

**UNITED STATES
AIR FORCE**

OCCUPATIONAL SURVEY REPORT



**SATELLITE, WIDEBAND, AND TELEMETRY SYSTEMS
AFSC 2E1X1**

OSSN: 2480

AUGUST 2002

**OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION and TRAINING COMMAND
1550 5th STREET EAST
RANDOLPH AFB, TEXAS 78150-4449**

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PREFACE

This report presents the results of an Air Force Occupational Survey of the Satellite, Wideband, and Telemetry Systems career ladder (AFSC 2E1X1). Authority for conducting an occupational survey is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Career Field Manager, technical training school, all major using commands, and other interested operations and training officials.

Lieutenant Kristen Barrera, Inventory Development Specialist, developed the survey instrument. Lieutenant Joshua Smalley, Occupational Analyst, analyzed the data and wrote the final report. Mr. Tyrone Hill provided computer-programming support, and Ms. Dolores Navarro provided administrative support. Major Jose Caussade, Chief, Airman Analysis Section, reviewed and approved this report for release.

Additional copies of this report may be obtained by writing to AFOMS/OMYXI, 1550 5th Street East, Randolph AFB TX 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our website at <https://www.omsq.af.mil/>.

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**OCCUPATIONAL SURVEY REPORT (OSR)
SATELLITE, WIDEBAND, AND TELEMETRY SYSTEMS
(AFSC 2E1X1)**

EXECUTIVE SUMMARY

1. **Survey Coverage**: The Satellite, Wideband, and Telemetry Systems career ladder was surveyed to obtain current task, software, and equipment data for use in evaluating current training programs. The data will also be used to support Specialty Knowledge Test (SKT) development. Surveys were sent to 1,827 Active Duty (AD), 1,305 Air National Guard (ANG), and 37 Air Force Reserve Command (AFRC) personnel. Survey results were based on 1,418 members responding (937 AD, 478 ANG, and 3 AFRC).
2. **Specialty Jobs**: Structure analysis identified three clusters and three independent jobs within the specialty. Despite this, the vast majority of the members are performing similar tasks within the general electronics repair and maintenance of antenna systems arena.
3. **Career Ladder Progression**: The Satellite, Wideband, and Telemetry Systems career ladder progression is typical of most career ladders. There was a slight distinction between 3- and 5-skill levels with the 5-skill levels performing more supervisory work. The distinction between 5- and 7-skill-level members was more obvious with the 7-skill-level members spending more than 21% of their time performing supervisory/management activities.
4. **Training Analysis**: The Course Training Standard (CTS) for the specialty, dated 1 April 2000, was reviewed in light of the survey data. The CTS, for the most part, is supported by the survey data. However, there were a large number of tasks that were not referenced to the CTS that warrant review for possible inclusion. A complete review of the CTS has been provided to the technical school for evaluation. The Plan of Instruction (POI) for the 3-skill-level course, dated 1 May 2000, was also reviewed.
5. **Job Satisfaction Analysis**: In general, job satisfaction among most 2E1X1 personnel was good. However, members of the Maintenance Control Independent Job had relatively low job satisfaction ratings.
6. **Retention Dimensions**: Members in all three TAFMS groups (1-48 months, 49-96 months, and 97+ months) agreed on several factors potentially influencing their decision to reenlist or separate. Top factors for reenlistment include job security, military lifestyle, medical or dental care for the active duty member, and retirement benefits. The three TAFMS groups were also in agreement concerning the top factors for separation, including pay and allowances, civilian job opportunities, and military lifestyle.

INTRODUCTION

Air Force Occupational Measurement Squadron (AFOMS)

Occupational Analysis Program

Simply put, our mission is to provide occupational data for decisionmakers allowing them to make informed personnel, training, and education decisions based, not on opinion and conjecture, but on empirical, quantitative data.

Survey Development Process

An occupational survey begins with a job inventory (JI) -- a list of all the tasks performed by members of a given Air Force Specialty Code (AFSC) as part of their actual career field work (that is, additional duties and the like are not included). We strive to ensure that every function career field members perform is included by working very closely with technical training personnel, the Air Staff, and operational subject-matter experts (SMEs) to produce a task list that is complete and understandable to the typical job incumbent filling out the survey. The SMEs also ensure the task list is written to the same level of specificity across duty areas and that each task is mutually exclusive, that it is not covered in the task list more than once.

In addition to this comprehensive task list, job inventories include a number of background questions that deal with demographic information, job satisfaction, equipment usage, and any other area that our customers may desire to focus on.

Furthermore, the JI is only one of the surveys that AFOMS produces. The JI task list is used in creating several other surveys that are important for developing and refining career field training programs and for developing career field promotion tests; these surveys and how their results are used will be described shortly.

Survey Administration

The sample of members who receive the JI primarily depends on the size of the career ladder. We typically survey 100% of all eligible members in career ladders numbering 3,000 members or less. For career ladders larger than 3,000 assigned members, we typically select a random sample of half of the eligible members. Return rates (the percentage of surveys we receive back from the field) generally run 70% or greater. All this combines to produce very large and very representative samples in almost every study we conduct, compared for example to the samples obtained by private commercial surveying and marketing firms, and this in turn leads to highly accurate information about the work and demographics of the career field.

When the number of tasks is large, responding to the JI can be somewhat time-consuming for the Air Force member, but it is a simple process. Respondents are asked to examine each task and indicate

whether they do or do not perform that task in their current job. They are then asked to rate each task they marked on a scale of 1 to 9 based on how much relative time they spend performing that task in their present job.

Survey Analysis

Survey responses are processed using a set of computer programs called the Comprehensive Occupational Data Analysis Programs (CODAP). We are able to calculate some important basic information about each task from the information that respondents provide in the JI: the Percent Members Performing (PMP) and the Percent Time Spent (PTS). CODAP groups survey respondents according to their similarity of task performance, and our analysts study these groupings to identify distinct jobs. Further, we can provide PMP and PTS information for any subgroup. For example, we can easily determine the percent of E-5s or 3-skill-level or first-term airmen who perform each task, and estimate the average amount of job time they spend performing it. This is important because many of the applications of our data target particular subgroups within the career ladder.

Uses of Survey Data

Survey results are formally reported in an **Occupational Survey Report (OSR)** -- what you are currently reading -- but the OSR is by no means the only product of an occupational survey study. The OSR provides a high-level "snapshot" of an entire AFSC in a compact package, but it is not intended to provide the comprehensive information needed to support important decisions about a career field. That is the purpose of "data extracts," which are comprehensive, detailed sets of CODAP-generated reports designed for particular applications.

The Training Extract -- AFOMS survey data are essential to technical training professionals. The Training Extract provides information about what career ladder incumbents are actually doing in their jobs at each stage of their career, along with supporting information regarding when and how members should be trained to perform their jobs. The data found in the Training Extract regarding first-job, first-term, and 3-skill-level members are the *primary source of empirical information* available to support such decisions.

In addition to the JI, AFOMS produces two other surveys that directly support the training community. Depending on the size of the career ladder, a sample of at least 50 (and frequently 100 or more) 7-skill-level craftsmen is selected to complete a Training Emphasis (TE) survey. A similar-sized sample of other 7-skill-level craftsmen is selected to complete a Task Difficulty (TD) survey.

The TE survey, like the JI, contains the complete career ladder task list, and, like the JI, respondents are asked to rate tasks on a 0 to 9 scale. Unlike the JI, however, respondents are asked to rate tasks based on how much emphasis they believe should be placed on that task for entry-level structured training. A "0" indicates the respondent's belief that no structured training is required for that task, while a "1" indicates the respondent's belief that very little emphasis be placed on providing structured training on that task. A rating of "9" indicates that it is essential to provide structured training on the task.

Structured training is defined as resident technical schools; field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. The responses of the entire sample of raters are averaged for each task resulting in a TE rating for each task.

The TD survey also contains the full task list and requests that respondents rate each task on a scale of 1 to 9 (“1” is low, “9” is high); but this time, respondents are asked to rate the amount of time needed to learn to perform that task satisfactorily. In other words, as the name implies, TD is an indicator of how difficult the task is to learn to do. The sample's *average* TD for each task in the inventory is standardized with a mean rating of 5.0 and a standard deviation of 1.0.

When used in conjunction with the PMP and PTS for first-enlistment members, average TE and TD ratings provide insight into the appropriate training requirements for new personnel in the career ladder. These four indices (PMP, PTS, TE, and TD) are used to compute a composite index, the Automated Training Indicator (ATI), for each task. The ATI expresses in a single number between 1 and 18 (“1” is low, “18” is high) the importance of including training for that task in the initial resident technical course. ATIs allow training developers to quickly focus attention on those tasks that are most likely to qualify for resident course consideration. Further information concerning TE and TD ratings and ATIs for the entire task list can be found in the Training Extract that accompanies this OSR.

The major users of Training Extract information are attendees at Utilization and Training Workshops (U&TWs). The U&TW is a summit of representative career ladder, training, and classification leaders whose purpose is to evaluate current training efficiency and effectiveness in order to propose and approve changes to the Specialty Training Standard (STS) or Course Training Standard (CTS), particularly with regard to 3-skill-level training, and to address utilization issues. The AFSC's job description in Attachment 6 of AFMAN 36-2108, *Enlisted Classification*, is reviewed in light of the survey data and appropriately revised to reflect the jobs being performed by the career ladder members.

Part of the process of compiling the Training Extract involves the *STS matching* process, during which technical school personnel match JI tasks to STS elements; that is, they tell us what particular task or tasks correspond to each STS element when it is covered in training. This is especially useful when STS performance codes are being reviewed for the 3-skill-level course. For example, the U&TW attendees might be asked to consider adding a task performance code to an STS element that has only been trained to a knowledge level previously. Occupational survey data are an important input in determining the appropriate proficiency code. Separate Training Extracts are produced for AD and reserve force (ANG and AFRC) component members.

The Specialty Knowledge Test (SKT) Extract -- AFOMS survey data are key to ensuring that SKTs are valid. SKTs are an important part of the Weighted Airman Promotion System (WAPS). Because an airman's test score is frequently the deciding factor in determining who is promoted, SKTs must be valid, fair, and credible.

In terms of SKTs, *valid* means that every question on the test is tied to a task which has been shown to be important to successful performance in the specialty. This tie is crucial to documenting the validity of SKT content.

AFOMS surveys provide test writers with information on the percentage of airmen performing tasks (PMP), an estimate of how much job time they spend performing tasks (PTS), how difficult tasks are to master (TD), and the importance of formal training on tasks (TE). This information is combined to produce a composite index called the Predicted Testing Importance (PTI). Those tasks that are rated highest in PTI are ones that are high in all four of our primary indices -- PMP, PTS, TD, and TE -- exactly the kinds of tasks that one would consider job-essential and critical for incumbents to know and thus be tested on. PTI information is used for minor test revisions; how it is used will be explained shortly.

Field-validated testing importance (FVTI) data are produced for major test revisions. Approximately 6 months before the start of test development, a sample of 100 senior career field NCOs are sent a survey containing a list of tasks rated highest in PTI. Respondents are asked to provide a 1-7 rating ("1" is low, "7" is high) of how important they believe it is to include a question concerning that task on the SKT. The responses are averaged for each task, yielding the FVTI index -- a direct measure of the opinions of career field experts as to what constitutes "job-essential" knowledge.

PTI and FVTI information is included in the SKT Extract which is specifically tailored for use by the SKT teams who come to AFOMS to write the promotion examinations. Two sets of reports are prepared -- one set uses only data for E-5s and the other uses combined data for E-6s and E-7s. Each report gives the SKT team information on every task's PMP, PTS, and PTI, and, for major test revisions, FVTI data. Occupational survey data are thus the only objective source of information available to the team regarding how to make the test they write meet legal requirements for validity and fairness.

The Analysis Extract -- The Analysis Extract is an archive of all the data collected in the course of a study that are not incorporated in one of the other extracts. We typically produce separate Analysis Extracts for AD and ANG/AFRC members. The Analysis Extract is usually an enormous document, a compilation of the many reports that "slice and dice" the data in virtually every potentially useful way. Just about any question anyone has regarding career ladder work, personnel, or training and utilization issues can be answered by consulting one or another of the reports in the Analysis Extract.

The Occupational Survey Report -- This document, the Occupational Survey Report (OSR), captures survey data and analysis both in breadth and depth. For ease of reading, the first half of the OSR concentrates on breadth with compelling factors and implications across the specialty. The ensuing appendices show depth with regard to these factors and implications, primarily in tabular format. Where appropriate, highlights of the tables are contained in the body. The reader will find tables in their entirety at the end of the narrative.

OCCUPATIONAL SURVEY REPORT (OSR) SATELLITE, WIDEBAND, AND TELEMETRY SYSTEMS (AFSC 2E1X1)

This is a report of an occupational survey of the Satellite, Wideband, and Telemetry Systems career ladder, conducted by the Occupational Analysis Flight, AFOMS. The OSR reports the findings of current data that are available for use in guiding the development and evaluation of training and support planned changes within this career ladder. In addition, the data are used to support SKT development. The previous 2E1X1 Satellite and Wideband Systems OSR was completed in June 1997. On 30 April 2000, AFSC 2E4X1 (Space Systems) and AFSC 2E8X1 (Instrumentation and Telemetry Systems) merged with the 2E1X1s. The previous OSRs for 2E4X1 and 2E8X1 are dated December 1996 and August 1997, respectively.

