERAGE TAFHS (MONTHS)	77	61	48	59	91	109
PERCENT IN FIRST ENLISTMENT	20%	57%	57%	53%	20%	0%
AVERAGE NUMBER OF TASKS PERFORMED	71	46	52	115	97	47
AVERAGE NUMBER SUPERVISED	0	1	2	3	2	1

* Less than 1 percent

TABLE 3 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS AND SUBCLUSTERS

	COMBAT COMM SYS PERSONNEL (STG238)	COMM SYS CONTROL SUPVRS (STG072)	TRAINING NCOs (STG847)	BASE CTR TEST FCLTY PERS (STG169)	TRAINING INSTRS (STG111)	MOBILITY/ CONTINGENCY PERSONNEL (STG052)
NUMBER IN GROUP	117	247	17	10	24	17
PERCENT OF SAMPLE	7%	15%	1%	1%	2%	1%
PERCENT OVERSEAS	0%	51%	59%	10%	0%	29%
DAFSC DISTRIBUTION:						
49330	17%	2%	0%	40%	0%	29%
49350	60%	26%	71%	50%	54%	59%
49370	23%	62%	29%	10%	46%	12%
49390	0%	7%	0%	0%	0%	0%
49300	0%	3%	0%	0%	0%	0%
AVERAGE T1CF (MONTHS)	56	118	71	76	113	38
AVERAGE TAFMS (MONTHS)	89	174	83	94	114	54
PERCENT IN FIRST ENLISTMENT	32%	1%	23%	20%	8%	41%
AVERAGE NUMBER OF TASKS PERFORMED	144	104	37	38	34	34
AVERAGE NUMBER SUPERVISED	4	5	2	3	4	5

* Less than 1 percent

TABLE 3 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS AND SUBCLUSTERS

	PERFORMANCE MONITORS & EVAL PERS (STG037)	PRIMARY CONTR CEN/ SATELLITE SYS PERSONNEL (STG211)	COMP OPRS/ ADMIN TECHS (STG079)	COMM SYS ADMIN MGRS (STG133)	SYSTEM EVAL/QA (STG187)
NUMBER IN GROUP	52	9	38	36	13
PERCENT OF SAMPLE	3%	1%	2%	3%	1%
PERCENT OVERSEAS	50%	44%	42%	27%	77%
DAFSC DISTRIBUTION:					
49330	4%	11%	0%	4%	0%
49350	58%	56%	24%	23%	15%
49370	36%	33%	74%	69%	77%
49390	2%	0%	2%	4%	0%
49300	0%	0%	0%	0%	8%
AVERAGE T1CF (MONTHS)	80	114	133	165	166
AVERAGE TAFMS (MONTHS)	104	123	184	195	212
PERCENT IN FIRST-ENLISTMENT	43%	22%	0%	4%	0%
AVERAGE NUMBER OF TASKS PERFORMED	38	40	35	18	21
AVERAGE NUMBER SUPERVISED	2	3	2	2	0

* Less than 1 percent

TABLE 4

RELATIVE PERCENT TIME SPENT ON DUTIES ACROSS JOB GROUPS

DUTIES	SYS TEST & EVAL TEAM PERS (STG044)	TELECOM SYS ANLYS SVS PERSONNEL (STG150)	SHIFT LDR/ SUPVRS (STG143)	NETWORK CONTROLLERS (STG239)	AUTODIN SWITCHING CTR PERS (STG282)	SHIFT SUPVRS & NCOICs (STG308)
A. ORGANIZING AND PLANNING	1	0	1	1	1	1
B. DIRECTING AND IMPLEMENTING	2	5	6	4	7	14
C. INSPECTING AND EVALUATING	1	1	1	1	1	3
D. TRAINING	1	1	1	1	2	11
E. PERFORMING ADMINISTRATIVE FUNCTIONS	9	16	38	20	28	20
F. PERFORMING CIRCUIT MONITORING & ANALYSIS	49	20	9	15	18	12
G. PERFORMING WIDEBAND SYSTEMS PER- FORMANCE MONITORING & ANALYSIS	16	4	2	4	2	2
H. MAINTAINING TELECOMMUNICATIONS SERVICE	11	35	36	45	36	30
I. ERECTING & MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	4	13	4	5	4	4
J. PERFORMING GENERAL TELECOMMUNICA- TIONS FUNCTIONS	6	3	2	2	1	1
K. PERFORMING PRIMARY CONTROL CENTER AND DEFENSE SATELLITE COMMUNICA- TIONS SYSTEMS FUNCTIONS	0	0	*	1	*	*

* Less than 1 percent

TABLE 4 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES ACROSS JOB GROUPS

DUTIES	CRITICOMM CONTROL PERSONNEL (STG375)	OVERSEAS DCS TECH CONTROL (STG130)	DCS AUTO TECH CONTR PERSONNEL (STG158)	COMM SYS TECH CONTR PERSONNEL (STG125)	CIRCUIT ACTIONS PERSONNEL (STG190)	CONT TEST FACILITY CABLE REPR (STG200)
A. ORGANIZING AND PLANNING	2	1	1	1	5	8
B. DIRECTING AND IMPLEMENTING	1	1	*	1	9	12
C. INSPECTING AND EVALUATING	1	1	*	1	3	3
D. TRAINING	6	1	2	2	2	9
E. PERFORMING ADMINISTRATIVE FUNCTIONS	38	15	20	19	29	25
F. PERFORMING CIRCUIT MONITORING & ANALYSIS	9	43	37	31	15	8
G. PERFORMING WIDEBAND SYSTEMS PER- FORMANCE MONITORING & ANALYSIS	2	5	3	8	2	*
H. MAINTAINING TELECOMMUNICATIONS SERVICE	30	25	29	25	24	23
I. ERECTING & MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	2	5	4	5	6	6
J. PERFORMING GENERAL TELECOMMUNICA- TIONS FUNCTIONS	4	1	*	2	4	6
K. PERFORMING PRIMARY CONTROL CENTER AND DEFENSE SATELLITE COMMUNICA- TIONS SYSTEMS FUNCTIONS	*	*	*	*	*	*

* Less than 1 percent

TABLE 4 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES ACROSS JOB GROUPS

DUTIES	COMBAT COMM SYS PERSONNEL (STG238)	COMM SYS CONTROL SUPVRS (STG072)	TRAINING NCOs (STG847)	BASE CTR TEST FCLTY PERS (STG169)	TRAINING INSTRS (STG111)	MOBILITY/ CONTINGENCY PERSONNEL (STG052)
A. ORGANIZING AND PLANNING	2	14	5	3	1	1
B. DIRECTING AND IMPLEMENTING	5	19	11	4	7	2
C. INSPECTING AND EVALUATING	2	11	3	1	1	1
D. TRAINING	3	11	71	2	40	6
E. PERFORMING ADMINISTRATIVE FUNCTIONS	14	22	8	19	8	17
F. PERFORMING CIRCUIT MONITORING & ANALYSIS	14	6	*	12	20	10
G. PERFORMING WIDEBAND SYSTEMS PER- FORMANCE MONITORING & ANALYSIS	1	1	*	2	8	1
H. MAINTAINING TELECOMMUNICATIONS SERVICE	19	9	1	42	13	11
I. ERECTING & MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	33	3	*	5	1	38
J. PERFORMING GENERAL TELECOMMUNICA- TIONS FUNCTIONS	6	1	*	10	1	13
K. PERFORMING PRIMARY CONTROL CENTER AND DEFENSE SATELLITE COMMUNICA- TIONS SYSTEMS FUNCTIONS	*	*	*	*	*	*

* Less than 1 percent

TABLE 4 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES ACROSS JOB GROUPS

DUTIES	PERFORMANCE MONITORS & EVAL PERS (STG037)	PRIMARY CONTR CEN/ SATELLITE SYS PERSONNEL (STG211)	COMP OPRS/ ADMIN TECHS (STG079)	COMM SYS ADMIN MGRS (STG133)	SYSTEM EVAL/QA (STG187)
A. ORGANIZING AND PLANNING	4	2	15	6	8
B. DIRECTING AND IMPLEMENTING	8	10	22	14	12
C. INSPECTING AND EVALUATING	2	2	11	15	49
D. TRAINING	3	3	3	2	8
E. PERFORMING ADMINISTRATIVE FUNCTIONS	66	23	37	53	17
F. PERFORMING CIRCUIT MONITORING & ANALYSIS	3	1	2	1	1
G. PERFORMING WIDEBAND SYSTEMS PERFORMANCE MONITORING & ANALYSIS	2	*	1	*	*
H. MAINTAINING TELECOMMUNICATIONS SERVICE	8	9	5	3	1
I. ERECTING & MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	1	1	3	1	1
J. PERFORMING GENERAL TELECOMMUNICA- TIONS FUNCTIONS	3	3	1	4	3
K. PERFORMING PRIMARY CONTROL CENTER AND DEFENSE SATELLITE COMMUNICA- TIONS SYSTEMS FUNCTIONS	*	48	*	1	*

* Less than 1 percent

perform automated impulse noise tests
pack or unpack equipment
measure channel levels on baseband signals

Only 7 percent of these personnel are in their first enlistment. Personnel average 135 months in the military, and they supervise an average of two subordinates. Sixty-eight percent hold DAFSC 49370.

Within this cluster, two job types were identified. The primary difference between the two centered around the fact that one group was more involved with manual testing, while the other group was more involved with automated testing.

II. TELECOMMUNICATION SERVICE SYSTEMS ANALYSIS PERSONNEL CLUSTER (STG150), N=11). This group of personnel are telecommunication technicians primarily involved with systems analysis, to include digital circuit fault isolation and related functions. There are two noted variations within this cluster--Zenith 100 and 150 computer personnel and those who do not use computers in the performance of their job. These personnel have an average of 52 months in the military, and 64 percent are in their first enlistment. Eighty-two percent are assigned to overseas locations. They spend a majority of their job time (84 percent) performing tasks related to four broad duty categories--maintaining telecommunications service, performing circuit monitoring and analysis, performing administrative functions, and erecting and maintaining tactical and combat communications equipment and facilities. They perform an average of 34 tasks. Common tasks include:

perform fault isolation on analog circuits
check continuity between local and distant technical controls
check continuity between local technical control and users
coordinate circuit and system outages with users or associated facilities
perform audio channel loop-backs
perform digital circuit loop-backs
check continuity of cables or in-house wiring
perform on-call patches
perform equipment loop-backs
coordinate circuit or equipment problems with other technical controls or communications facilities
adjust line amplifiers
perform continuity checks on patch cords

III. SHIFT LEADERS AND SUPERVISORS CLUSTER (STG143, N=34). These personnel are primarily technicians who perform both technical and supervisory functions. They spend 74 percent of their job time on tasks related to performing administrative functions, and maintaining telecommunications service. They perform an average of 31 tasks. Common tasks include:

- coordinate circuit and system outages with users or associated facilities
- participate in alerts or recalls
- perform digital circuit loop-backs
- patch cryptographic equipment
- perform fault isolation on circuits using black digital patch bays
- coordinate circuit or equipment problems with other technical technical controls or communications facilities
- perform equipment loop-backs
- prepare master station log forms
- perform time hacks on master station clocks

Fifty-three percent of these personnel are in their first enlistment and average 66 months in the military. Seventy-one percent hold DAFSC 49350.

IV. NETWORK CONTROLLERS CLUSTER (STG239, N=40). This cluster of personnel are primarily responsible for monitoring and maintaining the network communications systems for the Air Force. Only 5 percent of these personnel are assigned to overseas locations. A majority of the job time (80 percent) is spent maintaining telecommunications service, performing administrative functions, and performing circuit monitoring and analysis. They perform an average of 55 tasks. Common tasks include:

- perform digital circuit loop-backs
- perform equipment loop-backs
- perform fault isolation on computer network circuits
- coordinate circuit or equipment problems with other technical controls or communications facilities
- perform fault isolation on high speed data circuits
- perform audio channel loop-backs
- coordinate circuit and system outages with users or associated facilities
- perform BIT error rate test on high speed circuits
- analyze causes of digital circuit failures
- perform fault isolation on data circuits to outlying buildings

Within this cluster, two job types were identified. One small group of 11 people broke out because they were slightly more involved with the patch and test functions. A second group of 29 people were all assigned to the Air Force Military Personnel Center (AFMPC) and were responsible for communication circuits between AFMPC and personnel computers located at other bases.

V. AUTODIN SWITCHING CENTER PERSONNEL CLUSTER (STG282, N=32). The incumbents in this cluster are working mainly in AUTODIN switching centers. They are primarily responsible for ensuring that AUTODIN switching circuits and associated equipment are operating correctly. Two variations are noted

within this cluster--Primary/AUTODIN Technical Control Services (High Speed Data) Personnel and Digital Control (Primary Technical Control Facility) Personnel. They perform an average of 58 tasks. Common tasks include:

- perform digital circuit loop-backs
- perform fault isolation on circuits using black digital patch bays
- perform equipment loop-backs
- patch cryptographic equipment
- coordinate circuit and system outages with users or associated facilities
- participate in alerts or recalls
- perform cryptographic synchronizations
- perform audio channel loop-backs
- maintain circuit outage reports
- prepare technical control communications work order forms

VI. SHIFT SUPERVISORS AND NCOICs INDEPENDENT JOB TYPE (STG308, N=20). These personnel are first-line supervisors and NCOICs of various telecommunications facilities. They are primarily responsible for day-to-day supervision of subordinate personnel. They supervise an average of three subordinates. A majority of their job time (64 percent) is spent on tasks related to three broad duty categories--maintaining telecommunications service, performing administrative functions, and directing and implementing. They perform an average of 65 tasks. Common tasks include:

- perform digital circuit loop-backs
- counsel trainees on training progress
- counsel personnel
- direct fault isolation or correction of circuit or system malfunctions
- write APR
- supervise Apprentice Communications-Computer Systems Control Specialists (AFSC 49330)
- patch cryptographic equipment
- supervise Communications-Computer Systems Control Specialists (AFSC 49350)
- conduct OJT

VII. CRITICOMM CONTROLLERS IJT (STG375, N=5). These personnel perform a unique job involving critical communications systems. A majority of their job time is spent in two broad categories--performing administrative functions and maintaining telecommunications service. Within their job, they are involved with modems, cryptographic equipment, and associated equipment. They perform an average of 71 tasks. Common tasks include:

- coordinate circuit and system outages with users or associated facilities
- coordinate power changeovers with communications support facilities
- patch MODEMs
- perform fault isolation on AUTOSEVOCOM
- patch multiplexers
- patch cryptographic equipment
- maintain communications outage reports
- patch commercial equipment, lines, or channels
- perform time hacks on master station clocks
- direct fault isolation or correction of circuit or system malfunctions

VIII. OVERSEAS DEFENSE COMMUNICATIONS SERVICE (DCS) TECHNICAL CONTROLLERS CLUSTER (STG130, N=28). This cluster of respondents is primarily located overseas (86 percent). These incumbents work in DCS technical control facilities and are responsible for ensuring that communications circuits and associated traffic are operating optimally. Many of the tasks they perform involve manual procedures. These incumbents spend 83 percent of their time on tasks related to performing circuit monitoring and analysis, maintaining telecommunications service, and performing administrative functions. Two variations are noted within this cluster--Manual Technical Controllers and Overseas Primary Technical Controllers. The Manual Technical Controllers are more involved with manual procedures than the Overseas Primary Technical Controllers. They perform an average of 46 tasks. Common tasks include:

- perform manual idle channel noise tests
- perform manual QC on standard test tone levels
- perform manual impulse noise tests
- perform audio channel loop-backs
- coordinate circuit and system outages with users or associated facilities
- perform manual envelope delay distortion tests
- perform digital circuit loop-backs
- perform fault isolation on analog circuits
- perform maximum change in audio frequency tests
- perform equipment loop-backs
- perform manual amplitude vs frequency tests (frequency response test)

IX. DCS AUTOMATED TECHNICAL CONTROL IJT (STG158, N=14). These incumbents work primarily in DCS technical control facilities and are responsible for ensuring that communications circuits and associated traffic are operating effectively. These personnel are similar to those personnel described in the overseas DCS technical controllers group above, with the main distinction being that this group is more involved with automated procedures.

The incumbents spend 86 percent of their job time performing circuit monitoring and analysis, maintaining telecommunications service, and performing administrative functions. They perform an average of 52 tasks. Common tasks include:

- coordinate circuit and system outages with users or associated facilities
- perform automated quality checks on standard test tone levels
- perform automated idle channel noise tests
- perform automated impulse noise tests
- perform automated envelope delay distortion tests
- perform digital circuit loop-backs
- perform automated amplitude vs frequency tests (frequency response tests)
- perform harmonic distortion tests
- perform automated phase jitter tests

X. COMMUNICATIONS SYSTEMS TECHNICAL CONTROL PERSONNEL CLUSTER (STG125, N=541). This large cluster represents the core job of the Communications-Computer Systems Control career ladder. These personnel are primarily responsible for accomplishing the day-to-day telecommunications control functions. They spend 75 percent of their job time on tasks related to performing circuit monitoring and analysis, maintaining telecommunications service, and performing administrative functions. They perform an average of 115 tasks. Common tasks include:

- perform audio channel loop-backs
- perform fault isolation on analog circuits
- perform manual idle channel noise tests
- perform maximum change in audio frequency tests
- perform manual QC on standard test tone levels
- perform manual impulse noise tests
- perform continuity checks on patch cords
- perform on-call patches
- perform manual envelope delay distortion tests
- perform digital circuit loop-backs
- perform equipment loop-backs
- coordinate circuit and system outages with users or associated facilities

This cluster consists of several variations--Technical Control Personnel, Information Systems Personnel, Telecommunications Personnel, System Shift Supervisors, Base Control Test Facilities Personnel, Quality Control NCOs, Wideband/ABNCP Net Controllers, Site Control Personnel, Technical Control Training NCOs, and Wing Circuit NCOs.

