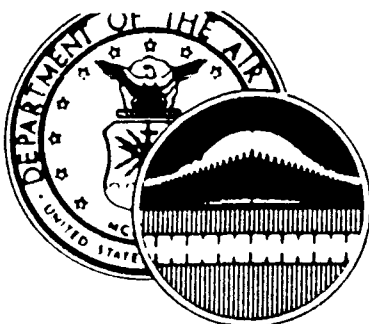




UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT

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CABLE SPLICING PROJECT/MAINTENANCE ACTION

AFSC 361X1

AFPT 90-361-822

JANUARY 1991

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

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PREFACE

This report presents the results of an Air Force Occupational Survey of the Cable Splicing Project/Maintenance Action (AFSC 361X1) career ladder. Authority for conducting occupational surveys is contained in AFR 35-2. Computer products used in this report are available for use by operations and training officials.

Captain Doug Ketch developed the survey instrument, Ms Olga Velez provided computer programming support, and Ms Tamme Lambert provided administrative support. Major John Kropac and Captain Kevin Osten analyzed the data, and Major Kropac wrote the final report. This report has been reviewed and approved for release by Lieutenant Colonel Charles D. Gorman, Chief, Airman Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Squadron.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies may be requested from the Occupational Measurement Squadron, Attention: Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150-5000.

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SUMMARY OF RESULTS

1. Survey Coverage: Survey results are based on responses from 597 Cable Splicing Project/Maintenance Action personnel. This represents 62 percent of the total assigned AFSC 361X1 population. Incumbents were surveyed across Air Force Communications Command (AFCC) and Air Training Command (ATC) and included personnel from the 3-, 5-, and 7-skill-level DAFSCs.

2. Career Ladder Structure: Five clusters and four independent job types were identified in the career ladder structure analysis. One cluster (representing 61 percent of the total sample) spends varying amounts of time in the installation and maintenance of base cables. Another cluster (representing 8 percent of the total sample) contains individuals who spend the majority of their time maintaining Hardened Intersite Cable Systems (HICS). Eight percent of the total sample is contained in the First-Line Supervisor cluster, consisting of two job types. These members spend most of their time supervising and performing administrative and supply tasks, but perform technical tasks as well. The Supervisory cluster, which accounts for another 3 percent, has two jobs. These more senior personnel principally supervise and perform only a minimum of technical tasks. There is also a cluster of cable affairs technicians who perform a more administrative job, annotating and maintaining records and files, and interpreting forms and diagrams.

The four independent job types consisted of technical training personnel, engineering and installation (EI) team members, quality assurance/quality control (QA/QC) inspectors and evaluators, and cable supply personnel. These specific jobs contain small groups of people who perform mostly unrelated functions.

3. Career Ladder Progression: The AFSC 361X1 career ladder shows a normal career progression pattern. At the 3- and 5-skill-level, the job is primarily technical. At the 7-skill-level, most members continue to perform numerous technical duties, along with a normal increased supervisory responsibility.

4. AFR 39-1 Specialty Descriptions: A comparison of survey data to AFR 39-1 indicates the AFR 39-1 Specialty Descriptions provide comprehensive depictions of the respective jobs. However, some additions are recommended, primarily the expansion of the Specialty Summary for the 7-skill-level to include their technical duties, and the inclusion of several job tasks in the Duties and Responsibilities sections. These changes will provide a more complete and accurate job description of career ladder functions.

5. Training Analysis: Changes to the AFSC 361X1 career ladder precluded the match of survey data to the Specialty Training Standard (STS) or the Plan of Instruction (POI) for the 36131 course. However, information is provided on the Task Difficulty (TD) and Training Emphasis (TE) ratings of tasks, along with the Automated Training Indicator (ATI), which serves as a basis for trainers to make adjustments in training in the 361X1 residence course. Electronic Principles Inventory (EPI) data for 361X1 personnel were matched with Electronic Fundamentals/Applications STS 1 tasks and show which electronics fundamentals are most valuable for AFSC 361X1 first-enlistment personnel to know.

6. Job Satisfaction: Overall, 361X1 personnel are satisfied with their jobs. Responses for all facets of job satisfaction are slightly higher than those of a comparative sample of wire communications systems maintenance AFSCs surveyed in 1989. Comparisons with the previous OSR show improvement in all areas, especially reenlistment intentions. Personnel in certain job groups find their job less satisfying and interesting than others, reporting lower utilization of talents and training, and some express relatively negative reenlistment intentions. However, there is a general trend of increasing job satisfaction as time goes on and a positive reenlistment trend at the higher TAFMS levels, where the majority of individuals are choosing reenlistment over separation. Job satisfaction is generally good according to 361X1 personnel, especially compared to the responses of other similar career ladders and the previous 1981 survey group.

7. Implications: Survey data support the current structure of AFSC 361X1. The 361X1 job has remained primarily the same since the last survey. There have been some technological advances and changes, such as in fiber optics. Career ladder and training documents reflect most of these changes and are generally adequate, but there is a need for more revisions to better match these documents to actual job requirements.

OCCUPATIONAL SURVEY REPORT
CABLE SPLICING PROJECT/MAINTENANCE ACTION CAREER LADDER
(AFSC 361X1)

INTRODUCTION

This report presents the results of an occupational survey of the Cable Splicing Project/Maintenance Action career ladder completed by the USAF Occupational Measurement Squadron in September 1990. The present survey was requested by HQ USAF/LEYE to provide data for the possible restructuring of the entire 36XXX career field. This report is based upon data gathered prior to April 1990 and describes the career ladder before new responsibilities were added to the newly retitled 361X1, Communications Cable Systems Installation/Maintenance career ladder.

Background

The last OSR for the 361X1 career ladder was completed in July 1981. The 1981 OSR was requested by Sheppard Technical Training Center to assess the effects of the recent merging of AFSCs 361X1 and 361X2.

The Cable Splicing Project/Maintenance Action career ladder was initially created in July 1954 as the 361X1 Cable Splicing specialty. In March 1965, the 361X1 career ladder was split and AFSCs 361X3, Missile Systems Cable Splicer, and 361X4, Cable Splicers, were created. Those AFSCs remained unchanged until April 1977, when they were redesignated as AFSCs 361X1 and 361X2, respectively. The present structure occurred in April 1978 when AFSCs 361X1 and 361X2 were again merged to create AFSC 361X1, Cable Splicing Project/Maintenance Action career ladder.

Individuals possessing AFSC 361X1 install, maintain, and repair underground, buried, and aerial copper core and fiber optic cables supporting command, control, communications, and computer (SC4) systems.

AFSC 361X1 training occurs at Sheppard AFB TX. The J3ABR36131 002 Apprentice Cable Splicing Project/Maintenance Action Specialist course lasts 14 weeks 4 days. Topics covered in this course include: pole climbing; splicing and sealing of hardened missile and communication cables; splicing aerial, buried, and underground cables; cable maps and diagrams; test equipment; pressurized cable systems; cable fault isolation; performance testing; fiber optics splicing; and Hardened Intersite Cable System (HICS) pressure monitoring systems.

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SURVEY METHODOLOGY

Inventory Development

Data for this survey were collected using USAF Job Inventory AFPT 90-361-822, dated May 1989. The Inventory Developer reviewed pertinent career ladder documents and the previous 361X1 inventory and OSR to prepare a tentative task list. This task list was then validated through personal interviews with 25 subject-matter experts from 5 Air Force bases.

<u>UNIT</u>	<u>REASON FOR VISIT</u>
3750 TTG, Sheppard AFB TX	Technical Training Center
1923 CG/LGPK, Kelly AFB TX	Base Maintenance for Cable Splicing (O&M)
1839 EIG/ISWU, Keesler AFB MS	Engineering and Installation (EI) and Fiber Optic Cable
HQ EID/IST & HQ EID/ISR, Tinker AFB OK	Team Chief Academy
2154CS/LGPH, Whiteman AFB MO	HICS Missile Cable Splicing

The resulting inventory listed 621 tasks grouped into 17 duty headings. There were also 21 background questions. Some of these questions dealt with job satisfaction, job title, functional area assigned, organizational level assigned, and installation, maintenance, or operation of various equipment items.

Survey Administration

From June 1989 through March 1990, Consolidated Base Personnel Offices at operational bases worldwide administered the inventory booklets to all eligible DAFSC 361X1 personnel at the 3-, 5-, and 7-skill-levels. Participants were selected from a computer-generated mailing list provided by the Air Force Human Resources Laboratory, Brooks AFB TX. Personnel not receiving booklets included those in transition for a permanent change of station (PCS), members retiring at the time of survey, those hospitalized, and those who had not been in their current job for at least 6 weeks.

All individuals who filled out an inventory booklet first completed an identification and background information section. Next, they went through the booklet and checked each task performed in their current job. After checking all tasks performed, the respondents rated each of these tasks on a 9-point scale reflecting relative time spent on each task compared to all other tasks. Ratings ranged from 1 (indicating a very small amount of time spent) to 9 (indicating a very large amount of time spent). To determine

relative time spent for each task checked by a respondent, the sum of a respondent's ratings was assumed to account for 100 percent of his or her time spent on the job. All of a respondent's ratings were added together, and then each rating was divided by the sum of all responses. Then, this quotient was multiplied by 100 to obtain the relative time spent for each task. This procedure provided a basis for comparing tasks not only in terms of percent members performing, but also in terms of relative percent time spent on tasks and groups of tasks.

Survey Sample

Table 1 shows the distribution, by MAJCOM, of assigned personnel in the career ladder as of June 1990. Also shown in this table are the total assigned and eligible populations in the career ladder as of this date. Table 2 shows the survey sample representation across paygrades. As Tables 1 and 2 indicate, survey representation by MAJCOM and paygrade is representative of the career ladder as a whole. The 597 respondents in the final survey sample represent 62 percent of the total 965 DAFSC 361X1 personnel assigned.

Task Factor Administration

Once the survey data were processed and input into a Sperry 1100 mainframe computer, Comprehensive Occupational Data Analysis Programs (CODAP) were used to analyze the data and create job descriptions for various groupings of respondents. But job descriptions alone do not provide sufficient information for making decisions about career ladder documents or training programs. Task Difficulty (TD) and Training Emphasis (TE) data can be useful for analysis of the career ladder. To obtain the needed task factor data, senior AFSC 361X1 personnel (mostly those in paygrades E-6 and E-7) were asked to complete TD and TE booklets. All of these booklets were processed separately from the job inventories, and these compiled data are used in a number of different analyses discussed later in this report.

Task Difficulty (TD). Task difficulty is defined as the length of time an average airman needs to learn how to perform a task. This survey had 40 experienced supervisors rate the difficulty of the tasks in the inventory on a 9-point scale ranging from 1 (extremely low difficulty) to 9 (extremely high difficulty). Ratings were adjusted so tasks of average difficulty would have a value of 5.0 and a standard deviation of 1.0. Thus, tasks with ratings of 6.00 and higher are considered difficult to learn how to perform. The resulting data yield essentially a rank ordering of tasks indicating the degree of difficulty for each task in the inventory.

Training Emphasis (TE). Training emphasis is a rating of which tasks require structured training for first-enlistment personnel. Structured training is defined as training provided by resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or any other organized training method. Thirty-one experienced AFSC 361X1 supervisors rated the tasks in the inventory on a 10-point scale ranging from 0 (no training emphasis required) to 9 (high training emphasis required). In this

TABLE 1
COMMAND REPRESENTATION OF SURVEY SAMPLE
AFSC 361X1*

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AFCC	97	97
ATC	2	3
PACAF/USAFE	1	-

Total Assigned	965
Total Number Eligible for Survey	827
Total in Sample	597
Percent of Assigned in Sample	62%
Percent of Eligible in Sample	72%

* As of June 1990

- Indicates less than 1 percent

Note: AFSC 361X1 personnel not eligible for survey include those members with discharge, retirement, PCS, or hospital status, and those having less than 6 weeks in their present job.

TABLE 2
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE
AFSC 361X1*

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
E7	7	7
E6	10	9
E5	20	20
E4	32	37
AIRMAN (E1-E3)	29	26

* As of April 1990

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

specialty, tasks have an average (mean) TE rating of 2.87 and a standard deviation of 1.56. Tasks considered high in TE have ratings of 4.43 and above. These TE data also provide essentially a rank ordering of tasks, whereby those tasks with higher ratings are perceived as most important for structured training.

When TD data and TE ratings are used together, they provide valuable insight into training requirements and help validate the need for structured training for the career ladder.

SPECIALTY JOBS (Career Ladder Structure)

The structure of jobs within the Cable Splicing Project/Maintenance Action career ladder was examined on the basis of similarity of tasks performed and the percent of time spent by job incumbents, independent of background or other factors.

For the purpose of organizing individual jobs into similar units of work, an automated job clustering program compares the job description for each individual in the sample to every other job description in terms of the tasks performed and the relative amount of time spent doing those tasks. The automated program is designed to find the two most similar job descriptions and merge them into a group. All other job descriptions are then compared to this group, and those that are similar are also merged. In successive stages, new members are added to merge with groups already formed or to create new groups, until all job incumbents (and their respective job descriptions) are merged. The result is a pattern of jobs making up the 361X1 career ladder.