Career Ladder Background

According to the Specialty Description in AFMAN 36-2108, *Enlisted Classification*, dated 31 October 2001, duties and responsibilities of members of the 2E1X1 career field include (but are not limited to) deploying, operating, and sustaining ground and space based satellite, Beyond Line-of-Sight (BLOS) wideband communications, telemetry, and instrumentation systems; managing and performing design support, installation, calibration, testing, operation, maintenance, and repair of facilities, systems, equipment, and related subsystems; monitoring, analyzing, and directing performance checks and measurements to ensure acceptable performance; configuring equipment; establishing and maintaining communications links with distant terminals; operating earth terminal control consoles and monitoring system performance indicators; implementing operational directives; and managing wideband and satellite earth terminal facilities or activities.

After Basic Military Training, members of the career field attend the L3AQRE131-650 Electronic Principles course taught at Lackland AFB TX. This is then followed by the initial technical training school for the AFSC, which is located at Ft. Gordon Army Installation (AIN), GA. The E3ABP2E131-000 Satellite, Wideband, and Telemetry Systems Apprentice course is 89 academic days long and provides graduates with the knowledge and skills for the following principles and activities:

- Theory of electronics; interpreting publications, blueprints, writing and logic diagrams, and schematics; and communications theory.
- Principles of fixed and transportable wideband and earth terminal communications systems and equipment and their operational procedures; satellite orbital mechanics; principles of multiplexing, networks associated with multichannel equipment; and voice and record communications equipment.

- Data analysis procedures; test equipment and circuit analysis; installing and testing practices; atomic frequency generating devices, and Defense Information Agency technical and satellite control and testing procedures.

Entry into AFSC 2E1X1 requires an Armed Forces Vocational Aptitude Battery (ASVAB) “Electronic” score of 67 and a Strength requirement of “J” (weight lift of 60 lb). For award and retention of this AFSC, personnel must have normal color vision as defined in AFI 48-123, *Medical Examinations and Standards*, and be eligible for a Secret security clearance according to AFI 31-501, *Personnel Security Program Management*.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Occupational Survey Study Number (OSSN) 2480, dated October 2001. During the development of the comprehensive task list, 81 subject-matter experts were interviewed from eleven operational bases and one training unit. In addition to the standard background questions, the survey requested the following information: base of assignment; command of assignment; job satisfaction and reenlistment intentions; number of deployments and days TDY; organizational level; schedule worked; job title; work or functional area; AFSC held prior to merger; systems used or maintained; and test equipment. The inventory listed 806 tasks grouped under 17 duty headings and a background section. (The complete task list is available on the CD-ROM containing the products from this study.)

<u>BASE</u>	<u>REASON FOR VISIT</u>
Ft Gordon AIN GA	Technical Training School
Barksdale AFB LA	Unique unit; support air operations center as deployable forward air control center
Tinker AFB OK	High tempo mobility squadron providing deployable communications
MacDill AFB FL	Unique mission; support Central Command and Joint Task Force missions in US
McGuire AFB NJ	High operations tempo and participation in Operation Reach Back
FE Warren AFB WY	Run MILSTAR/SATCOM operator school and control ICBM SHF Satellite Terminal
Buckley AFB CO	Maintain Defense Satellite Program and performs missile warning and launch notification
Peterson AFB CO	HQ AFSPC
Schriever AFB CO	Support MILSTAR mission; personnel have a wide range of knowledge in a variety of areas
Beale AFB CA	Lightweight mobility and fixed systems
Vandenberg AFB CA	Control of self-destruct portion of ICBMs and telemetry information
Eglin AFB FL	Test & support and radar services to combat air operations

2E1X1 Survey Administration

From October 2001 to January 2002, the survey control monitor at the technical training school and operational bases administered the inventory to all eligible DAFSC 2E131, 2E151, and 2E171 AD, ANG, and AFRC personnel. Members ineligible to take the survey included the following: (1) hospitalized members; (2) members in transition for a permanent change of station; (3) members retiring within the time the inventories were administered to the field; and (4) members who had been in their present jobs for less than 6 weeks. Participants were selected from a computer-generated mailing list obtained from data tapes maintained by the Air Force Personnel Center, Randolph AFB TX.

Survey Sample

The data on survey returns were examined to ensure that the final sample reflected an accurate representation across major commands (MAJCOMs), paygrades, and skill levels. [Table 1](#) shows the distribution of the survey sample by MAJCOM, while [Table 2](#) reflects the survey distribution by paygrade groups. [Table 3](#) reveals the final sample distribution by skill level. [Table 4](#) displays the component characteristics for the AD, ANG, and AFRC members in the final sample. Note that because there are too few AFRC members in the sample, the AFRC component was not considered any further for analysis.

TABLE 1

MAJCOM REPRESENTATION OF TOTAL SAMPLE		
COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
ACC	20	23
USAFE	9	9
PACAF	8	10
AFSPC	8	8
AFMC	6	5
AMC	4	6
AETC	2	3
AFSOC	1	1
OTHER	***	***
ANG	38	34
AFRC	2	**
TOTAL ASSIGNED*		3,894
TOTAL SURVEYS MAILED		3,169
TOTAL IN SAMPLE		1,418
PERCENT OF ASSIGNED IN SAMPLE		36
PERCENT OF MAILED IN SAMPLE		45

* As of Oct 01

** Indicates less than one percent

*** Highest percentages in "Other" include Air Intelligence Agency, [AFOTE](#), and Air Force Elements Europe

TABLE 2

PAYGRADE DISTRIBUTION OF SAMPLE		
PAYGRADE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
E-1 - E-2	2	0
E-3	15	13
E-4	24	28
E-5	26	26
E-6	18	18
E-7	15	14
E-8	*	0
* Indicates less than 1 percent		
Note: Columns may not add to 100 due to rounding error		

TABLE 3

SKILL-LEVEL DISTRIBUTION OF SAMPLE		
SKILL LEVEL	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
2E131	18	18
2E151	51	52
2E171	31	30

TABLE 4

COMPONENT CHARACTERISTICS			
	AD	ANG	AFRC
ASSIGNED	2,369	1,466	59
SURVEYED	1,827	1,305	37
SAMPLE	937	478	3
% OF SURVEYED	51	37	8

The Command, Paygrade, and Skill-Level distributions of the survey sample are close to the percent assigned indicating that the sample is a true representation of the career ladder population assigned to the MAJCOMs.

2E1X1 JOB STRUCTURE

The first step in the analysis process is to identify the career ladder structure in terms of the jobs performed by the respondents. CODAP creates an individual job description for each respondent based on the tasks performed and relative amount of time spent on these tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, CODAP either adds new members to this initial group or forms new groups based on the similarity of tasks and time spent ratings. Human analysis of the final output, aided by additional measures of similarities and differences between groups, determines the final job structure of the career field as described here.

The basic group used in the hierarchical clustering process is the **Job**. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a **Cluster**. Jobs not falling within any cluster are identified as **Independent Jobs**. The structure of the career ladder is then defined in terms of clusters, jobs, and independent jobs. The job structure resulting from this grouping process (the various jobs within the AFSC) can be used to evaluate the changes that have occurred in the AFSC since the previous OSR. It can also be used to guide future changes in the AFSC. The above terminology will be used in the discussion of the 2E1X1 career ladder.

Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, three clusters and three independent jobs were identified within the Satellite, Wideband, and Telemetry Systems career ladder. Figure 1 shows this job structure. A written outline of the job structure follows. The stage (STG) number shown beside each title references computer-printed information. The letter “N” represents the number of members in each group. [Tables 5-10](#) provide detailed descriptions of the clusters and jobs, including demographic information and a listing of representative tasks performed. In addition, some distinguishing tasks performed for jobs identified within clusters are shown.

- I. SATELLITE/WIDEBAND TECHNICIAN CLUSTER (STG 116, N=825)
 - A. COMBAT COMM CREW CHIEF JOB (STG 224, N=10)
 - B. FIXED ANTENNA JOB (STG 222, N=35)
 - C. SATELLITE/WIDEBAND TECHNICIAN JOB (STG 229, N=604)
 - D. AFSAT/MILSTAR CREW CHIEF JOB (STG 233, N=27)
 - E. GROUND RADIO JOB (STG 239, N=10)
- II. TELEMETRY, INSTRUMENTATION, AND ROBOTICS INDEPENDENT JOB (STG 186, N=29)
- III. ANG ENGINEERING & INSTALLATION CLUSTER (STG 102, N=25)

- A. ENGINEERING AND INSTALLATION JOB (STG 203, N=10)
- B. E & I FIRST-LINE SUPERVISOR JOB (STG 200, N=14)
- IV. TECHNICAL TRAINING INSTRUCTOR INDEPENDENT JOB (STG 259, N=18)
- V. MAINTENANCE CONTROL INDEPENDENT JOB (STG 273, N=12)
- VI. MANAGEMENT CLUSTER (STG 139, N=136)
 - A. MANAGEMENT JOB (STG 188, N=121)
 - B. QUALITY ASSURANCE JOB (STG 207, N=15)

[Table 11](#) displays time spent on duties by the members within these clusters and jobs.

**IDENTIFIED JOB STRUCTURE AND PERCENTAGES OF
TOTAL SURVEY SAMPLE
(N =1,418)**

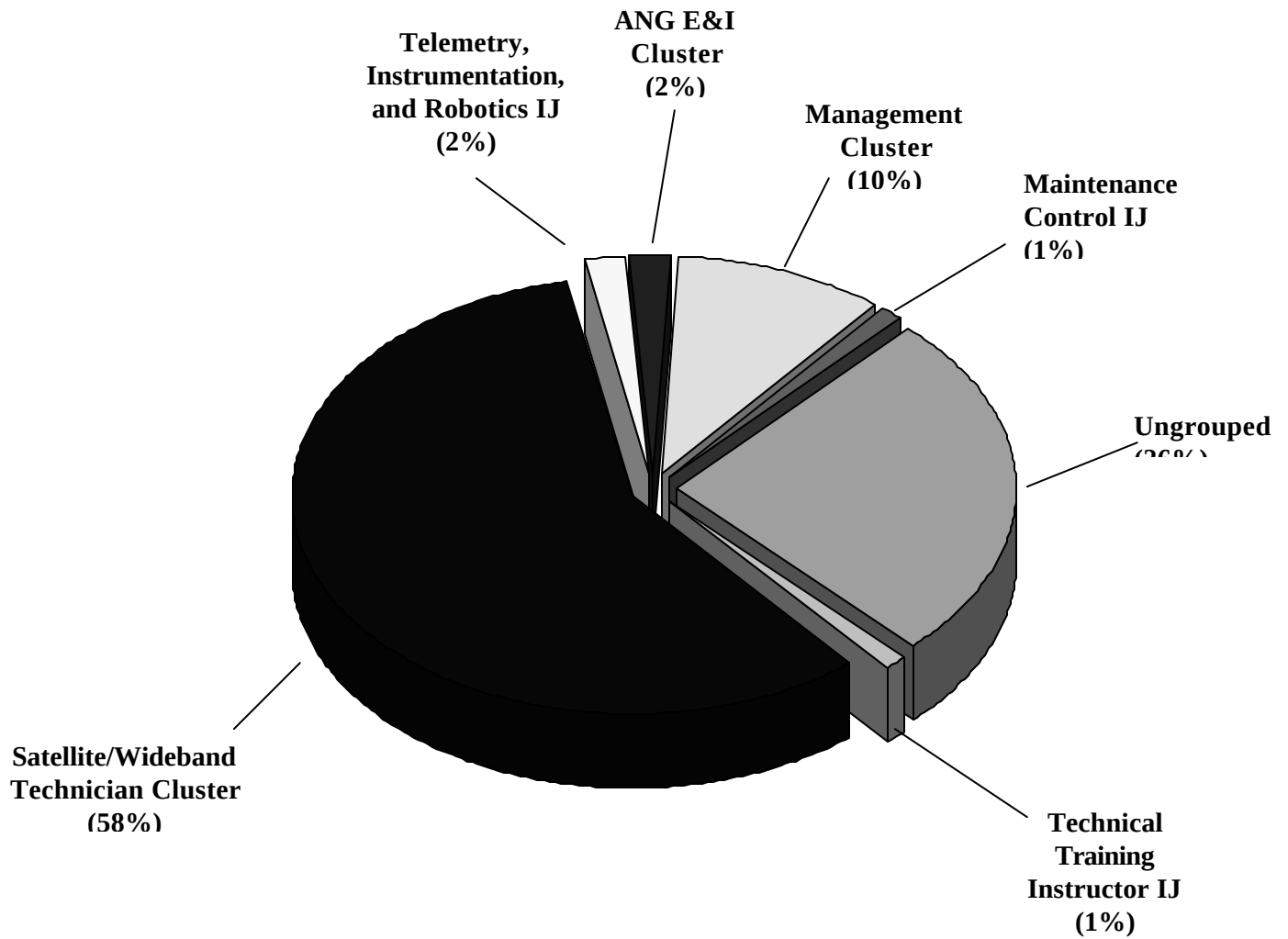


FIGURE 1

Members Not Grouped

- Remaining 26% of survey sample did not group with any cluster or independent job
 - Survey respondents sometimes do not fall into an identified job because they perform fewer tasks or mark the same tasks but give considerably different time spent ratings for those tasks
 - In addition, there may not have been enough individuals performing the same combination of tasks to warrant identification of a job
 - Members not grouped into any cluster or job were holding a variety of job titles, such as Wideband Specialist, Satellite Wideband Technician, Global Communications Journeyman, Space Systems Technician, Electronic Mechanic Supervisor, GPS Field Technician, and Van Chief.
 - Important point to note is that all major AFSC functions are covered in identified clusters and independent jobs

Comparison of Current Specialty Jobs to Previous Survey

Because the previous study was before the merger of three career fields into one 2E1X1 AFSC, the Telemetry, Instrumentation, and Robotics Independent Job was not present in the last study. In addition, two independent jobs and one cluster from the previous study (Mobility Operations Support Job, Defense Satellite Communications Systems Job, and Mobile Cluster) were not identified in the present study.