XI. CIRCUIT ACTIONS PERSONNEL CLUSTER (STG190, N=84). This cluster of respondents is primarily responsible for directing floor operations at telecommunications facilities and ensuring that communications and associated

equipment remain operational. They spend almost equal amounts of time on administrative and technical-related functions. Overall, 68 percent of their job time is spent on tasks related to three broad duties--performing administrative functions, maintaining telecommunications service, and performing circuit monitoring and analysis. They perform an average of 97 tasks. Common tasks include:

- maintain circuit data forms
- direct wiring of cross-connections on distribution frames or matrix boards
- wire cross-connects on distribution frames
- prepare circuit data forms
- implement activation or changes of circuits
- wire temporary cross-connects on distribution frames
- label patch bays or equipment
- check continuity of cables or in-house wiring
- perform fault isolation on analog circuits
- maintain circuit history folders
- establish changes in circuits or channels

XII. CONTROL TEST FACILITY CABLE REPAIR PERSONNEL IJT (STG200, N=5). These personnel are primarily responsible for repairing and maintaining cables or cable systems. While they are primarily involved with cables and cable systems, they also perform circuit monitoring and analysis. They spend 60 percent of their job time on tasks related to performing administrative functions, maintaining telecommunications service, and directing and implementing. They perform an average of 47 tasks. Common tasks include:

- maintain cable record forms
- determine work priorities
- plan work assignments
- conduct OJT
- check continuity of cables or in-house wiring
- perform fault isolation on cable systems
- prepare circuit data forms
- direct fault isolation or correction of circuit or system malfunctions
- prepare cable record forms
- perform fault isolation on DDN systems and circuits
- wire cross-connects on distribution frames

XIII. COMBAT COMMUNICATIONS SYSTEMS PERSONNEL IJT (STG238, N=117). Fifty-eight percent of these personnel are assigned to combat communication groups, with 37 percent assigned to tactical units. These incumbents spend 33 percent of their job time erecting and maintaining tactical and combat communications equipment and facilities, 19 percent maintaining telecommunications service, and 14 percent performing circuit monitoring and analysis. They are primarily responsible for ensuring that communications circuits used by mobile

tactical units are operational. There are four noted variations within this cluster--Tactical Unit Personnel, Combat Communications Systems Personnel, Mobility Personnel, and Combat Shift Workers. They perform an average of 144 tasks. Common tasks include:

- operate military vehicles
- camouflage mobile sites
- check continuity between local technical control and users
- pack or unpack equipment
- check continuity between local and distant technical controls
- perform audio channel loop-backs
- prepare mobile vans for transport or storage
- fire m-16 weapons
- load or unload mobile communications equipment on and off vehicles and pallets
- operate environmental control units

XIV. COMMUNICATIONS SYSTEMS CONTROL SUPERVISORY PERSONNEL CLUSTER (STG072, N=247). These respondents are first-line supervisors of various telecommunications facilities. They spend a majority of their job time (55 percent) performing tasks related to supervisory duties (A-D). An additional 22 percent is spent on administrative functions. Although they are generally supervisors, they also perform some technical tasks. Within this cluster, several variations are noted--Communications Systems Shift Leaders, Communications Systems NCOICs, Managers and Branch Chiefs, Tactical Supervisors, OJT Supervisors, and Circuit History Data Supervisors. They perform an average of 104 tasks. Common tasks include:

- write APR
- counsel personnel
- indoctrinate newly assigned personnel
- interpret policies, directives, or procedures for subordinates
- determine work priorities
- assign personnel to duty positions
- participate in alerts or recalls
- prepare recommendations for awards or decorations
- schedule leaves
- supervise Communications-Computer Systems Control Specialists (AFSC 49350)

XV. TRAINING NCOs IJT (STG847, N=17). These individuals are primarily responsible for training subordinates at the worksite. They are assigned to locations other than the technical school, and provide hands-on training to ensure that job requirements are correctly met. They spend a majority of their job time (71 percent) on training tasks. They perform an average of 37 tasks and supervise an average of two subordinates. Common tasks include:

- counsel personnel
- develop training plans
- write test questions
- score tests
- administer tests
- evaluate OJT trainees
- counsel trainees on training progress
- maintain training records, charts, or graphs
- determine OJT requirements
- evaluate progress of students

XVI. BASE CONTROL TEST FACILITY PERSONNEL IJT (STG169, N=10). These personnel are primarily involved with maintaining and monitoring base control test facilities, which involves fault isolations, analyzing causes of circuit failure, and systems repair. They spend 73 percent of their job time on tasks related to maintaining telecommunications service, performing administrative functions, and performing circuit monitoring and analysis. Only 10 percent are assigned to overseas locations. They perform an average of 38 tasks. Common tasks include:

- perform fault isolation on cable systems
- perform fault isolation on data circuits to outlying buildings
- perform equipment loop-backs
- perform fault isolation on high speed data circuits
- run data lines to computer terminals

XVII. TRAINING INSTRUCTORS (TECHNICAL SCHOOL) IJT (STG111, N=24). This group of 24 instructors conduct resident course classroom training and are all assigned to Keesler Technical Training Center. Fifty-four percent of these personnel hold DAFSC 49350, and the remaining 46 percent hold DAFSC 49370. They spend 73 percent of their job time on tasks related to three duties--training, performing circuit monitoring and analysis, and maintaining telecommunications service. They perform an average of 34 tasks. Common tasks include:

- administer tests
- score tests
- conduct resident course classroom training
- counsel trainees on training progress
- evaluate progress of students
- counsel personnel
- write test questions
- adjust line amplifiers
- measure group pilot levels
- remove or replace signaling units
- measure pilots at baseband level
- adjust amplitude equalizers

XVIII. MOBILITY/CONTINGENCY PERSONNEL CLUSTER (STG052, N=17). This group consists of personnel who perform driving, quality control, and setup functions, and other routine mobility and contingency-related functions. They spend 55 percent of their job time on tasks related to erecting and maintaining tactical and combat communications equipment and facilities and performing administrative functions. They perform an average of 34 tasks. Common tasks include:

- perform safety checks on vehicles
- road check vehicles
- operate military vehicles
- participate in alerts or recalls
- camouflage mobile sites
- pack or unpack equipment
- load or unload mobile communications equipment on and off vehicles and pallets
- clean weapons
- prepare mobile vans for transport or storage
- fire m-16 weapons
- prepare personal clothing and equipment for deployment
- clean or wax military vehicles

XIX. PERFORMANCE MONITORS AND EVALUATION PERSONNEL CLUSTER (STG037, N=52). These personnel are primarily responsible for monitoring performance of personnel within the Communications-Computer Systems Control career ladder. This cluster consists of several variations--Quality Control Personnel, Analysis and Evaluation Personnel, Systems Managers, Operational/Readiness Controllers, and Trends and Analysis Personnel. They perform an average of 38 tasks and supervise an average of two subordinates. Common tasks include:

- type forms, reports, or correspondence
- coordinate circuit and system outages with users or associated facilities
- maintain circuit outage reports
- maintain communications outage reports
- process forms, reports, or correspondence using word processors and keyboards
- maintain master station log forms
- store classified information or materials
- maintain trend analysis files
- store, update, or print computerized circuit/group outage records

XX. PRIMARY CONTROL CENTER/SATELLITE SYSTEMS PERSONNEL IJT (STG211, N=9). These personnel are primarily responsible for satellite communications systems. They perform technical, as well as some supervisory-related, functions. They spend 48 percent of their job time on tasks related to performing primary control center and defense satellite communications systems functions. They perform an average of 40 tasks. Common tasks include:

- perform reboot/restart procedures
- create master satellite access schedules
- perform primary control center (PCC) access approvals
- perform PCC access cancellations
- perform PCC access changes
- perform PCC access denials
- perform PCC access pre-emptions
- perform satellite minimize procedures
- maintain master satellite access schedules

XXI. COMPUTER OPERATORS/ADMINISTRATIVE TECHNICIANS CLUSTER (STG079, N=38). These incumbents are experienced personnel having an average of 184 months in the military. They perform administrative support function which makes use of computers in the performance of their jobs. There are two variations within this cluster--Zenith 150 Computer Personnel and Zenith 100 Computer Personnel. They spend 74 percent of their job time on tasks related to performing administrative functions, directing and implementing, and organizing and planning. They perform an average of 35 tasks. Common tasks include:

- coordinate operational changes to circuits or channels
 - with users or defense communications agency (DCA)
- coordinate special communications requirements with users or DCA
- conduct briefings
- determine work priorities
- participate in alerts or recalls
- type forms, reports, or correspondence
- draft recommendations for system improvements
- write staff studies, surveys, or special reports
- prepare correspondence
- determine requirements for space, personnel, equipment,
 - or supplies
- engineer communication circuit systems
- coordinate installations with users or associated facilities

XXII. COMMUNICATIONS SYSTEMS ADMINISTRATION MANAGERS IJT (STG133, N=36). This group is comprised of experienced personnel who are performing clerical-related communications systems functions. Sixty-one percent of this group hold DAFSC 49370 or higher. A majority of their job time (53 percent) is spent performing tasks related to administrative functions. They perform an average of 18 tasks such as:

- prepare correspondence
- type forms, reports, or correspondence
- write staff studies, surveys, or special reports
- process forms, reports, or correspondence using word processors and keyboards
- maintain correspondence files

- prepare operational messages
- store classified information or materials
 - or classified material inventories
- conduct briefings
- destroy classified information or materials
- determine work priorities

XXIII. SYSTEMS EVALUATORS/QUALITY ASSURANCE PERSONNEL IJT (STG187, N=13). These personnel are responsible for directing facility quality control programs. They spend 49 percent of their job time on tasks related to inspecting and evaluating. They perform an average of 21 tasks. Common tasks include:

- write staff studies, surveys, or special reports
- inspect communications facilities
- evaluate quality control programs
- evaluate inspection reports or procedures
- evaluate training methods
- evaluate unit emergency or contingency plans
- evaluate safety programs
- evaluate security programs
- perform operational evaluations of mobile units
- prepare correspondence
- conduct briefings
- inspect area security or classified material inventories

Summary

Twelve job clusters and 11 independent job types were identified, indicating the Communications-Computer Systems Control career ladder is somewhat diverse. All of the cluster groups performed tasks associated with the larger career ladder responsibilities, such as circuit monitoring and analysis, maintaining telecommunications service, and administrative and supervisory functions. The 11 independent job type groups performed specialized functions--Shift Supervisors and NCOICs, CRITICOMM Controllers, DCS Automated Technical Controllers, Control Test Facility Cable Repair Personnel, Combat Communication Systems Personnel, Training NCOs, Base Control Test Facility Personnel, Training Instructors (Technical School), Primary Control Center/Satellite Systems Personnel, Communication Systems Administration Managers, and System Evaluators/Quality Assurance Personnel.

ANALYSIS OF DAFSC GROUPS

In addition to examining the job structure of the Communications-Computer Systems Control specialty (as discussed in the SPECIALTY JOBS section), this report also includes an analysis of tasks performed at each skill level. This information can be used to evaluate whether personnel are utilized in the

manner specified by the Specialty Descriptions (AFR 39-1) and can serve as one basis for considering changes to current utilization policies and training programs.

A comparison of duties and tasks performed between 3- and 5-skill level personnel indicates the jobs they perform are essentially the same; therefore, they are discussed as one group (49330/49350). The distribution of skill-level members across the career ladder specialty jobs is shown in Table 5. To give some indications of how skill-level groups are working within this ladder, the relative time spent on each duty by skill-level groups is presented in Table 6.

As can be seen from the tables, as an individual progresses through the skill levels, slightly more supervisory and administrative responsibilities are assumed. Also, in this progression, there is a slight decline in the amount of time spent performing technical duties as skill levels increase. More detailed descriptions relative to how skill-level groups are working and the differences, if any, between jobs they perform are presented below.

Skill-Level Descriptions

DAFSC 49330/49350. The 3- and 5-skill level personnel (68 percent of the sample) perform an average of 89 tasks. The largest percentage of the 3- and 5-skill level group are working as Communications Systems Technical Control Personnel (45 percent), which is the core job of this career ladder. The remaining personnel are working across a wide variety of jobs ranging from Combat Communications to mobility and contingency functions. A small number are also performing as shift leaders. Most of their work time (79 percent) is spent on tasks related to performing administrative functions, performing circuit monitoring and analysis, and maintaining telecommunications service (see Table 6).

The average time in career field for these members is 40 months, with their average TAFMS being 63 months. Table 7 lists representative tasks performed by these personnel. As mentioned in the career ladder structure discussion, this is a diverse career ladder. Examples of most common tasks performed by these personnel, as presented in Table 7, clearly document the fragmented jobs performed by these personnel. Most tasks pertain to maintaining telecommunication service, performing administrative functions, performing circuit monitoring and analysis, and erecting and maintaining tactical and combat communications equipment and facilities.

DAFSC 49370. Approximately 30 percent (474 members) of this sample hold a 7-skill level. These members are working in most of the identified jobs, with the largest number (32 percent) performing as supervisory personnel (see Table 5). Although they are spending more job time on supervisory-related tasks than the previously described group (38 versus 15 percent), well over half their total job time is still spent on technical functions. These personnel have an average of 171 months in the military, with an average of 130 months in the career field. They perform an average of 81 tasks. Examples of tasks commonly performed by 7-skill level members are presented in Table 8. Tasks

TABLE 5
DAFSC DISTRIBUTION ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

	DAFSC 49330/50 (N=1088)	DAFSC 49370 (N=474)	DAFSC 49390/00 (N=33)
I. Systems Test and Evaluation Team Personnel Cluster (STG044, N=28)	1%	4%	0
II. Telecommunication Service Systems Analysis Personnel Cluster (STG150, N=11)	1%	*	0
III. Shift Leaders and Supervisors Cluster (STG143, N=34)	3%	*	0
IV. Network Controllers Cluster (STG239, N=40)	3%	1%	0
V. Autodin Switching Center Personnel Cluster (STG282, N=32)	3%	1%	0
VI. Shift Supervisors and NCOICs Independent Job Type (STG308, N=20)	1%	1%	0
VII. CRITICOMM Controllers IJT (STG375, N=5)	*	0	0
VIII. Overseas DCS Technical Controllers Cluster (STG130, N=28)	2%	1*	0
IX. DCS Automated Technical Control IJT (STG158, N=14)	1%	0	0
X. Communications Systems Technical Control Cluster (STG125, N=541)	45%	10%	0
XI. Circuit Actions Personnel Cluster (STG190, N=84)	5%	5%	3%
XII. Control Test Facility Cable Repair Personnel IJT (STG200, N=5)	*	*	0
XIII. Combat Communication Systems Personnel (STG238, N=117)	8%	6%	0
XIV. Communications Systems Control Supervisory Personnel (STG072, N=247)	6%	32%	76%
XV. Training NCOs IJT (STG847, N=17)	1%	1	0
XVI. Base Control Test Facility Personnel IJT (STG169, N=10)	1%	*	0
XVII. Training Instructors (Technical School) IJT (STG111, N=24)	1%	2	0
XVIII. Mobility/Contingency Personnel Cluster (STG052, N=17)	1%	*	0
XIX. Performance Monitors and Evaluation Personnel Cluster (STG037, N=52)	3%	4	6
XX. Primary Control Center/Satellite Systems Personnel IJT (STG211, N=9)	1%	1%	0
XXI. Computer Operators/Administrative Technicians Cluster (STG079, N=38)	1%	6%	3%
XXII. Communication Systems Administration Managers IJT (STG133, N=36)	1%	5%	3%
XXIII. Systems Evaluators/Quality Assurance Personnel IJT (STG187, N=13)	*	2%	3%
Not Grouped	10%	16%	9%
	98%	98%	100%

* Less than 1 percent

Note: Columns may not add to 100 percent due to rounding

TABLE 6
RELATIVE PERCENT TIME SPENT ON DUTY BY DAFSC GROUPS

<u>DUTIES</u>	<u>DAFSC 49330/50 (N=1,088)</u>	<u>DAFSC 49370 (N=474)</u>	<u>DAFSC 49390/00 (N=33)</u>
A. ORGANIZING AND PLANNING	2	9	21
B. DIRECTING AND IMPLEMENTING	6	13	23
C. INSPECTING AND EVALUATING	2	8	20
D. TRAINING	5	8	6
E. PERFORMING ADMINISTRATIVE FUNCTIONS	23	26	20
F. PERFORMING CIRCUIT MONITORING AND ANALYSIS	22	10	2
G. PERFORMING WIDEBAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	5	2	*
H. MAINTAINING TELECOMMUNICATIONS SERVICE	24	12	4
I. ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	7	6	1
J. PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	3	4	2
K. PERFORMING PRIMARY CONTROL CENTER AND DEFENSE SATELLITE COMMUNICATIONS SYSTEMS FUNCTIONS	1	1	*

* Less than 1 percent

NOTE: Columns may not add to 100 percent due to rounding

TABLE 7
EXAMPLES OF TASKS PERFORMED BY
DAFSC 49330/50 PERSONNEL
(N=1,088)

TASKS	PERCENT MEMBERS PERFORMING
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	71
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	71
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	69
E190 PARTICIPATE IN ALERTS OR RECALLS	68
H429 PERFORM EQUIPMENT LOOP-BACKS	68
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	67
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	63
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	60
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	60
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	59
H426 PERFORM CONTINUITY CHECKS ON PATCH CORDS	59
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	58
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	55
F320 PERFORM MANUAL QC ON STANDARD TEST TONE LEVELS	55
H453 PERFORM ON-CALL PATCHES	55
F257 ADJUST LINE AMPLIFIERS	54
I492 CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	53
F324 PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	52
F317 PERFORM MANUAL IMPULSE NOISE TESTS	51
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	50
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	50

TABLE 8
EXAMPLES OF TASKS PERFORMED BY
DAFSC 49370 PERSONNEL
(N=474)

TASKS	PERCENT MEMBERS PERFORMING
E190 PARTICIPATE IN ALERTS OR RECALLS	63
A4 DETERMINE WORK PRIORITIES	60
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	58
B31 COUNSEL PERSONNEL	57
C78 WRITE APR	55
B25 CONDUCT BRIEFINGS	53
E207 PREPARE CORRESPONDENCE	52
B46 INDOCTRINATE NEWLY ASSIGNED PERSONNEL	52
B48 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	51
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	48
A3 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	47
A7 DEVELOP WORK PROCEDURES	45
E243 PROCESS FORMS, REPORTS, OR CORRESPONDENCE USING WORD PROCESSORS AND KEYBOARDS	43
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALIST (AFSC 49350)	43
B51 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	43
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	42
E115 DESTROY CLASSIFIED INFORMATION OR MATERIALS	42
B32 DIRECT CIRCUIT OR SYSTEM CHECKS	42
D85 CONDUCT OJT	42
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	41
A24 SCHEDULE LEAVES	41
D88 COUNSEL TRAINEES ON TRAINING PROGRESS	40
A21 PLAN WORK ASSIGNMENTS	40
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	40
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	40
E244 STORE CLASSIFIED INFORMATION OR MATERIALS	38
A15 ESTABLISH STANDARD OPERATING PROCEDURES (SOP)	38
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	38
H429 PERFORM EQUIPMENT LOOP-BACKS	38
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	38
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	36
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	36
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	36

which best distinguish the 7-skill level group from the previously described 3-/5-skill level group are presented in Table 9. Those tasks are primarily related to supervision.

DAFSC 49390/CEM 49300. Due to the similarity of tasks performed, percent time spent on duties, and level of tasks performed, these two skill levels are difficult to distinguish and are, therefore, described together. These highly skilled personnel comprise approximately 2 percent of the survey sample. Respondents at these two skill levels spend more of their time performing management, supervisory, and staff-level functions than the other skill-level groups previously discussed. They work primarily within jobs identified as management, supervision, and administrative. Eighty-four percent of their job time is spent on management tasks related to four broad duties--organizing and planning, directing and implementing, inspecting and evaluating, and performing administrative tasks. The main differences between these highly experienced personnel and those previously discussed are in the level of performance, as these members are high-level managers and supervisors and are often supervisors of 7-skill level personnel. Table 10 provides those tasks commonly performed by these AFSC 49390 and CEM 49300 personnel. Table 11 provides those tasks which distinguish between these personnel and 7-skill level personnel. The main difference is the increased management responsibilities common at the 9-skill and CEM Code levels.

Summary

Career ladder progression through the AFSC 493X0 skill levels is well defined, with 3- and 5-skill level personnel spending the majority of their job time performing general Communications-Computer Systems Control duties. The 7-skill level personnel spend more time doing supervisory functions than the 3- and 5-skill group; however, even at the 7-skill level, time spent on technical tasks is still high. DAFSC 49390 and CEM 49300 personnel spend 84 percent of their job time on supervisory, management, and administrative tasks.

ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

Occupational survey data for each of the AFSC 493X0 skill levels were compared to the AFR 39-1 Specialty Descriptions for the Communication-Computer Systems Control career ladder (DAFSCs 49330/49350/49370/49390 and CEM Code 49300), dated 1 February 1988. These descriptions are intended to give a broad overview of the duties and tasks performed by each skill level of the career ladder.