For this report, the career ladder structure is described in terms of clusters, job types, and independent job types. The basic identifying group is the Job Type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When different job types have a substantial degree of similarity between them, they are grouped together and labeled a Cluster. In many career ladders, there are specialized job types that are too dissimilar to be grouped into any cluster. These unique groups are labeled Independent Job Types (IJT).

Structure Overview

Based on the similarity of tasks performed and the amount of time spent performing each task, five clusters, four job types, and four independent job types were identified. The major jobs listed below are illustrated in Figure 1, and descriptions for each are given on the following pages. The stage (STG) or group (GRP) numbers printed beside each job title are a reference to computer-generated information. The letter "N" within parentheses refers to the number of personnel in the group.

AFSC 361X1 SPECIALTY JOBS (N= 597)

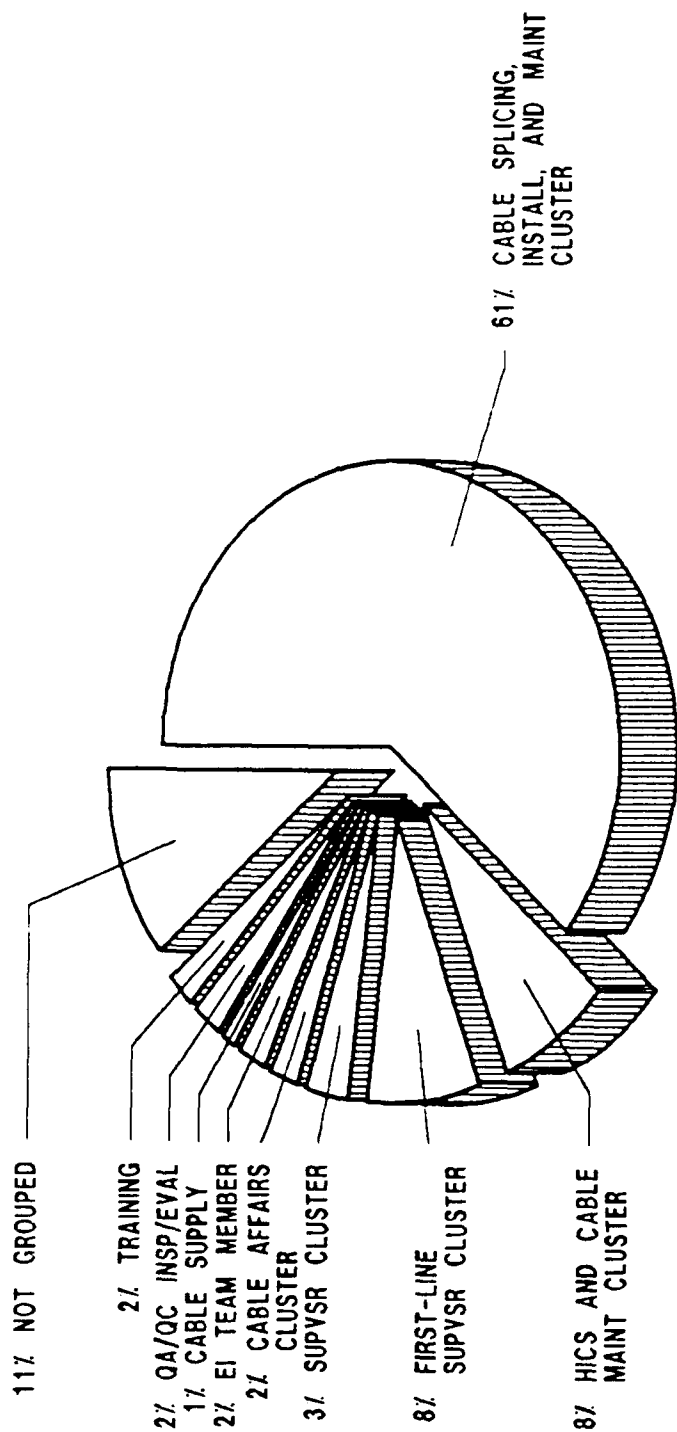


Figure 1

- I. CABLE SPLICING, INSTALLATION, AND MAINTENANCE CLUSTER (STG072, N=362)
- II. HICS AND CABLE MAINTENANCE TECHNICIAN CLUSTER (STG055, N=50)
- III. CABLE AFFAIRS TECHNICIAN CLUSTER (STG035, N=12)
- IV. FIRST-LINE SUPERVISOR CLUSTER (STG053, N=46)
 - A. Engineering and Installation (EI) Outside Plant Team Chiefs (STG092, N=21)
 - B. Cable Maintenance and Hardened Intersite Communication System (HICS) NCOICs (STG115, N=22)
- V. SUPERVISORY CLUSTER (STG050, N=18)
 - A. Wire Chiefs (STG098, N=6)
 - B. Training Supervisors (STG 067, N=10)
- VI. TRAINING IJT (GRP022, N=14)
- VII. ENGINEERING AND INSTALLATION (EI) TEAM MEMBER IJT (STG076, N=13)
- VIII. QUALITY ASSURANCE OR QUALITY CONTROL (QA/QC) INSPECTOR AND EVALUATOR IJT (STG107, N=10)
- IX. CABLE SUPPLY IJT (STG103, N=5)

The AFSC 361X1 personnel forming these clusters, job types, and independent job types account for 89 percent of the total survey sample. The other 11 percent (67 members), referred to as isolates, did not merge with any of these identified groups.

Two tables in this section provide background information about the clusters and independent job types listed. Table 3 provides background information for each job group, such as skill-level distribution, average paygrade, total months in service, and average number of tasks performed. Table 4 shows the average percent of time that the job groups spend across the duties listed in the job inventory.

Job Descriptions

I. CABLE SPLICING, INSTALLATION, AND MAINTENANCE CLUSTER (STG072, N=362). This group of 362 personnel is the largest cluster within the 361X1 job structure and represents 61 percent of the survey sample. Most (74 percent) are 5-skill-level personnel. Members of this very large cluster accomplish a variety of technical tasks, spending 18 percent of their time performing general preparation and maintenance activities (Duty G), 13 percent installing general communication systems cables and associated equipment (Duty H), and 12 percent performing cable tests and related tasks (Duty J). Another

TABLE 3

SELECTED BACKGROUND DATA FOR 361X1 CAREER LADDER JOBS

		JOB TYPES					
		CABLE SPLICING, INSTALLATION & MAINTENANCE CLUSTER (SIG072)	HICS & CABLE MAINTENANCE TECHNICIAN CLUSTER (SIG055)	CABLE AFFAIRS TECHNICIAN CLUSTER (SIG035)	FIRST-LINE SUPERVISOR CLUSTER (SIG053)	A. EI OUTSIDE PLANT TEAM & HICS CHIEFS (SIG092)	B. CABLE MAINTENANCE & HICS NCOICs (SIG115)
Number in Group		362	50	12	46	21	22
Percent of Sample		61%	8%	2%	8%	4%	4%

DAFSC Distribution
(Percent Responding)

36131	12%	14%	0%	0%	0%	0%	0%
36151	74%	72%	67%	17%	19%	18%	18%
36171	14%	14%	33%	83%	81%	82%	82%

Average Paygrade
Average Months in Career Ladder
Average Months in Service
Percent in First Enlistment
Average Number of Tasks Performed

E4	E4	E4	E6	E5	E6
56	49	80	141	139	149
64	61	96	164	159	176
57%	54%	8%	2%	0%	5%
183	116	35	153	185	130

Percent Supervising

30%	34%	0%	91%	90%	95%
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TABLE 3 (CONTINUED)

SELECTED BACKGROUND DATA FOR 361X1 CAREER LADDER JOBS

	JOB TYPES			INDEPENDENT JOB TYPES (IJT)					
	A.		B.	TRAINING IJT (GRP022)	EI TEAM MEMBER IJT (STG076)		QA/QC INSPECTOR & EVALUATOR IJT (STG107)		CABLE SUPPLY IJT (STG103)
	SUPERVISORY CLUSTER (STG050)	WIRE CHIEFS (STG098)	TRAINING SUPERVISORS (STG067)		IJT (STG076)		IJT (STG107)		
Number in Group	18	6	10	14	13	10	5		
Percent of Sample	3%	1%	2%	2%	2%	2%	1%		

DAFSC Distribution (Percent Responding)									
36131	0%	0%	0%	0%	15%	0%	0%		0%
36151	6%	0%	0%	64%	85%	30%	40%		
36171	94%	100%	100%	36%	0%	70%	60%		

Average Paygrade									
Average Months in Career Ladder	E7 173	E7 160	E7 179	E5 119	E4 43	E6 138	E5 110		
Average Months in Service	199	212	193	133	55	174	121		
Percent in First Enlistment	0%	0%	0%	0%	69%	0%	0%		0%
Average Number of Tasks Performed	41	29	47	94	58	46	38		

Percent Supervising									
	94%	100%	90%	0%	8%	10%	60%		

TABLE 4

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS*

DUTIES	CABLE SPLICING, INSTALLATION & MAINTENANCE CLUSTER (STG072)	HICS & CABLE MAINTENANCE TECHNICIAN CLUSTER (STG055)	CABLE AFFAIRS TECHNICIAN CLUSTER (STG035)	FIRST-LINE SUPERVISOR CLUSTER (STG053)	JOB TYPES	
					A. EI OUTSIDE PLANT TEAM CHIEFS (STG092)	B. CABLE MAINTENANCE & HICS NCOICs (STG115)
A. Organizing and Planning	2	1	17	14	12	16
B. Directing and Implementing	1	2	3	10	7	13
C. Inspecting and Evaluating	1	2	5	12	5	18
D. Training	2	4	3	10	6	13
E. Performing Team Chief Functions	-	-	2	6	11	1
F. Performing General Admin & Supply Tasks	6	8	36	15	12	17
G. Performing General Preparation and Maintenance Activities	18	12	9	8	12	4
H. Installing General Communication Systems Cables and Associated Equipment	13	3	-	3	6	1
I. Inspecting Cables and Associated Equipment	7	13	8	8	9	7
J. Performing Cable Tests and Related Tasks	12	6	5	4	6	2
K. Maintaining & Splicing General Cable Systems	9	1	0	2	4	-
L. Sealing Splices	9	2	0	1	3	-
M. Installing and Maintaining Splice Cases	7	1	0	1	2	-
N. Pressurizing and Maintaining Cable Pressure Systems	5	3	0	-	1	-
O. Installing and Maintaining HICS	-	26	3	2	-	3
P. Installing and Maintaining Fiber Optic Cable Systems	1	-	2	-	1	0
Q. Maintaining Tools and Equipment	7	15	6	4	4	3

* Columns may not add to 100 percent due to rounding

- Indicates less than 1 percent

TABLE 4 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS*

DUTIES	JOB TYPES			INDEPENDENT JOB TYPES (IJT)			
	SUPERVISORY CLUSTER (STG050)	A. WIRE CHIEFS (STG098)	B. TRAINING SUPERVISORS (STG067)	TRAINING IJT (GRP022)	EI TEAM MEMBER IJT (STG076)	QA/QC INSPECTOR & EVALUATOR IJT (STG107)	CABLE SUPPLY IJT (STG103)
A. Organizing and Planning	26	33	21	0	-	3	5
B. Directing and Implementing	20	21	20	1	-	2	4
C. Inspecting and Evaluating	26	29	27	1	0	23	6
D. Training	15	5	22	15	-	6	6
E. Performing Team Chief Functions	-	1	-	0	-	1	0
F. Performing General Admin & Supply Tasks	9	9	6	3	6	13	39
G. Performing General Preparation and Maintenance Activities	-	0	-	12	36	3	4
H. Installing General Communications Systems Cables and Associated Equipment	0	0	0	10	12	0	0
I. Inspecting Cables and Associated Equipment	2	1	2	10	4	47	9
J. Performing Cable Tests and Related Tasks	-	0	-	13	13	0	0
K. Maintaining & Splicing General Cable Systems	0	0	0	8	10	0	0
L. Sealing Splices	-	0	-	6	6	0	0
M. Installing and Maintaining Splice Cases	0	0	0	4	4	0	0
N. Pressurizing and Maintaining Cable Pressure Systems	-	0	-	5	-	-	2
O. Installing and Maintaining HICS	-	0	1	1	0	0	0
P. Installing and Maintaining Fiber Optic Cable Systems	0	1	0	7	1	0	0
Q. Maintaining Tools and Equipment	1	1	-	4	7	1	24

* Columns may not add to 100 percent due to rounding

- Indicates less than one percent

40 percent is spent maintaining and splicing general cable systems, sealing splices, inspecting cables and associated equipment, installing and maintaining splice cases, and maintaining tools and equipment. The remainder of the group members' time is divided among performing general administrative and supply tasks, pressurizing and maintaining cable pressure systems, organizing and planning, training, directing and implementing, inspecting and evaluating, and installing and maintaining fiber optic cable systems. Less than 1 percent is spent performing team chief functions and installing and maintaining HICS. Tasks performed by these members typically include:

- splice filled cables
- establish talking circuits
- wash or wax vehicles or trailers
- tag cables, terminals, or splices
- perform permanent or temporary bond of cable shields
- form buried cables for splicing
- clean tools
- seal splices with reenterable compounds
- install quick-connect or punch-on terminals

These personnel perform one of the highest average number of tasks (183) of any group identified, and average 64 months total active federal military service (TAFMS). Fifty-seven percent are in their first enlistment, and 30 percent indicate they supervise other personnel.