- Many of the tasks performed by the three dropped jobs/cluster from the previous study are being performed by members of the Satellite/Wideband Technician Cluster in the present study; the identifying characteristics of those jobs in the previous study were simply not as distinguishing in this study, resulting in a larger cluster of technicians performing all of the tasks
 - Overall nature of the 2E1X1 career ladder has changed slightly since the previous study in that there is more homogeneity of tasks performed, resulting in smaller areas for specialization

[Table 12](#) shows the clusters and jobs identified in this study compared to the previous study conducted in 1997.

SKILL AND EXPERIENCE ANALYSIS

An analysis of DAFSC groups in conjunction with the analysis of the career ladder structure is an important part of each OSR. This information may be used to evaluate how well career ladder documents, such as AFMAN 36-2108, *Enlisted Classification*, reflect what career ladder personnel are actually doing in the field.

TOTAL SAMPLE

Jobs

[Table 13](#) - Distribution of skill-level members across career ladder clusters and jobs:

- Majority of 3-, 5-, and 7-skill-level members in Satellite/Wideband Technician Cluster
- Second highest percentage of 2E171 members in Management Cluster

Duties

[Table 14](#) - Time spent on duties by members of skill-level groups:

- Members at 3- and 5-skill levels spend most of their time performing tasks in Duty A (Performing General Repair Activities)
- Seven-skill-level members spend 21% of their time performing Management and Supervisory Activities (Duty Q), significantly more than DAFSC 2E131 and 2E151 members
- Seven-skill-level members also spend a substantial amount of time performing tasks in Duty A

AD

Duties

[Table 15](#) - Time spent on duties by AD members of skill-level groups:

- AD members at 3- and 5-skill levels spend most of their time performing tasks in Duty A (Performing General Repair Activities)

- AD 7-skill-level members spend 33% of their time performing Management and Supervisory Activities (Duty Q), significantly more than DAFSC 2E131 and 2E151 members

Tasks

[Table 16](#) - Tasks performed by AD 2E131 members:

- Tasks being performed by highest percentages of 3-skill-level members are representative of a number of different duty areas

[Table 17](#) - Tasks performed by AD 2E151 members:

- Tasks being performed by highest percentages of 5-skill-level members show more heterogeneity than those performed by 3-skill-level members; tasks still representative of a number of different duty areas

[Table 18](#) - Tasks performed by AD 2E171 members:

- Heavy emphasis on supervisory and managerial activities at this skill level

ANG

Duties

[Table 19](#) - Time spent on duties by ANG members of skill-level groups:

- ANG members at both skill levels spend most of their time performing tasks in Duty A (Performing General Repair Activities)
 - Second highest percentage in Duty B (Maintaining Fixed and Mobile Antenna Systems)
- ANG 7-skill-level members spend 8% of their time performing Management and Supervisory Activities (Duty Q), slightly more than DAFSC 2E151 members

Tasks

[Table 20](#) - Tasks performed by ANG 2E151 members:

- Tasks being performed by highest percentages of 5-skill-level members are representative of a number of different duty areas

[Table 21](#) - Tasks performed by ANG 2E171 members:

- Slightly more emphasis on Mobility and Contingency activities at this skill level, however overall tasks performed remain very similar to those at the ANG 5-skill level

TRAINING ANALYSIS

Occupational survey data are a source of information that can assist in the development or evaluation of training programs for both entry-level and advanced members. In particular, the factors used to evaluate entry-level member training include the jobs that are being performed by first-enlistment personnel (1-48 months' TAFMS), the overall distribution of first-enlistment personnel across career ladder jobs, the percent of first-enlistment members who perform specific tasks, and ratings of relative training emphasis (TE) and task difficulty (TD). (TE and TD ratings are discussed in the [Task Factor Administration](#) section of this OSR.)

WHAT ENTRY-LEVEL MEMBERS NEED TO KNOW

First-Enlistment Personnel (1–48 months' TAFMS)

N=377 (27% of sample)

Jobs

[Figure 2](#) - Distribution of first-enlistment personnel across specialty clusters and jobs:

- Increase of 10% in Satellite/Wideband Technician Cluster versus jobs for total sample (Figure 1)

Duties

[Table 22](#) - Time spent on duties by first-enlistment personnel (1-48 months TAFMS):

- Highest percentage of time spent on Duty Area A (Performing General Repair Activities) among first-enlistment 2E1X1 personnel

Tasks

[Table 23](#) - Tasks performed by AFSC 2E1X1 first-enlistment personnel (1-48 months TAFMS):

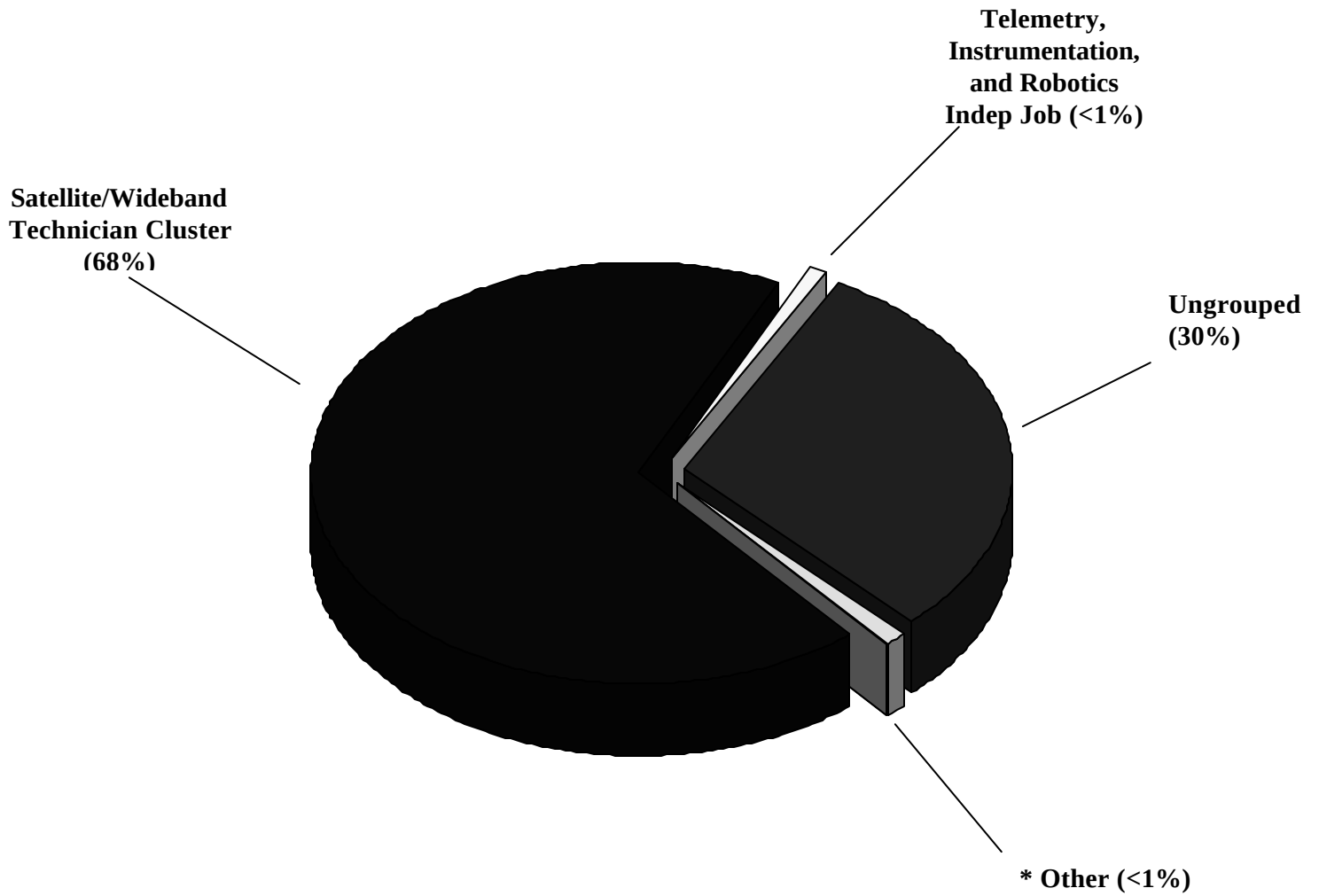
- Representative tasks performed by the highest numbers of first-enlistment personnel vary across a number of duty areas, with the majority performing tasks from Duty Area A (Performing General Repair Activities)

Equipment

[Table 24](#) - Systems used or operated

[Table 25](#) - Support equipment used or operated

**DISTRIBUTION OF AFSC 2E1X1 FIRST-ENLISTMENT
PERSONNEL ACROSS SPECIALTY JOBS
(N=377)**



***Other includes:**

- ANG E&I Cluster (<1%)
- Maintenance Control Independent Job (<1%)

FIGURE 2

TASK FACTOR SURVEYS

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information, along with data from the Specialty Training Standard (STS), Course Training Standard (CTS), and Plan of Instruction (POI), is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected DAFSC 2E1X1 members (generally E-6 or E-7 craftsmen) completed either a training emphasis (TE) or task difficulty (TD) survey. To obtain the needed CTS and POI data, CTS 2E1X1 was reviewed by comparing survey data to CTS elements.

Task Factor Administration

TE and TD data can help training development personnel decide which tasks to emphasize for entry-level, structured training (resident technical schools, field training detachments, mobile training teams, formal OJT, or any other organized training method). For example, tasks receiving high TE and TD ratings generally warrant resident training if they are also performed by a moderate-to-high percentage of first-enlistment members. Tasks receiving high TE and/or TD ratings but being performed by relatively low percentages of first-enlistment members may be more appropriately planned for structured OJT programs within the career ladder. Low TE and/or TD ratings may highlight tasks best omitted from training for new personnel. These task factors are, of course, not the only ones to weigh in making training decisions; the percentages of personnel performing the tasks, command concerns, the criticality of the tasks, and other important factors must also be carefully considered.

Training Emphasis (TE) — degree of emphasis that should be placed on each task for structured training of entry-level members:

- Forty-one DAFSC 2E1X1 senior noncommissioned officers (NCOs) rated tasks in inventory on a scale from 0 (no training required) to 9 (extremely high training emphasis)
- Average TE rating was 1.75 with a standard deviation of 1.29
 - If a task has a TE rating at least one standard deviation above the mean, that is, of at least 3.04, it is probably important to provide new personnel with formal training on that task

[Table 26](#) - Tasks with highest TE ratings:

- Most tasks with high TE ratings are from Duty A (Performing General Repair Activities) and Duty J (Performing Equipment Operations Activities) and involve preventative maintenance inspections or configuring electronic equipment

Task Difficulty (TD) — amount of time needed to learn to perform that task satisfactorily:

- Seventy-one DAFSC 2E1X1 senior NCOs rated difficulty of tasks in inventory using a scale from 1 (extremely low difficulty) to 9 (extremely high difficulty)
- TD ratings are normally adjusted so that tasks of average difficulty have a value of 5.00 and a standard deviation of 1.00
- Any task with a difficulty of 6.00 or greater is therefore considered difficult to learn

[Table 27](#) - Tasks with highest TD ratings:

- Also lists percent members performing these tasks by groups of 1-24 months' and 1-48 months' TAFMS, as well as members of the 3-, 5-, and 7-skill-level groups
- Tasks within Duties K (Performing Equipment Installation and Mission Support Activities) and I (Maintaining Common or Miscellaneous Subassemblies and Systems) received the overall highest TD ratings
- Unlike the listing of tasks with highest TE ratings, many tasks with highest TD ratings have low percent members performing:
 - This pattern is typical across many career fields because relatively few members perform the most difficult tasks

WHAT DO 2E1X1 TRAINING DOCUMENTS REFLECT?

Course Training Standard (CTS) Analysis

Technical school personnel from Detachment 1 of the 338th Training Squadron (338 TRS), Ft Gordon AIN GA, matched JI tasks to CTS items. Per AETCI 36-2601, dated 14 July 1999, CTS elements that are performed by at least 20% of members in appropriate skill-level groups [particularly first-job (1-24 months' TAFMS) members and first-enlistment (1-48 months' TAFMS) members] should be included in the CTS. Of course, these are not the only criteria for inclusion in the CTS, and other rational considerations may argue against inclusion. Likewise, elements matched to tasks with less than 20% performing in first-job and first-enlistment groups should be closely reviewed by subject-matter experts for possible deletion from the CTS, unless other considerations (such as mission criticality or criticality to a particular MAJCOM) argue for inclusion of these "unsupported items."

[Table 28](#) - CTS elements not supported by survey data along with the tasks matched to those items:

- Complete listing of CTS elements with tasks matched to those elements located in CTS report in Training Extract; these CTS elements should be reviewed for possible proficiency code revision or exclusion from the CTS

[Table 29](#) - Examples of tasks not referenced to CTS elements with 20% or more members performing:

- Complete listing of tasks not referenced to CTS located at end of CTS report in Training Extract; tasks should be reviewed for possible addition to CTS

Overall, there are few elements in the CTS that are not supported by the survey data; i.e., the elements in the CTS are well supported by the survey data accompanying the tasks matched to them. Review of the few elements not supported is recommended. Although the existing CTS seems well supported, there were a large number of tasks that were not referenced to any CTS elements that showed more than 20% members performing. These tasks should be reviewed for possible inclusion into the CTS.