Based on the preceding DAFSC analysis, the 3-/5-skill level description appears complete and accurately reflects the broad range of duties and responsibilities of Communications-Computer Systems Control personnel. The 7-skill level, 9-skill level, and CEM Code descriptions also appear complete and accurate. The 7-skill level description clearly indicates involvement

TABLE 9

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 49330/50 AND 49370 PERSONNEL

TASK	DAFSC 49370 (N=1,088)	DAFSC 49330/50 (N=474)	DIFFERENCE
E207 PREPARE CORRESPONDENCE	53	14	39
A3 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT OR SUPPLIES	47	11	36
B51 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	43	10	33
B25 CONDUCT BRIEFINGS	53	22	31
A24 SCHEDULE LEAVES	42	11	31
C78 WRITE APR	56	26	30
B48 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	51	22	29
A15 ESTABLISH STANDARD OPERATING PROCEDURES (SOP)	38	9	29
A4 DETERMINE WORK PRIORITIES	61	32	29
C65 EVALUATE INSPECTION REPORTS OR PROCEDURES	34	5	29
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	38	72	-34
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	36	67	-31
H429 PERFORM EQUIPMENT LOOP-BACKS	38	69	-31
H453 PERFORM ON-CALL PATCHES	26	56	-30
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	31	60	-29
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	40	69	-29
H457 PERFORM TIME HACKS ON MASTER STATION CLOCKS	18	47	-29
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	43	71	-28
F257 ADJUST LINE AMPLIFIERS	27	54	-27

TABLE 10
EXAMPLES OF TASKS PERFORMED BY
DAFSC 49390/49300 PERSONNEL
(N=33)

TASKS	PERCENT MEMBERS PERFORMING
A4 DETERMINE WORK PRIORITIES	81
B25 CONDUCT BRIEFINGS	81
A3 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	78
C78 WRITE APR	78
B31 COUNSEL PERSONNEL	78
B48 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	75
B51 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	75
B47 INITIATE PERSONNEL ACTION REQUESTS	75
B46 INDOCTRINATE NEWLY ASSIGNED PERSONNEL	75
B57 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL TECHNICIANS (AFSC 49370)	72
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	72
C80 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	69
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	69
C65 EVALUATE INSPECTION REPORTS OR PROCEDURES	66
A21 PLAN WORK ASSIGNMENTS	66
C66 EVALUATE JOB DESCRIPTIONS	66
E190 PARTICIPATE IN ALERTS OR RECALLS	66
E207 PREPARE CORRESPONDENCE	63
C73 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	63
A10 DRAFT RECOMMENDATIONS FOR SYSTEM IMPROVEMENTS	63
A8 DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES	63
A15 ESTABLISH STANDARD OPERATING PROCEDURES (SOP)	63
A7 DEVELOP WORK PROCEDURES	60
C60 ANALYZE WORKLOAD REQUIREMENTS	60
C64 EVALUATE INDIVIDUALS FOR PROMOTION	60
A24 SCHEDULE LEAVES	60
B50 PREPARE OPERATIONAL MESSAGES	57
A17 PLAN LAYOUT OF FACILITIES	57
A13 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	57
C72 EVALUATE USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	57
B26 CONDUCT STAFF MEETINGS	57
A9 DRAFT BUDGET REQUIREMENTS	54
C75 INSPECT COMMUNICATIONS FACILITIES	51
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	51
C70 EVALUATE SUGGESTIONS	51
E243 PROCESS FORMS, REPORTS, OR CORRESPONDENCE USING WORD PROCESSORS AND KEYBOARDS	48
B52 PREPARE REQUISITIONS FOR EQUIPMENT OR SUPPLIES	45
C67 EVALUATE QUALITY CONTROL PROGRAMS	45

TABLE 11

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 49370 AND 49390/00

TASK	DAFSC 49370	DAFSC 49390/00	DIFFERENCE
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	37	3	34
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	36	3	33
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	38	6	32
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	38	6	32
H429 PERFORM EQUIPMENT LOOP-BACKS	38	6	32
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	40	9	31
F320 PERFORM MANUAL QC ON STANDARD TEST TONE LEVELS	32	3	29
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	31	3	28
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	36	9	27
F317 PERFORM MANUAL IMPULSE NOISE TESTS	30	3	27
F324 PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	30	3	27
E227 PREPARE MASTER STATION LOG FORMS	27	0	27
I532 ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	27	0	27
B47 INITIATE PERSONNEL ACTION REQUESTS	27	76	-49
B57 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL TECHNICIANS (AFSC 49370)	29	73	-44
C80 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	26	70	-44
C66 EVALUATE JOB DESCRIPTIONS	23	67	-44
A8 DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES	22	64	-42
B26 CONDUCT STAFF MEETINGS	19	58	-39
A17 PLAN LAYOUT OF FACILITIES	19	58	-39
A5 DEVELOP ORGANIZATIONAL CHARTS	20	58	-38
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	33	70	-37
A9 DRAFT BUDGET REQUIREMENTS	19	55	-36
A10 DRAFT RECOMMENDATIONS FOR SYSTEM IMPROVEMENTS	30	63	-33

with not only the supervisory responsibilities, but also the technical aspects of Communications-Computer Systems Control duties as well, while the 9-skill level and CEM code description accurately covers the management and supervisory functions performed by these personnel.

TRAINING ANALYSIS

Occupational survey data are used to assist in the planning, development, reviewing, and evaluation of various training programs and documents, such as the STS and POI. These training efforts are relevant to personnel working in their first assignment. Some factors which may be used in the analysis include percent of first enlistment (1-48 months TAFMS) personnel performing tasks, along with Training Emphasis (TE) and Task Difficulty (TD) ratings (as explained in the Task Factor Administration Section). These factors were used in reviewing the AFSC 493X0 STS and POI for Course 3ABR49330, based on the matching of inventory tasks to the appropriate sections of the POI and STS by experienced technical school personnel from Keesler Technical Training Center. A complete computer list displaying percent members performing TE, and TD ratings for each task, along with STS and POI matchings, has been forwarded to the technical school for use in further reviews of training documents. A summary of that information is presented below.

Training Emphasis (TE)

Training emphasis (TE) for each task in the inventory was assessed through ratings by 56 experienced Communication-Computers Systems Control Personnel. Data were processed to produce ordered listings of tasks in terms of recommended emphasis in training for first-term enlisted personnel. The average rating for all tasks included in the job inventory is 2.29, with a standard deviation of 2.17. Tasks receiving ratings of 4.46 or higher may be considered to have relatively high training emphasis. For a more complete description of these ratings, see the section on Task Factor Administration in the INTRODUCTION to this report. Examples of tasks rated highest in training emphasis are listed in Table 12. As can be seen, these tasks are related to performing manual or automated tests during circuit monitoring and analysis.

Task Difficulty (TD)

The relative difficulty of each task in the inventory was assessed through ratings of 57 experienced 493X0 NCOs. These ratings were processed to produce an ordered listing of all tasks in terms of their relative difficulty. Ratings were standardized to have an average of 5.0, with a standard deviation equal to 1.0. Tasks rated the most difficult by AFSC 493X0 personnel are listed in Table 13, and are related to a variety of Communications-Computer Systems Control functions. Many of these tasks seem to be high-level functions involving supervisory and managerial duties such as directing and implementing, training, inspecting and evaluating, and organizing and

TABLE 12

EXAMPLES OF TASKS RATED HIGHEST IN TRAINING EMPHASIS

TASKS	TNG EMP	1ST JOB	1ST ENL	TSK DIF
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	6.73	74	73	6.48
F317 PERFORM MANUAL BIT ERROR RATE TESTS ON DIGITAL CIRCUITS AND EQUIPMENT				
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	6.38	36	41	5.66
F320 PERFORM MANUAL QC ON STANDARD TEST TONE LEVELS	6.38	63	63	4.08
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	6.30	61	62	3.70
F313 PERFORM MANUAL ENVELOPE DELAY DISTORTION TESTS	6.29	64	65	7.15
F317 PERFORM MANUAL IMPULSE NOISE TESTS	6.25	55	56	7.01
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	6.23	56	57	4.21
F319 PERFORM MANUAL PHASE JITTER TESTS	6.18	65	65	6.88
F323 PERFORM MANUAL TERMINAL IMPEDANCE TESTS	6.16	42	44	5.10
F310 PERFORM MANUAL AMPLITUDE VS FREQUENCY TESTS (FREQUENCY RESPONSE TEST)	6.11	44	45	5.61
F315 PERFORM MANUAL HITS/DROPOUTS TESTS	6.09	57	56	5.37
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	6.09	43	45	4.82
F318 PERFORM MANUAL NONLINEAR DISTORTION TESTS	6.02	57	58	6.59
F257 ADJUST LINE AMPLIFIERS	5.98	41	43	5.20
F324 PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	5.93	65	62	4.24
F252 ADJUST AMPLITUDE EQUALIZERS	5.93	58	60	4.17
F253 ADJUST DELAY EQUALIZERS	5.91	51	49	6.26
G372 PERFORM BIT ERROR RATE TEST ON HIGH SPEED DATA CIRCUITS	5.91	47	45	7.02
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	5.89	39	41	5.15
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	5.86	70	70	5.30
F322 PERFORM MANUAL SINGLE TONE INTERFERENCE TESTS (CROSSTALK TEST)	5.82	51	56	5.70
	5.80	33	36	4.94

TABLE 12 (CONTINUED)

EXAMPLES OF TASKS RATED HIGHEST IN TRAINING EMPHASIS

TASKS	TNG EMP	1ST JOB	1ST ENL	TSK DIF
F325 PERFORM MAXIMUM NET LOSS VARIATION TESTS	5.73	52	52	4.37
G373 PERFORM BIT ERROR RATE TESTS ON TIME DIVISION MULTIPLEXING (TDM) EQUIPMENT	5.73	26	30	5.31
H447 PERFORM FAULT ISOLATION ON PULSE CODE MODULATION (PCM) SYSTEMS	5.68	29	30	6.55
F314 PERFORM MANUAL HARMONIC DISTORTION TESTS	5.66	38	38	5.36
H434 PERFORM FAULT ISOLATION ON CABLE SYSTEMS	5.66	36	39	5.72
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	5.63	81	77	5.18
F277 PERFORM AUTOMATED IDLE CHANNEL NOISE TESTS	5.57	52	50	4.06
G375 PERFORM C-NOTCHED NOISE MEASUREMENTS ON TIME DIVISION MULTIPLEXING/PULSE CODE MODULATION (TDM/PCM) SYSTEMS	5.57	38	39	4.62
F278 PERFORM AUTOMATED IMPULSE NOISE TESTS	5.55	51	48	4.11
H437 PERFORM FAULT ISOLATION ON COMPUTER NETWORK CIRCUITS (MODEMS)	5.55	42	43	6.47
F274 PERFORM AUTOMATED ENVELOPE DELAY DISTORTION TESTS	5.54	47	45	5.04
F337 PERFORM OUT-OF-SERVICE QC ON SIGNALING UNITS	5.54	29	28	5.40
F273 PERFORM AUTOMATED BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	5.52	38	40	4.75

TABLE 13

EXAMPLES OF TASKS RATED HIGHEST IN TASK DIFFICULTY

TASKS	TSK DIF	1ST ENL	5- LEV	7- LEV	TNG EMP
D92 DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	8.82	1	2	4	.23
A11 ENGINEER COMMUNICATION CIRCUIT SYSTEMS	8.19	3	6	24	1.09
A9 DRAFT BUDGET REQUIREMENTS	8.00	1	4	19	.04
A16 FORMULATE CIRCUIT CUTOVER PLANS	7.80	5	9	18	.79
D93 DEVELOP TRAINING PLANS	7.77	12	24	34	1.88
C80 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	7.61	2	6	26	.11
A17 PLAN LAYOUT OF FACILITIES	7.52	4	6	19	.18
B58 SUPERVISE FOREIGN NATIONALS	7.42	1	2	4	.29
A10 DRAFT RECOMMENDATIONS FOR SYSTEM IMPROVEMENTS	7.39	3	7	30	.54
C63 EVALUATE BUDGET REQUIREMENTS	7.34	1	3	18	.04
F263 CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS, CIRCUITS, OR EQUIPMENT	7.21	50	47	31	5.07
F264 FAULT ISOLATE ANTENNA MALFUNCTIONS	7.16	7	7	4	2.52
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	7.15	65	58	37	6.29
A8 DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES	7.13	5	7	22	.04
D86 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	7.03	1	4	5	.71
D87 CONDUCT TRAINING CONFERENCES	7.03	2	4	4	.14
F253 ADJUST DELAY EQUALIZERS	7.02	45	38	19	5.91
F313 PERFORM MANUAL ENVELOPE DELAY DISTORTION TESTS	7.01	56	48	29	6.25
C79 WRITE CIVILIAN PERFORMANCE RATINGS	6.99	0	1	1	.00
A12 ESTABLISH FACILITY PROFICIENCY RATING PROGRAMS	6.98	2	5	12	.05
I532 ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	6.97	43	40	27	3.95
D91 DEVELOP JOB PROFICIENCY GUIDES (JPG)	6.94	2	10	24	.95
H433 PERFORM FAULT ISOLATION ON AUTOSEVOCOM	6.93	25	21	13	4.61
I517 ERECT OR DISMANTLE AN/TSQ 92 BUBBLES	6.93	0	0	0	.23
I514 DIRECT TACTICAL SITE COMMUNICATIONS SET UP	6.92	1	2	6	.59
C77 PERFORM OPERATIONAL EVALUATIONS OF MOBILE UNITS	6.91	0	1	8	.02
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	6.88	65	60	38	6.18
C78 WRITE APR	6.82	3	31	56	2.21
D110 WRITE TEST QUESTIONS	6.82	8	15	25	.98
H400 INSTALL CIRCUITS ON OUTLYING BUILDINGS	6.79	4	6	8	1.34
C71 EVALUATE UNIT EMERGENCY OR CONTINGENCY PLANS	6.79	1	4	21	.43

planning. A few telecommunications systems functions and mobility and contingency functions are also included. Most of the tasks listed are performed by very few first-job and first-enlistment personnel.

First-Enlistment Personnel

In addition to the analysis of tasks and jobs across skill-level groups, it is also important to analyze jobs and tasks as they relate to experience in the career ladder. First-enlistment personnel are of particular interest in terms of training implications. The distribution of first-enlistment personnel across jobs is displayed in Figure 2.

As illustrated in Figure 2, first-enlistment personnel participate in a wide range of activities related to 493X0 functions and are members of all major job clusters. Seventy-six percent of their job time is spent performing tasks related to three broad functions--performing circuit monitoring and analysis (27 percent), maintaining telecommunications service (26 percent), and performing administrative functions (23 percent). Since the first-enlistment group is the target population for initial skill training, determining the tasks they perform is most important. Table 14 provides tasks commonly performed by airman within their first enlistment (1-48 months TAFMS). Test equipment and equipment used and operated by these personnel are also important factors in determining tasks performed and training needs. Tables 14A and 14B list most commonly used and operated test equipment and equipment, respectively. Common tasks include: performing audio channel loop-backs, performing on-call patches, analyzing causes of digital circuit failures, adjusting and lining amplifiers, and performing continuity checks on patch cords.

Specialty Training Standard (STS)

During the course of this analysis, technical school personnel from Keesler Air Force Base matched inventory tasks to the current STS. Utilizing the results of the matched data, a review of STS 493X0, dated June 1988, was conducted.

Overall, many areas of the STS are well supported by survey data. There are, however, quite a few areas on the STS which, on the surface, do not appear to be supported due to less than 20 percent members of the criterion groups (first-term, 5-, and 7-skill levels) performing matched tasks. Closer examination of these nonsupported areas reveals that several areas are indeed jobs being performed by personnel in the 493X0 career ladder (for example, those dealing with the Defense Communications Agency (DCA), establishing quality control test schedules, and maintaining facility and link data). Low percent members performing matched tasks, in this case, may be more a function of the diversity of jobs within the career ladder rather than a lack of support. Therefore, these areas may most likely be appropriate for inclusion in the STS.

JOB GROUP DISTRIBUTION FOR FIRST ENLISTMENT 49340 AIRMEN
(N=497)

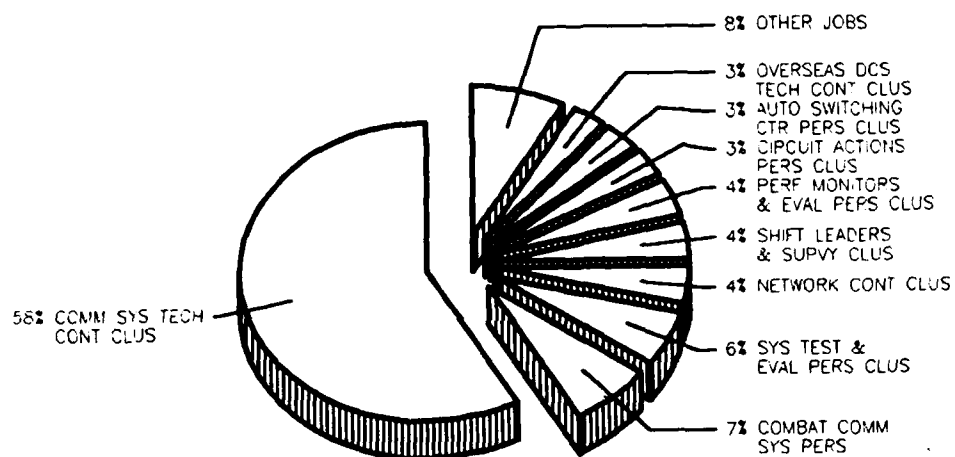


FIGURE 2

TABLE 14
EXAMPLES OF TASKS PERFORMED BY
FIRST-ENLISTMENT (1-48 MONTHS TAFMS) PERSONNEL
(N=497)

TASKS	PERCENT MEMBERS PERFORMING
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	78
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	76
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	75
H429 PERFORM EQUIPMENT LOOP-BACKS	74
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	73
E190 PARTICIPATE IN ALERTS OR RECALLS	70
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	69
H426 PERFORM CONTINUITY CHECKS ON PATCH CORDS	66
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	65
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	64
H453 PERFORM ON-CALL PATCHES	64
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	63
F320 PERFORM MANUAL QC ON STANDARD TEST TONE LEVELS	61
F257 ADJUST LINE AMPLIFIERS	61
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	60
F324 PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	59
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	57
I492 CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	57
F317 PERFORM MANUAL IMPULSE NOISE TESTS	56
F310 PERFORM MANUAL AMPLITUDE VS FREQUENCY TESTS (FREQUENCY RESPONSE TEST)	56
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	55
H396 DIRECT ALTERNATE ROUTING OF CIRCUITS	55
F313 PERFORM MANUAL ENVELOPE DELAY DISTORTION TESTS	55

TABLE 14 (CONTINUED)

EXAMPLES OF TASKS PERFORMED BY
FIRST-ENLISTMENT (1-48 MONTHS TAFMS) PERSONNEL
(N=497)

TASKS	PERCENT MEMBERS PERFORMING
H457 PERFORM TIME HACKS ON MASTER STATION CLOCKS	53
F325 PERFORM MAXIMUM NET LOSS VARIATION TESTS	52
E200 PREPARE CIRCUIT OUTAGE REPORTS	51
H391 COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	50
H288 PERFORM IN-SERVICE QC ON COMPOSITE SIGNAL TRANSMISSION LEVELS	50
H420 PATCH MODEMS	50
F277 PERFORM AUTOMATED IDLE CHANNEL NOISE TESTS	49
F263 CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS, CIRCUITS, OR EQUIPMENT	49
F252 ADJUST AMPLITUDE EQUALIZERS	49
E227 PREPARE MASTER STATION LOG FORMS	48
F281 PERFORM AUTOMATED QUALITY CHECKS ON STANDARD TEST TONE LEVELS	47
E239 PREPARE TECHNICAL CONTROL COMMUNICATIONS WORK ORDER FORMS	47

TABLE 14A

TEST EQUIPMENT USED BY 50 PERCENT OR
MORE FIRST-ENLISTMENT PERSONNEL
(PERCENT MEMBERS RESPONDING)

	<u>PERCENT MEMBERS RESPONDING</u>
Attenuators	58
Audio Frequency Signal Generators	76
Bit error Rate Test Sets	69
Built in test equipment	52
Decibel (dB) Meters	82
Digital Analyzers	57
Digital Distortion Analyzers	73
Digital Pattern Generators	68
Electronic Voltmeters	52
Envelope Delay Measuring Sets	76
Frequency Counters	69
Frequency Selective Voltmeters	69
Heikimen Test Systems (Manual)	64
Impulse Noise Counters	78
Multimeters	51
Noise Level Measuring Sets	66
Ohmmeters	51
Oscilloscopes	79
Phase Jitter Measuring Sets	72
Speakers	77
Teletypewriters	76
Test Pattern Generators	66

TABLE 14B
EQUIPMENT USED BY 50 PERCENT OR MORE
FIRST-ENLISTMENT PERSONNEL
(PERCENT MEMBERS RESPONDING)

	PERCENT MEMBERS PERFORMING
Alarm Systems	62
Amplitude and Delay Equalizers	62
Analog to Digital Converters	62
Black Digital Patch Bays	62
Circuit Conditioning Equipment	74
Circuit Patch Bays	85
Computer Printers (Hard Copy Printers)	51
Computer Terminals	51
Digital Data Modems	56
Distribution Frames	75
Pads and Amplifiers	74
Power Supplies	60
Signaling Equipment	50

There are, however, several subelements under major headings of the STS which need to be reviewed for appropriateness. These involve STS paragraph 7(a), Publications; and paragraphs 16f(1) establish quality control test schedules, 16f(7) maintaining facility and link data, 17c(17) singing point, 17c(18) echo return loss, (17e(7) digital level, 17i use automated test equipment, 18c(18) regenerative repeaters, and 18c(13) line isolation units (LIUs) (see Table 15). A full listing of all STS elements having less than 20 percent members performing matched tasks is presented in Appendix B.

In addition to reviewing those STS paragraphs which are not supported, training development personnel should also review tasks not referenced to the STS but which have more than 20 percent members performing and relatively high TE or TD ratings (see Table 16). A majority of these nonreferenced tasks are related to performing administrative functions and maintaining telecommunications service. All nonreferenced tasks should be reviewed by training managers and a decision made as to whether or not they should be covered by this STS.

Plan of Instruction (POI)

This 18.2-week Communications-Computer Systems Control Course, 3ABR49330, covers the various aspects of the Communications-Computer Systems Control career ladder, to include electronic principles--DC, AC, computers, soldering/desoldering, communications systems, multiplexing and transmission media, patching logic, fault isolation/technical control operations, systems control/circuit test, circuit conditioning, and systems impairments/assessment. The current POI for Course 3ABR49330 (dated June 1988) was examined using tasks matched by personnel from Keesler Technical Training Center to criterion objectives (CO), task difficulty ratings, training emphasis ratings, and percent of first-enlistment personnel performing information. The course was reviewed for appropriateness of instruction based on the jobs and tasks performed by survey respondents. The complete results of the matching of tasks to POI objectives are presented in a separate computer printout (PRTMOD) within the training extract.