II. HICS AND CABLE MAINTENANCE TECHNICIAN CLUSTER (STG055, N=50). Personnel in this cluster make up 8 percent of the total sample. Seventy-two percent of these people are at the 5-skill-level. Cluster personnel spend 51 percent of their time installing and maintaining HICS (Duty O), inspecting cables and associated equipment (Duty I), and performing general preparation and maintenance activities (Duty G) (see Table 4). Other activities performed by this group include administrative and supply tasks, performing cable tests, pressurizing and maintaining cable pressure systems, and sealing splices. There is little or no involvement performing team chief functions, or installing and maintaining fiber optic cable systems. Typical tasks performed by members within this cluster include:

- inspect ESA rooms
- inspect HICS interior grounding or sealing devices
- inspect cable air dryers
- install HICS demi-valve assemblies (DVA)
- inspect HICS cable yard manifold pressure systems
- wash or wax vehicles or trailers
- maintain and repair ATI splice cases
- band HICS line of sight and splice marker poles
- splice HICS cables
- remove or replace inner and outer ATI splice cases

The average number of tasks performed by people in this cluster is 116; they average 61 months TAFMS; 54 percent are in their first enlistment; and 34 percent indicate they supervise other AFSC 361X1 personnel (shown in Table 3).

III. CABLE AFFAIRS TECHNICIAN CLUSTER (STG035, N=12). The 12 members of this cluster represent 2 percent of the survey sample. Sixty-seven percent function at the 5-skill-level and 33 percent at the 7-skill-level. There are no 3-level personnel in this group. Cluster personnel spend over half of their time (53 percent) performing general administrative and supply tasks (Duty F) and organizing and planning (Duty A). Another 17 percent is spent performing general preparation and maintenance activities (Duty G) and inspecting cables and associated equipment (Duty I). This small group also spends some time installing and maintaining fiber optic cable systems (as shown in Table 4). Tasks commonly performed by this cluster include:

- locate cable routes
- coordinate cable installation or maintenance with contractors
- interpret CIR systems records or CSIRs
- review lists of materials, project drawings, or project specifications
- maintain cable records, diagrams, or card files
- interpret cable records or cable splicing diagrams
- evaluate project drawings or specifications
- coordinate communication requirements with base or tenant units
- annotate drawings, such as as-built or as-installed

Personnel in this cluster perform an average of 35 tasks. They have an average of 96 months TAFMS; only 8 percent are first enlistment. Group members indicate they do not supervise other 361X1 personnel.

IV. FIRST-LINE SUPERVISOR CLUSTER (STG053, N=46). The 46 members of this cluster represent 8 percent of the survey sample. The majority of these people (83 percent) function at the 7-skill-level and spend 42 percent of their time on general supervisory tasks (Duties A-C, E), 10 percent on training tasks (Duty D), and 15 percent on general administrative and supply tasks (Duty F). These supervisors spend a small portion of their time performing technical tasks, such as general maintenance of tools and equipment, and cable inspections. Typical tasks performed by this group are:

- counsel personnel on personal or military-related matters
- plan or schedule work assignments
- write APRs
- determine work priorities
- plan or schedule work priorities
- coordinate installation of cable, antenna or inside plant projects with using organization
- annotate training record activities

- interpret policies, directives, or procedures for subordinates
- review lists of materials, project drawings, or project specifications

Personnel in this cluster perform an average of 153 tasks, average 164 months TAFMS, only 2 percent are in their first enlistment, while 91 percent indicate they supervise other AFSC 361X1 personnel.

There are two job types within this cluster. The Engineering and Installation (EI) Outside Plant Team Chiefs (STG092, N=21) average the highest number of tasks performed of any group. These 21 members indicate 90 percent supervise. EI Outside Plant Team Chiefs spend 35 percent of their time performing general supervisory duties (Duties A-C, E) and 12 percent performing general administrative and supply tasks (Duty F), while the rest of the time is spent on training, maintenance, inspection, and installation tasks. The Cable Maintenance and HICS NCOICs (STG115, N=22) report 95 percent supervise. Forty-eight percent of their time is spent on general supervisory tasks (Duties A-C, E), 13 percent on training tasks, and 17 percent on administrative and supply tasks, while 22 percent is spent on technical tasks. This group is not involved in installing and maintaining fiber optic cable systems.

V. SUPERVISORY CLUSTER (STG050, N=18). This group represents 3 percent of the total sample and contains 18 members. Seven-skill-level personnel make up the majority of this group (94 percent), with no 3-skill-level or first-enlistment airmen in the group. This is the most senior 361X1 specialty job group, with members averaging 199 months in service. Supervisory cluster personnel perform an average of 41 tasks, and 94 percent indicate that they supervise other personnel. Seventy-two percent of their time is spent on general supervisory tasks (Duties A-C), 15 percent on training tasks (Duty D), and 9 percent on administrative and supply tasks (Duty F). As shown in Table 4, cluster personnel perform a minimum of technical tasks. Tasks commonly performed by this cluster include:

- counsel personnel on personal or military-related matters
- conduct supervisory orientations of newly assigned personnel
- write APRs
- interpret policies, directives, or procedures for subordinates
- assign individuals to duty positions
- assign sponsors for newly assigned personnel
- indorse airman performance reports (APR)
- schedule personnel for leave or temporary duty (TDY) assignment
- determine logistics requirements, such as space, personnel, equipment, or supplies
- evaluate inspection report findings

Two job types, Wire Chiefs (STG098, N=6) and Training Supervisors (STG067, N=10), were identified within this Supervisory cluster. The Wire Chiefs average 212 months TAFMS, perform an average of 29 tasks, and all are at the 7-skill-level. All six members indicate they supervise. The Training Supervisors group in this cluster average 193 months TAFMS and 47 tasks performed. The 10 members of the group, all at the 7-skill-level, supervise other personnel.

The Wire Chiefs and Training Supervisors groups, like the larger cluster, both spend the great majority of their time performing general supervisory tasks (Duties A-C) and perform very few technical tasks. The primary difference between the groups is the high amount of training time (22 percent) spent by the Training Supervisors versus the Wire Chiefs (5 percent). In contrast, the Wire Chiefs perform more supervisory roles (83 percent for Duties A-C) and general administration duties (9 percent) than the Training Supervisors group (68 percent and 6 percent, respectively).

VI. TRAINING IJT (GRP022, N=14). These 14 members represent 2 percent of the survey sample. Sixty-four percent function at the 5-skill-level and 36 percent at the 7-level. They have an average of 133 months in service and average 94 tasks performed. There are neither 3-skill-level personnel nor first-enlistment personnel in this group. These members also report they do not supervise. Personnel in this independent job group spend 15 percent of their time on specific training tasks (Duty D), while performing numerous other related technical tasks in their job. Some tasks commonly performed by this IJT include:

- administer tests
- conduct resident course classroom training
- score tests
- maintain training aids, areas, or equipment
- straight-splice conductors in general cables using mechanical connectors
- counsel trainees on training progress
- evaluate progress of trainees
- test acetylene pressure regulators for pressure leakage
- measure resistance
- inspect work areas for hazardous working conditions
- inspect test equipment

VII. ENGINEERING AND INSTALLATION (EI) TEAM MEMBER IJT (STG076, N=13). This group comprises 2 percent of the survey sample. The average total active federal military service is 55 months. Fifteen percent function at the 3-skill-level and 85 percent at the 5-skill-level. Sixty-nine percent of this independent job type are in their first enlistment, while 8 percent indicate they supervise. Members of the EI Team group perform an average of 58 tasks. Their primary duties involve general maintenance (Duty G), communications installation (Duty H), and testing, inspecting, and splicing cable systems (Duties I thru K). Some tasks typically performed by personnel in this group include:

- test subterranean structures for combustible gases
- test subterranean structures for oxygen deficiency
- remove or replace manhole covers
- clean manholes
- transport equipment to job sites
- erect traffic warning devices
- establish talking circuits
- direct operation of trucks or winches using hand signals
- set up or remove ground tents
- detect cable faults or splice errors using multimeters
- select traffic warning devices required for work areas
- form underground cables for splicing

The EI Team Member IJT is the most junior of all job specialty groups. With little or no time spent in supervision, administration, or supply, members perform a mostly technical job.

VIII. QUALITY ASSURANCE OR QUALITY CONTROL (QA/QC) INSPECTOR AND EVALUATOR IJT (STG107, N=10). These 10 members represent 2 percent of the survey sample. They have an average of 174 months in service, and the majority are at the 7-skill-level (70 percent), with the other 30 percent at the 5-skill-level. There are no members in their first enlistment. Ten percent of the group supervise others. Members indicate they perform an average of 46 tasks. Typical tasks of this fairly senior group include:

- evaluate personnel for compliance with performance standards or Technical Orders
- inspect work areas for hazardous working conditions
- inspect cables and associated equipment for evidence of corrosion
- inspect aerial, buried, or underground cable installations
- inspect in-progress work
- inspect emergency safety equipment for serviceability
- evaluate procedures for storage, inventory, or inspection of tools or equipment

Members spend 23 percent of their time in the general inspecting and evaluating duty area (Duty C) and 47 percent inspecting cables and associated equipment (Duty I).

IX. CABLE SUPPLY IJT (STG103, N=5). These five members represent 1 percent of the total sample. Two individuals function at the 5-skill-level and three at the 7-skill-level. The group has an average of 121 months TAFMS.

None are in their first enlistment. Sixty percent of the group supervise. Cable Supply group members perform an average of 38 tasks. The majority of their time is spent performing general administrative and supply tasks (39 percent) and maintaining tools and equipment (24 percent). Tasks most commonly performed by these members include:

- maintain equipment calibration records
- initiate or complete AF Forms 601 (Equipment Action Request)
- review test equipment calibration schedules
- research and initiate special supply requisitions
- complete AF Forms 2005 (Issue/Turn-in Requests)
- process damaged tools for distribution and replacement
- establish bench stock levels
- obtain follow up information on special supply requisitions

Summary of Specialty Jobs

Five clusters and four IJT's were identified in the AFSC 361X1 structure analysis. All members spend time performing a broad spectrum of tasks, and most have some involvement in all duties. While most groups identified in this survey are involved in almost all duties to some extent, there are clear groupings based on specific functions. In addition, differences in the amount of time spent in certain duties also dictate to which cluster or IJT members are assigned.

Personnel in this survey were grouped according to specialized activities shared with others across the career ladder. Supervisory personnel, for example, were divided into two clusters. The Supervisory cluster accounts for 3 percent of the total sample and was broken into two smaller groups of supervisors based on supervisory activities. Personnel in the First-Line Supervisor cluster make up 8 percent of the sample. The First-Line Supervisors in this cluster are comprised of two groups: EI Outside Plant Team Chiefs and Cable Maintenance and HICS NCOICs. Training personnel involved in instructional duties were grouped into the Training IJT and represent 2 percent of the survey population. While instructors, this group also spends a large percentage of their time inspecting equipment, work area, and work performed by other personnel. Other independent job types, based upon time spent in specific job functions, are: the Cable Supply personnel who account for 1 percent of the sample, EI Team Members who work with others in installation and maintenance project teams with 2 percent, and the QA/QC Inspector and Evaluator personnel, who check standards and specifications, representing another 2 percent of the total. Two other clusters are specifically job related. The HICS and Cable Maintenance Technician cluster accounts for 8 percent of the AFSC 361X1 sample and represents a group of individuals who are centered around Hardened Intersite Communication System maintenance activities. The Cable Affairs Technician cluster represents a small group of individuals (2 percent of the sample) who perform a small range of activities which are more administrative in nature, involving planning, interpreting,

recording, and inspecting tasks. Finally, the largest group of 361X1 personnel, representing 61 percent of the total sample, is the Cable Splicing, Installation and Maintenance cluster. Individuals in this cluster typically perform a wide range of tasks from the preparation of work areas to the splicing, maintenance, and installation of cables.

Comparison of Current Survey to Previous Surveys

The results of the specialty job analysis for this survey were compared to those of the previous AFSC 361X1 Occupational Survey Report (AFPT 90-361-429), dated July 1981. Although the previous study identified 3 clusters, 13 job types, and 6 independent job types and differs structurally in appearance from the present analysis, the jobs in both studies remain largely the same (see Table 5). The majority of the career ladder still falls into a single cluster of individuals responsible for general cable splicing, maintenance and installation activities. Other distinct jobs found in the previous OSR are found in the current data. Personnel filling the cable affairs and the training functions are found in both studies grouped as independent job types, with the exception that in the current study, the two groups of senior and junior instructors are grouped together. In the 1981 survey, individuals responsible for quality control inspections were grouped under different clusters. In this survey, they are grouped as a more homogeneous independent job group. Similarly, the single cluster of supervisors in the previous analysis, along with the smaller cable maintenance NCOICs job type, have been grouped here into two supervisor-specific clusters of general and first-line supervisors. In both studies, there is a separate cluster for personnel whose job requires them to spend most of their time on maintenance and installation of HICS; similarly there is a separate IJT for EI team members. In contrast, the function of cable supply, not distinguished in the previous analysis, is presently described as a separate independent job type. Comparisons between the current survey to the previous survey demonstrate that the overall 361X1 job remains largely the same, with employment differences accounting for different job groupings in the present analysis.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. DAFSC analysis identifies similarities and differences in task and duty performance at the various skill-levels. This information may be used to evaluate how well career ladder documents, such as AFR 39-1 Specialty Descriptions, reflect what career ladder personnel are actually doing in the field.