Plan of Instruction (POI) Analysis

In addition to the CTS, the POI for a course may also have unsupported objectives (included in the course but performed by few first-term airmen). Personnel from the 338 TRS also matched JI tasks to related training objectives in the POI for the entry-level course. POI blocks, units of instruction, and learning objectives were then compared to the standard set forth in AETCI 36-2601. This document indicates that tasks trained in the course but not performed by at least 30% of first-enlistment members should be considered for elimination from the course, unless other rational considerations argue for inclusion. This is especially so if TE ratings for the task are not particularly high.

- Tasks matched to POI objectives performed by less than 30% of job incumbents in their first job or first enlistment

[Table 30](#) - Examples of unsupported POI objectives along with the tasks matched to those objectives:

- Complete listing of unsupported POI objectives and tasks matched to those objectives located in POI report in Training Extract; these POI objectives should be reviewed for possible revision

[Table 31](#) - Examples of tasks not referenced to POI objectives with 30% or more members performing:

- Complete listing of tasks not referenced to POI located at end of POI report in Training Extract; tasks should be reviewed for possible addition to POI

Overall, the POI is well supported by the survey data. However, much like the CTS, there is a significant number of POI objectives that were not supported by survey data and many tasks that were not referenced to POI objectives at all. These items should all be carefully reviewed for possible removal or inclusion.

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. The survey included attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions.

Job Satisfaction

Overall = Good

[Table 32](#) - Job satisfaction data by job groups identified in **2E1X1 JOB STRUCTURE** section of this report:

- Maintenance Control Independent Job – somewhat lower job satisfaction overall compared to the remaining jobs and clusters
- Reenlistment intentions for Telemetry, Instrumentation, and Robotics Independent Job relatively low (44%)

[Table 33](#) displays job satisfaction data for the AD and ANG members. The results for the two components are summarized below:

- Job satisfaction ratings for the ANG members are higher than for the AD members, especially for job interest

[Table 34](#) displays job satisfaction data between the current 2E1X1 OSR data and the 1997 2E1X1 survey. The results from the comparison data are summarized below:

- Overall, job satisfaction ratings for the 2E1X1 members in the current study are similar when compared to the 2E1X1 members in the previous study
- Reenlistment intentions for 2E1X1 first-term airmen in the current study are lower compared to 1997

RETENTION DIMENSIONS

JIs also routinely collect information about factors that affect reenlistment and separation decisions. That is, respondents who say that they are likely to reenlist at the end of their present term (and those not eligible for retirement) are asked to indicate whether each of 31 different factors will have any effect on their intended decision and, if so, the degree to which each factor may influence their decision to reenlist. Respondents who indicate that they are likely to separate at the end of their present term (and those not eligible for retirement) are asked to indicate whether each of 31 different factors will have any effect on their intended decision and, if so, the degree to which each factor may influence their decision to separate. The degree is indicated on a 3-point scale ranging from “slight influence” to “strong influence.”

Reenlistment

[Table 35](#) - Lists the 31 factors in the order they appeared in the survey. The percent selecting each factor and the average rating for each factor by TAFMS group based on how much each factor may influence their decision to reenlist are also shown:

- Top 5 reasons members may choose to reenlist based on the highest percentages selecting each factor are listed below Table 35
 - Job security, medical or dental care for AD member, and military lifestyle appeared for each of the three TAFMS groups as top reasons for reenlisting
 - Retirement benefits was a major influence on reenlistment for two of the three TAFMS groups

Separation

[Table 36](#) - Displays the percentage of the members for each TAFMS group indicating that their plans to separate may be influenced by each factor as well as the average ratings by TAFMS group for the 31 factors based on the influence each factor may have on the respondents’ decisions to separate:

- Top 5 reasons members in each TAFMS group may choose to separate based on the highest percentages selecting each factor are listed below Table 36
 - Pay and allowances, military lifestyle, and civilian job opportunities are the top three factors that may influence the respondents’ decisions to separate for each TAFMS group
 - Number/duration of TDYs or deployments and esprit de corps/morale were major influences on separation for two of the three TAFMS groups

TABLE 5

SATELLITE/WIDEBAND TECHNICIAN CLUSTER (STG 116)
N=825 (58% of TOTAL SAMPLE)

DEMOGRAPHICS		
Average Time in Present Job	22 months	
Average TAFMS	82 months	
Predominant Paygrades	E-4	33%
	E-5	27%
	E-6	16%
Skill Levels	2E131	22%
	2E151	55%
	2E171	23%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	203	PERCENT MEMBERS PERFORMING
A0023	Perform system power-ups		95
A0022	Perform system power-downs		95
A0038	Remove or replace light bulbs		90
A0034	Remove or replace CCAs		87
A0017	Perform corrosion control		87
A0016	Operationally check system or test equipment		86
A0031	Remove or replace air filters		85
B0105	Visually inspect antennas		84
B0064	Perform PMIs on antenna systems		84
B0108	Visually inspect waveguides		84
A0011	Inspect waveguides		84
D0145	Perform PMIs on down-converters		83
D0138	Adjust down-converters		80
J0524	Configure patch panels		79
B0106	Visually inspect feedhorn assemblies		79
A0015	Install equipment grounds		78
J0523	Configure multiplexers or demultiplexers		77
J0522	Configure modems		77
E0179	Perform PMIs on up-converters		77
D0144	Perform PMIs on amplifiers		77
A0030	Remove electronic communications equipment		76
A0013	Install communications equipment		75
E0173	Adjust up-converters		75
J0528	Establish communications links		74
A0024	Perform preventive maintenance inspections (PMIs) on CCAs		74
B0060	Assemble or disassemble antennas		74
D0147	Perform PMIs on receivers		74
A0021	Perform system diagnostics		73
N0670	Inventory equipment, tools, parts, or supplies		72
J0519	Configure down-converters or up-converters		70
J0538	Perform bit error rate tests		70

TABLE 5 (Continued)
JOBS IDENTIFIED WITHIN SATELLITE/WIDEBAND TECHNICIAN CLUSTER

COMBAT COMM CREW CHIEF JOB (STG 224)
N=10 (1% OF CLUSTER)

DEMOGRAPHICS

Average Time in Present Job	23 months
Average TAFMS	146 months
Predominant Paygrade	E-5 60%
Predominant Skill Level	2E151

DISTINGUISHING TASKS

Q0785	Evaluate personnel for compliance with performance standards
Q0805	Write recommendations for awards or decorations
O0735	Set up or tear down tents
P0743	Conduct on-the-job training (OJT)
O0696	Don or doff chemical warfare personal protective clothing

FIXED ANTENNA JOB (STG 222)
N=35 (4% OF CLUSTER)

DEMOGRAPHICS

Average Time in Present Job	17 months
Average TAFMS	57 months
Predominant Paygrade	E-4 40%
Predominant Skill Levels	2E131 & 2E151

DISTINGUISHING TASKS

Top tasks are same as tasks listed for cluster

SATELLITE/WIDEBAND TECHNICIAN JOB (STG 229)
N=604 (73% OF CLUSTER)

DEMOGRAPHICS

Average Time in Present Job	23 months
Average TAFMS	77 months
Predominant Paygrades	E-4 35%
	E-5 26%
Predominant Skill Level	2E151

DISTINGUISHING TASKS

Top tasks are same as tasks listed for cluster

TABLE 5 (Continued)

**AFSAT/MILSTAR CREW CHIEF JOB (STG 233)
N=27 (3% OF CLUSTER)**

DEMOGRAPHICS

Average Time in Present Job	23 months
Average TAFMS	151 months
Predominant Paygrades	E-5 52%
	E-6 30%
Predominant Skill Level	2E151

DISTINGUISHING TASKS

P0743	Conduct on-the-job training (OJT)
P0744	Counsel trainees on training progress
N0670	Inventory equipment, tools, parts, or supplies
A0021	Perform system diagnostics

**GROUND RADIO JOB (STG 239)
N=10 (1% OF CLUSTER)**

DEMOGRAPHICS

Average Time in Present Job	13 months
Average TAFMS	55 months
Predominant Paygrades	E-3 36%
	E-4 36%
Predominant Skill Level	2E131

DISTINGUISHING TASKS

H0315	Perform PMIs on multiplexers and demultiplexers
H0294	Adjust multiplexers or demultiplexers
H0333	Remove or replace multiplexers or demultiplexers

TABLE 6
TELEMETRY, INSTRUMENTATION, AND ROBOTICS INDEPENDENT JOB
(STG 186)
N=29 (2% of TOTAL SAMPLE)

DEMOGRAPHICS		
Average Time in Present Job	22 months	
Average TAFMS	137 months	
Predominant Paygrades	E-5	31%
	E-6	28%
Skill Levels	2E131	7%
	2E151	55%
	2E171	38%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	110	PERCENT MEMBERS PERFORMING
A0012	Install cable assemblies or internal wiring		100
A0016	Operationally check system or test equipment		97
A0039	Remove or replace minor plug-in or screw-in electronic components		97
A0007	Fabricate or repair equipment cables		93
A0022	Perform system power-downs		93
A0023	Perform system power-ups		93
A0018	Perform end-to-end check-outs		90
K0587	Fabricate or repair cable connectors		90
A0043	Solder or desolder connectors or hardwire circuits		90
N0670	Inventory equipment, tools, parts, or supplies		83
A0033	Remove or replace cable assemblies or internal wiring		83
A0001	Adjust cable assemblies or internal wiring		83
A0038	Remove or replace light bulbs		83
A0046	Troubleshoot or repair cable assemblies or internal wiring		79
N0667	Evaluate serviceability of equipment, tools, parts, or supplies		76
P0743	Conduct on-the-job training (OJT)		72
A0021	Perform system diagnostics		72
K0589	Install or remove antenna systems		72
A0035	Remove or replace circuit board soldered electronic components		72
K0579	Design or construct mounting devices		69
K0578	Design or construct electronic circuits		69
N0674	Pick up, deliver, or store equipment, tools, parts, or supplies		69
A0017	Perform corrosion control		69
Q0770	Determine or establish work assignments or priorities		66
L0626	Evaluate new, modified, or prototype equipment		66
K0580	Determine power source requirements for equipment operation		66
N0665	Develop equipment checklists		66
B0074	Remove or replace antennas		62
A0005	Adjust user-calibrated test equipment		62
K0572	Coordinate instrumentation checkouts with other test teams		59
K0575	Coordinate test item or equipment preparation with technical data agencies or engineers		59
K0599	Interpret blueprints, cabling, circuit or wiring schematic diagrams		59
P0745	Determine training requirements		59
Q0791	Inspect personnel for compliance with military standards		59

TABLE 7
ANG ENGINEERING & INSTALLATION CLUSTER (STG 102)
N=25 (2% of TOTAL SAMPLE)

DEMOGRAPHICS		
Average Time in Present Job	26 months	
Average TAFMS	78 months	
Predominant Paygrades	E-5	40%
	E-6	32%
Skill Levels	2E151	56%
	2E171	44%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	59	PERCENT MEMBERS PERFORMING
K0594	Install or remove fixed communications equipment		100
A0013	Install communications equipment		96
K0599	Interpret blueprints, cabling, circuit or wiring schematic diagrams		88
A0015	Install equipment grounds		88
K0590	Install or remove cable ladders		84
K0593	Install or remove electrical conduits		84
A0012	Install cable assemblies or internal wiring		80
A0030	Remove electronic communications equipment		76
K0587	Fabricate or repair cable connectors		72
A0017	Perform corrosion control		72
A0007	Fabricate or repair equipment cables		68
A0014	Install cross-connections		68
K0592	Install or remove distribution frames and associated wiring		68
A0043	Solder or desolder connectors or hardwire circuits		64
K0613	Prepare pre-implementation documentation		64
O0715	Perform pallet buildup activities		60
O0696	Don or doff chemical warfare personal protective clothing		60
P0743	Conduct on-the-job training (OJT)		60
A0016	Operationally check system or test equipment		60
K0608	Perform project or scheme reviews		60
K0612	Prepare post-installation documentation		60
K0615	Prepare site for equipment installation		60
K0588	Form and fan equipment cables		56
A0033	Remove or replace cable assemblies or internal wiring		56
K0611	Prepare job completion documentation		56
K0614	Prepare project or scheme review documentation		56
K0609	Perform site survey procedures		56
K0607	Perform pre-implementation surveys		56
K0606	Perform post-installation operational tests		52
O0709	Pack or palletize mobility or contingency equipment for shipment or movement such as, airlift, road, or sealift		48
N0670	Inventory equipment, tools, parts, or supplies		48
K0589	Install or remove antenna systems		48
A0039	Remove or replace minor plug-in or screw-in electronic components		48

P0755	Maintain training records or files	44
K0570	Assemble and install cable troughs	40

TABLE 7 (Continued)

JOBS IDENTIFIED WITHIN ANG ENGINEERING & INSTALLATION CLUSTER

**ENGINEERING AND INSTALLATION JOB (STG 203)
N=10 (40% OF CLUSTER)**

DEMOGRAPHICS

Average Time in Present Job	20 months
Average TAFMS	34 months
Predominant Paygrade	E-5 90%
Predominant Skill Level	2E151

DISTINGUISHING TASKS

Top tasks are same as tasks listed for cluster

**E & I FIRST LINE SUPERVISOR JOB (STG 200)
N=14 (56% OF CLUSTER)**

DEMOGRAPHICS

Average Time in Present Job	30 months
Average TAFMS	121 months
Predominant Paygrade	E-5 43%
Predominant Skill Levels	2E171

DISTINGUISHING TASKS

P0743 Conduct on-the-job training (OJT)

TABLE 8
TECHNICAL TRAINING INSTRUCTOR INDEPENDENT JOB (STG 259)
N=18 (1% of TOTAL SAMPLE)