Overall, the basic course is well supported by survey data. Training is provided on all major jobs being performed in the field. However, within several blocks of instruction, there were behavioral objectives which were not supported by the data. Most of these unsupported objectives are found in V 1d - Describe the steps taken in intrusioning, VII 1d - Identify signal flow, IX 2a - Describe procedures used for request for service, IX 2c - Describe procedures required for acceptance of telecommunications service order, XI 2a - Identify characteristics associated with digital impairments, XI 2c - Describe the procedures required for acceptance of telecommunications service orders, XI 2g - describe procedures for the reconfiguration of TDM equipment, and XI 2h - Describe procedures used to change configurations of interface terminals. Examples of unsupported objectives are presented in Table 17. A complete listing of all unsupported objectives can be found in Appendix C.

TABLE 15

EXAMPLE OF STS ELEMENTS REFLECTING LOW PERCENT MEMBERS PERFORMING TASKS
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

STS ELEMENTS	TNG EMP	PERCENT MEMBERS PERFORMING					TSK DIF
		1ST JOB	1ST ENL	5- LVL	7- LVL		
7. PUBLICATIONS							
A14 ESTABLISH PUBLICATION LIBRARIES	1.18	4	7	10	19	4.97	
7a DEFENSE COMMUNICATIONS AGENCY (DCA)							
- B -							
E130 MAINTAIN CIRCUIT TRUNK DIRECTIVES	1.91	4	3	3	7	4.24	
16f. SYSTEMS MANAGEMENT							
16f(1) ESTABLISH QUALITY CONTROL TEST SCHEDULES - a b							
A18 PLAN QUALITY CONTROL PROGRAMS	1.45	5	6	12	12	6.23	
B38 DIRECT QUALITY CONTROL PROGRAMS	1.63	6	8	14	19	5.41	
B45 IMPLEMENT TELECOMMUNICATIONS FACILITIES TESTING PROGRAMS	1.09	5	4	8	12	5.58	
16f(7) MAINTAIN FACILITY AND LINK DATA							
- - -							
E133 MAINTAIN COMMUNICATIONS FACILITIES LINK DATA REPORTS	2.41	6	6	8	12	5.08	
E159 MAINTAIN LINK PERFORMANCE REPORTS	2.30	9	8	8	6	3.99	
E145 MAINTAIN DCS DATA BASES	1.84	4	4	6	14	5.08	
17c(27) SINGING POINT							
a c -							
F321 PERFORMING MANUAL SINGING POINT TESTS	4.25	5	5	4	5	5.09	

TABLE 15 (CONTINUED)

EXAMPLE OF STS ELEMENTS REFLECTING LOW PERCENT MEMBERS PERFORMING TASKS
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

STS ELEMENTS		TNG EMP	PERCENT MEMBERS PERFORMING					TSK DIF
			1ST JOB	1ST ENL	5- LVL	7- LVL		
17c(18)	ECHO RETURN LOSS a c -							
F312	PERFORM MANUAL ECHO RETURN LOSS TESTS	5.25	16	14	9	9	5.70	
17e(7)	DIGITAL LEVEL a c -							
G385	PERFORM VOLTAGE MEASUREMENTS ON TDM/PCM SYSTEMS	4.07	9	8	6	4	4.82	
17i	USE AUTOMATED TEST EQUIPMENT 2b c -							
F285	PERFORM CIRCUIT PERFORMANCE MONITORING SYSTEMS SELF-TESTS USING PROTOCOLS	4.02	8	9	9	3	5.76	
H410	OPERATE COMPUTER DIAGNOSTIC EQUIPMENT, SUCH AS DATA SCOPES ADN PROTOCOL	3.57	10	15	16	13	6.41	
18c(13)	LINE ISOLATION UNITS (LIUs) a c -							
F258	ADJUST LINE ISOLATION RELAYS (LIR) OR BATTERY ISOLATION RELAYS (BIR)	5.14	11	4	4	4	5.05	

TABLE 16

EXAMPLES OF TASKS NOT REFERENCED TO
STS 493XO

TASKS NOT REFERENCED		TNG EMP	1ST JOB	1ST ENL	493 50	493 70	TSK DIF
H424	PERFORM AUDIO CHANNEL LOOP-BACKS	5.32	81	79	70	38	3.18
H428	PERFORM DIGITAL CIRCUIT LOOP-BACKS	5.25	78	75	65	36	3.49
H429	PERFORM EQUIPMENT LOOP-BACKS	5.50	76	74	68	38	3.52
E190	PARTICIPATE IN ALERTS OR RECALLS	2.59	69	70	69	64	3.38
E212	PREPARE EQUIPMENT OUTAGE REPORTS	3.21	37	35	29	14	4.78
E217	PREPARE IN-SERVICE OR OUT-OF-SERVICE QUALITY CONTROL REPORTS	3.34	35	33	27	10	4.97
H401	LOAD (REKEY) CRYPTOGRAPHIC MATERIAL	2.43	29	33	32	19	4.50
H425	PERFORM CONTINUITY CHECKS ON CROSS-CONNECT CURDS	4.16	34	33	28	17	3.26
H427	PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	3.63	27	31	27	16	4.13
H455	PERFORM OPERATOR MAINTENANCE ON TELETYPENRITERS, SUCH AS CHANGING RIBBONS OR REPLACING PAPER	3.32	38	40	37	25	3.12
H411	OPERATE CRYPTOGRAPHIC EQUIPMENT	2.61	18	24	23	13	4.76
E114	COORDINATE REQUESTS FOR MAINTENANCE ASSISTANCE WITH OFFICE OF PRIMARY RESPONSIBILITIES (OPR)	2.13	26	25	23	22	5.17

TABLE 17

EXAMPLES OF POI ELEMENTS REFLECTING LOW
PERCENT MEMBERS PERFORMING
(LESS THAN 30 PERCENT PERFORMING)

		TNG EMP	ATI	1ST JOB	1ST ENL	TSK DIF
V 1d.	Describe the steps to be taken in reporting of meaconing, intrusion, jamming, and interference (MIJI). STS: 2c(4) Meas: W (1.5)					
E162	Maintain meaconing, intrusion, jamming, and interference (MIJI) reports	2.30	7	6	7	4.91
B43	Implement security programs	1.14	2	1	2	5.04
VII 1d.	Identify signal flow connectivity through the digital patchbays. STS: 16e(6), 18c(13) Meas: W (2.5)					
F258	Adjust line isolation relays (LIR) or battery isolation relays (BIR)	5.14	11	4	4	5.05
IX 2a.	Describe procedures used for Request for Service (RFS). STS: 16f(6)(a)1 Meas: W (.5)					
A18	Plan quality control programs	1.45	2	5	6	6.23
IX 2c.	Describe the procedures required for acceptance of Telecommunications Service Order (TSO). STS: 16f(6)(a)3 Meas: W (3.5)					
B41	Implement changes to telecommunications systems	.82	2	5	7	6.27

TABLE 17 (CONTINUED)

EXAMPLES OF POI ELEMENTS REFLECTING LOW
PERCENT MEMBERS PERFORMING
(LESS THAN 30 PERCENT PERFORMING)

		TNG EMP	ATI	1ST JOB	1ST ENL	TSK DIF
XI 2a.	Identify characteristics associated with digital impairments. STS: 9b(1), 9e(1), 9e(2), 17e(2), 17e(3), 17e(7), 18c(5) Meas: W (5)					
G379	Perform nonlinear distortion measurements on TDM/PCM systems	4.54	11	2	18	5.45
G376	Perform compression-expansion linearity tests	3.91	7	4	5	5.36
XI 2c.	Describe the procedures required for acceptance of Telecommunications Service Order (TSO). STS: 16f(6)(a)3 Meas: W (5)					
B41	Implement changes to telecommunications systems	.82	2	5	7	6.27
XI 2g.	Describe procedures for the reconfiguration of TDM equipment. STS: 10d, 10g(10)(a), 16g(10)(b), 16e(16) Meas: PC (3)					
H389	Configure modems	3.14	7	14	20	5.84
XI 2h.	Describe procedures used to change configurations of interface terminals. STS: 10g(10)(a), 10g(10)(b), 16e(15) Meas: W (3)					
H399	Implement telecommunications systems contingency plans	3.50	7	20	24	5.96

In addition to the unsupported objectives, several tasks not being trained in the basic course which have more than 30 percent of first-enlistment personnel performing and high TE or TD ratings. Examples of those tasks are presented in Table 18. Training personnel are encouraged to review those tasks not referenced to POI 493X0 to determine whether it is most appropriate to cover those tasks in the basic course or in some other form of training.

ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS

A comparison was made between the tasks performed and the background data for the DAFSC 49350 personnel who were assigned within the CONUS versus those who were assigned to overseas locations. Overall, the jobs performed by the two groups are very similar with respect to the tasks performed and the time spent on those tasks. However, the job of the overseas respondents seem to be of a more technical control nature, due primarily to the fact that a number of the technical control functions are being performed by commercial companies in the CONUS.

A small number of task differences were noted between CONUS and overseas incumbents. For example, a larger number of overseas personnel reported spending time on such tasks as performing audio channel loop-back, checking continuity of cables or in-house wiring, and directing alternate routing of circuits. In addition, overseas personnel make wider use of DCS Communications Control Systems Facilities than CONUS personnel. Table 19 provides a list of those tasks which best differentiate between the CONUS and overseas incumbents.

A comparison of the background data reveals that a slightly larger percentage of CONUS personnel were in their first enlistment (32 percent versus 27 percent), while the average months in the career field are identical (48 months). Overseas respondents, however, reported performing a greater average number of tasks than those in the CONUS (103 versus 78).

Overall, only minor differences were identified between the role of CONUS and overseas personnel (see Table 20). The most noted differences are in the average number of tasks performed and the tasks which result due to lack of civilian contractors overseas.

JOB SATISFACTION

To provide functional managers within the AFSC 493X0 career ladder with a better understanding of factors which may affect the job performance of AFSC 493X0 airmen, an analysis of job satisfaction data was conducted. These data were gathered through the use of four inventory questions covering job interest, perceived utilization of talents and training, and reenlistment intentions.

TABLE 18

EXAMPLES OF TASKS NOT REFERENCED TO POI

TASKS	TNG EMP	1ST JOB	1ST ENL	TSK DIF
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	6.18	65	65	6.88
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	6.29	64	65	7.15
H391 COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	4.48	46	50	4.76
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	5.32	81	79	3.18
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	5.25	78	75	3.49
H429 PERFORM EQUIPMENT LOOP-BACKS	5.50	76	74	3.52
E115 DESTROY CLASSIFIED INFORMATION OR MATERIALS	3.14	37	39	3.84
E128 MAINTAIN CIRCUIT OUTAGE REPORTS	4.11	41	39	4.52
E161 MAINTAIN MASTER STATION LOG FORMS	3.84	41	39	3.92
E212 PREPARE EQUIPMENT OUTAGE REPORTS	3.21	37	35	4.78
E217 PREPARE IN-SERVICE OR OUT-OF-SERVICE QUALITY CONTROL REPORTS	3.34	35	33	4.97
H401 LOAD (REKEY) CRYPTOGRAPHIC MATERIAL	2.43	29	33	4.50
H425 PERFORM CONTINUITY CHECKS ON CROSS-CONNECT CORDS	4.16	34	33	3.26
H427 PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	3.63	27	31	4.13
H455 PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS, SUCH AS CHANGING RIBBONS OR REPLACING PAPER	3.32	38	40	3.12
I532 ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	3.95	39	43	6.97
J600 LABEL PATCH BAYS OR EQUIPMENT	2.70	33	35	3.76
H426 PERFORM CONTINUITY CHECKS ON PATCH CORDS	4.48	66	66	2.83
F276 PERFORM AUTOMATED HITS/DROPOUTS TESTS	5.34	38	38	4.03
F315 PERFORM MANUAL HITS/DROPOUTS TESTS	6.09	43	45	4.82
F331 PERFORM OUT-OF-SERVICE QC ON DC CIRCUITS	5.46	37	32	4.52
F336 PERFORM OUT-OF-SERVICE QC ON LINE AMPLIFIERS	5.07	30	30	4.20
F340 PERFORM OUT-OF-SERVICE QC ON TELETYPEWRITERS	4.68	30	30	4.21
F346 PERFORM QC ON TELETYPEWRITER PRINTERS	4.21	33	31	4.18
H434 PERFORM FAULT ISOLATION ON CABLE SYSTEMS	5.66	36	39	5.72
H437 PERFORM FAULT ISOLATION ON COMPUTER NETWORK CIRCUITS (MODEMS)	5.55	82	43	6.47
H447 PERFORM FAULT ISOLATION ON PULSE CODE MODULATION (PCM) SYSTEMS	5.68	29	30	6.55

TABLE 19

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 49350 CONUS AND OVERSEAS PERSONNEL

TASKS	CONUS	O/S	DIFFERENCE
F257 ADJUST LINE AMPLIFIERS	35	70	-35
F325 PERFORM MAXIMUM NET LOSS VARIATION TESTS	28	62	-34
H449 PERFORM FAULT ISOLATION ON SIGNALING EQUIPMENT	20	54	-34
F320 PERFORM MANUAL QC ON STANDARD TEST TONE LEVELS	38	72	-34
H453 PERFORM ON-CALL PATCHES	37	71	-34
F323 PERFORM MANUAL TERMINAL IMPEDANCE TESTS	20	54	-33
H463 REMOVE OR REPLACE DELAY EQUALIZERS	7	31	-23
H396 DIRECT ALTERNATE ROUTING OF CIRCUITS	35	59	-23
G371 PERFORM BASEBAND SWEEPS	14	36	-23
F305 PERFORM INSERTION LOSS (FREQUENCY RESPONSE) TESTS ON CIRCUIT COMPONENTS	12	34	-23
H443 PERFORM FAULT ISOLATION ON FREQUENCY DIVISION MULTIPLEX (FDM) SYSTEMS	19	41	-23
H459 REMOVE OR REPLACE AMPLITUDE EQUALIZERS	9	31	-23
F263 CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS, CIRCUITS, OR EQUIPMENT	35	58	-22
I492 CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	42	64	-22
F260 ADJUST SIGNALING UNITS	15	37	-22
F353 PERFORM TOTAL PEAK TELEGRAPH DISTORTION TESTS	12	34	-22
F314 PERFORM MANUAL HARMONIC DISTORTION TESTS	23	45	-22
F353 PERFORM TOTAL PEAK TELEGRAPH DISTORTION TESTS	12	34	-22
F293 PERFORM IN-SERVICE QC ON DIRECT CURRENT (DC) CIRCUITS	19	39	-21
F307 PERFORM LINK PERFORMANCE ASSESSMENT (LPA) OR PERFORM- ANCE MONITORING PROGRAM	9	29	-21
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	44	66	-21
G355 CALCULATE LINK IDLE CHANNEL NOISE (ICN) VALUES	14	34	-20
H455 PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS, SUCH AS CHANGING RIBBONS OR REPLACING PAPER	27	46	-20
G375 PERFORM C-NOTCHED NOISE MEASUREMENTS ON TIME DIVISION MULTIPLEXING/PULSE CODE MODULATION (TDM/PCM) SYSTEMS	21	41	-20
G366 MEASURE PILOTS AT BASEBAND LEVEL	16	35	-20
F337 PERFORM OUT-OF-SERVICE QC ON SIGNALING UNITS	14	34	-20
G357 DETERMINE LINK STATUS	11	31	-20
G364 MEASURE GROUP PILOT LEVELS	14	34	-20
E242 PREPARE WIDEBAND OUTAGE RECORD FORMS	12	33	-20
E115 DESTROY CLASSIFIED INFORMATION OR MATERIALS	33	52	-19
G370 PERFORM BASEBAND LOADING (BBL) MEASUREMENTS	14	33	-19

TABLE 20

COMPARISON OF BACKGROUND AND JOB SATISFACTION INFORMATION
FOR DAFSC 49350 CONUS AND OVERSEAS PERSONNEL

	CONUS PERSONNEL (N=406)	OVERSEAS PERSONNEL (N=429)
AVERAGE NUMBER OF TASKS PERFORMED:	78	103
AVERAGE MONTHS TICF	48	48
AVERAGE MONTHS TAFMS	74	71
PERCENT IN FIRST ENLISTMENT:	32	27
JOB SATISFACTION DATA:		
PERCENT FINDING THEIR JOB INTERESTING	73	81
PERCENT PERCEIVING THEIR TALENTS ARE UTILIZED AT LEAST FAIRLY WELL	75	82
PERCENT PERCEIVING THEIR TRAINING IS UTILIZED AT LEAST FAIRLY WELL	71	83
PERCENT PLANNING TO REENLIST	54	59

Table 21 presents job satisfaction data for TAFMS groups. Overall, job satisfaction indicators are satisfactory. When compared to a comparative sample of similar personnel surveyed in 1987, job satisfaction data are, in most cases, equal to or slightly higher for AFSC 493X0 personnel in most categories. The one exception is reenlistment intentions which are slightly lower. Being assigned to the routine and field-related functions was stated as the most probable cause for this low desire to reenlist. When comparing job satisfaction indicators of the current and previous survey, it is interesting to note that current personnel reflect higher job satisfaction than those of the previous survey (see Table 23).

Job satisfaction indicators for the specialty job groups were also generally good, with Control Test Facility Cable Repair Personnel and Systems Evaluators/Quality Assurance Personnel showing the lowest job interest of all the job groups (see Table 22). Only 50 percent of these personnel perceived their job as interesting. This low perception about their job appears to be the result of performing a job which makes use of only routine communications control skills and does not involve the more challenging and desirable communications control tasks.

Comparison to Previous OSR

The results of this survey report were compared with those of the previous occupational survey report of the Communications-Computer Systems Control career ladder, dated December 1980, to determine what, if any, changes have occurred since that time. Overall, the career ladder has remained fairly stable, with the exception of a name change from Telecommunications Systems Control career ladder to Communications-Computer Systems Control career ladder change of AFSC number from AFSC 307X0 to 493X0 and the addition of soldering functions. Specialty jobs appear to generally parallel those found in 1980. Perhaps the only minor difference seen between the two studies involves the scope of jobs. In 1988, AFSC 493X0 personnel are performing a broader job. In 1980, AFSC 307X0 personnel were performing more specialized jobs. As an example, a job such as microwave Personnel was distinctively described in the 1980 survey. However, in the current study, tasks related to microwave are still being performed, but are subsumed within other jobs.

IMPLICATIONS

The results of this occupational survey report indicate that, overall, the Communications-Computer Systems Control career ladder is relatively stable. Although the career ladder title changed from Telecommunications Systems Control to Communications-Computer Systems Control, the AFSC changed from 307X0 to 493X0, and soldering functions were added, the main duties and responsibilities of the ladder did not change drastically.

The job structure analysis identified a diverse specialty. The 12 major job clusters contain many of the same tasks. The 11 independent job types (IJT) encompass specialized functions, and personnel in those IJTs perform

TABLE 21

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING*)

	MONTHS TAFMS					
	1-48	49-96			97+	
	493X0 (N=497)	COMP SAMPLE** (N=3,237)	493X0 (N=455)	COMP SAMPLE (N=1,170)	493X0 (N=643)	COMP SAMPLE (N=2,227)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	80	56	76	64	74	73
SO-SO	11	23	12	20	13	15
DULL	8	20	11	15	11	11
NO RESPONSE	1	1	1	1	1	1
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY	81	64	77	72	76	79
LITTLE OR NOT AT ALL	18	35	22	27	23	20
NO RESPONSE	1	1	1	1	1	1
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	80	76	74	72	71	75
LITTLE OR NOT AT ALL	19	23	25	27	28	24
NO RESPONSE	1	1	1	1	1	1
<u>REENLISTMENT INTENTIONS:</u>						
I WILL RETIRE	1	1	1	1	22	21
YES, PROBABLY YES	47	60	58	75	65	69
NO, OR PROBABLY NO	51	38	40	23	12	9
NO RESPONSE	1	1	1	1	1	1

* Columns may not add up to 100 percent due to nonresponse or rounding
 ** Includes direct support AFSCs 391X0, 392X0, 552X5, 566X0, 603X0, and 612X1 surveyed in 1987.