Comparisons of the duties and tasks performed across DAFSCs 36131 and 36151 showed little difference between the two skill levels. At the higher skill level, there is naturally an increase in administrative and supervisory tasks performed, along with increased performance of tasks requiring greater skill and experience. In addition, 3-skill-level personnel are found employed

TABLE 5
COMPARISON OF CAREER LADDER STRUCTURE FOR
CURRENT AND PREVIOUS SURVEY

<u>JOBS IDENTIFIED IN CURRENT STUDY</u>	<u>JOBS IDENTIFIED IN PREVIOUS OSR</u>
Cable Splicing, Installation, and Maintenance	Cable Maintenance; Base Cable Preparation and Maintenance
EI Team Member	Junior EI Personnel
HICS and Cable Maintenance Technician	Missile Systems Cable Maintenance
Cable Affairs	Cable Affairs Monitors
Cable Supply	-
Training	Junior Resident Course Instructors; Senior Resident Course Instructors
First-Line Supervisors; Supervisory cluster	Supervision and Management Personnel
QA/QC Inspector and Evaluator	Quality Control Inspectors; Equipment Inspectors; Cable Testers

only in cable splicing, installation and maintenance, HICS and cable maintenance technician, and engineering and installation team member-type jobs. However, employment does not vary considerably from that of 5-skill-level personnel. Analysis, therefore, concentrated on differences between the combined 3-/5-skill-level and the 7-skill-level.

When the duties of these two groups are compared, differences are more evident. The duties performed by the 3-/5-skill-level group are more technical in nature than those of the 7-skill-level group. The 3-/5-skill-level personnel spend more time performing general preparation and maintenance activities (Duty G), installing general communications systems cables and associated equipment (Duty H), performing cable tests and related tasks (Duty J), maintaining and splicing general cable systems (Duty K), sealing splices (Duty L), and installing and maintaining splice cases (Duty M). While 7-skill-level personnel perform these same duties, time spent on these technical duties is significantly reduced. Time is more typically spent organizing and planning, directing and implementing, inspecting and evaluating, and training (Duties A-D), as well as performing general administrative and supply tasks (Duty F) and inspecting cables and associated equipment (Duty I). Personnel at this level also still maintain tools and equipment (Duty M), such as washing or waxing vehicles or trailers, but as a considerably smaller percentage than the 3-/5-level personnel. At the 7-skill-level, supervisory duties are increased over the 3-/5-skill-level, while the amount of time spent in technical duties decreases equally across all duties.

Skill Level Descriptions

DAFSC 36131/36151. The 448 members of this 3-/5-skill level group account for 75 percent of the total sample. Their job is largely technical, spending approximately 75 percent of their time in duties technical in nature and 8 percent in general administrative and supply tasks. The Cable Splicing, Installation, and Maintenance cluster employs 69 percent of all 3-/5-skill level personnel, and the HICS and Cable Maintenance Technician group another 10 percent (Table 6). Individuals in this group perform an average of 147 tasks. The representative tasks performed by the 3-/5-skill level are displayed in Table 8. Table 10 displays those tasks that best differentiate between DAFSC 36131/36151 and 36171 groups.

DAFSC 36171. The 148 individuals in the 7-skill group comprise 25 percent of the total survey sample. As Table 7 shows, this group spends approximately 30 percent of its time on supervising duties (Duties A-C), 8 percent on training (Duty D), 11 percent on performing general administrative and supply tasks (Duty F), and another 2 percent on performing team chief functions (Duty E). The 7-skill-level group spends 47 percent of its time on technical duties (Duties G-Q) compared to the 83 percent average time spent by 3-/5-skill members. Thirty-four percent of the 7-skill-level members are found in the Cable Splicing, Installation, and Maintenance cluster, while 26 percent are in the First-Line Supervisor cluster and another 11 percent in the Supervisory cluster. Members in the 7-skill-level group perform an average of 135 tasks. Table 9 displays the representative tasks performed by this group, and Table 10 shows which tasks best differentiate 7-skill-level people from 3-/5-skill-level members.

TABLE 6

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS CAREER LADDER JOB GROUPS
(As a Percentage of DAFSC Groups)*

JOB GROUPS	DAFSC 36131/ 36151 (N=448)	DAFSC 36171 (N=148)
I. CABLE SPLICING, INSTALLATION, AND MAINTENANCE CLUSTER (N=362)	69	34
II. HICS AND CABLE MAINTENANCE TECHNICIAN CLUSTER (N=50)	10	5
III. CABLE AFFAIRS TECHNICIAN CLUSTER (N=12)	2	3
IV. FIRST-LINE SUPERVISOR CLUSTER (N=46)	2	26
A. EI Outside Plant Team Chiefs (N=21)	(1)	(11)
B. Cable Maintenance and HICS NCOICs (N=22)	(1)	(12)
V. SUPERVISORY CLUSTER (N=18)	< 1	11
A. Wire Chiefs (N=6)	(0)	(4)
B. Training Supervisors (N=10)	(0)	(7)
VI. TRAINING INDEPENDENT JOB GROUP (N=14)	2	3
VII. EI TEAM MEMBER INDEPENDENT JOB GROUP (N=13)	3	0
VIII. QA/QC INSPECTOR AND EVALUATOR INDEPENDENT JOB GROUP (N=10)	1	5
IX. CABLE SUPPLY INDEPENDENT JOB GROUP (N=5)	< 1	2
X. NOT GROUPED (N=67)**	10	11

* Columns may not add to 100 percent due to rounding

** Those incumbents whose jobs differ from the identified specialty jobs

() Indicates a group within a cluster

TABLE 7
AVERAGE PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS*

<u>DUTIES</u>	<u>DAFSC 36131/ 36151 (N=448)</u>	<u>DAFSC 36171 (N=148)</u>
A. Organizing and Planning	2	11
B. Directing and Implementing	1	8
C. Inspecting and Evaluating	1	11
D. Training	2	8
E. Performing Team Chief Functions	1	2
F. Performing General Administration and Supply Tasks	8	11
G. Performing General Preparation and Maintenance Activities	18	8
H. Installing General Communications Systems Cables and Associated Equipment	11	5
I. Inspecting Cables and Associated Equipment	7	10
J. Performing Cable Tests and Related Tasks	11	6
K. Maintaining and Splicing General Cable Systems	8	3
L. Sealing Splices	7	3
M. Installing and Maintaining Splice Cases	5	2
N. Pressurizing and Maintaining Cable Pressure Systems	4	2
O. Installing and Maintaining HICS	3	2
P. Installing and Maintaining Fiber Optic Cable Systems	1	1
Q. Maintaining Tools and Equipment	8	5

* Columns may not add to 100 percent due to rounding

TABLE 8

REPRESENTATIVE TASKS PERFORMED BY DAFSC 36131/36151 AIRMEN
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 36131/ 36151 (N=448)
Q621 Wash or wax vehicles or trailers	86
Q597 Clean tools	83
J339 Establish talking circuits	83
G222 Transport equipment to job sites	80
J336 Detect cable faults or splicer errors using multimeters	78
G178 Backfill cable splicing pits or cable trenches using handtools	75
J334 Detect cable faults or splicer errors using headsets and batteries	75
K402 Splice filled cables	75
G184 Clean splicing pits	75
G195 Erect traffic warning devices	75
H294 Tag cables, terminals, or splices	74
G198 Excavate splicing pits or cable trenches using handtools	74
G200 Form buried cables for splicing	74
G192 Erect barriers or manhole guards around open trenches or pits	73
K390 Perform permanent bond of cable shields	73
L418 Perform temporary or emergency splice seals using CR tape	73
M439 Install splice cases	72
G207 Remove or replace manhole covers	72
G183 Clean manholes	72
K411 Straight-splice conductors in general cables using mechanical connectors	71
F156 Locate cable routes	70
L431 Seal splices with reenterable compounds	70
G201 Form underground cables for splicing	70

TABLE 9
REPRESENTATIVE TASKS PERFORMED BY DAFSC 36171 AIRMEN
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 36171 (N=148)
B31 Counsel personnel on personal or military-related matters	72
C68 Write APRs	70
F123 Annotate AF Forms 1800 (Operator's Inspection Guide and Trouble Report (General Purpose Vehicles))	66
I306 Inspect completed work	65
D73 Annotate training records	62
A17 Plan or schedule work assignments	61
A8 Determine work priorities	61
B39 Interpret policies, directives, or procedures for subordinates	61
F157 Interpret cable records or cable splicing diagrams	61
I317 Inspect in-progress work	59
A18 Plan or schedule work priorities	59
I328 Inspect test equipment	59
I330 Inspect vehicles or special purpose equipment	59
D76 Conduct OJT	57
F156 Locate cable routes	57
C53 Evaluate personnel for compliance with performance standards or TOs	56
A4 Coordinate installation of cable, antenna, or inside plant projects with using organizations	56
I324 Inspect splicing materials	56
I332 Inspect work areas for hazardous working conditions	56
Q619 Sign for tools or test equipment	55
Q620 Turn in tools or test equipment	55
D80 Counsel trainees on training progress	54
F155 Inventory equipment, tools, or supplies	54
A20 Review lists of materials, project drawings or specifications	53
Q621 Wash or wax vehicles or trailers	53
A13 Establish performance standards for subordinates	53
D88 Evaluate progress of trainees	53
C55 Evaluate project drawings or specifications	52

TABLE 10

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 36131/36151 AND 36171 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 36131/ 36151 (N=448)	DAFSC 36171 (N=148)	DIFFERENCE
M439 Install splice cases	72	31	+41
K384 Clear cap conductors	76	41	+35
K411 Straight-splice conductors in general cables using mechanical connectors	71	36	+35
G204 Load or replenish splicing materials prior to dispatch of splicer's trucks	64	30	+34
H294 Tag cables, terminals, or splices	74	41	+33
G195 Erect traffic warning devices	75	42	+33
J334 Detect cable faults or splicer errors using headsets and batteries	75	43	+32
K393 Remove or replace cables from ducts, or conduits	62	30	+32
J339 Establish talking circuits	83	51	+32
G201 Form underground cables for splicing	70	39	+31
L419 Perform temporary or emergency splice seals using rubber bandage	63	32	+31

C31 Write APRs	19	70	-51
B68 Counsel personnel on personal or military-related matters	23	72	-49
B39 Interpret policies, directives, or procedures for subordinates	16	61	-45
A18 Plan or schedule work priorities	16	59	-43
C70 Write recommendations for awards and decorations	9	51	-42
A8 Determine work priorities	20	61	-41
B29 Conduct supervisory orientations of newly assigned personnel	11	50	-39
C53 Evaluate personnel for compliance with performance standards or Technical Orders	18	56	-38
A4 Coordinate installation of cable, antenna, or inside plant projects with using organization	19	56	-37
A7 Determine logistics requirements, such as space, personnel, equipment, or supplies	9	46	-37
D95 Review job qualification standards (JQS)	15	51	-36

Summary

As members of AFSC 361X1 progress to the 7-skill-level, their job remains technical in nature, but increases in normal supervisory responsibility. At the 3-/5-skill-level, technical tasks (Duties G-Q) occupy 83 percent of their job time, decreasing to 47 percent at the 7-skill level, while supervisory duties (A-C) increase from 4 percent for the 3-/5-skill-level to 30 percent for the 7-skill-level.

ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

The results of the specialty job structure and skill-level analyses were compared to the AFR 39-1 Specialty Descriptions (dated 1 February 1988) for the Cable Splicing Project/Maintenance Action specialty. Survey data show the AFR 39-1 Specialty Descriptions accurately reflect the jobs and tasks currently being performed in the career ladder, although the descriptions fail to include certain job tasks, such as those involving aerial, buried, and telecommunication cable systems, as well as those involving general administration and supply. A further review of the updated AFR 39-1 Specialty Descriptions (dated 30 April 1990) for Communication Cable Systems Installation/Maintenance Specialists indicates the descriptions have been broadened to include these missing duty and responsibility descriptions, with the exception of the general administrative and supply tasks. While the Specialty Summary for AFSCs 36111/36131/36151 adequately describes the required performance, with the exception mentioned above, there is a mismatch between required performance and the actual job at present in the 7-skill-level Specialty Summary. As the Duties and Responsibilities section describes, supported by survey data, 7-level 361X1 members are also required to perform numerous technical duties, not mentioned in the Specialty Summary. Technical duties account for 47 percent of these members' time at this level. In turn, general administrative and supply duties account for at least 11 percent of their time. To present a more accurate job description of this AFSC, the Specialty Summary and the Duties and Responsibilities sections should be amended to include these omissions.