DEMOGRAPHICS		
Average Time in Present Job	28 months	
Average TAFMS	181 months	
Predominant Paygrade	E-6	44%
Skill Levels	2E151	56%
	2E171	44%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	27	PERCENT MEMBERS PERFORMING
P0744	Counsel trainees on training progress		94
P0748	Develop written tests		94
P0742	Conduct formal course classroom training		89
P0749	Develop or procure training materials or aids		89
P0754	Inspect training materials or aids for operation or suitability		89
P0756	Personalize lesson plans		89
P0739	Administer or score tests		89
P0747	Develop training programs, plans, or procedures		83
P0753	Evaluate progress of trainees		78
P0755	Maintain training records or files		78
P0740	Brief personnel concerning training programs or matters		78
P0750	Establish or maintain study reference files		72
P0746	Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs)		72
P0741	Complete student entry or withdrawal forms		72
P0745	Determine training requirements		67
P0752	Evaluate effectiveness of training programs, plans, or procedures		56
P0758	Write training reports		50
Q0791	Inspect personnel for compliance with military standards		44
A0023	Perform system power-ups		44
A0022	Perform system power-downs		44
Q0768	Counsel subordinates concerning personal matters		39
P0751	Evaluate training methods or techniques of instructors		39
Q0785	Evaluate personnel for compliance with performance standards		33
Q0763	Conduct self-inspections or self-assessments		33
Q0792	Interpret policies, directives, or procedures for subordinates		28
P0757	Prepare job qualification standards (JQSs)		28
P0743	Conduct on-the-job training (OJT)		22

TABLE 9
MAINTENANCE CONTROL INDEPENDENT JOB (STG 273)
N=12 (1% of TOTAL SAMPLE)

DEMOGRAPHICS		
Average Time in Present Job	21 months	
Average TAFMS	117 months	
Predominant Paygrade	E-5	42%
Skill Levels	2E151	67%
	2E171	33%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	43	PERCENT MEMBERS PERFORMING
L0633	Retrieve CAMS, REMIS, IMMP, or GO81 listings or reports		100
L0635	Review preventive maintenance schedules		100
L0636	Update EIL and master PMI listings		100
M0658	Maintain or update status indicators, such as boards, graphs, or charts		92
M0643	Compile data for records, reports, logs, or trend analyses		92
L0642	Verify accuracy of CAMS, REMIS, IMMP, or GO81 daily inputs		83
N0664	Coordinate maintenance of equipment with appropriate agencies		83
L0638	Update historical reports in CAMS, REMIS, IMMP, or GO81		83
L0632	Report equipment status to appropriate agencies		75
L0623	Analyze core automated maintenance system (CAMS), Reliability and Maintainability Information System (REMIS), Improved Maintenance Management Program (IMMP), or GO81 data		75
L0639	Update maintenance data collection (MDC) data in CAMS, REMIS, IMMP, or GO81		75
L0625	Develop equipment inventory listings (EILs) and master PMI listings		75
O0693	Develop maintenance plans		67
O0696	Don or doff chemical warfare personal protective clothing		67
L0640	Update personnel data files in CAMS, REMIS, IMMP, or GO81		58
M0663	Write minutes of briefings, conferences, or meetings		58
O0735	Set up or tear down tents		58
M0657	Maintain TO libraries		58
L0622	Adjust daily maintenance plans to meet operational commitments		50
N0673	Maintain organizational equipment or supply records		50
N0672	Maintain documentation on items requiring periodic inspections or calibrations		50
O0715	Perform pallet buildup activities		50
M0651	Initiate or maintain standby rosters or workcenter pyramid recall rosters		50
Q0762	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops		42

TABLE 10

**MANAGEMENT CLUSTER (STG 139)
N=136 (10% of TOTAL SAMPLE)**

DEMOGRAPHICS		
Average Time in Present Job	21 months	
Average TAFMS	204 months	
Predominant Paygrades	E-6	32%
	E-7	54%
	2E151	18%
Skill Levels	2E171	82%
TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING
	85	
Q0791	Inspect personnel for compliance with military standards	89
Q0805	Write recommendations for awards or decorations	87
Q0768	Counsel subordinates concerning personal matters	85
Q0785	Evaluate personnel for compliance with performance standards	84
Q0763	Conduct self-inspections or self-assessments	82
Q0770	Determine or establish work assignments or priorities	81
Q0792	Interpret policies, directives, or procedures for subordinates	80
Q0804	Write or indorse military performance reports	79
Q0765	Conduct supervisory performance feedback sessions	78
Q0786	Evaluate personnel for promotion, demotion, reclassification, or special awards	78
Q0781	Establish performance standards for subordinates	76
Q0767	Conduct supervisory orientations for newly assigned personnel	76
Q0806	Write replies to inspection reports	74
Q0762	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	73
Q0776	Develop or establish work schedules	72
Q0769	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	71
Q0799	Schedule personnel for TDY assignments, leaves, or passes	71
P0744	Counsel trainees on training progress	68
P0745	Determine training requirements	68
Q0783	Evaluate inspection report findings or inspection procedures	67
M0654	Maintain administrative files	67
Q0787	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	66
Q0760	Assign personnel to work areas or duty positions	66
Q0784	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) Program	66
P0755	Maintain training records or files	65
Q0790	Initiate actions required due to substandard performance of personnel	65
N0668	Identify and report equipment or supply problems	64
P0740	Brief personnel concerning training programs or matters	62
M0651	Initiate or maintain standby rosters or workcenter pyramid recall rosters	62
Q0801	Write job or position descriptions	61
Q0788	Implement safety or security programs	60
Q0761	Assign sponsors for newly assigned personnel	60
P0753	Evaluate progress of trainees	59

TABLE 10 (Continued)

JOBS IDENTIFIED WITHIN MANAGEMENT CLUSTER

MANAGEMENT JOB (STG 188)

N=121 (89% OF CLUSTER)

DEMOGRAPHICS

Average Time in Present Job	21 months
Average TAFMS	203 months
Predominant Paygrade	E-7 54%
Predominant Skill Level	2E171

DISTINGUISHING TASKS

Top tasks are same as tasks listed for cluster

QUALITY ASSURANCE JOB (STG 207)

N=15 (11% OF CLUSTER)

DEMOGRAPHICS

Average Time in Present Job	17 months
Average TAFMS	220 months
Predominant Paygrades	E-6 47%
	E-7 53%
Predominant Skill Level	2E171

DISTINGUISHING TASKS

Q0800	Write inspection reports
Q0783	Evaluate inspection report findings or inspection procedures
Q0764	Conduct staff assistance visits, inspections, or audits
Q0806	Write replies to inspection reports

TABLE 11

AVERAGE PERCENT TIME SPENT ON DUTIES
BY 2E1X1 CLUSTERS AND JOBS

<u>DUTIES</u>	SAT/WDBND TECHNICIAN CLUSTER (N=825) (STG 116)	TELEMETRY, INSTRUMENT, AND ROBOTIC INDEP JOB (N=29) (STG 186)	ANG E & I CLUSTER (N=25) (STG 102)
A PERFORMING GENERAL REPAIR ACTIVITIES	16	24	28
B MAINTAINING FIXED AND MOBILE ANTENNA SYSTEMS	12	3	2
C MAINTAINING TRACKING SYSTEMS	3	1	*
D MAINTAINING RECEIVERS AND DOWNLINK SYSTEMS	7	2	1
E MAINTAINING TRANSMITTERS AND UPLINK SYSTEMS	6	1	1
F MAINTAINING AIR FORCE SATELLITE COMMUNICATIONS (AFSATCOM) AND MILSTAR SYSTEMS	3	1	1
G PERFORMING AIRCREW ACTIVITIES	*	2	*
H MAINTAINING MULTIPLEXERS, MODEMS, AND ASSOCIATED INTERFACE EQUIPMENT	8	4	2
I MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES AND SYSTEMS	6	10	1
J PERFORMING EQUIPMENT OPERATIONS ACTIVITIES	12	5	2
K PERFORMING EQUIPMENT INSTALLATION AND MISSION SUPPORT ACTIVITIES	4	15	33
L PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	4	4	*
M PERFORMING ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	3	4	2
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3	5	3
O PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	7	*	8
P PERFORMING TRAINING ACTIVITIES	3	6	9
Q PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	4	11	6

* Indicates less than 1%

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

TABLE 11 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES
BY CAREER LADDER CLUSTERS AND JOBS

<u>DUTIES</u>	TECH TNG INSTRUCTOR	MAINT CONTROL	MANAGEMNT CLUSTER
	INDEP JOB (N=18) (STG 259)	INDEP JOB (N=12) (STG 273)	
A PERFORMING GENERAL REPAIR ACTIVITIES	7	*	3
B MAINTAINING FIXED AND MOBILE ANTENNA SYSTEMS	1	0	1
C MAINTAINING TRACKING SYSTEMS	*	0	*
D MAINTAINING RECEIVERS AND DOWNLINK SYSTEMS	1	0	*
E MAINTAINING TRANSMITTERS AND UPLINK SYSTEMS	*	0	*
F MAINTAINING AIR FORCE SATELLITE COMMUNICATIONS (AFSATCOM) AND MILSTAR SYSTEMS	*	0	*
G PERFORMING AIRCREW ACTIVITIES	0	*	*
H MAINTAINING MULTIPLEXERS, MODEMS, AND ASSOCIATED INTERFACE EQUIPMENT	*	0	1
I MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES AND SYSTEMS	*	0	1
J PERFORMING EQUIPMENT OPERATIONS ACTIVITIES	2	1	1
K PERFORMING EQUIPMENT INSTALLATION AND MISSION SUPPORT ACTIVITIES	2	1	2
L PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	*	35	7
M PERFORMING ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	1	18	10
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	8	6
O PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	1	19	10
P PERFORMING TRAINING ACTIVITIES	69	4	11
Q PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	13	13	45

* Indicates less than 1%

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

TABLE 12

SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1997 SURVEYS

PRESENT SURVEY (N=1,418)		1997 SURVEY (N=1,846)	
SATELLITE/WIDEBAND TECHNICIAN CLUSTER	58%		
COMBAT COMM CREW CHIEF JOB			
FIXED ANTENNA JOB		FIXED WIDEBAND CLUSTER	7%
SATELLITE/WIDEBAND TECH JOB			
AFSAT/MILSTAR CREW CHIEF JOB		AFSATCOM CLUSTER	2%
GROUND RADIO JOB			
MANAGEMENT CLUSTER	10%	SUPERVISORY AND MANAGEMENT CLUSTER	8%
MANAGEMENT JOB			
QUALITY ASSURANCE JOB		QUALITY ASSURANCE JOB	2%
TELEMETRY, INSTRUMENTATION, AND ROBOTICS INDEPENDENT JOB	2%	*	
ANG ENGINEERING AND INSTALLATION CLUSTER	2%	ENGINEERING AND INSTALLATION JOB	6%
ENGINEERING & INSTALLATION JOB			
E & I FIRST LINE SUPERVISOR JOB			
TECHNICAL TRAINING INSTRUCTOR INDEPENDENT JOB	1%	INSTRUCTOR JOB	1%
MAINTENANCE CONTROL INDEPENDENT JOB	1%	JOB CONTROLLER JOB	1%
*		MOBILITY OPERATIONS SUPPORT JOB	4%
*		MOBILE CLUSTER	37%
*		DEFENSE SATELLITE COMMUNICATIONS SYSTEMS JOB	6%

* Indicates cluster/job not found in study

TABLE 13

DISTRIBUTION OF AFSC 2E1X1 SKILL-LEVEL MEMBERS
ACROSS CAREER LADDER JOBS (PERCENT IN EACH JOB)

	2E131 (N=251)	2E151 (N=739)	2E171 (N=428)
SATELLITE/WIDEBAND TECHNICIAN CLUSTER	72	61	45
TELEM, INSTRUMENTATION, & ROBOTICS INDEPENDENT JOB	1	2	3
ANG ENGINEERING AND INSTALLATION CLUSTER	0	2	3
TECHNICAL TRAINING INSTRUCTOR INDEPENDENT JOB	0	1	2
MAINTENANCE CONTROL INDEPENDENT JOB	0	1	1
MANAGEMENT CLUSTER	0	3	26
NOT GROUPEd	27	30	20

TABLE 14

TIME SPENT ON DUTIES BY MEMBERS OF AFSC 2E1X1 SKILL-LEVEL GROUPS
(PERCENT RESPONDING)

DUTIES	2E131 (N=251)	2E151 (N=739)	2E171 (N=428)
A PERFORMING GENERAL REPAIR ACTIVITIES	22	20	12
B MAINTAINING FIXED AND MOBILE ANTENNA SYSTEMS	12	10	7
C MAINTAINING TRACKING SYSTEMS	3	2	1
D MAINTAINING RECEIVERS AND DOWNLINK SYSTEMS	7	6	3
E MAINTAINING TRANSMITTERS AND UPLINK SYSTEMS	5	4	2
F MAINTAINING AIR FORCE SATELLITE COMMUNICATIONS (AFSATCOM) AND MILSTAR SYSTEMS	3	3	1
G PERFORMING AIRCREW ACTIVITIES	1	*	*
H MAINTAINING MULTIPLEXERS, MODEMS, AND ASSOCIATED INTERFACE EQUIPMENT	9	7	4
I MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES AND SYSTEMS	7	5	3
J PERFORMING EQUIPMENT OPERATIONS ACTIVITIES	10	10	6
K PERFORMING EQUIPMENT INSTALLATION AND MISSION SUPPORT ACTIVITIES	3	4	5
L PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	3	4	6
M PERFORMING ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	3	4	6
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3	3	4
O PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	5	7	10
P PERFORMING TRAINING ACTIVITIES	2	5	8
Q PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	6	21