TABLE 22

JOB SATISFACTION INFORMATION FOR 493X0 CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT RESPONDING)

EXPRESSED JOB INTEREST:	SYS TEST & EVAL TEAM PERSONNEL (STG044)	TELECOMM SYS ANALYS SVS PERSONNEL (STG150)	SHIFT LEADER/ SUPVs (STG143)	NETWORK CONTROLLERS (STG239)	AUTODIN SWITCHING CTR PERS (STG282)
INTERESTING	79	91	53	90	75
SO-SO	11	0	21	10	13
DULL	7	9	26	0	12
MY JOB UTILIZES MY TALENTS:					
FAIRLY WELL OR BETTER	75	91	53	85	72
VERY LITTLE OR NOT AT ALL	21	9	47	15	28
MY JOB UTILIZES MY TRAINING:					
FAIRLY WELL OR BETTER	75	91	62	73	81
VERY LITTLE OR NOT AT ALL	25	9	38	27	19
REENLISTMENT INTENTIONS:					
I WILL RETIRE	21	0	3	5	3
YES OR PROBABLY YES	57	64	62	52	47
NO OR PROBABLY NO	21	36	35	43	50

* Responses may not add to 100 percent due to rounding or no response

** 1986 Comparative Sample taken from Direct Support Specialties: AFSC 493X0 (N=2,140)

TABLE 22 (CONTINUED)

JOB SATISFACTION INFORMATION FOR 493X0 CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT RESPONDING)

	SHIFT SUPV & NCOICs STG308	CRITICOMM CONTROL PERSONNEL STG375	OVERSEAS DCS TECH CONTROL STG130	DCS AUTO TECH CONTR PERSONNEL STG158	COMM SYS TECH CONTR PERSONNEL STG125
<u>EXPRESSED JOB INTEREST:</u>					
INTERESTING	60	60	61	93	85
SO-SO	20	20	21	7	9
DULL	20	20	18	0	5
<u>MY JOB UTILIZES MY TALENTS:</u>					
FAIRLY WELL OR BETTER	70	80	71	79	85
VERY LITTLE OR NOT AT ALL	30	20	29	21	15
<u>MY JOB UTILIZES MY TRAINING:</u>					
FAIRLY WELL OR BETTER	70	80	72	100	91
VERY LITTLE OR NOT AT ALL	30	20	28	0	8
<u>REENLISTMENT INTENTIONS:</u>					
I WILL RETIRE	5	0	0	0	1
YES OR PROBABLY YES	60	100	57	50	56
NO OR PROBABLY NO	35	0	43	50	41

* Responses may not add to 100 percent due to rounding or no response

** 1986 Comparative Sample taken from Direct Support Specialities: AFSC 493X0 (N=2,140)

TABLE 22 (CONTINUED)

JOB SATISFACTION INFORMATION FOR 493X0 CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT RESPONDING)

	CIRCUIT ACTION PERS (STG190)	CNT TEST FCLTY CABLE RPR (STG200)	COMBAT COMM PERS (STG238)	COMM SYS CONTROL SUPV (STG072)	TRNG NCOS (STG847)
<u>EXPRESSED JOB INTEREST:</u>					
INTERESTING	85	25	65	79	82
SO-SO	11	60	16	11	18
DULL	4	20	19	9	0
<u>MY JOB UTILIZES MY TALENTS:</u>					
FAIRLY WELL OR BETTER	91	40	70	83	100
VERY LITTLE OR NOT AT ALL	10	60	30	16	0
<u>MY JOB UTILIZES MY TRAINING:</u>					
FAIRLY WELL OR BETTER	78	0	62	77	94
VERY LITTLE OR NOT AT ALL	21	100	38	22	6
<u>REENLISTMENT INTENTIONS:</u>					
I WILL RETIRE	3	20	5	25	0
YES OR PROBABLY YES	54	60	64	62	71
NO OR PROBABLY NO	43	20	30	13	24

* Responses may not add to 100 percent due to rounding or no response

** 1986 Comparative Sample taken from Direct Support Specialties: AFSC 493X0 (N=2,140)

TABLE 22 (CONTINUED)

JOB SATISFACTION INFORMATION FOR 493X0 CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT RESPONDING)

	BASE CONTROL TEST FCLTY PERS (STG169)	TRNG INSTRs (STG111)	MOBILITY/ CONTINGENCY PERSONNEL (STG052)	PERFORMANCE MONITORS & EVAL PERS (STG037)
<u>EXPRESSED JOB INTEREST:</u>				
INTERESTING	80	71	47	58
SO-SO	10	17	6	19
DULL	10	13	47	23
<u>MY JOB UTILIZES MY TALENTS:</u>				
FAIRLY WELL OR BETTER	70	88	29	59
VERY LITTLE OR NOT AT ALL	30	12	71	40
<u>MY JOB UTILIZES MY TRAINING:</u>				
FAIRLY WELL OR BETTER	30	67	29	55
VERY LITTLE OR NOT AT ALL	70	29	71	44
<u>REENLISTMENT INTENTIONS:</u>				
I WILL RETIRE	0	13	0	15
YES OR PROBABLY YES	90	58	53	62
NO OR PROBABLY NO	10	29	47	23

* Responses may not add to 100 percent due to rounding or no response

** 1986 Comparative Sample taken from Direct Support Specialities: AFSC 493X0 (N=2,140)

TABLE 22 (CONTINUED)

JOB SATISFACTION INFORMATION FOR 493X0 CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT RESPONDING)

	PRIMARY CONT CTR/ SATELLITE	COMPUTER OPERATOR ADM TECH (STG079)	COMM SYS ADM MGRS (STG133)	SYS EVAL QA PERS (STG187)
EXPRESSED JOB INTEREST:				
INTERESTING	67	92	58	54
SO-SO	11	5	31	8
DULL	22	0	11	31
MY JOB UTILIZES MY TALENTS:				
FAIRLY WELL OR BETTER	56	92	65	69
VERY LITTLE OR NOT AT ALL	44	8	34	23
MY JOB UTILIZES MY TRAINING:				
FAIRLY WELL OR BETTER	22	71	35	53
VERY LITTLE OR NOT AT ALL	78	29	65	47
REENLISTMENT INTENTIONS:				
I WILL RETIRE	11	18	23	46
YES OR PROBABLY YES	56	63	46	46
NO OR PROBABLY NO	33	18	31	8

* Responses may not add to 100 percent due to rounding or no response

** 1986 Comparative Sample taken from Direct Support Specialties: AFSC 493X0 (N=2,140)

TABLE 23

COMPARISON OF PREVIOUS AND CURRENT JOB SATISFACTION INDICATORS BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING*)

	1-48 MOS TAFMS)		49-96 MOS TAFMS		97+ MOS TAFMS	
	1988 (N=474)	1980 (N=414)	1988 (N=455)	1980 (N=369)	1988 (N=643)	1980 (N=503)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	80	71	76	70	74	66
SO-SO	11	15	12	17	13	14
DULL	8	13	11	13	11	19
NO RESPONSE	1	1	1	-	1	1
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY	81	74	77	26	76	74
LITTLE OR NOT AT ALL	18	24	22	74	23	25
NO RESPONSE	1	1	1	-	1	1
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	80	71	74	74	71	69
LITTLE OR NOT AT ALL	19	29	25	25	28	30
NO RESPONSE	1	-	1	1	1	1
<u>REENLISTMENT INTENTIONS:</u>						
I WILL RETIRE	1	-	1	-	22	-
YES OR PROBABLY YES	47	32	58	42	65	65
NO OR PROBABLY NO	51	67	40	57	12	33
NO RESPONSE	1	1	1	1	1	2

* Columns may not add up to 100 percent due to nonresponse or rounding

** Includes direct support AFSCs 391X0, 392X0, 552X5, 566X0, 603X0, and 612X1 surveyed in 1987

mostly those tasks related to that specialized function. CONUS and overseas personnel are performing essentially the same jobs. Job satisfaction indicators generally are satisfactory and the AFR 39-1 Specialty Descriptions are broad, accurate, and complete.

Survey data indicate the current STS provides support for the tasks and jobs performed by career ladder personnel; however, several items are not supported by OSR data and several unreferenced tasks need to be reviewed for possible inclusion. The POI also generally was providing training in areas and subjects relevant to the jobs graduates would be expected to perform. There were, however, several unsupported areas and several unreferenced tasks. Unreferenced tasks and unsupported POI objectives should also be examined to determine if the objectives should be covered and if tasks should be included in this document.

APPENDIX A

TABLE A1
 REPRESENTATIVE TASKS PERFORMED BY
 SYSTEMS TEST AND EVALUATION TEAM PERSONNEL CLUSTER
 (STG044, N=28)

TASKS	PERCENT MEMBERS PERFORMING
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	75
F317 PERFORM MANUAL IMPULSE NOISE TESTS	71
F310 PERFORM MANUAL AMPLITUDE VS FREQUENCY TESTS (FREQUENCY RESPONSE TEST)	71
F313 PERFORM MANUAL ENVELOPE DELAY DISTORTION TESTS	68
F319 PERFORM MANUAL PHASE JITTER TESTS	68
F324 PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	64
F272 PERFORM AUTOMATED AMPLITUDE VS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	61
F278 PERFORM AUTOMATED IMPULSE NOISE TESTS	57
J605 PACK OR UNPACK EQUIPMENT	54
G361 MEASURE CHANNEL LEVELS ON BASEBAND SIGNALS	54
F277 PERFORM AUTOMATED IDLE CHANNEL NOISE TESTS	54
F280 PERFORM AUTOMATED PHASE JITTER TESTS	54
F281 PERFORM AUTOMATED QUALITY CHECKS ON STANDARD TEST TONE LEVELS	50
F315 PERFORM MANUAL HITS/DROPOUTS TESTS	50
G364 MEASURE GROUP PILOT LEVELS	50
G366 MEASURE PILOTS AT BASEBAND LEVEL	50
F274 PERFORM AUTOMATED ENVELOPE DELAY DISTORTION TESTS	50
F318 PERFORM MANUAL NONLINEAR DISTORTION TESTS	50
J609 PICK UP OR DELIVER EQUIPMENT AT PREVISION MEASUREMENT EQUIPMENT LABORATORY (PMEL)	46
F311 PERFORM MANUAL BIT ERROR RATE TESTS ON DIGITAL CIRCUITS AND EQUIPMENT	46
F322 PERFORM MANUAL SINGLE TONE INTERFERENCE TESTS (CROSSTALK TEST)	46
F320 PERFORM MANUAL QC ON STANDARD TEST TONE LEVELS	46
G370 PERFORM BASEBAND LOADING (BBL) MEASUREMENTS	46
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	46
G371 PERFORM BASEBAND SWEEPS	46
F279 PERFORM AUTOMATED NONLINEAR DISTORTION TESTS	46
F276 PERFORM AUTOMATED HITS/DROPOUTS TESTS	46
F283 PERFORM AUTOMATED TERMINAL IMPEDANCE TESTS	43
F282 PERFORM AUTOMATED SINGLE TONE INTERFERENCE TESTS (CROSSTALK TEST)	39
F306 PERFORM INTERMODULATION DISTORTION TESTS	36
F325 PERFORM MAXIMUM NET LOSS VARIATION TESTS	36
J610 SCHEDULE EQUIPMENT FOR PMEL SERVICING	36
E201 PREPARE CIRCUIT PARAMETER TEST DATA FORMS	29
I492 CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	25

TABLE A2
REPRESENTATIVE TASKS PERFORMED BY
TELECOMMUNICATION SERVICE SYSTEMS ANALYSIS PERSONNEL CLUSTER
(STG150, N=11)

TASKS	PERCENT MEMBERS PERFORMING
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	91
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	91
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	91
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	82
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	73
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	73
I492 CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	64
H453 PERFORM ON-CALL PATCHES	64
H429 PERFORM EQUIPMENT LOOP-BACKS	64
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	55
F257 ADJUST LINE AMPLIFIERS	55
H426 PERFORM CONTINUITY CHECKS ON PATCH CORDS	55
E115 DESTROY CLASSIFIED INFORMATION OR MATERIALS	55
E190 PARTICIPATE IN ALERTS OR RECALLS	55
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	55
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	45
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	45
F281 PERFORM AUTOMATED QUALITY CHECKS ON STANDARD TEST TONE LEVELS	45
F278 PERFORM AUTOMATED IMPULSE NOISE TESTS	45
J607 PERFORM ESCORT DUTIES	45
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	45
H437 PERFORM FAULT ISOLATION ON COMPUTER NETWORK CIRCUITS (MODEMS)	36
F317 PERFORM MANUAL IMPULSE NOISE TESTS	36
H471 REMOVE OR REPLACE PADS	36
E227 PREPARE MASTER STATION LOG FARMS	36
F288 PERFORM IN-SERVICE QC ON COMPOSITE SIGNAL TRANSMISSION LEVELS	36
G366 MEASURE PILOTS AT BASEBAND LEVEL	27
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	27
G370 PERFORM BASEBAND LOADING (BBL) MEASUREMENTS	27
H457 PERFORM TIME HACKS ON MASTER STATION CLOCKS	27
H391 COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	27
H425 PERFORM CONTINUITY CHECKS ON CROSS-CONNECT CORDS	27
E200 PREPARE CIRCUIT OUTAGE REPORTS	18

TABLE A3
 REPRESENTATIVE TASKS PERFORMED BY
 SHIFT LEADERS AND SUPERVISORS CLUSTER
 (STG143, N=34)

TASKS	PERCENT MEMBERS PERFORMING
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	97
E190 PARTICIPATE IN ALERTS OR RECALLS	85
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	85
H419 PATCH CRYPTOGRAPHIC EQUIPMENT	79
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	76
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	74
H429 PERFORM EQUIPMENT LOOP-BACKS	74
E227 PREPARE MASTER STATION LOG FORMS	71
H457 PERFORM TIME HACKS ON MASTER STATION CLOCKS	62
E113 COORDINATE POWER CHANGEOVERS WITH COMMUNICATIONS SUPPORT FACILITIES	53
E200 PREPARE CIRCUIT OUTAGE REPORTS	53
E240 PREPARE TROUBLE AND RESTORATION RECORD FORMS	50
E418 PATCH COMMERCIAL EQUIPMENT, LINES, OR CHANNELS	50
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	50
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	47
H427 PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	47
E239 PREPARE TECHNICAL CONTROL COMMUNICATIONS WORK ORDER FORMS	44
H431 PERFORM FAULT ISOLATION ON AUTODIN SWITCHING CENTER EQUIPMENT	44
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	41
E215 PREPARE HAZCON REPORTS	41
H426 PERFORM CONTINUITY CHECKS ON PATCH CORDS	41
E211 PREPARE DCS STATUS REPORTS	38
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	38
I532 ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	38
H420 PATCH MODEMS	32
H391 COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	32
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	32
E114 COORDINATE REQUESTS FOR MAINTENANCE ASSISTANCE WITH OFFICE OF PRIMARY RESPONSIBILITY (OPR)	29
E161 MAINTAIN MASTER STATION LOG FORMS	26
E238 PREPARE SCHEDULED DOWNTIME REQUESTS	26
E212 PREPARE EQUIPMENT OUTAGE REPORTS	24
F328 PERFORM OUT-OF-SERVICE QC ON CRYPTOGRAPHIC EQUIPMENT	24
F293 PERFORM IN-SERVICE QC ON DIRECT CURRENT (DC) CIRCUITS	21

TABLE A4
REPRESENTATIVE TASKS PERFORMED BY
NETWORK CONTROLLERS CLUSTER
(STG239, N=40)

TASKS	PERCENT MEMBERS PERFORMING
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	95
H429 PERFORM EQUIPMENT LOOP-BACKS	90
H437 PERFORM FAULT ISOLATION ON COMPUTER NETWORK CIRCUITS	90
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	85
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	88
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	85
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	80
G372 PERFORM BIT ERROR RATE TEST ON HIGH SPEED CIRCUITS	80
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	78
H439 PERFORM FAULT ISOLATION ON DATA CIRCUITS TO OUTLYING BUILDINGS	73
H410 OPERATE COMPUTER DIAGNOSTIC EQUIPMENT, SUCH AS DATA SCOPES AND PROTOCOL	70
H389 CONFIGURE MODEMS	68
F311 PERFORM MANUAL BIT ERROR RATE TESTS ON DIGITAL CIRCUITS AND EQUIPMENT	68
H420 PATCH MODEMS	67
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	63
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	63
H419 PATCH CRYPTOGRAPHIC EQUIPMENT	63
H438 PERFORM FAULT ISOLATION ON COMPUTER SYSTEMS AND ASSOCIATED PERIPHERALS	63
H401 LOAD (REKEY) CRYPTOGRAPHIC MATERIAL	58
H450 PERFORM FAULT ISOLATION ON TIME DIVISION MULTIPLEX (TDM) SYSTEMS	55
H418 PATCH COMMERCIAL EQUIPMENT, LINES, OR CHANNELS	55
E115 DESTROY CLASSIFIED INFORMATION OR MATERIALS	55
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	55
H411 OPERATE CRYPTOGRAPHIC EQUIPMENT	53
H427 PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	53
F273 PERFORM AUTOMATED BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	52
E200 PREPARE CIRCUIT OUTAGE REPORTS	45
H412 OPERATE ON-LINE COMPUTER SYSTEM DIAGNOSTIC TERMINALS	45
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	43
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	42

TABLE A5

REPRESENTATIVE TASKS PERFORMED BY
AUTODIN SWITCHING CENTER PERSONNEL CLUSTER
(STG282, N=32)

TASKS	PERCENT MEMBERS PERFORMING
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	100
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	97
H429 PERFORM EQUIPMENT LOOP-BACKS	97
H419 PATCH CRYPTOGRAPHIC EQUIPMENT	94
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	84
E190 PARTICIPATE IN ALERTS OR RECALLS	81
H427 PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	75
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	75
E128 MAINTAIN CIRCUIT OUTAGE REPORTS	69
E239 PREPARE TECHNICAL CONTROL COMMUNICATIONS WORK ORDER FORMS	69
E240 PREPARE TROUBLE AND RESTORATION RECORD FORMS	69
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	66
H431 PERFORM FAULT ISOLATION ON AUTODIN SWITCHING CENTER EQUIPMENT	66
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	63
H420 PATCH MODEMS	63
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	63
F289 PERFORM IN-SERVICE QC ON CRYPTOGRAPHIC EQUIPMENT	62
H437 PERFORM FAULT ISOLATION ON COMPUTER NETWORK CIRCUITS (MODEMS)	59
B53 SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49330)	59
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	59
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	56
E200 PREPARE CIRCUIT OUTAGE REPORTS	56
E211 PREPARE DCS STATUS REPORTS	53
H439 PERFORM FAULT ISOLATION ON DATA CIRCUITS TO OUTLYING BUILDINGS	50
E161 MAINTAIN MASTER STATION LOG FORMS	50
H438 PERFORM FAULT ISOLATION ON COMPUTER SYSTEMS AND ASSOCIATED PERIPHERALS	50
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	50
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	50
F265 MONITOR CIRCUIT DISPLAY STATUS BOARDS	41
F268 MONITOR VISUAL AND AUDIO ALARMS USING CIRCUIT MONITORING SYSTEMS	41

TABLE A6
REPRESENTATIVE TASKS PERFORMED BY
SHIFT SUPERVISORS & NCOICs IJT
(STG308, N=20)

TASKS	PERCENT MEMBERS PERFORMING
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	100
D88 COUNSEL TRAINEES ON TRAINING PROGRESS	100
B31 COUNSEL PERSONNEL	95
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	95
C78 WRITE APR	95
B53 SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49330)	90
H419 PATCH CRYPTOGRAPHIC EQUIPMENT	90
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49350)	85
D85 CONDUCT OJT	85
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	85
H429 PERFORM EQUIPMENT LOOP-BACKS	85
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	80
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	80
E190 PARTICIPATE IN ALERTS OR RECALLS	80
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	80
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	75
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	70
H391 COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	70
H420 PATCH MODEMS	70
B48 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	65
A4 DETERMINE WORK PRIORITIES	65
D97 EVALUATE OJT TRAINEES	65
E227 PREPARE MASTER STATION LOG FORMS	65
H396 DIRECT ALTERNATE ROUTING OF CIRCUITS	65
H427 PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	65
H418 PATCH COMMERCIAL EQUIPMENT, LINES, OR CHANNELS	65
B46 INDOCTRINATE NEWLY ASSIGNED PERSONNEL	60
E240 PREPARE TROUBLE AND RESTORATION RECORD FORMS	60
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	60
B32 DIRECT CIRCUIT OR SYSTEM CHECKS	55
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	55
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	55
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	35

TABLE A7
REPRESENTATIVE TASKS PERFORMED BY
CRITICMM CONTROLLERS IJT
(STG375, N=5)