TRAINING ANALYSIS

Occupational survey data provide one of several sources of information which can be used to make training programs more relevant and meaningful to first-term personnel. Factors useful for evaluating training include the description of the jobs being performed by first-enlistment members and their overall distribution across career ladder jobs; percentages of first-enlistment (1-48 months TAFMS) personnel performing specific tasks or using certain equipment; as well as TE and TD ratings (previously explained in the SURVEY METHODOLOGY section). A summary of this information is presented below.

Usually, an examination of the Specialty Training Standard (STS) and the Plan of Instruction (POI) for the career ladder is also conducted, where appropriate sections of these documents are reviewed against tasks matched from the Job Inventory. This matching process would normally take place at the technical training center at Sheppard AFB TX. However, a match of inventory tasks to these documents was deemed inappropriate for this survey because recent career ladder changes (effective April 1990) made it difficult to use OSR data gathered before the 1990 changes. Therefore, data relevant to the STS and POI will not be furnished in this report. Working with AF Communications Command, technical training center personnel are proceeding to update the 361X1 STS and POI documents to include duties that are currently the responsibility of AFSC 361X0 (Antenna/Cable Systems) personnel.

First-Enlistment Personnel

There were 273 survey sample members in their first enlistment, representing approximately 46 percent of the sample. These specialists perform all aspects of the technical-type jobs described in the SPECIALTY JOB section of this report. They do not normally perform functions associated with supervisory jobs. The distribution of first-term personnel across the specialty jobs is displayed in Figure 2. This figure shows that the majority of the group (75 percent) is concentrated in the Cable Splicing, Installation, and Maintenance cluster, another 10 percent in the HICS and Cable Maintenance Technician cluster, and another 3 percent in the EI Team member IJT. The remaining 12 percent of this group were distributed among other specialty jobs. In response to a job title identification question, 33 percent of first-term personnel report that they perform a Base Cable Technician job, while 31 percent describe themselves as performing a Cable Splicer job, 15 percent as an EI Team member, 9 percent as a HICS Cable Technician, and 8 percent as an EI Outside Plant Technician. A list of tasks performed by all group members is found in Table 11. Table 12 shows a list of equipment operated by first-enlistment members. Overall, the first-term group comprises about 62 percent of the 3-/5-skill-level group, and the task listings for these groups are very similar.

Training Emphasis Data

Training Emphasis (TE) data are based on the judgments of experienced career ladder NCOs working in Air Force operational units. TE ratings were determined through the responses of a sample of 31 experienced career ladder members. TE ratings provide training personnel with a rank ordering of tasks considered important for first-term airman training. The average TE rating for this AFSC was 2.87, with a standard deviation of 1.56. Consequently, a high TE rating for this AFSC is 4.43 and above. Tasks with the highest TE ratings involve cable testing and related activities, general preparation and maintenance activities, maintaining and splicing general cable systems, pressurizing and maintaining cable pressure systems, sealing splices, and general administrative and supply tasks. If a task receives a high TE rating and has a high percentage of first-term members performing, and possibly a high difficulty rating, then strong recommendations can be made to train the

DISTRIBUTION OF FIRST-ENLISTMENT PERSONNEL ACROSS SPECIALTY JOBS (N= 273)

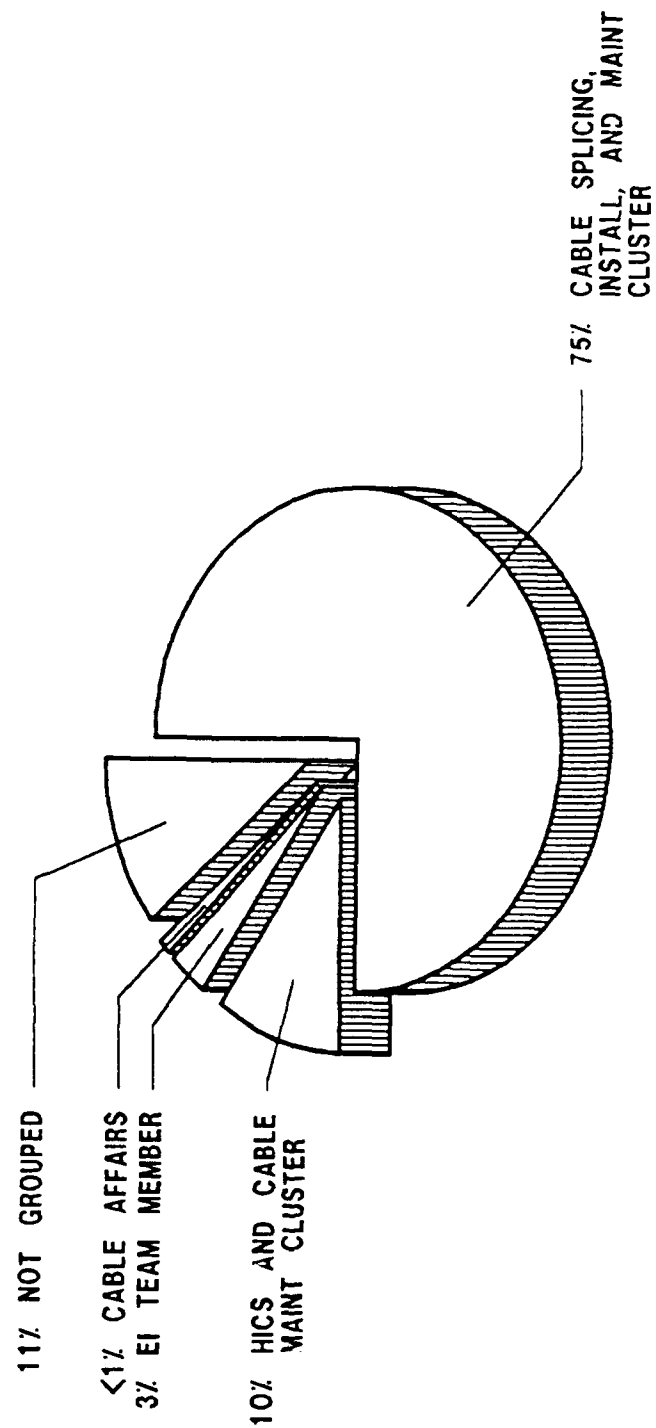


Figure 2

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY DAFSC 361X1 AIRMEN WITH 1-48 MONTHS TAFMS

TASKS	PERCENT MEMBERS PERFORMING (N=273)
Q621 Wash or wax vehicles or trailers	92
Q597 Clean tools	87
J339 Establish talking circuits	86
G222 Transport equipment to job sites	85
J336 Detect cable faults or splicer errors using multimeters	84
K384 Clear cap conductors	82
H294 Tag cables, terminals, or splices	81
G178 Backfill cable splicing pits or cable trenches using handtools	81
G184 Clean splicing pits	81
J334 Detect cable faults or splicer errors using headsets and batteries	81
M439 Install splice cases	80
K402 Splice filled cables	80
G200 Form buried cables for splicing	79
G183 Clean manholes	79
G195 Erect traffic warning devices	79
G207 Remove or replace manhole covers	78
G198 Excavate splicing pits or cable trenches using hand tools	78
L418 Perform temporary or emergency splice seals using CR tape	78
K391 Perform temporary bond of cable shields	78
G201 Form underground cables for splicing	77
L431 Seal splices with reenterable compounds	76
K390 Perform permanent bond of cable shields	76
K411 Straight-splice conductors in general cables using mechanical connectors	74
Q620 Turn in tools or test equipment	72
Q619 Sign for tools or test equipment	72
L421 Prepare lead sleeves for sealing	72
F156 Locate cable routes	71
H271 Install quick-connect or punch-on terminals	71
M430 Install lead sleeves	71
G223 Withdraw materials from bench stock	70
H242 Install cables using open trench method	70

TABLE 12

EQUIPMENT USED OR OPERATED BY DAFSC 361X1 AIRMEN WITH 1-48 MONTHS TAFMS

TASKS	PERCENT MEMBERS PERFORMING (N=273)
Stencil Kits	86
Manhole Hooks	85
Manhole Guards	83
Metal Stamp Kits	82
Manhole Ladders	81
Cable Cutters	80
Acetylene Torch Kits	80
Walking or Measuring Wheels (Cyclometers)	79
Crimping Tools	78
Traffic Warning Devices	78
Acetylene Cylinders	74
Electric Water Pumps (Portable)	72
Ground Tents	72
Pressure Testing Regulators	70
Splicer's Seats and Tool Boxes	69
Portable Generators	68
Bolt Cutters	68
Mechanical Water Pumps	67
Digging Bars	65
Cable Racking Jacks	64
Injection Guns	64
Manhole Cable Shoes	63
Duct Rods	62
Wire Wrap Guns	58
Ventillator Blowers or Sails	58
Portable Heaters	56
Propane Cylinders	56
224 CF Nitrogen Cylinders	54
Climbing Equipment	52
Electric Soldering Irons	52
Cable Reel Jacks	51
Heat Guns	50

task to a high level. A list of tasks having the highest TE ratings is found in Table 13. For a more complete description of the TE ratings, see the Task Factor Administration section in SURVEY METHODOLOGY.

Task Difficulty Data

Task Difficulty (TD) ratings, like TE ratings, are based on the judgments of experienced career ladder NCOs working in Air Force operational units. TD ratings are collected to measure the relative learning difficulty of each job inventory task. TD ratings for this survey were assessed through the responses of 40 experienced career ladder NCOs. These ratings were standardized to provide a rank-ordered task list with an average difficulty of 5.00. Tasks rated 6.00 and above are considered higher in difficulty. A listing of those tasks having the highest TD ratings is found in Table 14. The tasks rated with the highest TD involve inspecting and evaluating, training, organizing and planning, and cable testing and related activities. For a more complete description of these ratings, see the Task Factor Administration section in SURVEY METHODOLOGY.

Automated Training Indicator (ATI) Data

The TD and TE ratings, combined with percentages of first-term personnel performing tasks, serve as a basis for determining whether adjustments to training should be made. To help in this determination, an Automated Training Indicator (ATI) is computed for each task in the job inventory. ATI combines the first-enlistment percent members performing, TE, and TD data to compute training decisions based on ATCR 52-22, Atch 1. The computed ATI is numbered on a 1 to 18 scale, with an 18 representing the highest recommendation for training. An ATI of 8 or less leads to a training decision of OJT only. To illustrate how the ATI is computed, if a task has received high TE and TD ratings, and also has a high percentage of first-term members performing, then a high ATI rating is assigned to the task. With a high ATI rating, strong recommendations can be made to emphasize training that task. Table 15 shows examples of tasks from the 361X1 job inventory which have the highest ATI ratings. These tasks concern installation of cable equipment, detecting cable faults, locating cables and leaks, and performing repair or replacement procedures. All tasks in Table 15 have high TE (above 4.43) and percent members performing data, and moderate or high TD ratings, making them outstanding candidates for basic resident technical training.

Electronic Principles

Electronic principles data for the 361X1 career ladder were collected from March through July 1987 from 138 5-skill-level members who completed an Electronic Principles Inventory (EPI), which identifies the electronic principles personnel must understand to perform any electronics-related job. Task statements from the EPI were then matched to Electronic Fundamentals/Applications STS 1, dated 20 February 1987. Those STS 1 elements having matched electronic principles tasks, and which have 30 percent or more of the

TABLE 13

TASKS RATED HIGHEST IN TRAINING EMPHASIS (TE)

TASKS	TRG EMP*	PERCENT FIRST ENLIST (N=273)	TSK DIFF**
J336 Detect cable faults or splicer errors using multimeters	7.25	84%	5.35
J339 Establish talking circuits	6.75	86%	4.11
J353 Locate cable faults using time domain reflectometers (TDR)	6.38	65%	7.31
J337 Detect cable faults using cable fault locators	6.28	59%	5.62
J340 Identify and locate severed cables	6.22	66%	5.16
J354 Locate or determine depth of buried cables, pipes, or other components	6.16	63%	5.74
G221 Test subterranean structures for toxic gases	6.06	68%	3.68
J334 Detect cable faults or splicer errors using headsets and batteries	6.03	81%	5.36
J343 Identify and tag conductors in nonworking cables using multimeters	6.03	45%	4.75
G220 Test subterranean structures for oxygen deficiency	5.97	68%	3.68
J358 Locate splicer errors using TDR	5.97	53%	7.04
J359 Locate unmarked splices	5.97	58%	7.01
G219 Test subterranean structures for combustible gases	5.94	68%	3.68
J345 Identify and tag conductors in working cables using headset capacitors and batteries	5.88	50%	5.10
K402 Splice filled cables	5.84	80%	4.68
N470 Locate pressure leaks with flash test methods	5.84	62%	4.01
K392 Perform working cable section replacements	5.81	68%	6.49
J361 Measure resistance	5.78	63%	4.70
L418 Perform temporary or emergency splice seals using CR tape	5.78	78%	4.36
J342 Identify and tag conductors in nonworking cables using headsets and batteries	5.75	57%	4.60
F156 Locate cable routes	5.72	71%	4.37