* Indicates less than 1%

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

TABLE 15

TIME SPENT ON DUTIES BY AD MEMBERS OF AFSC 2E1X1 SKILL-LEVEL GROUPS
(PERCENT RESPONDING)

DUTIES	AD 2E131 (N=248)	AD 2E151 (N=465)	AD 2E171 (N=224)
A PERFORMING GENERAL REPAIR ACTIVITIES	22	19	8
B MAINTAINING FIXED AND MOBILE ANTENNA SYSTEMS	12	9	4
C MAINTAINING TRACKING SYSTEMS	3	2	1
D MAINTAINING RECEIVERS AND DOWNLINK SYSTEMS	7	5	1
E MAINTAINING TRANSMITTERS AND UPLINK SYSTEMS	5	3	1
F MAINTAINING AIR FORCE SATELLITE COMMUNICATIONS (AFSATCOM) AND MILSTAR SYSTEMS	3	3	1
G PERFORMING AIRCREW ACTIVITIES	1	*	*
H MAINTAINING MULTIPLEXERS, MODEMS, AND ASSOCIATED INTERFACE EQUIPMENT	9	6	2
I MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES AND SYSTEMS	7	5	3
J PERFORMING EQUIPMENT OPERATIONS ACTIVITIES	10	8	4
K PERFORMING EQUIPMENT INSTALLATION AND MISSION SUPPORT ACTIVITIES	3	4	4
L PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	3	6	6
M PERFORMING ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	3	5	8
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3	3	4
O PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	5	6	10
P PERFORMING TRAINING ACTIVITIES	2	7	9
Q PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	9	33

* Indicates less than 1%

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

TABLE 16

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E131 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING (N=248)
	150	
A0022	Perform system power-downs	88
A0023	Perform system power-ups	87
A0038	Remove or replace light bulbs	86
A0017	Perform corrosion control	80
A0031	Remove or replace air filters	80
A0034	Remove or replace CCAs	79
A0016	Operationally check system or test equipment	76
B0064	Perform PMIs on antenna systems	74
A0039	Remove or replace minor plug-in or screw-in electronic components	72
A0002	Adjust circuit card assemblies (CCAs)	71
D0145	Perform PMIs on down-converters	70
A0024	Perform preventive maintenance inspections (PMIs) on CCAs	69
A0007	Fabricate or repair equipment cables	69
B0105	Visually inspect antennas	69
D0138	Adjust down-converters	68
A0037	Remove or replace equipment grounds	68
A0015	Install equipment grounds	67
A0004	Adjust equipment grounds	67
A0011	Inspect waveguides	66
B0108	Visually inspect waveguides	65
D0150	Remove or replace down-converters	64
J0523	Configure multiplexers or demultiplexers	62
A0030	Remove electronic communications equipment	62
E0179	Perform PMIs on up-converters	62
D0144	Perform PMIs on amplifiers	62
D0136	Adjust amplifiers	62
J0522	Configure modems	61
A0013	Install communications equipment	60
J0524	Configure patch panels	60
E0173	Adjust up-converters	60
H0315	Perform PMIs on multiplexers and demultiplexers	59
B0106	Visually inspect feedhorn assemblies	59
N0670	Inventory equipment, tools, parts, or supplies	58
D0147	Perform PMIs on receivers	58
A0054	Visually inspect safety cables	58
B0060	Assemble or disassemble antennas	57
0063	Perform PMIs on antenna status equipment	56
A0021	Perform system diagnostics	55
H0314	Perform PMIs on modems	55
J0519	Configure down-converters or up-converters	55
A0026	Perform PMIs on equipment grounds	54
J0538	Perform bit error rate tests	53
A0027	Perform PMIs on equipment safety devices	51

TABLE 17

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E151 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING (N=465)
	142	
A0022	Perform system power-downs	78
A0023	Perform system power-ups	78
A0038	Remove or replace light bulbs	72
A0017	Perform corrosion control	68
A0016	Operationally check system or test equipment	67
A0031	Remove or replace air filters	66
A0007	Fabricate or repair equipment cables	65
A0034	Remove or replace CCAs	63
A0039	Remove or replace minor plug-in or screw-in electronic components	63
P0743	Conduct on-the-job training (OJT)	58
A0021	Perform system diagnostics	57
N0670	Inventory equipment, tools, parts, or supplies	56
B0064	Perform PMIs on antenna systems	55
B0105	Visually inspect antennas	55
A0018	Perform end-to-end check-outs	53
A0024	Perform preventive maintenance inspections (PMIs) on CCAs	53
A0030	Remove electronic communications equipment	53
A0015	Install equipment grounds	52
P0755	Maintain training records or files	51
A0013	Install communications equipment	51
M0645	Destroy classified materials or documents	51
A0002	Adjust circuit card assemblies (CCAs)	51
J0528	Establish communications links	49
J0524	Configure patch panels	49
A0046	Troubleshoot or repair cable assemblies or internal wiring	49
L0635	Review preventive maintenance schedules	48
A0012	Install cable assemblies or internal wiring	45
P0744	Counsel trainees on training progress	44
M0653	Inventory classified materials or documents	43
L0633	Retrieve CAMS, REMIS, IMMP, or GO81 listings or reports	42
L0640	Update personnel data files in CAMS, REMIS, IMMP, or GO81	42
Q0791	Inspect personnel for compliance with military standards	41
J0514	Annotate master station or project logs	40
N0667	Evaluate serviceability of equipment, tools, parts, or supplies	40
Q0768	Counsel subordinates concerning personal matters	39
P0753	Evaluate progress of trainees	38
L0642	Verify accuracy of CAMS, REMIS, IMMP, or GO81 daily inputs	37
P0745	Determine training requirements	35
Q0785	Evaluate personnel for compliance with performance standards	35
Q0763	Conduct self-inspections or self-assessments	30
M0643	Compile data for records, reports, logs, or trend analyses	29
P0747	Develop training programs, plans, or procedures	28
P0749	Develop or procure training materials or aids	23

TABLE 18

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E171 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING (N=224)
	103	
Q0805	Write recommendations for awards or decorations	67
Q0768	Counsel subordinates concerning personal matters	66
Q0791	Inspect personnel for compliance with military standards	65
Q0785	Evaluate personnel for compliance with performance standards	63
Q0765	Conduct supervisory performance feedback sessions	63
Q0804	Write or indorse military performance reports	62
Q0763	Conduct self-inspections or self-assessments	60
Q0770	Determine or establish work assignments or priorities	59
Q0792	Interpret policies, directives, or procedures for subordinates	58
Q0799	Schedule personnel for TDY assignments, leaves, or passes	58
Q0767	Conduct supervisory orientations for newly assigned personnel	57
Q0776	Develop or establish work schedules	56
Q0781	Establish performance standards for subordinates	56
Q0762	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	55
Q0769	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	55
P0755	Maintain training records or files	54
P0744	Counsel trainees on training progress	54
Q0786	Evaluate personnel for promotion, demotion, reclassification, or special awards	54
M0654	Maintain administrative files	53
Q0787	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	52
P0745	Determine training requirements	52
N0668	Identify and report equipment or supply problems	52
Q0806	Write replies to inspection reports	51
Q0784	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) Program	51
P0753	Evaluate progress of trainees	50
Q0760	Assign personnel to work areas or duty positions	50
M0651	Initiate or maintain standby rosters or workcenter pyramid recall rosters	50
M0652	Initiate requests for temporary duty (TDY) orders	49
N0664	Coordinate maintenance of equipment with appropriate agencies	49
Q0783	Evaluate inspection report findings or inspection procedures	48
P0740	Brief personnel concerning training programs or matters	48
P0743	Conduct on-the-job training (OJT)	48
Q0766	Conduct safety inspections of equipment or facilities	47
Q0790	Initiate actions required due to substandard performance of personnel	47
Q0777	Draft budget requirements	44
Q0788	Implement safety or security programs	44
Q0795	Review budget requirements	43
M0663	Write minutes of briefings, conferences, or meetings	43
M0643	Compile data for records, reports, logs, or trend analyses	42
P0747	Develop training programs, plans, or procedures	42
Q0780	Establish organizational policies, such as operating instructions (OIs) or standard	41

M0658	operating procedures (SOPs) Maintain or update status indicators, such as boards, graphs, or charts	40
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TABLE 19

TIME SPENT ON DUTIES BY ANG MEMBERS OF AFSC 2E1X1 SKILL-LEVEL GROUPS
(PERCENT RESPONDING)

DUTIES	ANG 2E151 (N=272)	ANG 2E171 (N=203)
A PERFORMING GENERAL REPAIR ACTIVITIES	22	16
B MAINTAINING FIXED AND MOBILE ANTENNA SYSTEMS	12	10
C MAINTAINING TRACKING SYSTEMS	3	2
D MAINTAINING RECEIVERS AND DOWNLINK SYSTEMS	8	5
E MAINTAINING TRANSMITTERS AND UPLINK SYSTEMS	5	4
F MAINTAINING AIR FORCE SATELLITE COMMUNICATIONS (AFSATCOM) AND MILSTAR SYSTEMS	3	2
G PERFORMING AIRCREW ACTIVITIES	*	*
H MAINTAINING MULTIPLEXERS, MODEMS, AND ASSOCIATED INTERFACE EQUIPMENT	8	5
I MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES AND SYSTEMS	5	3
J PERFORMING EQUIPMENT OPERATIONS ACTIVITIES	12	9
K PERFORMING EQUIPMENT INSTALLATION AND MISSION SUPPORT ACTIVITIES	5	6
L PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	2	5
M PERFORMING ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	2	4
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	4
O PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	7	10
P PERFORMING TRAINING ACTIVITIES	2	7
Q PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	2	8

* Indicates less than 1%

TABLE 20

REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E151 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	149	PERCENT MEMBERS PERFORMING (N=272)
A0022	Perform system power-downs		88
A0023	Perform system power-ups		87
A0015	Install equipment grounds		78
A0011	Inspect waveguides		76
A0013	Install communications equipment		74
A0017	Perform corrosion control		73
B0108	Visually inspect waveguides		73
A0038	Remove or replace light bulbs		73
A0016	Operationally check system or test equipment		72
B0060	Assemble or disassemble antennas		72
D0138	Adjust down-converters		71
B0105	Visually inspect antennas		71
D0145	Perform PMIs on down-converters		70
A0034	Remove or replace CCAs		69
J0523	Configure multiplexers or demultiplexers		68
J0524	Configure patch panels		67
B0106	Visually inspect feedhorn assemblies		67
A0004	Adjust equipment grounds		66
A0030	Remove electronic communications equipment		65
A0037	Remove or replace equipment grounds		65
D0147	Perform PMIs on receivers		65
A0024	Perform preventive maintenance inspections (PMIs) on CCAs		64
E0179	Perform PMIs on up-converters		64
E0173	Adjust up-converters		64
D0144	Perform PMIs on amplifiers		64
B0064	Perform PMIs on antenna systems		64
J0529	Establish orderwire contacts		63
B0059	Assemble feedhorn assemblies		63
J0528	Establish communications links		62
J0522	Configure modems		62
A0039	Remove or replace minor plug-in or screw-in electronic components		62
A0031	Remove or replace air filters		62
J0545	Perform loop-back or end-to-end tests		61
A0021	Perform system diagnostics		61
O0735	Set up or tear down tents		61
D0136	Adjust amplifiers		61
B0074	Remove or replace antennas		61
J0519	Configure down-converters or up-converters		60
H0315	Perform PMIs on multiplexers and demultiplexers		60
K0617	Set up antenna systems		59
H0294	Adjust multiplexers or demultiplexers		59
B0079	Remove or replace feedhorn assemblies		59
J0538	Perform bit error rate tests		58

TABLE 21

REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E171 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING (N=203)
A0022	Perform system power-downs	75
A0023	Perform system power-ups	75
A0017	Perform corrosion control	75
P0743	Conduct on-the-job training (OJT)	74
A0016	Operationally check system or test equipment	73
B0108	Visually inspect waveguides	72
A0013	Install communications equipment	70
A0015	Install equipment grounds	69
A0011	Inspect waveguides	69
A0038	Remove or replace light bulbs	69
B0060	Assemble or disassemble antennas	66
O0696	Don or doff chemical warfare personal protective clothing	66
A0030	Remove electronic communications equipment	66
B0105	Visually inspect antennas	66
O0735	Set up or tear down tents	65
P0744	Counsel trainees on training progress	64
B0106	Visually inspect feedhorn assemblies	64
A0031	Remove or replace air filters	64
N0670	Inventory equipment, tools, parts, or supplies	63
A0034	Remove or replace CCAs	61
P0755	Maintain training records or files	60
A0021	Perform system diagnostics	60
B0064	Perform PMIs on antenna systems	60
D0147	Perform PMIs on receivers	60
J0524	Configure patch panels	59
B0107	Visually inspect QRAs	59
D0145	Perform PMIs on down-converters	59
P0753	Evaluate progress of trainees	58
O0734	Set up or tear down shelters	58
O0710	Perform camouflage procedures	57
J0523	Configure multiplexers or demultiplexers	56
B0059	Assemble feedhorn assemblies	56
D0144	Perform PMIs on amplifiers	56
A0018	Perform end-to-end check-outs	55
A0024	Perform preventive maintenance inspections (PMIs) on CCAs	55
J0522	Configure modems	55
Q0791	Inspect personnel for compliance with military standards	54
A0054	Visually inspect safety cables	54
O0715	Perform pallet buildup activities	53
J0545	Perform loop-back or end-to-end tests	53
K0589	Install or remove antenna systems	53
K0617	Set up antenna systems	52
P0745	Determine training requirements	52
O0725	Prepare equipment for deployments	52