TASKS	PERCENT MEMBERS PERFORMING
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	100
E113 COORDINATE POWER CHANGEOVERS WITH COMMUNICATIONS SUPPORT FACILITIES	100
H420 PATCH MODEMS	100
H433 PERFORM FAULT ISOLATION ON AUTOSEVOCOM	100
H421 PATCH MULTIPLEXERS	100
H419 PATCH CRYPTOGRAPHIC EQUIPMENT	100
E132 MAINTAIN COMMUNICATIONS OUTAGE REPORTS	80
H418 PATCH COMMERCIAL EQUIPMENT, LINES, OR CHANNELS	80
H457 PERFORM TIME HACKS ON MASTER STATION CLOCKS	80
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	80
F311 PERFORM MANUAL BIT ERROR RATE TESTS ON DIGITAL CIRCUITS AND EQUIPMENT	80
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	80
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	80
H450 PERFORM FAULT ISOLATION ON TIME DIVISION MULTIPLEX (TDM) SYSTEMS	80
E212 PREPARE EQUIPMENT OUTAGE REPORTS	80
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	80
E128 MAINTAIN CIRCUIT OUTAGE REPORTS	80
E203 PREPARE COMMUNICATION OUTAGE REPORTS	80
F273 PERFORM AUTOMATED BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	80
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	80
E125 MAINTAIN CIRCUIT DATA FORMS	80
E190 PARTICIPATE IN ALERTS OR RECALLS	80
F266 MONITOR CIRCUIT/SYSTEM EYE PATTERN DISPLAYS	80
H426 PERFORM CONTINUITY CHECKS ON PATCH CORDS	80
E180 MAINTAIN TROUBLE AND RESTORATION RECORD FORMS	60
H454 PERFORM OPERATOR MAINTENANCE ON COMPUTER PRINTERS, SUCH AS SETTING PAPER THICKNESS AND REPLACING PAPER	60
H411 OPERATE CRYPTOGRAPHIC EQUIPMENT	60
E114 COORDINATE REQUESTS FOR MAINTENANCE ASSISTANCE WITH OFFICE OF PRIMARY RESPONSIBILITY (OPR)	60
E112 COORDINATE INSTALLATIONS WITH USERS OR ASSOCIATED FACILITIES	60
E161 MAINTAIN MASTER STATION LOG FORMS	60
F284 PERFORM BIT ERROR RATE TESTS ON ANALOG CIRCUITS (QUASI)	60

TABLE A8

REPRESENTATIVE TASKS PERFORMED BY
OVERSEAS DCS TECHNICAL CONTROLLERS CLUSTER
(STG130, N=28)

TASKS	PERCENT MEMBERS PERFORMING
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	100
F320 PERFORM MANUAL QC ON STANDARD TEST TONE LEVELS	100
F317 PERFORM MANUAL IMPULSE NOISE TESTS	93
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	82
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	75
F313 PERFORM MANUAL ENVELOPE DELAY DISTORTION TESTS	79
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	71
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	64
F324 PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	71
H429 PERFORM EQUIPMENT LOOP-BACKS	64
F310 PERFORM MANUAL AMPLITUDE VS FREQUENCY TEST (FREQUENCY RESPONSE TEST)	64
F315 PERFORM MANUAL HITS/DROPOUTS TESTS	64
F319 PERFORM MANUAL PHASE JITTER TESTS	61
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	61
F325 PERFORM MAXIMUM NET LOSS VARIATION TESTS	57
F318 PERFORM MANUAL NONLINEAR DISTORTION TESTS	57
F257 ADJUST LINE AMPLIFIERS	54
F322 PERFORM MANUAL SINGLE TONE INTERFERENCE TESTS (CROSSTALK TEST)	50
F314 PERFORM MANUAL HARMONIC DISTORTION TESTS	50
E190 PARTICIPATE IN ALERTS OR RECALLS	46
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	46
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	46
F288 PERFORM IN-SERVICE QC ON COMPOSITE SIGNAL TRANSMISSION LEVELS	46
F323 PERFORM MANUAL TERMINAL IMPEDANCE TESTS	46
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	43
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	43

TABLE A9
REPRESENTATIVE TASKS PERFORMED BY
DCS AUTOMATED TECHNICAL CONTROL IJT
(STG158, N=14)

TASKS	PERCENT MEMBERS PERFORMING
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	100
F281 PERFORM AUTOMATED QUALITY CHECKS ON STANDARD TEST TONE LEVELS	100
F277 PERFORM AUTOMATED IDLE CHANNEL NOISE TESTS	93
F278 PERFORM AUTOMATED IMPULSE NOISE TESTS	93
F274 PERFORM AUTOMATED ENVELOPE DELAY DISTORTION TESTS	93
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	93
F272 PERFORM AUTOMATED AMPLITUDE VS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	86
F275 PERFORM HARMONIC DISTORTION TESTS	86
F280 PERFORM AUTOMATED PHASE JITTER TESTS	86
F273 PERFORM AUTOMATED BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	79
H429 PERFORM EQUIPMENT LOOP-BACKS	79
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	79
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	79
F276 PERFORM AUTOMATED HITS/DROPOUTS TESTS	71
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	71
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	64
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	64
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	64
E190 PARTICIPATE IN ALERTS OR RECALLS	64
H437 PERFORM FAULT ISOLATION ON COMPUTER NETWORK CIRCUITS (MODEMS)	64
F279 PERFORM AUTOMATED NONLINEAR DISTORTION TESTS	64
F257 ADJUST LINE AMPLIFIERS	64
E200 PREPARE CIRCUIT OUTAGE REPORTS	57
G372 PERFORM BIT ERROR RATE TEST ON HIGH SPEED DATA CIRCUITS	57
E242 PREPARE WIDEBAND OUTAGE RECORD FORMS	50
F288 PERFORM IN-SERVICE QC ON COMPOSITE SIGNAL TRANSMISSION LEVELS	50
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	43
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	43
A4 DETERMINE WORK PRIORITIES	43
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	43
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	36

TABLE A10

REPRESENTATIVE TASKS PERFORMED BY
COMMUNICATION SYSTEMS TECHNICAL CONTROL PERSONNEL CLUSTER
(STG125, N=541)

TASKS	PERCENT MEMBERS PERFORMING
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	94
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	92
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	87
F324 PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	87
F320 PERFORM MANUAL QC ON STANDARD TEST TONE LEVELS	85
F317 PERFORM MANUAL IMPULSE NOISE TESTS	84
H426 PERFORM CONTINUITY CHECKS ON PATCH CORDS	84
H453 PERFORM ON-CALL PATCHES	83
F313 PERFORM MANUAL ENVELOPE DELAY DISTORTION TESTS	82
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	82
H429 PERFORM EQUIPMENT LOOP-BACKS	82
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	81
F310 PERFORM MANUAL AMPLITUDE VS FREQUENCY TEST (FREQUENCY RESPONSE TEST)	81
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	80
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	79
F257 ADJUST LINE AMPLIFIERS	79
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	79
F325 PERFORM MAXIMUM NET LOSS VARIATION TESTS	78
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	74
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	72
H396 DIRECT ALTERNATE ROUTING OF CIRCUITS	71
H457 PERFORM TIME HACKS ON MASTER STATION CLOCKS	71
F288 PERFORM IN-SERVICE QC ON COMPOSITE SIGNAL TRANSMISSION LEVELS	70
I492 CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	67
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	65
H391 COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	63
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	63
E200 PREPARE CIRCUIT OUTAGE REPORTS	59
E227 PREPARE MASTER STATION LOG FORMS	58
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	55
E240 PREPARE TROUBLE AND RESTORATION RECORD FORMS	55
G371 PERFORM BASEBAND SWEEPS	54
I532 ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	48

TABLE A11
REPRESENTATIVE TASKS PERFORMED BY
CIRCUIT ACTIONS PERSONNEL CLUSTER
(STG190, N=84)

TASKS	PERCENT MEMBERS PERFORMING
E125 MAINTAIN CIRCUIT DATA FORMS	94
E116 DIRECT WIRING OF CROSS-CONNECTIONS ON DISTRIBUTION FRAMES OR MATRIX BOARDS	89
H477 WIRE CROSS-CONNECTS ON DISTRIBUTION FRAMES	90
E197 PREPARE CIRCUIT DATA FORMS	89
E117 IMPLEMENT ACTIVATION OR CHANGES OF CIRCUITS	88
H478 WIRE TEMPORARY CROSS-CONNECTS ON DISTRIBUTION FRAMES	86
J600 LABEL PATCH BAYS OR EQUIPMENT	85
I492 CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	83
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	82
E127 MAINTAIN CIRCUIT HISTORY FOLDERS	81
C62 ESTABLISH CHANGES IN CIRCUITS OR CHANNELS	79
E112 COORDINATE INSTALLATIONS WITH USERS OR ASSOCIATED FACILITIES	79
H429 PERFORM EQUIPMENT LOOP-BACKS	77
E199 PREPARE CIRCUIT HISTORY FOLDERS	76
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	76
B36 DIRECT LABELING OF PATCH BAYS	74
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	73
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	73
E124 MAINTAIN CABLE RECORD FORMS	71
H461 REMOVE OR REPLACE COMPONENTS ON DISTRIBUTION FRAMES	68
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	68
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	67
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	65
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	65
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	65
E196 PREPARE CABLE RECORD FORMS	64
F263 CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS. CIRCUITS, OR EQUIPMENT	64
B28 COORDINATE OPERATIONAL CHANGES TO CIRCUITS OR CHANNELS WITH USERS OR DEFENSE COMMUNICATIONS AGENCY (DCA)	63
E245 STORE, UPDATE, OR PRINT COMPUTERIZED CIRCUIT DATA	63
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	62
E243 PROCESS FORMS, REPORTS, OR CORRESPONDENCE USING WORD PROCESSORS AND KEYBOARDS	60
E207 PREPARE CORRESPONDENCE	57
A16 FORMULATE CIRCUIT CUTOVER PLANS	56

TABLE A12

REPRESENTATIVE TASKS PERFORMED BY
CONTROL TEST FACILITY CABLE REPAIR PERSONNEL IJT
(STG200, N=5)

TASKS	PERCENT MEMBERS PERFORMING
E124 MAINTAIN CABLE RECORD FORMS	100
A4 DETERMINE WORK PRIORITIES	80
A21 PLAN WORK ASSIGNMENTS	80
D85 CONDUCT OJT	80
I492 CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	80
H434 PERFORM FAULT ISOLATION ON CABLE SYSTEMS	80
E197 PREPARE CIRCUIT DATA FORMS	80
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	80
E196 PREPARE CABLE RECORD FORMS	80
H440 PERFORM FAULT ISOLATION ON DDN SYSTEMS AND CIRCUITS	80
H477 WIRE CROSS-CONNECTS ON DISTRIBUTION FRAMES	80
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	80
E116 DIRECT WIRING OF CROSS-CONNECTIONS ON DISTRIBUTION FRAMES OR MATRIX BOARDS	80
E125 MAINTAIN CIRCUIT DATA FORMS	80
H478 WIRE TEMPORARY CROSS-CONNECTS ON DISTRIBUTION FRAMES	80
H439 PERFORM FAULT ISOLATION ON DATA CIRCUITS TO OUTLYING BUILDINGS	60
H436 PERFORM FAULT ISOLATION ON COMMERCIAL PHONE SYSTEMS	60
H437 PERFORM FAULT ISOLATION ON COMPUTER NETWORK CIRCUITS (MODEMS)	60
B32 DIRECT CIRCUIT OR SYSTEM CHECKS	60
J599 DISPATCH MAINTENANCE SPECIALISTS OR EQUIPMENT	60
E127 MAINTAIN CIRCUIT HISTORY FOLDERS	60
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	60
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	60
J611 SECURE FACILITIES	60
B31 COUNSEL PERSONNEL	60
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49350)	40
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	40
H461 REMOVE OR REPLACE COMPONENTS ON DISTRIBUTION FRAMES	40
E117 IMPLEMENT ACTIVATION OR CHANGES OF CIRCUITS	40
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	40
A8 DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES	40
A13 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	40
D89 DETERMINE OJT REQUIREMENTS	40
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	40

TABLE A13
 REPRESENTATIVE TASKS PERFORMED BY
 COMBAT COMMUNICATIONS SYSTEMS PERSONNEL IJT
 (STG238, N=117)

TASKS	PERCENT MEMBERS PERFORMING
J604 OPERATE MILITARY VEHICLES	97
I488 CAMOUFLAGE MOBILE SITES	97
I491 CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL AND USERS	96
J605 PACK OR UNPACK EQUIPMENT	96
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	95
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	93
I572 PREPARE MOBILE VANS FOR TRANSPORT OR STORAGE	93
I524 FIRE M-16 WEAPONS	92
I534 LOAD OR UNLOAD MOBILE COMMUNICATIONS EQUIPMENT ON AND OFF VEHICLES AND PALLETS	92
I542 OPERATE ENVIRONMENTAL CONTROL UNITS	91
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	91
H429 PERFORM EQUIPMENT LOOP-BACKS	90
I573 PREPARE PERSONAL CLOTHING AND EQUIPMENT FOR DEPLOYMENT	90
I492 CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	90
I590 ROAD CHECK VEHICLES	90
E190 PARTICIPATE IN ALERTS OR RECALLS	87
I533 LAY CABLES	87
H426 PERFORM CONTINUITY CHECKS ON PATCH CORDS	86
I566 PERFORM SAFETY CHECKS ON VEHICLES	86
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	84
I493 CLEAN WEAPONS	84
I532 ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	83
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	81
J596 CLEAN OR WAX MILITARY VEHICLES	81
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	79
I515 DON OR DOFF CHEMICAL SUITS	75
I494 CONDUCT PERFORMANCE ASSESSMENT OF TACTICAL OR MOBILE COMMUNICATIONS SYSTEMS	71
I486 APPLY POWER TO FACILITIES	70
I522 ERECT OR DISMANTLE 12-MAN TENTS	70
I559 PERFORM INTERFACE CHECKS OF MOBILE COMMUNICATIONS FACILITIES	70
H387 CHANGE FREQUENCIES ON RADIO SYSTEMS	69
E227 PREPARE MASTER STATION LOG FORMS	68
I523 ERECT OR DISMANTLE 5-MAN TENTS	67
J611 SECURE FACILITIES	64
I574 PREPARE SITES FOR MOBILE COMMUNICATION	62

TABLE A14

REPRESENTATIVE TASKS PERFORMED BY
COMMUNICATION SYSTEMS CONTROL SUPERVISORY PERSONNEL CLUSTER
(STG072, N=247)

TASKS	PERCENT MEMBERS PERFORMING
C78 WRITE APR	91
B31 COUNSEL PERSONNEL	94
B46 INDOCTRINATE NEWLY ASSIGNED PERSONNEL	89
B48 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	85
A4 DETERMINE WORK PRIORITIES	85
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	80
E190 PARTICIPATE IN ALERTS OR RECALLS	80
B51 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	78
A24 SCHEDULE LEAVES	77
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49350)	76
A7 DEVELOP WORK PROCEDURES	74
A3 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	72
A21 PLAN WORK ASSIGNMENTS	72
B25 CONDUCT BRIEFINGS	72
A13 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	70
A15 ESTABLISH STANDARD OPERATING PROCEDURES (SOP)	70
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	68
D88 COUNSEL TRAINEES ON TRAINING PROGRESS	66
E207 PREPARE CORRESPONDENCE	65
C73 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	54
D82 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	64
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	62
D85 CONDUCT OJT	62
D89 DETERMINE OJT REQUIREMENTS	62
C64 EVALUATE INDIVIDUALS FOR PROMOTION	60
C65 EVALUATE INSPECTION REPORTS OR PROCEDURES	60
C60 ANALYZE WORKLOAD REQUIREMENTS	60
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	59
D93 DEVELOP TRAINING PLANS	57
B57 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL TECHNICIANS (AFSC 49370)	53
B50 PREPARE OPERATIONAL MESSAGES	51
E243 PROCESS FORMS, REPORTS, OR CORRESPONDENCE USING WORD PROCESSORS AND KEYBOARDS	49
B53 SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49330)	43
C80 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	36

TABLE A15
REPRESENTATIVE TASKS PERFORMED BY
TRAINING NCOs IJT
(STG847, N=17)

TASKS	PERCENT MEMBERS PERFORMING
B31 COUNSEL PERSONNEL	100
D93 DEVELOP TRAINING PLANS	100
D110 WRITE TEST QUESTIONS	100
D108 SCORE TESTS	100
D81 ADMINISTER TESTS	100
D97 EVALUATE OJT TRAINEES	94
D88 COUNSEL TRAINEES ON TRAINING PROGRESS	94
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	94
D89 DETERMINE OJT REQUIREMENTS	94
D98 EVALUATE PROGRESS OF STUDENTS	88
D99 EVALUATE TRAINING METHODS	88
D101 MAINTAIN MMICS RECURRING TRAINING FORECASTS	88
D105 PLAN OJT	88
D107 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	88
D106 PREPARE TRAINING REPORTS	94
D100 MAINTAIN MAINTENANCE MANAGEMENT INFORMATION AND CONTROL SYSTEMS (MMICS) TASK TABLE LIST	82
D85 CONDUCT OJT	82
D95 DIRECT TRAINING PROGRAMS, OTHER THAN OJT	76
D91 DEVELOP JOB PROFICIENCY GUIDES (JPG)	76
D103 MAINTAIN MMICS WORKCENTER TASK ASSIGNMENTS	76
D102 MAINTAIN MMICS TRAINING VISIBILITY LEDGERS	71
E190 PARTICIPATE IN ALERTS OR RECALLS	71
B46 INDOCTRINATE NEWLY ASSIGNED PERSONNEL	65
D84 CONDUCT FACILITY RATING TRAINING	65
D109 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	65
D82 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	59
A12 ESTABLISH FACILITY PROFICIENCY RATING PROGRAMS	58
D96 ESTABLISH STUDY REFERENCE FILES	53
C78 WRITE APR	47
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	47
A13 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	41
B25 CONDUCT BRIEFINGS	41
D90 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	35
E207 PREPARE CORRESPONDENCE	35
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49350)	29
B47 INITIATE PERSONNEL ACTION REQUESTS	24
E243 PROCESS FORMS, REPORTS, OR CORRESPONDENCE USING WORD PROCESSORS AND KEYBOARDS	24
B45 IMPLEMENT TELECOMMUNICATIONS FACILITIES TESTING PROGRAMS	18

TABLE A16

REPRESENTATIVE TASKS PERFORMED BY
BASE CONTROL TEST FACILITY PERSONNEL IJT
(STG169, N=10)

TASKS	PERCENT MEMBERS PERFORMING
H434 PERFORM FAULT ISOLATION ON CABLE SYSTEMS	100
H439 PERFORM FAULT ISOLATION ON DATA CIRCUITS TO OUTLYING BUILDINGS	90
H429 PERFORM EQUIPMENT LOOP-BACKS	90
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	90
H476 RUN DATA LINES TO COMPUTER TERMINALS	80
J604 OPERATE MILITARY VEHICLES	80
F311 PERFORM MANUAL BIT ERROR RATE TESTS ON DIGITAL CIRCUITS AND EQUIPMENT	70
G372 PERFORM BIT ERROR RATE TEST ON HIGH SPEED DATA CIRCUITS	70
H437 PERFORM FAULT ISOLATION ON COMPUTER NETWORK CIRCUITS (MODEMS)	70
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	60
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	60
E190 PARTICIPATE IN ALERTS OR RECALLS	60
H400 INSTALL CIRCUITS ON OUTLYING BUILDINGS	60
H475 REPAIR HIGH SPEED DATA CIRCUITS	60
H477 WIRE CROSS-CONNECTS ON DISTRIBUTION FRAMES	60
H389 CONFIGURE MODEMS	60
H448 PERFORM FAULT ISOLATION ON QUASI-ANALOG MODULATION (QAM) SYSTEMS	60
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	50
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	50
E245 STORE, UPDATE, OR PRINT COMPUTERIZED CIRCUIT DATA	50
H438 PERFORM FAULT ISOLATION ON COMPUTER SYSTEMS AND ASSOCIATED PERIPHERALS	50
I532 ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	50
J596 CLEAN OR WAX MILITARY VEHICLES	50
J605 PACK OR UNPACK EQUIPMENT	50
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	50
H450 PERFORM FAULT ISOLATION ON TIME DIVISION MULTIPLEX (TDM) SYSTEMS	40
I590 ROAD CHECK VEHICLES	40
I566 PERFORM SAFETY CHECKS ON VEHICLES	40
E112 COORDINATE INSTALLATIONS WITH USERS OR ASSOCIATED FACILITIES	40
J609 PICK UP OR DELIVER EQUIPMENT AT PRECISION MEASUREMENT EQUIPMENT LABORATORY (PMEL)	40
E128 MAINTAIN CIRCUIT OUTAGE REPORTS	30
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	20

TABLE A17

REPRESENTATIVE TASKS PERFORMED BY
TRAINING INSTRUCTORS (TECHNICAL SCHOOL) IJT
(STG111, N=24)