* Training Emphasis (TE) has an average of 2.87 and a Standard Deviation of 1.56 (High TE ratings are 4.43 and above)

** Task Difficulty (TD) has an average of 5.0 and a Standard Deviation of 1.0 (High TD ratings are 6.0 and above)

TABLE 14

TASKS RATED HIGHEST IN TASK DIFFICULTY (TD)

TASKS	PERCENT MEMBERS PERFORMING				
	TSK DIFF*	FIRST	DAFSC	DAFSC	TRG EMP**
		ENLIST (N=273)	36151 (N=380)	36171 (N=148)	
C70	7.76	3	9	51	1.78
A25	7.39	4	7	28	.28
D82					
J353	7.33	2	4	14	1.09
C68	7.31	65	67	48	6.38
C69	7.22	4	21	70	2.88
C71	7.15	1	2	17	.72
J358	7.09	3	6	19	.59
J359	7.04	53	57	37	5.97
A10	7.01	58	56	36	5.97
P556	6.97	1	4	29	.41
D83	6.87	0	1	1	2.13
A12	6.80	2	5	15	.56
A15	6.79	2	4	19	.59
C49	6.77	15	21	51	1.38
O504	6.73	3	4	26	.44
H276	6.65	11	9	6	2.97
O519	6.65	3	4	2	1.09
O500	6.59	8	8	5	2.84
K392	6.50	10	9	6	3.47
	6.49	68	63	40	5.81

* Task Difficulty (TD) has an average of 5.0 and a

Standard Deviation of 1.0 (High TD ratings are 6.0 and above)

** Training Emphasis (TE) has an average of 2.87 and a

Standard Deviation of 1.56 (High TE ratings are 4.43 and above)

TABLE 15

EXAMPLE TASKS HAVING HIGHEST AUTOMATED TRAINING INDICATOR (ATI) RATINGS

TASKS	TRG EMP*	PERCENT FIRST ENLIST (N=273)	TSK DIFF**	ATI
F156 Locate cable routes	5.72	71%	4.37	18
G200 Form buried cables for splicing	5.47	79%	4.06	18
G219 Test subterranean structures for combustible gases	5.94	68%	3.68	18
H242 Install cables using open trench method	5.03	70%	3.89	18
H271 Install quick-connect or punch-on terminals	5.16	71%	3.64	18
J334 Detect cable faults or splicer errors using headsets and batteries	6.03	81%	5.36	18
J336 Detect cable faults or splicer errors using multimeters	7.25	84%	5.35	18
J337 Detect cable faults using cable fault locators	6.28	59%	5.62	18
J351 Locate cable faults using fault locators	5.63	50%	6.17	18
J353 Locate cable faults using time domain reflectometers (TDR)	6.38	65%	7.31	18
J354 Locate or determine depth of buried cables, pipes, or other components				
J358 Locate splicer errors using TDR	6.16	63%	5.74	18
J359 Locate unmarked splices	5.97	53%	7.04	18
K387 Perform cable count changes	5.97	58%	7.01	18
K392 Perform working cable section replacements	5.09	59%	6.19	18
L416 Flash test splice closures	5.81	68%	6.49	18
L418 Perform temporary or emergency splice seals using CR tape	5.59	72%	4.07	18
M439 Install splice cases	5.78	78%	4.36	18
M440 Install split lead sleeves	5.31	80%	5.36	18
N470 Locate pressure leaks with flash test method	4.72	67%	5.64	18
	5.84	62%	4.01	18

* Training Emphasis (TE) has an average of 2.87 and a

Standard Deviation of 1.56 (High TE ratings are 4.43 and above)

** Task Difficulty (TD) has an average of 5.0 and a

Standard Deviation of 1.0 (High TD ratings are 6.0 and above)

EPI survey members responding "yes" to performing that item, are presented in Table 16. These electronics fundamentals are considered most critical for first-term members to know.

JOB SATISFACTION ANALYSIS

An important part of the OSR process involves the analysis of job satisfaction data. These data can be used by career ladder managers to gain a better understanding of those factors affecting job performance of AFSC 361X1 personnel. This survey compared job satisfaction indicators on three levels. Table 17 displays job satisfaction indicators for AFSC 361X1 TAFMS groups and a comparative sample of other mission equipment maintenance career ladders surveyed in 1989. Table 18 compares the job satisfaction indicators and reenlistment intentions for the current survey and the previous 1981 AFSC 361X1 survey. Table 19 compares the job satisfaction indicators and reenlistment intentions for the specialty job groups within the 361X1 career ladder.

Indicators for job satisfaction show that AFSC 361X1 career ladder personnel are generally satisfied in their jobs. Table 17 shows that all TAFMS groups (1-48, 49-96, 97+ TAFMS) indicate a high degree of satisfaction in the categories of job interest, utilization of both talents and training, and sense of accomplishment. The one exception was the response to reenlistment intentions. Reenlistment intentions increased as time increased in the 361X1 career ladder, but the intention to reenlist for the 1-48 TAFMS group was slightly low (54 percent), with the 49-96 TAFMS group moderately more positive (69 percent). The other job satisfaction indicators remained approximately the same across all TAFMS groups, with a slight peak for most categories at the 49-96 TAFMS level. Perceived utilization of talents, however, dropped very slightly after the 1-48 TAFMS level.

AFSC 361X1 personnel were generally more positive about job satisfaction than the comparative sample of mission equipment support personnel. For the comparative sample group, there was also a slight trend to express somewhat less satisfaction as time increased in their career. The one exception to this is in their reenlistment intentions. While job interest remained essentially the same over time and job satisfaction decreased slightly, reenlistment intentions actually increased and were higher for the 1-48 and 49-96 TAFMS groups than those groups in the 361X1 sample (Table 17). With this one exception, personnel in the 361X1 career ladder show a more positive response to job satisfaction than their counterparts in the comparative sample of other mission equipment maintenance personnel career ladders.

As displayed in Table 18, comparisons between the current 1990 and previous 1981 surveys show a general increase in job satisfaction at all TAFMS levels, with the exception of job interest for first-term personnel, where there was a slight drop in interest in the 1990 survey. The most notable improvements are in reenlistment intentions, even though still slightly low for the 1-48 TAFMS group in the current survey. The 1981 survey showed only a

TABLE 16

AFSC 361X1 ELECTRONICS FUNDAMENTALS SIS AREAS WITH 30 PERCENT
OR MORE DAFSC 36151 PERSONNEL PERFORMING ASSOCIATED TASKS
(Data collected through responses of 138 EPI survey members)

STS ITEM NO.	SIS ELEMENTS	TASK NO	PERCENT PERFORMING
1.	Basic Terms		
	a. Metric notation	A001 Do you use metric terms	53
	b. DC terms	A002 Do you use basic DC electrical/electronic terms	78
	c. AC terms	A003 Do you use basic AC electrical/electronic terms	64
2.	Basic Circuits		
	a. Theory of operation	A004 Do you trace schematic or block diagrams of circuits containing conductors, fuses, lamps, switches, or batteries	42
	b. Troubleshoot circuits	A005 Do you troubleshoot circuits containing conductors, fuses, lamps, switches, or batteries	67
3.	Basic Circuit Calculations		
	a. DC	A006 Do you calculate value of voltage, current, resistance, or power	51
25.	Solder/Desolder		
	a. Terminal connections	A141 Do you solder or desolder hardware connections	51
	b. PC boards	A145 Do you perform high reliability soldering	32
	c. Multipin connectors	A149 Do you repair or fabricate connectors or cables on multiconductor cables	87
	d. Coaxial connectors	A150 Do you repair or fabricate connectors or cables on coaxial cables	70
26.	Assemble Solderless Connectors		
	a. Crimp	A146 Do you use crimping tool to repair or make connections	89
		A147 Do you use wire wrap tool to make connections	81
		A148 Do you use punch-on tool to make connections	83
	b. Coaxial	A150 Do you repair or fabricate connectors or cables on coaxial cables	70
	c. Multipin	A149 Do you repair or fabricate connectors or cables on multiconductor cables	87

TABLE 16 (CONTINUED)

AFSC 361X1 ELECTRONICS FUNDAMENTALS STS AREAS WITH 30 PERCENT
OR MORE DAFSC 36151 PERSONNEL PERFORMING ASSOCIATED TASKS
(Data collected through responses of 138 EPI survey members)

STS ITEM NO.	STS ELEMENTS	TASK NO	PERCENT PERFORMING
27.	Use Test Equipment		
	a. Multimeter, analog	B153 Do you use the multimeter to measure DC voltage values	78
		B154 Do you use the multimeter to measure AC voltage values	61
		B156 Do you use the multimeter to measure DC current values	56
		B157 Do you use the multimeter to measure AC current values	40
		B159 Do you use the multimeter to measure circuit resistance	89
		B160 Do you use the multimeter to measure component resistance	33
	g. Multimeter, digital	B188 Do you use digital multimeters	51
	q. Reflectometer	B198 Do you use reflectometers	41
47.	Transmission Lines		
	a. Theory of operation	H532 Do you perform tasks on twisted pair transmission lines	64
		H534 Do you perform tasks on flexible coaxial transmission lines	34
		H536 Do you perform tasks on fiber-optic transmission lines	35
	b. Perform measurements	H524 Do you measure electrical length on transmission lines	35
		H525 Do you measure physical length on transmission lines	43

TABLE 17

COMPARISON OF JOB SATISFACTION INDICATORS FOR 361X1 AND COMPARATIVE
SAMPLE GROUP
(PERCENT MEMBERS RESPONDING)*

	<u>1-48 MOS TAFMS</u>		<u>49-96 MOS TAFMS</u>		<u>97+ MOS TAFMS</u>	
	1990 (N=273)	COMP SAMPLE** (N=2658)	1990 (N=132)	COMP SAMPLE** (N=1930)	1990 (N=192)	COMP SAMPLE** (N=2575)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	83	77	87	75	85	77
SO-SO	10	15	5	17	10	14
DULL	5	8	5	8	4	8
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	86 13	85 15	93 5	85 14	90 9	84 15
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	91 7	87 12	88 9	83 16	88 11	82 18
<u>SENSE OF ACCOMPLISHMENT:</u>						
SATISFIED	82	76	86	75	81	67
NEUTRAL	8	14	4	12	6	11
DISSATISFIED	7	9	8	11	11	22
<u>REENLISTMENT INTENTIONS:</u>						
YES, OR PROBABLY YES	54	61	69	72	80	75
NO, OR PROBABLY NO	44	37	30	26	7	10
PLAN TO RETIRE	1	2	1	1	13	14

* Columns may not add to 100 percent due to rounding or lack of response.

** Comparative sample of Mission Equipment Maintenance AFSCs surveyed in 1989 including 362X4, 411X2A, 454X0A/B and 451X4 personnel. AFSC 36XXX is grouped functionally based on mission and type of job under Mission Equipment Maintenance

TABLE 18

COMPARISON OF JOB SATISFACTION INDICATORS ACROSS TAFMS GROUPS
FOR CURRENT AFSC 361X1 SURVEY AND PREVIOUS SURVEY DATED JULY 1981
(PERCENT MEMBERS RESPONDING)*

	<u>1-48 MOS TAFMS</u>		<u>49-96 MOS TAFMS</u>		<u>97+ MOS TAFMS</u>	
	1990 (N=273)	1981 (N=256)	1990 (N=132)	1981 (N=138)	1990 (N=192)	1981 (N=197)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	83	84	87	80	85	78
SO-SO	10	11	5	14	10	13
DULL	5	4	5	5	4	6
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	86 13	85 14	93 5	88 12	90 9	88 10
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	91 7	88 10	88 9	89 11	88 11	86 13
<u>REENLISTMENT INTENTIONS:</u>						
YES, OR PROBABLY YES	54	35	69	60	80	35
NO, OR PROBABLY NO	44	63	30	38	7	63
PLAN TO RETIRE	1	NA	1	NA	13	NA

* Columns may not add to 100 percent due to rounding or lack of response

NA - Data not available

TABLE 19

JOB SATISFACTION DATA FOR CLUSTERS AND JOB TYPES
(PERCENT MEMBERS RESPONDING)*

	CABLE SPLICING, INSTALLATION & MAINTENANCE CLUSTER	HICS & CABLE MAINTENANCE TECHNICIAN CLUSTER	CABLE AFFAIRS TECHNICIAN CLUSTER	FIRST-LINE SUPERVISOR CLUSTER	JOB TYPES	
					A. EI OUTSIDE PLANT TEAM CHIEFS	B. CABLE MAINTENANCE & HICS NCOICs
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	87	64	75	93	100	86
SO-SO	7	18	8	0	0	0
DULL	3	18	8	7	0	14
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	91 7	70 30	75 17	95 2	100 0	91 5
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	94 4	72 28	59 33	96 4	100 0	91 9
<u>REENLISTMENT INTENTIONS:</u>						
YES, OR PROBABLY YES	62	62	75	76	76	73
NO, OR PROBABLY NO	35	38	17	4	10	0
PLAN TO RETIRE	2	0	0	20	14	27

* Columns may not add to 100 percent due to rounding or a lack of response

TABLE 19 (CONTINUED)

JOB SATISFACTION DATA FOR CLUSTERS AND JOB TYPES
(PERCENT MEMBERS RESPONDING)*

	JOB TYPES			INDEPENDENT JOB TYPES (IJT)						
	SUPERVISORY CLUSTER	A.		B. TRAINING SUPERVISORS	TRAINING IJT	EI TEAM MEMBER		QA/QC INSPECTOR & EVALUATOR IJT	CABLE SUPPLY IJT	
		WIRE CHIEFS				IJT	IJT			
<u>EXPRESSED JOB INTEREST:</u>										
INTERESTING	83	100	80	93	62	90	80			
SO-SO	6	0	10	0	23	10	20			
DULL	11	0	10	0	8	0	0			
<u>PERCEIVED UTILIZATION OF TALENTS:</u>										
FAIRLY WELL TO PERFECTLY	84	100	80	100	77	100	80			
LITTLE OR NOT AT ALL	17	0	20	0	15	0	20			
<u>PERCEIVED UTILIZATION OF TRAINING:</u>										
FAIRLY WELL TO PERFECTLY	66	100	50	100	77	100	80			
LITTLE OR NOT AT ALL	33	0	50	0	15	0	20			
<u>REENLISTMENT INTENTIONS:</u>										
YES, OR PROBABLY YES	83	67	90	100	54	70	80			
NO, OR PROBABLY NO	6	0	10	0	46	0	20			
PLAN TO RETIRE	11	33	0	0	0	30	0			

* Columns may not add to 100 percent due to rounding or a lack of response

35 percent intention to reenlist for the 1-48 group (compared to 54 percent in the current study), an increase to 60 percent for the 49-96 group (compared to 69 percent), but a drop to 35 percent intention to reenlist for the 97+ group (compared to 80 percent in 1990).