TABLE 22

PERCENT TIME SPENT ON DUTIES BY
FIRST-ENLISTMENT PERSONNEL (1–48 MONTHS' TAFMS)

DUTIES		1-48
		MONTHS' TAFMS (N=377)
A	PERFORMING GENERAL REPAIR ACTIVITIES	22
B	MAINTAINING FIXED AND MOBILE ANTENNA SYSTEMS	12
C	MAINTAINING TRACKING SYSTEMS	3
D	MAINTAINING RECEIVERS AND DOWNLINK SYSTEMS	7
E	MAINTAINING TRANSMITTERS AND UPLINK SYSTEMS	5
F	MAINTAINING AIR FORCE SATELLITE COMMUNICATIONS (AFSATCOM) AND MILSTAR SYSTEMS	3
G	PERFORMING AIRCREW ACTIVITIES	*
H	MAINTAINING MULTIPLEXERS, MODEMS, AND ASSOCIATED INTERFACE EQUIPMENT	9
I	MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES AND SYSTEMS	7
J	PERFORMING EQUIPMENT OPERATIONS ACTIVITIES	10
K	PERFORMING EQUIPMENT INSTALLATION AND MISSION SUPPORT ACTIVITIES	4
L	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	4
M	PERFORMING ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	3
N	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3
O	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	5
P	PERFORMING TRAINING ACTIVITIES	2
Q	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1

TABLE 23

REPRESENTATIVE TASKS PERFORMED BY AFSC 2E1X1
FIRST-ENLISTMENT PERSONNEL (1–48 MONTHS' TAFMS)

TASKS	<i>Average number of tasks performed</i>	PERCENT MEMBERS PERFORMING (N=377)
A0022	Perform system power downs	87
A0023	Perform system power ups	86
A0038	Remove or replace light bulbs	85
A0017	Perform corrosion control	79
A0031	Remove or replace air filters	79
A0034	Remove or replace CCAs	76
A0016	Operationally check system or test equipment	74
A0039	Remove or replace minor plug in or screw in electronic components	72
B0064	Perform PMIs on antenna systems	71
A0007	Fabricate or repair equipment cables	69
A0024	Perform preventive maintenance inspections (PMIs) on CCAs	68
B0105	Visually inspect antennas	68
D0145	Perform PMIs on down converters	66
A0002	Adjust circuit card assemblies (CCAs)	66
A0004	Adjust equipment grounds	66
A0015	Install equipment grounds	65
D0138	Adjust down converters	65
A0037	Remove or replace equipment grounds	65
B0108	Visually inspect waveguides	65
A0011	Inspect waveguides	64
A0030	Remove electronic communications equipment	62
D0136	Adjust amplifiers	61
A0013	Install communications equipment	60
D0144	Perform PMIs on amplifiers	60
E0179	Perform PMIs on up converters	60
J0523	Configure multiplexers or demultiplexers	59
N0670	Inventory equipment, tools, parts, or supplies	58
J0524	Configure patch panels	58
J0522	Configure modems	58
H0315	Perform PMIs on multiplexers and demultiplexers	57
B0060	Assemble or disassemble antennas	56
D0147	Perform PMIs on receivers	56
A0021	Perform system diagnostics	55
H0314	Perform PMIs on modems	54
B0063	Perform PMIs on antenna status equipment	54
A0026	Perform PMIs on equipment grounds	53
J0519	Configure down converters or up converters	53
J0528	Establish communications links	52
J0545	Perform loop back or end to end tests	49
A0018	Perform end to end check outs	47
L0635	Review preventive maintenance schedules	43
P0743	Conduct on the job training (OJT)	42

TABLE 24

SYSTEMS USED OR OPERATED BY
FIRST-ENLISTMENT AFSC 2E1X1 PERSONNEL
(PERCENT USING OR MAINTAINING)

SYSTEMS	(N=377)
Antennas	81
Multiplexers	79
Modems	77
Satellite Communications	75
Cryptographic	53
Radios	53
Timing	51
Line of Sight Communications	49

TABLE 25

SUPPORT EQUIPMENT USED OR OPERATED BY
FIRST-ENLISTMENT AFSC 2E1X1 PERSONNEL
(PERCENT USING OR OPERATING)

TEST EQUIPMENT	(N=377)
----------------	---------

Multimeters, Digital	87
Analyzers, Spectrum	80
Oscilloscopes	80
Built In Test Equipment	79
Attenuators, Variable	73
Dummy Loads	73
Attenuators, Fixed	70
Counters, Frequency	69
Meters, Power	64
Attenuators, Decibel (Db)	60
Generators, Signal	59
Test Sets, Bit Error Rate	59
Generators, Radio Frequency (RF) Signal	55
Power Supplies, DC	55
Multimeters, Analog	54
Torque Wrenches	54
Waveguide Couplers or Adapters	50
Counters, Noise	43
Laptop or Notebook Computers	40
Probes, High Voltage	40
Vibragrounds	38
Directional Couplers	37
Power Supplies, Variable	36
Frequency Measuring Sets	35
Global Positioning Systems	35
Voltmeters, Frequency Selective	34

TABLE 26

AFSC 2E1X1 TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS

TASKS		PERCENT MEMBERS PERFORMING			TSK DIF
		TNG EMP	1-24 MOS	1-48 MOS	
			TAFMS	TAFMS	
A0016	Operationally check system or test equipment	6.41	69	74	5.23
J0522	Configure modems	6.00	57	58	4.60
A0022	Perform system power-downs	5.98	84	87	2.40
A0023	Perform system power-ups	5.93	84	86	2.46
A0018	Perform end-to-end check-outs	5.93	37	47	5.95
J0524	Configure patch panels	5.80	57	58	4.99
J0553	Perform satellite acquisition procedures	5.71	46	49	5.09
J0523	Configure multiplexers or demultiplexers	5.68	61	59	4.79
J0519	Configure down-converters or up-converters	5.61	55	53	4.39
J0528	Establish communications links	5.41	50	52	6.05
D0138	Adjust down-converters	5.41	68	65	4.90
J0555	Perform satellite tracking procedures	5.34	46	49	4.82
A0021	Perform system diagnostics	5.27	45	55	5.58
J0529	Establish orderwire contacts	5.27	45	44	5.33
D0145	Perform PMIs on down-converters	5.20	72	66	4.54
E0179	Perform PMIs on up-converters	5.17	63	60	4.63
E0201	Troubleshoot or repair up-converters	5.12	56	55	6.17
E0173	Adjust up-converters	4.93	60	58	5.24
E0174	Adjust high-voltage power supplies	4.90	46	46	5.86
H0307	Perform modem bit error rate tests	4.90	43	45	4.72
H0315	Perform PMIs on multiplexers and demultiplexers	4.90	55	57	4.90
K0617	Set up antenna systems	4.78	38	43	5.54
J0538	Perform bit error rate tests	4.76	49	51	4.90
H0314	Perform PMIs on modems	4.76	51	54	4.67
D0164	Troubleshoot or repair down-converters, other than tracking down-converters	4.73	50	51	6.20
H0294	Adjust multiplexers or demultiplexers	4.73	56	51	5.33
B0108	Visually inspect waveguides	4.66	62	65	2.50
E0178	Perform PMIs on transmitters	4.66	45	47	4.96

TE MEAN = 1.75; S.D. = 1.29; HIGH = 3.04

TABLE 27

AFSC 2E1X1 TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

TASKS		PERCENT MEMBERS PERFORMING						
		TSK DIF	1-24	1-48	3-	5-	7-	TNG EMP
			MOS TAFMS	MOS TAFMS	SKL LVL	SKL LVL	SKL LVL	
K0581	Draft blueprints, cabling, circuit or wiring schematic diagrams	8.25	3	6	4	8	8	.15
K0578	Design or construct electronic circuits	8.03	6	7	4	8	6	.27
K0583	Draft systems diagrams	7.77	2	6	2	8	8	.32
K0582	Draft facility layouts	7.73	3	3	3	6	4	.05
A0029	Reconstruct traces on circuit boards	7.35	4	6	5	6	3	.83
K0584	Evaluate condition and quality of instrumentation recordings	7.03	6	5	4	4	6	.12
K0579	Design or construct mounting devices	7.00	4	7	5	8	7	.27
Q0778	Draft host-tenant or interservice agreements	6.99	1	1	0	2	9	.00
L0626	Evaluate new, modified, or prototype equipment	6.88	9	9	7	17	24	.37
I0491	Troubleshoot or repair laser systems	6.77	3	2	2	2	1	.20
Q0777	Draft budget requirements	6.72	1	1	1	5	44	.00
K0580	Determine power source requirements for equipment operation	6.67	7	13	10	15	12	.93
E0203	Troubleshoot or repair high-voltage power supplies	6.64	45	45	46	35	15	4.32
I0500	Troubleshoot or repair optical systems	6.61	1	3	2	4	4	.76
K0585	Evaluate test locations	6.58	4	5	3	7	9	.12
I0496	Troubleshoot or repair mission console workstations	6.51	3	6	7	3	3	.49
I0481	Troubleshoot or repair cryptographic equipment	6.50	11	13	15	10	5	1.22
Q0796	Review host-tenant or interservice agreements	6.50	1	1	1	3	21	.12
F0248	Troubleshoot AFSATCOM systems to identify faulty units	6.49	23	23	25	16	5	3.07
K0604	Perform information system (IS) relocation project or scheme procedures	6.48	2	2	1	2	1	.17
F0252	Troubleshoot or repair CPUs	6.47	6	9	7	10	5	1.10
I0495	Troubleshoot or repair magnetic mass storage	6.47	2	2	3	1	0	.39
I0490	Troubleshoot or repair infrared systems	6.46	2	2	2	2	0	.44
I0499	Troubleshoot or repair optical disk recorders	6.45	2	2	2	2	1	.17
O0689	Determine cost factors for support agreements	6.45	2	2	1	3	13	.22
I0479	Troubleshoot or repair computer processors	6.45	5	6	4	7	2	.54

TD MEAN = 5.00; S.D. = 1.00; HIGH = 6.00

TABLE 28

CTS ELEMENTS NOT SUPPORTED BY SURVEY DATA
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

UNIT	LEARNING OBJECTIVE	PERCENT MEMBERS PERFORMING		TNG EMP	TSK DIF	ATI
		1ST JOB (N=121)	1ST ENL (N=377)			
7.2 Task	Troubleshoot and repair timing synchronization equipment I0488. Troubleshoot or repair frequency standards	13	18	2.59	6.26	7
9.15 Task	Perform an operational check of the TRC 170 Tropospheric Scatter equipment communications link J0567. Verify operational readiness with ground network or distant terminals	12	18	2.85	4.44	7
10.17 Task	Perform an operational check of a SHF tactical satellite equipment communications link J0567. Verify operational readiness with ground network or distant terminals	12	18	2.85	4.44	7
16.1 Task	Perform cable transmission line measurements J0560. Perform transmission line loss measurements	7	11	1.93	4.97	7

* Mean TE Rating = 1.75 Standard Deviation = 1.29 High TE = 3.04

** Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 29

EXAMPLES OF TASKS NOT REFERENCED TO CTS ELEMENTS
WITH 20 PERCENT OR MORE MEMBERS PERFORMING

TASKS		TNG EMP	1ST JOB (N=121)	1ST ENL (N=377)	TSK DIF	ATI
A0022	Perform system power-downs	5.98	84	87	2.40	13
A0023	Perform system power-ups	5.93	84	86	2.46	13
A0017	Perform corrosion control	4.07	75	79	1.74	13
A0034	Remove or replace CCAs	4.49	79	76	2.04	13
A0016	Operationally check system or test equipment	6.41	69	74	5.23	18
A0007	Fabricate or repair equipment cables	3.66	55	69	5.39	18
B0105	Visually inspect antennas	4.02	60	68	2.36	13
A0024	Perform preventive maintenance inspections (PMIs) on CCAs	4.24	59	68	3.41	13
A0002	Adjust circuit card assemblies (CCAs)	3.46	66	66	2.89	13
D0138	Adjust down converters	5.41	68	65	4.90	18
A0037	Remove or replace equipment grounds	3.76	64	65	2.48	13
B0108	Visually inspect waveguides	4.66	62	65	2.50	13
A0030	Remove electronic communications equipment	3.63	50	62	3.39	13
D0150	Remove or replace down converters	4.05	60	61	4.64	18
D0136	Adjust amplifiers	4.51	60	61	5.38	18
A0013	Install communications equipment	4.41	57	60	5.60	18
E0173	Adjust up converters	4.93	60	58	5.24	18
H0335	Remove or replace power supplies	3.83	55	58	4.32	18

* Mean TE Rating = 1.75 Standard Deviation = 1.29 High TE = 3.04

** Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 30

EXAMPLES OF POI OBJECTIVES NOT SUPPORTED BY SURVEY DATA
(LESS THAN 30 PERCENT MEMBERS PERFORMING)

UNIT	LEARNING OBJECTIVE	PERF CODE	PERCENT MEMBERS PERFORMING		TNG EMP	TSK DIF	ATI
			1ST JOB (N=121)	1ST ENL (N=377)			
II.4.b.	Given a transmission line (coaxial cable) with an attenuator of undetermined value, a signal generator and a power meter, determine the amount of attenuation in the transmission line system within 5%	PC					
Task	J0560. Perform transmission line loss measurements		7	11	1.93	4.97	7
VIII.5.c	Given the appropriate technical data and a scenario, research the required parts information without error	PC					
Task	N0666. Establish requirements for equipment, tools, parts or supplies		17	24	.80	5.00	2