TASKS	PERCENT MEMBERS PERFORMING
D81 ADMINISTER TESTS	100
D108 SCORE TESTS	96
D86 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	87
D88 COUNSEL TRAINEES ON TRAINING PROGRESS	83
D98 EVALUATE PROGRESS OF STUDENTS	83
B31 COUNSEL PERSONNEL	79
D110 WRITE TEST QUESTIONS	71
F257 ADJUST LINE AMPLIFIERS	54
G364 MEASURE GROUP PILOT LEVELS	54
H472 REMOVE OR REPLACE SIGNALING UNITS	54
G366 MEASURE PILOTS AT BASEBAND LEVEL	50
F252 ADJUST AMPLITUDE EQUALIZERS	42
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	42
H430 PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	42
E190 PARTICIPATE IN ALERTS OR RECALLS	42
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	42
H453 PERFORM ON-CALL PATCHES	42
D92 DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	37
F253 ADJUST DELAY EQUALIZERS	37
H470 REMOVE OR REPLACE LINE AMPLIFIERS	37
D90 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	33
G363 MEASURE GROUP PILOT FREQUENCIES	33
D93 DEVELOP TRAINING PLANS	29
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	29
G368 MEASURE SUPERGROUP PILOT LEVELS	29
H420 PATCH MODEMS	29
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	25
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	25
F260 ADJUST SIGNALING UNITS	25
F320 PERFORM MANUAL QC ON STANDARD TEST TONE LEVELS	25
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	25
E243 PROCESS FORMS, REPORTS, OR CORRESPONDENCE USING WORD PROCESSORS AND KEYBOARDS	21
F254 ADJUST ECHO SUPPRESSORS	21
F255 ADJUST FOUR-WIRE TERMINATING SETS	21
F317 PERFORM MANUAL IMPULSE NOISE TESTS	21
F277 PERFORM AUTOMATED IDLE CHANNEL NOISE TESTS	17
F273 PERFORM AUTOMATED BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	5

TABLE A18

REPRESENTATIVE TASKS PERFORMED BY
MOBILITY/CONTINGENCY PERSONNEL CLUSTER
(STG052, N=17)

TASKS	PERCENT MEMBERS PERFORMING
I566 PERFORM SAFETY CHECKS ON VEHICLES	82
I590 ROAD CHECK VEHICLES	76
J604 OPERATE MILITARY VEHICLES	71
E190 PARTICIPATE IN ALERTS OR RECALLS	65
I488 CAMOUFLAGE MOBILE SITES	65
J605 PACK OR UNPACK EQUIPMENT	65
I534 LOAD OR UNLOAD MOBILE COMMUNICATIONS EQUIPMENT ON AND OFF VEHICLES AND PALLETS	65
I493 CLEAN WEAPONS	59
I572 PREPARE MOBILE VANS FOR TRANSPORT OR STORAGE	59
I524 FIRE M-16 WEAPONS	59
I573 PREPARE PERSONAL CLOTHING AND EQUIPMENT FOR DEPLOYMENT	53
J596 CLEAN OR WAX MILITARY VEHICLES	47
H424 PERFORM AUDIO CHANNEL LOOP-BACKS	47
H387 CHANGE FREQUENCIES ON RADIO SYSTEMS	47
I522 ERECT OR DISMANTLE 12-MAN TENTS	47
F316 PERFORM MANUAL IDLE CHANNEL NOISE TESTS	41
H397 DIRECT FREQUENCY CHANGES OR CHECKS	41
I515 DON OR DOFF CHEMICAL SUITS	41
I552 PALLETIZE CARGO BUILD-UP FOR AIRLIFT	41
I542 OPERATE ENVIRONMENTAL CONTROL UNITS	41
E227 PREPARE MASTER STATION LOG FORMS	35
E161 MAINTAIN MASTER STATION LOG FORMS	35
F277 PERFORM AUTOMATED IDLE CHANNEL NOISE TESTS	35
I520 ERECT OR DISMANTLE ANTENNAS	35
J601 MAINTAIN GROUNDS, SUCH AS MOWING LAWNS AND TRIMMING EDGES	35
F281 PERFORM AUTOMATED QUALITY CHECKS ON STANDARD TEST TONE LEVELS	35
H420 PATCH MODEMS	35
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	29
E125 MAINTAIN CIRCUIT DATA FORMS	29
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	29
I490 CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	29
I574 PREPARE SITES FOR MOBILE COMMUNICATION	29
I575 RECONFIGURE AN/TSC 107 VANS	29
J611 SECURE FACILITIES	29
D93 DEVELOP TRAINING PLANS	24
E219 PREPARE INVENTORY OF MISSION ESSENTIAL AND ITEMS	24
E124 MAINTAIN CABLE RECORD FORMS	6
E180 MAINTAIN TROUBLE AND RESTORATION RECORD FORMS	6

TABLE A19

REPRESENTATIVE TASKS PERFORMED BY
 PERFORMANCE MONITORS AND EVALUATION PERSONNEL CLUSTER
 (STG037, N=52)

TASKS	PERCENT MEMBERS PERFORMING
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	63
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	62
E128 MAINTAIN CIRCUIT OUTAGE REPORTS	56
E132 MAINTAIN COMMUNICATIONS OUTAGE REPORTS	56
E243 PROCESS FORMS, REPORTS, OR CORRESPONDENCE USING WORD PROCESSORS AND KEYBOARDS	54
E161 MAINTAIN MASTER STATION LOG FORMS	50
E244 STORE CLASSIFIED INFORMATION OR MATERIALS	48
E179 MAINTAIN TREND ANALYSIS FILES	40
E246 STORE, UPDATE, OR PRINT COMPUTERIZED CIRCUIT/GROUP OUTAGE RECORDS	40
E203 PREPARE COMMUNICATION OUTAGE REPORTS	37
E135 MAINTAIN COMMUNICATIONS SYSTEM/FACILITY STATUS REPORTS	33
E146 MAINTAIN EQUIPMENT OUTAGE REPORTS	35
E245 STORE, UPDATE, OR PRINT COMPUTERIZED CIRCUIT DATA	29
E200 PREPARE CIRCUIT OUTAGE REPORTS	31
E174 MAINTAIN SCHEDULED DOWNTIME REQUESTS	40
E190 PARTICIPATE IN ALERTS OR RECALLS	63
E115 DESTROY CLASSIFIED INFORMATION OR MATERIALS	58
E207 PREPARE CORRESPONDENCE	35
E151 MAINTAIN HAZARDOUS CONDITION (HAZCON) REPORTS	35
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	35
H391 COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	35
E212 PREPARE EQUIPMENT OUTAGE REPORTS	25
E186 MONITOR MISSION IMPAIRMENT STATUS	23
E227 PREPARE MASTER STATION LOG FORMS	33
E180 MAINTAIN TROUBLE AND RESTORATION RECORD FORMS	35
B50 PREPARE OPERATIONAL MESSAGES	40
B25 CONDUCT BRIEFINGS	38
E238 PREPARE SCHEDULED DOWNTIME REQUESTS	31
E144 MAINTAIN DEFENSE COMMUNICATIONS SYSTEMS (DCS) STATUS REPORTS ON CIRCUITS OR CHANNELS	25
E152 MAINTAIN IN-SERVICE OR OUT-OF-SERVICE QUALITY CONTROL REPORTS	31
E164 MAINTAIN MISSION IMPAIRMENT REPORTS	17
E187 MONITOR OPERATIONAL EQUIPMENT STATUS	23
E189 NOTIFY COMMUNICATIONS SUPPORT FACILITIES OF SEVERE WEATHER WARNING CALLS	25
E129 MAINTAIN CIRCUIT PARAMETER TEST DATA FORMS	25

TABLE A20
 REPRESENTATIVE TASKS PERFORMED BY
 PRIMARY CONTROL CENTER/SATELLITE SYSTEMS PERSONNEL IJT
 (STG211, N=9)

TASKS	PERCENT MEMBERS PERFORMING
K631 PERFORM REBOOT/RESTART PROCEDURES	100
K613 CREATE MASTER SATELLITE ACCESS SCHEDULES	89
K623 PERFORM PRIMARY CONTROL CENTER (PCC) ACCESS APPROVALS	89
K624 PERFORM PCC ACCESS CANCELLATIONS	89
K625 PERFORM PCC ACCESS CHANGES	89
K626 PERFORM PCC ACCESS DENIALS	89
K627 PERFORM PCC ACCESS PRE-EMPTIONS	89
K633 PERFORM SATELLITE MINIMIZE PROCEDURES	89
K614 MAINTAIN MASTER SATELLITE ACCESS SCHEDULES	78
K630 PERFORM PCC MESSAGE PROCESSING PROCEDURES	78
K628 PERFORM PCC ACCESS REQUESTS	78
E244 STORE CLASSIFIED INFORMATION OR MATERIALS	78
B50 PREPARE OPERATIONAL MESSAGES	78
K629 PERFORM PCC END-OF-MONTH CLOSEOUT PROCEDURES	78
E243 PROCESS FORMS, REPORTS, OR CORRESPONDENCE USING WORD PROCESSORS AND KEYBOARDS	67
B27 COORDINATE FREQUENCY UTILIZATION WITH USING AGENCIES	67
B28 COORDINATE OPERATIONAL CHANGES TO CIRCUITS OR CHANNEL WITH USERS OR DEFENSE COMMUNICATIONS AGENCY (DCA)	67
K615 MONITOR SATELLITE ANOMALIES	67
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	56
E115 DESTROY CLASSIFIED INFORMATION OR MATERIALS	56
E190 PARTICIPATE IN ALERTS OR RECALLS	56
H454 PERFORM OPERATOR MAINTENANCE ON COMPUTER PRINTERS, SUCH AS SETTING PAPER THICKNESS AND REPLACING PAPER	56
K619 OPERATE GENERAL PURPOSE SCAN PROGRAMS	56
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	56
B30 COORDINATE SPECIAL COMMUNICATIONS REQUIREMENTS WITH USERS OR DCA	44
H415 OPERATIONALLY CHECK SATELLITE COMMUNICATIONS SYSTEMS	44
K621 PERFORM DOSS MENU OPERATIONS	33
K622 PERFORM MULTIPOINT COMMUNICATIONS NETWORK (MCN) FUNCTIONS	33
K617 OPERATE DEFENSE OPERATIONAL SUPPORT SYSTEM (DOSS) PERIPHERAL EQUIPMENT	33
E207 PREPARE CORRESPONDENCE	33
H397 DIRECT FREQUENCY CHANGES OR CHECKS	33
E161 MAINTAIN MASTER STATION LOG FORMS	33
E221 PREPARE JOINT MESSAGE FORMS	33
E173 MAINTAIN SATELLITE COMMUNICATIONS REPORT	33
E227 PREPARE MASTER STATION LOG FORMS	33

TABLE A21

REPRESENTATIVE TASKS PERFORMED BY
COMMUNICATION SYSTEMS SHIFT LEADERS JT
(STG159, N=15)

TASKS	PERCENT MEMBERS PERFORMING
C78 WRITE APR	100
B31 COUNSEL PERSONNEL	93
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49350)	93
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	86
D82 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	86
B46 INDOCTRINATE NEWLY ASSIGNED PERSONNEL	80
A24 SCHEDULE LEAVES	80
B53 SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49330)	80
B48 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	73
A4 DETERMINE WORK PRIORITIES	73
D88 COUNSEL TRAINEES ON TRAINING PROGRESS	73
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	60
D85 CONDUCT OJT	60
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	53
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	53
C74 INSPECT AREA SECURITY OR CLASSIFIED MATERIAL INVENTORIES	53
E190 PARTICIPATE IN ALERTS OR RECALLS	53
A21 PLAN WORK ASSIGNMENTS	46
C73 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	40
C60 ANALYZE WORKLOAD REQUIREMENTS	40
B25 CONDUCT BRIEFINGS	40
A7 DEVELOP WORK PROCEDURES	40
B51 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	40
A13 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	40
A3 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	33
H450 PERFORM FAULT ISOLATION ON TIME DIVISION MULTIPLEX (TDM) SYSTEMS	33
E115 DESTROY CLASSIFIED INFORMATION OR MATERIALS	33
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	33
D89 DETERMINE OJT REQUIREMENTS	26
E215 PREPARE HAZCON REPORTS	26
B32 DIRECT CIRCUIT OR SYSTEM CHECKS	26
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	26
C64 EVALUATE INDIVIDUALS FOR PROMOTION	20

TABLE A22
 REPRESENTATIVE TASKS PERFORMED BY
 OJT SUPERVISORS JT
 (GP0364, N=9)

TASKS	PERCENT MEMBERS PERFORMING
B31 COUNSEL PERSONNEL	100
D82 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	100
D88 COUNSEL TRAINEES ON TRAINING PROGRESS	100
D97 EVALUATE OJT TRAINEES	100
H396 DIRECT ALTERNATE ROUTING OF CIRCUITS	100
D89 DETERMINE OJT REQUIREMENTS	89
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	89
H443 PERFORM FAULT ISOLATION ON FREQUENCY DIVISION MULTIPLEX (FDM) SYSTEMS	89
J607 PERFORM ESCORT DUTIES	89
D105 PLAN OJT	89
D93 DEVELOP TRAINING PLANS	78
D94 DIRECT OJT PROGRAMS	78
A13 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	78
D110 WRITE TEST QUESTIONS	78
D99 EVALUATE TRAINING METHODS	78
E190 PARTICIPATE IN ALERTS OR RECALLS	78
F261 ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	78
A7 DEVELOP WORK PROCEDURES	67
A4 DETERMINE WORK PRIORITIES	67
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	67
B46 INDOCTRINATE NEWLY ASSIGNED PERSONNEL	67
D107 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	67
D108 SCORE TESTS	67
D109 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	67
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	67
D85 CONDUCT OJT	67
D81 ADMINISTER TESTS	56
D91 DEVELOP JOB PROFICIENCY GUIDES (JPG)	56
C78 WRITE APR	56
A15 ESTABLISH STANDARD OPERATING PROCEDURES (SOP)	56
B53 SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49330)	56
A21 PLAN WORK ASSIGNMENTS	56
B32 DIRECT CIRCUIT OR SYSTEM CHECKS	56
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	56
D101 MAINTAIN MMICS RECURRING TRAINING FORECASTS	44
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49350)	33
C65 EVALUATE INSPECTION REPORTS OR PROCEDURES	33

TABLE A23

REPRESENTATIVE TASKS PERFORMED BY
CIRCUIT HISTORY AND DATA SUPERVISORS
(GP0379, N=9)

TASKS	PERCENT MEMBERS PERFORMING
D85 CONDUCT OJT	100
H435 PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	100
H446 PERFORM FAULT ISOLATION ON HIGH SPEED DATA CIRCUITS	100
E117 IMPLEMENT ACTIVATION OF CHANGES OF CIRCUITS	89
D97 EVALUATE OJT TRAINEES	89
H429 PERFORM EQUIPMENT LOOP-BACKS	89
H410 OPERATE COMPUTER DIAGNOSTIC EQUIPMENT, SUCH AS DATA SCOPES AND PROTOCOL	89
E112 COORDINATE INSTALLATIONS WITH USERS OR ASSOCIATED FACILITIES	89
D93 DEVELOP TRAINING PLANS	89
E111 COORDINATE CIRCUIT AND SYSTEM OUTAGES WITH USERS OR ASSOCIATED FACILITIES	89
H428 PERFORM DIGITAL CIRCUIT LOOP-BACKS	89
E245 STORE, UPDATE, OR PRINT COMPUTERIZED CIRCUIT DATA	89
H419 PATCH CRYPTOGRAPHIC EQUIPMENT	89
E250 TYPE FORMS, REPORTS, OR CORRESPONDENCE	89
H391 COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	88
B34 DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	88
B28 COORDINATE OPERATIONAL CHANGES TO CIRCUITS OR CHANNELS WITH USERS OR DEFENSE COMMUNICATIONS AGENCY (DCA)	78
B53 SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPECIALISTS (AFSC 49330)	78
D88 COUNSEL TRAINEES ON TRAINING PROGRESS	78
D89 DETERMINE OJT REQUIREMENTS	78
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	78
F262 ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	78
H431 PERFORM FAULT ISOLATION ON AUTODIN SWITCHING CENTER	78
C62 ESTABLISH CHANGES IN CIRCUITS OR CHANNELS	67
E127 MAINTAIN CIRCUIT HISTORY FOLDERS	67
E199 PREPARE CIRCUIT HISTORY FOLDERS	67
F263 CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS, CIRCUITS, OR EQUIPMENT	67
H390 COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	67
H427 PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	67
E197 PREPARE CIRCUIT DATA FORMS	67
D84 CONDUCT FACILITY RATING TRAINING	67
E125 MAINTAIN CIRCUIT DATA FORMS	56

APPENDIX B

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

		TNG EMP	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	TOT SPL	TSK DIF
2B. OPERATIONS SECURITY (OPSEC)									
B43 IMPLEMENT SECURITY PROGRAMS		1.14	2	1	2	7	19	10	5.04
2B(1). DEFINITION OF OPSEC									
B43 IMPLEMENT SECURITY PROGRAMS		1.14	2	1	2	7	19	10	5.04
2B(2). HISTORY OF OPSEC									
B43 IMPLEMENT SECURITY PROGRAMS		1.14	2	1	2	7	19	10	5.04
2B(3). RELATIONSHIP OF OPSEC TO OTHER SECURITY PROGRAMS SUCH AS COMSEC, INFORMATION SECURITY AND PHYSICAL SECURITY									
B43 IMPLEMENT SECURITY PROGRAMS		1.14	2	1	2	7	19	10	5.04
2B(4). COMMON OPSEC VULNERABILITIES									
B43 IMPLEMENT SECURITY PROGRAMS		1.14	2	1	2	7	19	10	5.04
2B(5). OPSEC SIGNIFICANCE OF UNCLASSIFIED DATA AND PROCEDURES									
B43 IMPLEMENT SECURITY PROGRAMS		1.14	2	1	2	7	19	10	5.04
2B(6). SPECIFIC OPSEC VULNERABILITIES OF AFSC 493X0	A B B								
B43 IMPLEMENT SECURITY PROGRAMS		1.14	2	1	2	7	19	10	5.04

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS (CONTINUED)
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

	THG EMP	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	TOT SPL	TSK DIF
2C. ELECTRONIC COMBAT (EC)								
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
2C(1). BACKGROUND AND HISTORY	-	A	-	-	-	-	-	-
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
2C(2). TERMS AND DEFINITIONS								
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
2C(2)(A). ELECTRONIC COUNTERMEASURES (ECM)	-	A	-	-	-	-	-	-
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
2C(2)(B). ELECTRONIC COUNTER-COUNTER-MEASURES (ECCM)	-	A	-	-	-	-	-	-
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
2C(2)(C). ELECTRONIC SUPPORT MEASURES (ESM)	-	A	-	-	-	-	-	-
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
2C(3). INTERACTION BETWEEN ESM, ECM, AND ECCM	-	A	-	-	-	-	-	-
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
2C(4). REPORT MEASURING, INTRUSION, JAMMING, AND INTERFERENCE (MIJI)	-	A	-	-	-	-	-	-

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS (CONTINUED)
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

	TNG EMP	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	TOT SPL	TSK DIF
E162 MAINTAIN MEACONING, INTRUSION, JAMMING, AND INTERFERENCE (HLJI) REPORTS	2.30	7	6	7	6	7	6	4.91
E228 PREPARE MIJI REPORTS	3.13	7	8	11	9	7	8	6.11
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
2D. PHYSICAL SECURITY								
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
B43 IMPLEMENT SECURITY PROGRAMS	1.14	2	1	2	7	19	10	5.04
4. SUPERVISION								
A24 SCHEDULE LEAVES	.38	2	0	7	14	42	21	3.15
B25 CONDUCT BRIEFINGS	1.11	2	7	13	27	53	32	5.41
B26 CONDUCT STAFF MEETINGS	.14	2	0	1	3	19	9	5.54
B54 SUPERVISE CIVILIAN PERSONNEL, OTHER THAN FOREIGN NATIONALS	.09	2	1	1	1	3	2	6.45
B58 SUPERVISE FOREIGN NATIONALS	.29	2	0	1	2	4	2	7.42
B59 SUPERVISE PERSONNEL WITH AFSC OTHER THAN AFSC 492X0	.04	2	1	1	5	15	8	6.28
C70 EVALUATE SUGGESTIONS	.13	2	1	2	5	19	10	6.24
C73 ENDORSE AIRMAN PERFORMANCE REPORTS (APR)	.46	2	0	2	9	32	16	5.11
C79 WRITE CIVILIAN PERFORMANCE RATINGS	.00	***	0	0	1	1	1	6.99
ZA. ORIENT NEW PERSONNEL								
B46 INDOCTRINATE NEWLY ASSIGNED PERSONNEL	1.29	2	8	11	30	52	34	4.79
B48 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	.95	2	4	9	26	51	32	5.63
A597 CONDUCT FACILITY FAMILIARIZATION VISITS	.68	2	7	10	17	27	19	4.15
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	.34	1	0	2	7	33	15	1.67
4B. EVALUATE WORK PERFORMANCE OF SUBORDINATE PERSONNEL								
C64 EVALUATE INDIVIDUALS FOR PROMOTION	.64	2	0	1	8	29	15	6.20
C78 WRITE APR	2.21	2	0	3	31	56	36	6.62