Job satisfaction for the specialty job groups was generally positive for all groups. Table 19 indicates that perhaps the most satisfied job group was the Training IJT. The least satisfied groups were the HICS and Cable Maintenance Technician cluster and the EI Team Member IJT, which responded relatively negatively to all job satisfaction indicators. These groups, along with the Cable Splicing, Installation and Maintenance cluster, also showed relatively high numbers of personnel intending on not reenlisting (excluding plans to retire).

With some exceptions, total job satisfaction for the 361X1 career ladder is high. Those specialty job groups in the career ladder less positive about their jobs report less perceived utilization of their talents and training, as well as having less interesting jobs. Compared to the sample of other mission equipment maintenance personnel career ladders, the AFSC 361X1 group has expressed generally greater job satisfaction. Compared to the response of the earlier 1981 survey, job satisfaction has increased, most notably reenlistment intentions. While reenlistment intentions are only moderately positive for the first- and second-term personnel, most personnel are nevertheless staying in the career field and are even reenlisting at a higher rate as TAFMS increases.

IMPLICATIONS

There have not been major changes for the personnel in this career ladder since the completion of the last 361X1 OSR. The 361X1 job has remained primarily the same, although the career ladder has incorporated new duties and responsibilities since the last survey, such as in fiber optics. Career ladder progression is generally typical, remaining technical even up to the 7-skill-level, where supervisory duties increase, but do not predominate. The AFR 39-1 Specialty Descriptions provide a fairly accurate picture of most of the duties of a 361X1 member, but could use some minor revision to include some of the technical aspects of the job mentioned above. Job satisfaction is slightly higher than the comparative sample on most indicators and has improved greatly since the previous OSR, especially in reenlistment intentions. However, there remains lower job satisfaction and reenlistment intentions with certain specialty job groups, particularly with first-enlistment personnel.

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY
CAREER LADDER STRUCTURE GROUPS

TABLE A1
 REPRESENTATIVE TASKS PERFORMED BY
 CABLE SPLICING, INSTALLATION AND MAINTENANCE CLUSTER
 (ST0072)

GROUP SIZE: 362	AVERAGE TICF: 56 MONTHS
PREDOMINANT PAYGRADE: E4	AVERAGE TAFMS: 64 MONTHS
PREDOMINANT SKILL LEVEL: 5	AVERAGE # TASKS PERFORMED: 183
PERCENT OF SAMPLE: 60%	

TASKS	PERCENT MEMBERS PERFORMING
K402 Splice filled cables	95
J339 Establish talking circuits	95
Q621 Wash or wax vehicles or trailers	93
K390 Perform permanent bond of cable shields	93
H294 Tag cables, terminals, or splices	93
K391 Perform temporary bond of cable shields	93
Q597 Clean tools	92
G200 Form buried cables for splicing	91
J336 Detect cable faults or splicer errors using multimeters	91
J334 Detect cable faults or splicer errors using headsets and batteries	91
K384 Clear cap conductors	91
G222 Transport equipment to job sites	90
G195 Erect traffic warning devices	90
L431 Seal splices with reenterable compounds	90
G183 Clean manholes	90
L418 Perform temporary or emergency splice seals using CR tape	90
G207 Remove or replace manhole covers	89
H271 Install quick-connect or punch-on terminals	89
L433 Wrap cable splices with muslin or plastic	89
K411 Straight-splice conductors in general cables using mechanical connectors	88
G192 Erect barriers or manhole guards around open trenches or pits	88
G201 Form underground cables for splicing	88
G184 Clean splicing pits	88
G198 Excavate splicing pits or cable trenches using handtools	87
G178 Backfill cable splicing pits or cable trenches using handtools	86

TABLE A2

REPRESENTATIVE TASKS PERFORMED BY
HICS AND CABLE MAINTENANCE TECHNICIAN CLUSTER
(ST0055)

GROUP SIZE: 50
PREDOMINANT PAYGRADE: E4
PREDOMINANT SKILL LEVEL: 5
PERCENT OF SAMPLE: 8%

AVERAGE TICF: 49 MONTHS
AVERAGE TAFMS: 61 MONTHS
AVERAGE # TASKS PERFORMED: 116

TASKS	PERCENT MEMBERS PERFORMING
0491 Inspect ESA rooms	100
I315 Inspect HICS interior grounding or sealing devices	96
I301 Inspect cable air dryers	94
0493 Install HICS demi-valve assemblies (DVA)	94
I313 Inspect HICS cable yard manifold pressure systems	90
0505 Perform penetration or blackout procedures of Minuteman launch facility support buildings (LFSB)	88
0499 Maintain and repair ATI splice cases	88
0484 Band HICS line of sight and splice marker poles	88
0524 Splice HICS cables	88
0516 Remove or replace inner and outer ATI splice cases	88
Q596 Clean cable air dryers	86
I312 Inspect HICS cable for hardness integrity	86
Q595 Adjust cable air dryers output pressure	86
I316 Inspect HICS splices	86
0501 Maintain stored cables in HICS cable yards	86
J375 Test electrical surge arresters (ESA)	86
0522 Repair HICS DVAs	86
0515 Remove or replace HICS line of sight and splice marker poles	86
0494 Install HICS line of sight and splice marker poles	86
0504 Perform penetration or blackout procedures of Minuteman launch facilities (LF)	84
0500 Maintain and repair terminal splice cases in HICS cable	84
0523 Scan and examine PTs using teletypewriter	80
F123 Annotate AF Forms 1800 (Operator's Inspection Guide and Trouble Report (General Purpose Vehicles))	78
F156 Locate cable routes	78

TABLE A3

REPRESENTATIVE TASKS PERFORMED BY
CABLE AFFAIRS TECHNICIAN CLUSTER
(ST0035)

GROUP SIZE: 12
PREDOMINANT PAYGRADE: E4
PREDOMINANT SKILL LEVEL: 5
PERCENT OF SAMPLE: 2%

AVERAGE TICF: 80 MONTHS
AVERAGE TAFMS: 96 MONTHS
AVERAGE # TASKS PERFORMED: 35

TASKS	PERCENT MEMBERS PERFORMING
F156 Locate cable routes	100
F131 Coordinate cable installation or maintenance with contractors	83
F154 Interpret CIR systems records or CSIRs	83
F123 Annotate AF Forms 1800 (Operator's Inspection Guide and Trouble Report (General Purpose Vehicles))	83
Q621 Wash or wax vehicles or trailers	83
A20 Review lists of materials, project drawings, or project specifications	75
F158 Maintain cable records, diagrams, or card files	75
F152 Interpret cable records or cable splicing diagrams	75
C55 Evaluate project drawings or specifications	67
A3 Coordinate communication requirements with base or tenant units	58
F126 Annotate drawings, such as as-built or as-installed	53
J354 Locate or determine depth of buried cables, pipes, or other components	50
J359 Locate unmarked splices	50
O484 Band HICS line of sight and splice marker poles	50
C65 Perform aerial fly-over inspections or surveys	50
I330 Inspect vehicles or special purpose equipment	50
F153 Interpret cable transfer worksheets or cutsheets	50
A4 Coordinate installation of cable, antenna, or inside plant projects with using organization	42
I312 Inspect HICS cable for hardness integrity	42
A15 Plan cable installations, modifications, removals, or rehabilitations	42
F151 Input data using computer terminals	42
I300 Inspect aerial, buried, or underground cable installations	42
Q619 Sign for tools or test equipment	42

TABLE A4
 REPRESENTATIVE TASKS PERFORMED BY
 FIRST-LINE SUPERVISOR CLUSTER
 (ST0053)

GROUP SIZE: 46
 PREDOMINANT PAYGRADE: E6
 PREDOMINANT SKILL LEVEL: 7
 PERCENT OF SAMPLE: 8%

AVERAGE TICF: 141 MONTHS
 AVERAGE TAFMS: 164 MONTHS
 AVERAGE # TASKS PERFORMED: 153

TASKS	PERCENT MEMBERS PERFORMING
B031 Counsel personnel on personal or military-related matters	98
A017 Plan or schedule work assignments	96
C68 Write APRs	96
A8 Determine work priorities	93
A18 Plan or schedule work priorities	91
A4 Coordinate installation of cable, antenna, or inside plan project with using organization	91
D73 Annotate training records	89
B42 Supervise Cable Splicing Project/Maintenance Action Specialists (AFSC 36151)	85
B39 Interpret policies, directives, or procedures for subordinates	85
A13 Establish performance standards for subordinates	85
A20 Review lists of materials, project drawings, or project specifications	85
A9 Develop work methods or controls	85
D76 Conduct OJT	85
A15 Plan cable installations, modifications, removals, or rehabilitations	83
I306 Inspect completed work	80
C55 Evaluate project drawings or specifications	80
A3 Coordinate communication requirements with base or tenant units	78
D80 Counsel trainees on training progress	78
D91 Maintain training records, charts, or graphs	78
C53 Evaluate personnel for compliance with performance standards or Technical Orders	76
I317 Inspect in-progress work	76
F152 Interpret cable records or cable splicing diagrams	76
D81 Determine training requirements	76
B30 Conduct team briefings or debriefings	72

TABLE A5

REPRESENTATIVE TASKS PERFORMED BY
E1 OUTSIDE PLANT TEAM CHIEF PERSONNEL
(ST0092)

GROUP SIZE: 6
 PREDOMINANT PAYGRADES: E5 & E6
 PREDOMINANT SKILL LEVEL: 7
 PERCENT OF SAMPLE: 4%

AVERAGE TICF: 139 MONTHS
 AVERAGE TAFMS: 159 MONTHS
 AVERAGE # TASKS PERFORMED: 185

TASKS	PERCENT MEMBERS PERFORMING
A020 Review lists of materials, project drawings, or project specifications	100
A17 Plan or schedule work assignments	100
I306 Inspect completed work	95
A4 Coordinate installation of cable, antenna, or inside plant projects with using organization	95
E102 Conduct predeployment actions, such as team support, billeting, transportation, and messing facilities	95
E101 Conduct final project acceptance inspections with quality assurance evaluator and base quality control inspector	95
E126 Annotate drawings, such as as-built or as-installed	95
E136 Initiate engineering change request/authorizations (ECR/A)	95
B31 Counsel personnel on personal or military-related matters	95
C68 Write APRs	95
F138 Initiate or complete AF 95 Forms 103 (Base Civil Engineering Work Clearance Request)	95
I317 Inspect in-progress work	90
A8 Determine work priorities	90
B10 Coordinate host base support with appropriate personnel	90
B42 Supervise Cable Splicing Project/Maintenance Action Specialists (AFSC 36151)	90
A18 Plan or schedule work priorities	90
E107 Conduct project reviews	90
G224 Withdraw project materials from storage	90
E100 Complete daily documentation of job, summary, and project drawings	86
I332 Inspect work areas for hazardous working conditions	86

TABLE A6

REPRESENTATIVE TASKS PERFORMED BY
CABLE MAINTENANCE AND HICS NCOIC PERSONNEL
(ST0115)

GROUP SIZE: 22	AVERAGE TICF: 149 MONTHS
PREDOMINANT PAYGRADES: E6 & E7	AVERAGE TAFMS: 176 MONTHS
PREDOMINANT SKILL LEVEL: 7	AVERAGE # TASKS PERFORMED: 130
PERCENT OF SAMPLE: 4%	