* Mean TE Rating = 1.75 Standard Deviation = 1.29 High TE = 3.04

** Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 31

EXAMPLES OF TASKS NOT REFERENCED TO POI OBJECTIVES
WITH 30 PERCENT OR MORE MEMBERS PERFORMING

TASKS		TNG EMP	1ST JOB (N=121)	1ST ENL (N=377)	TSK DIF	ATI
A0022	Perform system power-downs	5.98	84	87	2.40	13
A0023	Perform system power-ups	5.93	84	86	2.46	13
A0017	Perform corrosion control	4.07	75	79	1.74	13
A0034	Remove or replace CCAs	4.49	79	76	2.04	13
A0016	Operationally check system or test equipment	6.41	69	74	5.23	18
A0007	Fabricate or repair equipment cables	3.66	55	69	5.39	18
B0105	Visually inspect antennas	4.02	60	68	2.36	13
D0150	Remove or replace down converters	4.05	60	61	4.64	18

* Mean TE Rating = 1.75 Standard Deviation = 1.29 High TE = 3.04

** Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 32

JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS
(PERCENT MEMBERS RESPONDING)

	SATELLITE/ WIDEBAND TECHNICIAN CLUSTER (N=825) (STG 116)	TELEMETRY, INSTRMNT & ROBOTICS INDEP JOB (N=29) (STG 186)	ANG E & I CLUSTER (N=25) (STG 102)	TECHNICAL TRAINING INSTRUCTOR INDEP JOB (N=18) (STG 259)	MAINTENANCE CONTROL INDEP JOB (N=12) (STG 273)	MGMT CLUSTER (N=136) (STG 139)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	72	97	76	89	42	74
SO-SO	16	0	16	6	17	16
DULL	12	3	8	6	42	10
<u>PERCEIVED USE OF TALENTS</u>						
EXCELLENT TO PERFECT	13	31	8	33	17	18
FAIRLY WELL TO VERY WELL	70	62	72	67	42	70
NONE TO VERY LITTLE	17	7	20	0	42	13
<u>PERCEIVED USE OF TRAINING</u>						
EXCELLENT TO PERFECT	15	24	0	28	0	11
FAIRLY WELL TO VERY WELL	72	52	64	67	67	65
NONE TO VERY LITTLE	13	24	36	6	33	24
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
SATISFIED	65	93	52	83	50	74
NEUTRAL	15	0	36	6	17	14
DISSATISFIED	20	7	12	11	33	13
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	56	45	84	56	67	54
NO OR PROBABLY NO	34	21	8	6	17	5
WILL RETIRE	10	34	8	39	17	40

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

TABLE 33

JOB SATISFACTION INDICATORS FOR AD AND ANG MEMBERS
(PERCENT MEMBERS RESPONDING)

	AD (N=937)	ANG (N=478)
<u>EXPRESSED JOB INTEREST</u>		
INTERESTING	66	78
SO-SO	17	14
DULL	16	8
<u>PERCEIVED USE OF TALENTS</u>		
EXCELLENT TO PERFECT	15	13
FAIRLY WELL TO VERY WELL	64	71
NONE TO VERY LITTLE	21	17
<u>PERCEIVED USE OF TRAINING</u>		
EXCELLENT TO PERFECT	12	14
FAIRLY WELL TO VERY WELL	63	71
NONE TO VERY LITTLE	24	15
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>		
SATISFIED	61	67
NEUTRAL	14	18
DISSATISFIED	25	14

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

TABLE 34

COMPARISON OF JOB SATISFACTION INDICATORS BETWEEN CURRENT AND 1997 SURVEYS
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS' TAFMS		49-96 MONTHS' TAFMS		97+ MONTHS' TAFMS	
	2002 2E1X1 (N=377)	1997 2E1X1 (N=388)	2002 2E1X1 (N=133)	1997 2E1X1 (N=326)	2002 2E1X1 (N=427)	1997 2E1X1 (N=679)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	62	64	65	62	71	72
SO-SO	19	17	19	22	15	19
DULL	19	19	16	16	14	10
<u>PERCEIVED USE OF TALENTS</u>						
EXCELLENT TO PERFECT	8	9	17	9	19	14
FAIRLY WELL TO VERY WELL	66	62	62	64	63	68
NONE TO VERY LITTLE	26	29	20	28	18	18
<u>PERCEIVED USE OF TRAINING</u>						
EXCELLENT TO PERFECT	9	15	17	7	14	10
FAIRLY WELL TO VERY WELL	68	59	56	60	61	59
NONE TO VERY LITTLE	23	26	27	33	25	33
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
SATISFIED	56	58	59	60	67	68
NEUTRAL	15	18	15	16	13	10
DISSATISFIED	29	24	26	24	21	22
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	34	49	53	56	55	73
NO OR PROBABLY NO	66	51	46	43	8	8
WILL RETIRE	1	0	1	0	37	19

TABLE 35

**COMPARISON OF REENLISTMENT FACTORS BY TAFMS GROUPS –
PERCENT OF RESPONDENTS SELECTING EACH FACTOR AND
AVERAGE SCORE AMONG THOSE SELECTING EACH FACTOR**

31 FACTORS LISTED IN ORDER OF APPEARANCE IN SURVEY Scale: 1 = Slight Influence; 2 = Moderate Influence; 3 = Strong Influence	1-48 MONTHS' TAFMS (N=128)		49-96 MONTHS' TAFMS (N=71)		97+ MONTHS' TAFMS (N=234)	
	Percent		Percent		Percent	
	Selecting	Average	Selecting	Average	Selecting	Average
MILITARY LIFESTYLE	56	2.11	56	2.33	50	2.26
PAY AND ALLOWANCES	48	2.26	54	2.39	50	2.26
BONUS OR SPECIAL PAY	52	2.64	58	2.39	23	2.43
RETIREMENT BENEFITS	45	2.50	62	2.64	79	2.67
MILITARY-RELATED EDU & TRNG OPPORTUNITIES	65	2.45	48	2.26	42	2.08
OFF-DUTY EDU OR TRAINING OPPORTUNITIES	61	2.54	49	2.49	44	2.31
MEDICAL/ DENTAL CARE FOR AD MEMBER	55	2.47	55	2.56	45	2.43
MEDICAL/ DENTAL CARE FOR FAMILY MEMBERS	48	2.61	45	2.62	44	2.52
BASE HOUSING	16	1.95	25	2.33	11	1.96
BASE SERVICES	19	1.83	21	2.07	17	1.74
CHILDCARE NEEDS	6	2.50	17	2.83	8	2.05
SPOUSE'S CAREER	5	2.43	7	2.40	11	2.50
CIVILIAN JOB OPPORTUNITIES	32	2.56	20	2.29	19	2.18
EQUAL EMPLOYMENT OPPORTUNITIES	5	2.67	4	1.33	6	2.13
NUMBER OF PCS MOVES	15	2.21	13	2.67	14	2.18
LOCATION OF PRESENT ASSIGNMENT	23	2.41	32	2.39	30	2.20
NUMBER/DURATION OF TDYS OR DEPLOYMENTS	20	2.40	21	2.47	18	2.14
WORK SCHEDULE	25	1.97	25	1.89	24	1.96
ADDITIONAL DUTIES	8	1.70	8	2.00	6	1.85
JOB SECURITY	69	2.56	69	2.57	56	2.62
ENLISTED EVALUATION SYSTEM	3	2.25	10	1.86	7	2.12
PROMOTION OPPORTUNITIES	39	2.38	34	2.29	27	2.33
TRAINING/EXPERIENCE OF UNIT PERSONNEL	21	2.00	10	2.57	8	1.84
UNIT MANNING	6	1.88	1	2.00	5	2.09
UNIT RESOURCES	5	1.83	4	2.00	3	1.75
UNIT READINESS	4	1.80	4	2.67	3	1.57
RECOGNITION OF EFFORTS	23	2.14	18	2.46	18	2.17
ESPRIT DE CORPS/MORALE	27	2.46	30	2.62	32	2.38
LEADERSHIP OF IMMEDIATE SUPERVISOR	23	2.10	18	2.54	17	2.18
LEADERSHIP AT UNIT LEVEL	16	2.30	13	2.44	15	2.25
SENIOR AIR FORCE LEADERSHIP	7	2.00	11	2.25	11	2.15

TOP 5 REASONS FOR MEMBERS REENLISTING BY TAFMS GROUP

1-48 MONTHS' TAFMS (N=128)	49-96 MONTHS' TAFMS (N=71)	97+ MONTHS' TAFMS (N=234)
JOB SECURITY	JOB SECURITY	RETIREMENT BENEFITS

MILITARY-RELATED EDUCATION & TRAINING OPPORTUNITIES	RETIREMENT BENEFITS	JOB SECURITY
OFF-DUTY EDUCATION OR TRAINING OPPORTUNITIES	BONUS OR SPECIAL PAY	MILITARY LIFESTYLE
MILITARY LIFESTYLE	MILITARY LIFESTYLE	PAY AND ALLOWANCES
MEDICAL OR DENTAL CARE FOR AD MEMBER	MEDICAL OR DENTAL CARE FOR AD MEMBER	MEDICAL OR DENTAL CARE FOR AD MEMBER

TABLE 36

COMPARISON OF SEPARATION FACTORS BY TAFMS GROUPS –
PERCENT OF RESPONDENTS SELECTING EACH FACTOR AND
AVERAGE SCORE AMONG THOSE SELECTING EACH FACTOR

31 FACTORS LISTED IN ORDER OF APPEARANCE IN SURVEY Scale: 1 = Slight Influence; 2 = Moderate Influence; 3 = Strong Influence	1-48 MONTHS' TAFMS (N=247)		49-96 MONTHS' TAFMS (N=61)		97+ MONTHS' TAFMS (N=33)	
	Percent		Percent		Percent	
	Selecting	Average	Selecting	Average	Selecting	Average
MILITARY LIFESTYLE	63	2.29	52	2.25	64	2.24
PAY AND ALLOWANCES	62	2.39	66	2.45	67	2.36
BONUS OR SPECIAL PAY	18	1.93	30	1.72	36	2.42
RETIREMENT BENEFITS	8	2.21	20	2.25	21	2.29
MILITARY-RELATED EDU & TRNG OPPORTUNITIES	17	2.07	18	1.73	6	1.50
OFF-DUTY EDU OR TRAINING OPPORTUNITIES	28	2.31	25	2.00	21	2.43
MEDICAL/ DENTAL CARE FOR AD MEMBER	11	2.36	26	2.00	15	2.60
MEDICAL/ DENTAL CARE FOR FAMILY MEMBERS	10	2.38	25	2.07	15	2.20
BASE HOUSING	18	2.25	20	2.17	12	2.50
BASE SERVICES	13	2.03	18	1.73	6	2.00
CHILDCARE NEEDS	9	2.33	10	2.50	6	3.00
SPOUSE'S CAREER	13	2.42	16	2.30	15	2.00
CIVILIAN JOB OPPORTUNITIES	62	2.59	59	2.75	55	2.67
EQUAL EMPLOYMENT OPPORTUNITIES	4	2.50	2	3.00	3	2.00
NUMBER OF PCS MOVES	24	2.32	30	2.17	24	2.38
LOCATION OF PRESENT ASSIGNMENT	34	2.37	36	2.73	27	2.44
NUMBER/DURATION OF TDYS OR DEPLOYMENTS	31	2.51	41	2.60	39	2.23
WORK SCHEDULE	23	2.14	21	2.15	21	1.57
ADDITIONAL DUTIES	20	2.20	25	2.07	30	2.10
JOB SECURITY	8	1.95	8	2.20	3	3.00
ENLISTED EVALUATION SYSTEM	17	2.47	20	2.33	27	2.33
PROMOTION OPPORTUNITIES	20	2.41	20	2.17	36	2.50
TRAINING/EXPERIENCE OF UNIT PERSONNEL	21	2.17	20	2.33	27	2.00
UNIT MANNING	19	2.19	30	2.56	33	2.36
UNIT RESOURCES	19	2.06	21	2.77	27	2.22
UNIT READINESS	11	2.31	15	2.44	12	2.25
RECOGNITION OF EFFORTS	37	2.34	36	2.18	33	2.82
ESPRIT DE CORPS/MORALE	36	2.48	36	2.45	39	2.62
LEADERSHIP OF IMMEDIATE SUPERVISOR	21	2.45	23	2.29	15	3.00

LEADERSHIP AT UNIT LEVEL	27	2.34	36	2.27	33	2.55
SENIOR AIR FORCE LEADERSHIP	14	2.59	20	2.33	27	2.47

TOP 5 REASONS FOR MEMBERS SEPARATING BY TAFMS GROUP

1-48 MONTHS' TAFMS (N=247)	49-96 MONTHS' TAFMS (N=61)	97+ MONTHS' TAFMS (N=33)
MILITARY LIFESTYLE	PAY AND ALLOWANCES	PAY AND ALLOWANCES
PAY AND ALLOWANCES	CIVILIAN JOB OPPORTUNITIES	MILITARY LIFESTYLE
CIVILIAN JOB OPPORTUNITIES	MILITARY LIFESTYLE	CIVILIAN JOB OPPORTUNITIES
RECOGNITION OF EFFORTS	NUMBER/DURATION OF TDYs OR DEPLOYMENTS	NUMBER/DURATION OF TDYs OR DEPLOYMENTS
ESPRIT DE CORPS/MORALE	LOCATION OF PRESENT ASSIGNMENT	ESPRIT DE CORPS/MORALE