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS (CONTINUED)
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

		TNG EMP	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	TOT SPL	TSK DIF
4C. INITIATE CORRESPONDENCE	- - -								
A8 DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES		.04	2	4	5	7	22	12	7.13
B51 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS		.61	2	0	1	13	43	22	6.75
E207 PREPARE CORRESPONDENCE		1.80	2	4	6	17	53	27	6.05
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL		.34	1	0	2	7	33	15	1.67
4D. PLAN WORK ASSIGNMENTS AND PRIORITIES	- - -								
A4 DETERMINE WORK PRIORITIES		1.82	2	15	19	36	61	42	5.13
A5 DEVELOP ORGANIZATIONAL CHARTS		.18	2	5	5	9	20	12	3.61
A8 DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES		.04	2	4	5	7	22	12	7.13
A21 PLAN WORK ASSIGNMENTS		.96	2	1	3	17	41	23	4.80
C60 ANALYZE WORKLOAD REQUIREMENTS		.63	2	1	3	10	34	17	6.26
4E. SCHEDULE WORK ASSIGNMENTS	- - -								
A7 DEVELOP WORK PROCEDURES		.98	2	5	9	21	46	27	6.54
A21 PLAN WORK ASSIGNMENTS		.98	2	1	3	17	41	23	4.80
D82 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS		.77	2	1	2	14	31	18	3.87
D83 ASSIGN RESIDENT COURSE INSTRUCTORS		.05	2	0	0	1	2	1	4.87
E143 MAINTAIN DAILY STANDBY ROSTERS		.45	2	0	2	5	6	5	3.73
E175 MAINTAIN SCHEDULES OF TECHNICIAN AVAILABILITY		.79	2	1	3	10	24	13	4.18
E210 PREPARE DAILY STANDBY ROSTERS		.45	2	0	0	2	5	3	4.19
A1 ASSIGN PERSONNEL TO DUTY POSITIONS		.52	1	3	4	17	40	23	2.85
4F. SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL ACTIVITIES	- - -								
A6 DEVELOP PLANS TO INFORM COMMUNICATIONS CIRCUIT USERS OF CHANGES IN CIRCUIT CONFIGURATIONS		.66	2	4	6	11	21	13	5.14
A8 DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES		.04	2	4	5	7	22	12	7.13
A15 ESTABLISH STANDARD OPERATING PROCEDURES (SOP)		.63	2	0	3	11	38	19	6.34

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS (CONTINUED)
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

	TNG EMP	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	TOT SPL	TSK DIF
46. ESTABLISH RESOURCE REQUIREMENTS								
A3 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES								
A9 DRAFT BUDGET REQUIREMENTS	.39	2	2	5	13	47	23	5.35
A10 DRAFT RECOMMENDATIONS FOR SYSTEM IMPROVEMENTS	.04	2	0	1	4	19	9	6.00
B47 INITIATE PERSONNEL ACTION REQUESTS	.54	2	2	3	7	30	14	7.39
B52 PREPARE REQUISITIONS FOR EQUIPMENT OR SUPPLIES	.50	2	0	1	6	27	13	4.36
C63 EVALUATE BUDGET REQUIREMENTS	1.13	2	1	4	11	32	17	5.67
D107 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	.04	2	0	1	3	18	8	7.34
	.39	2	1	4	9	15	10	4.82
5. TRAINING								
D95 DIRECT TRAINING PROGRAMS OTHER THAN OJT	.30	2	2	3	8	13	8	6.17
D98 EVALUATE PROGRESS OF STUDENTS	1.18	2	2	6	14	19	14	5.55
5A. EVALUATE PERSONNEL FOR NEED OF TRAINING								
D97 EVALUATE COMBINEE TRAINEES	1.71	2	4	10	24	33	24	5.66
D109 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	.21	2	0	1	5	18	9	4.90
58. OJT								
A22 PREPARE JOB DESCRIPTIONS	.34	2	1	2	7	31	14	5.66
B47 INITIATE PERSONNEL ACTION REQUESTS	.50	2	0	1	6	27	13	4.36
58(1). DEVELOP JOB QUALIFICATION STANDARDS (JOSS)								
A13 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	.68	2	1	4	17	35	21	5.82
B53 SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CON- TROL SPECIALISTS (AFSC 49330)	2.20	2	7	14	33	25	26	6.19
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPE- CIALISTS (AFSC 49350)	.98	2	1	6	27	44	29	5.69

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS (CONTINUED)
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

		TING EMP	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	TOT SPL	TSK DIF
B57	SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL TECHNI- CIANS (AFSC 49370)	.16	2	0	1	4	29	12	5.42
D89	DETERMINE OJT REQUIREMENTS	1.09	2	2	4	17	35	21	6.18
D91	DEVELOP OJT PROFICIENCY GUIDES (JPG)	.95	2	1	2	10	24	13	6.94
D94	DIRECT OJT PROGRAMS	.64	2	1	4	12	24	15	6.45
D105	PLAN OJT	1.16	2	2	6	16	26	17	6.15
B56	SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SUPER- INTENDENTS (AFSC 49390)	.00	***	0	1	2	3	2	5.24

58(3). COUNSEL TRAINEES ON TRAINING
PROGRESS

B51	COUNSEL PERSONNEL	1.13	2	2	9	36	57	39	6.50
B53	SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CON- TROL SPECIALISTS (AFSC 49330)	2.20	2	7	14	33	25	26	6.19
B55	SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPE- CIALISTS (AFSC 49350)	.98	2	1	6	27	44	29	5.69
B57	SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL TECHNI- CIANS (AFSC 49370)	.16	2	0	1	4	29	12	5.42
D88	COUNSEL TRAINEES ON TRAINING PROGRESS	1.75	2	5	12	34	40	32	5.29
B56	SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SUPER- INTENDENTS (AFSC 49390)	.00	***	0	1	2	3	2	5.24

58(4). DEVELOP TRAINING MATERIALS

A72	ESTABLISH FACILITY PROFICIENCY RATING PROGRAMS	.05	2	1	2	5	12	7	6.98
B53	SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CON- TROL SPECIALISTS (AFSC 49330)	2.20	2	7	14	33	25	26	6.19
B55	SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPE- CIALISTS (AFSC 49350)	.98	2	1	6	27	44	29	5.69
B57	SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL TECHNI- CIANS (AFSC 49370)	.16	2	0	1	4	29	12	5.42
C92	DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	.23	2	1	1	2	4	3	8.82
C93	DEVELOP TRAINING PLANS	1.88	2	6	12	24	34	25	7.77

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS (CONTINUED)
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

	TNG EMP	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	TOT SPL	TSK DIF
D96 ESTABLISH STUDY REFERENCE FILES								
D110 WRITE TEST QUESTIONS	.48	2	0	2	6	10	7	5.25
B56 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SUPER- INTENDENTS (AFSC 4939C)	.98	2	5	8	15	25	16	6.82
	.00	***	0	1	2	3	2	5.24

5B(5). MAINTAIN TRAINING RECORDS

B53 SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CON- TROL SPECIALISTS (AFSC 4933C)	2.20	2	7	14	33	25	26	6.19
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPE- CIALISTS (AFSC 4935C)	.98	2	1	6	27	44	29	5.69
B57 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL TECHNI- CIANS (AFSC 4937C)	.16	2	0	1	4	29	12	5.42
D100 MAINTAIN MAINTENANCE MANAGEMENT INFORMATION AND CONTROL SYSTEMS (MMICS) TASK TABLE LIST	.91	2	2	3	9	10	8	5.87
D101 MAINTAIN MMICS RECURRING TRAINING FORECASTS	.70	2	2	3	9	11	9	5.61
D102 MAINTAIN MMICS TRAINING VISIBILITY LEDGERS	.70	2	2	3	7	9	7	5.68
D103 MAINTAIN MMICS WORKCENTER TASK ASSIGNMENTS	.79	2	2	4	9	10	9	5.66
D104 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	2.20	2	8	13	30	37	29	5.24
B56 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SUPER- INTENDENTS (AFSC 4939C)	.00	***	0	1	2	3	2	5.24

5B(6). EVALUATE EFFECTIVENESS OF TRAINING
PROGRAM

A73 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	.66	2		4	17	35	21	5.82
B53 SUPERVISE APPRENTICE COMMUNICATIONS-COMPUTER SYSTEMS CON- TROL SPECIALISTS (AFSC 4933C)	2.20	2	7	14	33	25	26	6.19
B55 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SPE- CIALISTS (AFSC 4935C)	.98	2	1	6	27	44	29	5.69
B57 SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL TECHNI- CIANS (AFSC 4937C)	.16	2	0	1	4	29	12	5.42
D81 ADMINISTER TESTS	.50	2	5	7	15	22	14	3.30
D84 CONDUCT FACILITY RATING TRAINING	.80	2	3	3	7	15	9	6.01
D99 EVALUATE TRAINING METHODS	.89	2	3	6	13	26	16	6.18
D106 PREPARE TRAINING REPORTS	.48	2	1	3	7	14	8	5.43
D108 SCORE TESTS	.41	1	2	5	13	20	13	2.93

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS (CONTINUED)
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

		TNG	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	7- SPL	TOT	TSK DIF
B56	SUPERVISE COMMUNICATIONS-COMPUTER SYSTEMS CONTROL SUPER- INTENDENTS (AFSC 49390)	.00	***	0	1	2	3	2		5.24
7. PUBLICATIONS										
A14	ESTABLISH PUBLICATION LIBRARIES	1.18	2	4	7	10	19	12		4.97
7A.	DEFENSE COMMUNICATIONS AGENCY (DCA) PUBLICATIONS SYSTEM									
E130	MAINTAIN CIRCUIT TRUNK DIRECTIVES	1.91	2	4	3	3	7	5		4.24
16F. SYSTEMS MANAGEMENT										
16F(1).	ESTABLISH QUALITY CONTROL TEST SCHEDULES									
A18	PLAN QUALITY CONTROL PROGRAMS	1.45	2	5	6	12	12	11		6.23
B38	DIRECT QUALITY CONTROL PROGRAMS	.63	2	6	8	14	19	14		5.41
B45	IMPLEMENT TELECOMMUNICATIONS FACILITIES TESTING PROGRAMS	1.09	2	5	4	8	12	8		5.58
16F(3). DEVELOP CONTINGENCY PLANS										
A18	PLAN QUALITY CONTROL PROGRAMS	1.45	2	5	6	12	12	11		6.23
A23	PREPARE UNIT EMERGENCY PLANS	.18	2	1	1	4	14	7		6.64
B30	COORDINATE SPECIAL COMMUNICATIONS REQUIREMENTS WITH USERS OR DCA	1.39	2	15	16	17	31	22		6.58
E137	MAINTAIN CONTINGENCY PLANS	1.11	2	1	3	6	19	10		5.19
16F(4). DEVELOP RESTORAL PLANS										
A10	PLAN QUALITY CONTROL PROGRAMS	1.45	2	5	6	12	12	11		6.23
16F(6)(A). CORRESPONDENCE										
A18	PLAN QUALITY CONTROL PROGRAMS	1.45	2	5	6	12	12	11		6.23
B50	PREPARE OPERATIONAL MESSAGES	1.70	2	6	10	17	35	22		5.20
E118	INITIATE RESPONSES TO EMERGENCY ACTION MESSAGES OR DISAS- TER REPORTS	1.05	2	6	5	6	8	7		6.27

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS (CONTINUED)
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

			ING EMP	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	TOT SPL	TSK DIF
16F(6)(A)1. REQUESTS FOR SERVICE (RFS)	A	B	-							
AT8 PLAN QUALITY CONTROL PROGRAMS			1.45	2	5	6	12	12	11	6.23
16F(6)(A)2. TELECOMMUNICATIONS SERVICE REQUEST (TSR)	A	B	-							
AT8 PLAN QUALITY CONTROL PROGRAMS			1.45	2	5	6	12	12	11	6.23
16F(6)(A)3. TELECOMMUNICATIONS SERVICE ORDER (TSO)	A	B	-							
AT8 PLAN QUALITY CONTROL PROGRAMS			1.45	2	5	6	12	12	11	6.23
B41 IMPLEMENT CHANGES TO TELECOMMUNICATIONS SYSTEMS			.82	2	5	7	11	19	13	6.27
16F(6)(A)4. COMMERCIAL LEASED ACTION MESSAGE (CLAM)	A	B	-							
AT8 PLAN QUALITY CONTROL PROGRAMS			1.45	2	5	6	12	12	11	6.23
16F(6)(A)5. COMPLETION REPORTS	A	B	-							
AT8 PLAN QUALITY CONTROL PROGRAMS			1.45	2	5	6	12	12	11	6.23
16F(6)(C)1. SUBMIT COMPLETION REPORTS	-	B	-							
AT8 PLAN QUALITY CONTROL PROGRAMS			1.45	2	5	6	12	12	11	6.23
16F(6)(D)1. UPDATE CIRCUIT AND SYSTEM RECORDS	-	B	-							
AT8 PLAN QUALITY CONTROL PROGRAMS			1.45	2	5	6	12	12	11	6.23
16F(7)1. MAINTAIN FACILITY AND LINK DATA	-		-							

STS PERFORMANCE ELEMENTS REFLECTING
LOW PERCENT MEMBERS PERFORMING TASKS (CONTINUED)
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

		TNG EMP	ATI	1ST JOB	1ST ENL	5- LEV	7- LEV	TOT SPL	TSK DIF
E133	MAINTAIN COMMUNICATIONS FACILITIES LINK DATA REPORTS	2.41	7	6	6	8	12	9	5.08
E159	MAINTAIN LINK PERFORMANCE REPORTS	2.30	7	9	8	8	6	7	3.99
B49	MAINTAIN DEFENSE STATION, AUTOMATIC DIGITAL NETWORK STA- TION, OR REPORTING STATION FILES	1.45	2	4	6	6	11	7	5.27
E135	MAINTAIN COMMUNICATIONS SYSTEM/FACILITY STATUS REPORTS	2.05	2	14	14	14	14	14	4.71
E145	MAINTAIN DCS DATA BASES	1.84	2	4	4	6	14	8	5.08
17C(17).	SINGING POINT		A C						
F321	PERFORM MANUAL SINGING POINT TESTS	4.25	11	5	5	4	5	5	5.09
17C(18).	ECHO RETURN LOSS		A C						
F312	PERFORM MANUAL ECHO RETURN LOSS TESTS	5.25	11	16	14	9	9	10	5.70
17E(7).	DIGITAL LEVEL		A C						
G385	PERFORM VOLTAGE MEASUREMENTS ON TDM/PCM SYSTEMS	4.07	7	9	8	6	4	5	4.82
171.	USE AUTOMATED TEST EQUIPMENT		2B C						
F285	PERFORM CIRCUIT PERFORMANCE MONITORING SYSTEMS SELF-TESTS USING PROTOCOLS	4.02	7	8	9	9	3	6	5.76
H410	OPERATE COMPUTER DIAGNOSTIC EQUIPMENT, SUCH AS DATA SCOPES AND PROTOCOL	3.57	7	10	15	16	13	13	6.41
H412	OPERATE ON-LINE COMPUTER SYSTEM DIAGNOSTIC TERMINALS	3.43	7	9	10	10	8	9	5.95
18C(8).	REGENERATIVE REPEATERS		- C						
F255	ADJUST REGENERATIVE REPEATERS	3.93	7	5	5	4	2	2	4.83
18C(12).	LINE ISOLATION UNITS (LIUS)		A C						
F258	ADJUST LINE ISOLATION RELAYS (LIR) OR BATTERY ISOLATION RELAYS (BIR)	5.14	11	4	4	4	4	4	5.05

APPENDIX C

POI ELEMENTS REFLECTING LOW PERCENT MEMBERS PERFORMING
(LESS THAN 30 PERCENT MEMBERS PERFORMING)

		TNG EMP	ATI	1ST JOB	1ST ENL	TSK DIF
V 1C. DEFINE SPECIFIC OPSEC VULNERABILITIES OF AFSC 493X0. STS: 2B(6)	(1.5)					
B43 IMPLEMENT SECURITY PROGRAMS		1.14	2	1	2	5.04
V 1D. DESCRIBE THE STEPS TO BE TAKEN IN REPORTING OF MEACONING, INTRUSION, JAMMING, AND INTERFERENCE (MIJI). STS: 2C(4) MEAS: W	(1.5)					
E162 MAINTAIN MEACONING, INTRUSION, JAMMING, AND INTERFERENCE (MIJI) REPORTS		2.30	7	6	7	4.91
E228 PREPARE MIJI REPORTS		3.13	7	8	11	6.11
B43 IMPLEMENT SECURITY PROGRAMS		1.14	2	1	2	5.04
VII 1D. IDENTIFY SIGNAL FLOW CONNECTIVITY THROUGH THE DIGITAL PATCHBAYS. STS: 16E(6), 18C(13) MEAS: W	(2.5)					
F258 ADJUST LINE ISOLATION RELAYS (LIR) OR BATTERY ISOLATION RELAYS (BIR)		5.14	11	4	4	5.05
IX 2. SYSTEMS MANAGEMENT						
IX 2A. DESCRIBE PROCEDURES USED FOR REQUEST FOR SERVICE (RFS). STS: 16F(6)(A)1 MEAS: W	(.5)					
A18 PLAN QUALITY CONTROL PROGRAMS		1.45	2	5	6	6.23
IX 2B. DESCRIBE HOW TO SUBMIT TELECOMMUNICATIONS SERVICE REQUEST (TSR). STS: 16F(6)(A)2 MEAS: W	(1)					

POI ELEMENTS REFLECTING LOW PERCENT MEMBERS PERFORMING
LESS THAN 30 PERCENT MEMBERS PERFORMING (CONTINUED)

TNG EMP	ATI	1ST JOB	1ST ENL	TSK DIF
1.45	2	5	6	6.23

A18 PLAN QUALITY CONTROL PROGRAMS

IX 2C. DESCRIBE THE PROCEDURES REQUIRED FOR ACCEPTANCE OF
TELECOMMUNICATIONS SERVICE ORDER (TSO). STS: 16F(6)(A)3
MEAS: W (3.5)

A18	PLAN QUALITY CONTROL PROGRAMS	1.45	2	5	6	6.23
B41	IMPLEMENT CHANGES TO TELECOMMUNICATIONS SYSTEMS	.82	2	5	7	6.27

0201 IX 2D. DESCRIBE THE PURPOSE OF A COMMERCIAL LEASED ACTION
MESSAGE (CLAM). STS: 16F(6)(A)4 MEAS: W

A18	PLAN QUALITY CONTROL PROGRAMS	1.45	2	5	6	6.23
-----	-------------------------------	------	---	---	---	------

XI 2A. IDENTIFY CHARACTERISTICS ASSOCIATED WITH DIGITAL
IMPAIRMENTS. STS: 9B(1), 9E(1), 9E(2), 17E(2), 17E(3),
17E(7), 18C(5) MEAS: W (5)

G379	PERFORM NONLINEAR DISTORTION MEASUREMENTS ON TDM/PCM SYSTEMS	4.54	11	20	18	5.45
G376	PERFORM COMPRESSION-EXPANSION LINEARITY TESTS	3.91	7	4	5	5.36
G385	PERFORM VOLTAGE MEASUREMENTS ON TDM/PCM SYSTEMS	4.07	7	9	8	4.82

XI 2C. DESCRIBE THE PROCEDURES REQUIRED FOR ACCEPTANCE OF
TELECOMMUNICATIONS SERVICE ORDER (TSO).
STS: 16F(6)(A)3 MEAS: W (5)

A18	PLAN QUALITY CONTROL PROGRAMS	1.45	2	5	6	6.23
B41	IMPLEMENT CHANGES TO TELECOMMUNICATIONS SYSTEMS	.82	2	5	7	6.27

POI ELEMENTS REFLECTING LOW PERCENT MEMBERS PERFORMING
LESS THAN 30 PERCENT MEMBERS PERFORMING (CONTINUED)

		TNG EMP	ATI	1ST JOB	1ST ENL	TSK DIF
XI 2G. DESCRIBE PROCEDURES FOR THE RECONFIGURATION OF TDM EQUIPMENT. STS: 10D, 10G(10)(A), 16G(10)(B), 16E(16) MEAS: PC (3)						
H389 CONFIGURE MODEMS		3.14	7	14	20	5.84
I 2H. DESCRIBE PROCEDURES USED TO CHANGE CONFIGURATIONS OF INTERFACE TERMINALS. STS: 10G(10)(A), 10G(10)(B), 16E(15) MEAS: W (3)						
H399 IMPLEMENT TELECOMMUNICATIONS SYSTEMS CONTINGENCY PLANS		3.50	7	20	24	5.96