TASKS	PERCENT MEMBERS PERFORMING
B31 Counsel personnel on personal or military-related matters	100
A8 Determine work priorities	100
B39 Interpret policies, directives, or procedures for subordinates	95
A18 Plan or schedule work priorities	95
A17 Plan or schedule work assignments	95
C68 Write APRs	95
D81 Determine training requirements	95
C51 Evaluate maintenance or use of workspace, equipment, or supplies	95
A9 Develop work methods or controls	95
D95 Review job qualification standards (JQS)	95
B33 Direct maintenance of administrative files	91
A13 Establish performance standards for subordinates	91
D93 Plan or schedule training, such as OJT, ancillary training, instructor training, and vehicle safety training	91
A3 Coordinate communication requirements with base or tenant units	91
D73 Annotate training records	91
B29 Conduct supervisory orientations of newly assigned personnel	91
C53 Evaluate personnel for compliance with performance standards or Technical Orders	86
D92 Monitor effectiveness of upgrade training, such as career knowledge, job proficiency, and qualification training	86
C52 Evaluate or review staff studies, surveys, or special reports, such as maintenance reports	82
B34 Direct maintenance or utilization of equipment	82

TABLE A7
 REPRESENTATIVE TASKS PERFORMED BY
 SUPERVISORY CLUSTER
 (ST0050)

GROUP SIZE: 18
 PREDOMINANT PAYGRADE: E7
 PREDOMINANT SKILL LEVEL: 7
 PERCENT OF SAMPLE: 3%

AVERAGE TICF: 173 MONTHS
 AVERAGE TAFMS: 199 MONTHS
 AVERAGE # TASKS PERFORMED: 41

TASKS	PERCENT MEMBERS PERFORMING
B31 Counsel personnel on personal or military-related matters	94
B29 Conduct supervisory orientations of newly assigned personnel	94
C68 Write APRs	89
B39 Interpret policies, directives, or procedures for subordinates	89
A1 Assign individuals to duty positions	83
A2 Assign sponsors for newly assigned personnel	83
A8 Determine work priorities	78
C61 Indorse airman performance reports (APR)	72
C70 Write recommendations for awards and decorations	72
A24 Schedule personnel for leave or temporary duty (TDY) assignment	72
A7 Determine logistics requirements, such as space, personnel, equipment, or supplies	67
C50 Evaluate inspection report findings	61
A18 Plan or schedule work priorities	61
A13 Establish performance standards for subordinates	61
A4 Coordinate installation of cable, antenna, or inside plant projects with using organization	56
A17 Plan or schedule work assignments	56
A3 Coordinate communication requirements with base or tenant units	56
A9 Develop work methods or controls	56
B45 Supervise military personnel with AFSC other than 361X1	50
D73 Annotate training records	50
C47 Analyze workload requirements	50
C52 Evaluate or review staff studies, surveys, or special reports, such as maintenance reports	50

TABLE A8
REPRESENTATIVE TASKS PERFORMED BY
WIRE CHIEF PERSONNEL
(ST0098)

GROUP SIZE: 6
PREDOMINANT PAYGRADE: E7
PREDOMINANT SKILL LEVEL: 7
PERCENT OF SAMPLE: 1%

AVERAGE TICF: 160 MONTHS
AVERAGE TAFMS: 212 MONTHS
AVERAGE # TASKS PERFORMED: 29

TASKS	PERCENT MEMBERS PERFORMING
C68 Write APRs	100
C61 Indorse airman performance reports (APR)	100
C70 Write recommendations for awards and decorations	100
B31 Counsel personnel on personal or military-related matters	100
B29 Conduct supervisory orientations of newly assigned personnel	100
A4 Coordinate installation of cable, antenna, or inside plant projects with using organizations	83
B45 Supervise military personnel with AFSC other than 361X1	83
A2 Assign sponsors for newly assigned personnel	83
A25 Write job or position descriptions	83
A8 Determine work priorities	67
A24 Schedule personnel for leave or temporary duty (TDY) assignments	67
C69 Write civilian performance and promotion appraisals	67
A1 Assign individuals to duty positions	67
A3 Coordinate communication requirements with base or tenant units	67
C50 Evaluate inspection report findings	67
A7 Determine logistics requirements, such as space, personnel, equipment, or supplies	67
B39 Interpret policies, directives, or procedures for subordinates	67
A13 Establish performance standards for subordinates	50
A10 Draft budget requirements	50
B33 Direct maintenance of administrative files	50
B28 Conduct staff meetings	50
B44 Supervise civilian personnel	50
F164 Maintain transaction rosters, such as D04, D18, D19 and M30	50
F162 Maintain publication reading files	50

TABLE A9
REPRESENTATIVE TASKS PERFORMED BY
TRAINING SUPERVISOR PERSONNEL
(ST0067)

GROUP SIZE: 10
PREDOMINANT PAYGRADE: E7
PREDOMINANT SKILL LEVEL: 7
PERCENT OF SAMPLE: 2%

AVERAGE TICF: 179 MONTHS
AVERAGE TAFMS: 193 MONTHS
AVERAGE # TASKS PERFORMED: 47

TASKS	PERCENT MEMBERS PERFORMING
B39 Interpret policies, directives, or procedures	100
B31 Counsel personnel on personal or military-related matters	90
B29 Conduct supervisory orientations of newly assigned personnel	90
A1 Assign individuals to duty positions	90
A17 Plan or schedule work assignments	80
C68 Write APRs	80
A8 Determine work priorities	80
A24 Schedule personnel for leave or temporary duty (TDY) assignment	70
A18 Plan or schedule work priorities	70
C50 Evaluate inspection report findings	70
C70 Write recommendations for awards and decorations	70
D80 Counsel trainees on training progress	70
D88 Evaluate progress of trainees	70
A9 Develop work methods or controls	70
A13 Establish performance standards for subordinates	70
B43 Supervise Cable Splicing Project/Maintenance Action Technicians (AFSC 36171)	60
C61 Indorse airman performance reports (APR)	60
D81 Determine training requirements	60
C53 Evaluate personnel for compliance with performance standards or Technical Orders	60
C47 Analyze workload requirements	60
D73 Annotate training records	60
C52 Evaluate or review staff studies, surveys, or special reports, such as maintenance reports	60
D91 Maintain training records, charts, or graphs	60

TABLE A10
REPRESENTATIVE TASKS PERFORMED BY
TRAINING IJT
(GRO022)

GROUP SIZE: 14
PREDOMINANT PAYGRADE: E5
PREDOMINANT SKILL LEVEL: 5
PERCENT OF SAMPLE: 2%

AVERAGE TICF: 119 MONTHS
AVERAGE TAFMS: 133 MONTHS
AVERAGE # TASKS PERFORMED: 94

TASKS	PERCENT MEMBERS PERFORMING
D72 Administer tests	100
D77 Conduct resident course classroom training	93
D96 Score tests	93
D90 Maintain training aids, areas, or equipment	93
K411 Straight-splice conductors in general cables using mechanical connectors	93
D80 Counsel trainees on training progress	93
D88 Evaluate progress of trainees	86
G217 Test acetylene pressure regulators for pressure leakage	86
J361 Measure resistance	86
I332 Inspect work areas for hazardous working conditions	86
I328 Inspect test equipment	79
I324 Inspect splicing materials	79
J339 Establish talking circuits	79
I306 Inspect completed work	71
M438 Install lead sleeves	71
D98 Write test questions	71
Q597 Clean tools	71
I304 Inspect climbing equipment, poles, or areas prior to ascending poles	71
J374 Take and record loop resistance readings	71
D73 Annotate training records	64
M435 Install auxiliary sleeves	64
G223 Withdraw materials from benchstock	64
L425 Seal cable ends using cable end caps	64
K378 Bridge-splice conductors in general cables using mechanical connectors	64
L421 Prepare lead sleeves for sealing	64
K391 Perform temporary bond of cable shields	64
I317 Inspect in-progress work	57

TABLE A11

REPRESENTATIVE TASKS PERFORMED BY
EI TEAM MEMBER IJT
(ST0076)

GROUP SIZE: 13
PREDOMINANT PAYGRADE: E4
PREDOMINANT SKILL LEVEL: 5
PERCENT OF SAMPLE: 2%

AVERAGE TICF: 43 MONTHS
AVERAGE TAFMS: 55 MONTHS
AVERAGE # TASKS PERFORMED: 58

TASKS	PERCENT MEMBERS PERFORMING
G219 Test subterranean structures for combustible gases	100
G220 Test subterranean structures for oxygen deficiency	100
G209 Remove or replace manhole covers	100
G183 Clean manholes	100
G221 Test subterranean structures for toxic gases	92
G222 Transport equipment to job sites	92
G195 Erect traffic warning devices	92
J339 Establish talking circuits	85
G190 Direct operation of trucks or winches using hand signals	85
G214 Set up or remove ground tents	85
G192 Erect barriers or manhole guards around open trenches or pits	77
J336 Detect cable faults or splicer errors using multimeters	77
G213 Set up manhole ladders	77
G211 Select traffic warning devices required for work areas	77
G201 Form underground cables for splicing	77
J334 Detect cable faults or splicer errors using headsets and batteries	77
L418 Perform temporary or emergency splice seals using CR tape	69
K402 Splice filled cables	69
M439 Install splice cases	69
Q621 Wash or wax vehicles or trailers	69
G184 Clean splicing pits	62
H238 Install cable racks or hooks in manhole vaults or distributing points	62
H231 Install bonding ribbons in manholes or vaults	62
G178 Backfill cable splicing pits or cable trenches using handtools	62
K409 Straight-splice conductors in general cables using foldback modular method	54

TABLE A12

REPRESENTATIVE TASKS PERFORMED BY
QC/QA INSPECTOR AND EVALUATOR IJT
(ST0107)

GROUP SIZE: 10
PREDOMINANT PAYGRADE: E6
PREDOMINANT SKILL LEVEL: 7
PERCENT OF SAMPLE: 2%

AVERAGE TICF: 138 MONTHS
AVERAGE TAFMS: 174 MONTHS
AVERAGE # TASKS PERFORMED: 46

TASKS	PERCENT MEMBERS PERFORMING
C53 Evaluate personnel for compliance with performance standards or Technical Orders (TO)	100
I332 Inspect work areas for hazardous working conditions	100
I303 Inspect cables and associated equipment for evidence of corrosion	100
I300 Inspect aerial, buried, or underground cable installations	100
I317 Inspect in-progress work	100
I307 Inspect emergency safety equipment for serviceability	100
C54 Evaluate procedures for storage, inventory, or inspection of tools or equipment	100
I306 Inspect completed work	90
I330 Inspect vehicles or special purpose equipment	90
I327 Inspect subterranean structures, such as cable vaults, handholes, or manholes	90
I318 Inspect installed cable pressure system equipment or components	90
I328 Inspect test equipment	80
C50 Evaluate inspection report findings	80
I301 Inspection cable air dryers	80
I309 Inspect general aerial, buried, or underground	80
I310 Inspect grounding or bonding devices, other than hardened intersite cable systems (HICS)	80
C60 Identify problem areas using deficiency or service reports	70
F157 Locate technical order numbers and titles in index-type Technical Orders	70
C56 Evaluate safety or security programs	70
I311 Inspect hand or special purpose tools	70
C55 Evaluate project drawings or specifications	70

TABLE A13

REPRESENTATIVE TASKS PERFORMED BY
CABLE SUPPLY IJT
(ST0103)

GROUP SIZE: 5
 PREDOMINANT PAYGRADE: E5
 PREDOMINANT SKILL LEVEL: 7
 PERCENT OF SAMPLE: 1%

AVERAGE TICF: 110 MONTHS
 AVERAGE TAFMS: 121 MONTHS
 AVERAGE # TASKS PERFORMED: 38

TASKS	PERCENT MEMBERS PERFORMING
F159 Maintain equipment calibration records	100
F141 Initiate or complete AF Forms 601 (Equipment Action Request)	100
F142 Initiate or complete AFTO Form 350 or DD Forms 1577 (Reparable Item Processing Tags)	100
B40 Review test equipment calibration schedules	100
F170 Research and initiate special supply requisitions	100
F130 Complete AF Forms 2005 (Issue/Turn in Requests)	100
F168 Process damaged tools for distribution and replacement	100
A11 Establish bench stock levels	100
F165 Obtain follow-up information on special supply requisitions	100
F134 Initiate AF Forms 9 (Request for Purchase)	80
F155 Inventory equipment, tools, or supplies	80
Q597 Clean tools	80
Q600 Issue tools and test equipment	80
Q601 Maintain bench stock or tool cribs	80
I328 Inspect test equipment	80
Q618 Schedule test equipment or special purpose tools for calibration	80
F164 Maintain transaction rosters, such as D04, D18, D19 and M30	80
I324 Inspect splicing materials	80
F143 Initiate or complete DD Form 1348-6 (DOD Single Line Item Requisition System Document (Manual - Long Form))	80
G223 Withdraw materials from bench stock	60
Q608 Perform operator maintenance on test equipment, such as cleaning and battery replacement	60
I311 Inspect hand or special purpose tools	60