





# OCCUPATIONAL SURVEY REPORT



COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC SYSTEMS

AFSC 2E2X1

**OSSN: 2508** 

**FEBRUARY 2003** 

OCCUPATIONAL ANALYSIS PROGRAM
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#### **PREFACE**

This report presents the results of an Air Force Occupational Survey of the Computer, Network, Switching and Cryptographic Systems career ladder (AFSC 2E2X1). 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.

First Lieutenant Chad Anson, Inventory Development Specialist, developed the survey instrument. First Lieutenant Alicia Thompson, Occupational Analyst, analyzed the data and wrote the final report. Ms. Jeanie Guesman provided computer-programming support, and Ms. Dolores Navarro provided administrative support. Major Jose Caussade, Chief, Enlisted Analysis Section, reviewed and approved this report for release.

Additional copies of this report may be obtained by writing to AFOMS/OAOD, 1550 5<sup>th</sup> 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 <a href="https://www-r.omsq.af.mil/">https://www-r.omsq.af.mil/</a>. (Note: If you experience a Microsoft Word security problem after clicking on the above link, please copy the address window in your web browser.)

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# OCCUPATIONAL SURVEY COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC SYSTEMS (AFSC 2E2X1)

#### **EXECUTIVE SUMMARY**

- 1. <u>Survey Coverage</u>: The Computer, Network, Switching and Cryptographic 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 1,980 Active Duty (AD), 1,147 Air National Guard (ANG), and 225 Air Force Reserve Command (AFRC) personnel. Survey results were based on 1,636 members responding (1,047 AD, 507 ANG, and 82 AFRC).
- 2. <u>Specialty Jobs</u>: Structure analysis identified two clusters and ten independent jobs within the specialty. Technical duties, Duty A through Duty E, are widely performed by members of all components and all skill levels. There is still a distinction between the former 2E2X1 personnel and the former 2E3X1 personnel, which is expected after a recent merger of two career fields.
- 3. <u>Career Ladder Progression</u>: The Computer, Network, Switching and Cryptographic Systems career ladder progression is typical of most career ladders. There was a distinction between 3- and 5-skill-level members, with the 5-skill-level members performing more supervisory work. The distinction between 5- and 7-skill-level members was more obvious, with the 7-skill-level members spending more time performing supervisory/management activities. The 9-skill-level members are spending a greater amount of time performing supervisory/management activities than the 7-skill-level members.
- **4.** <u>Training Analysis</u>: The Course Training Standard (CTS) for the specialty, dated November 2001, was reviewed. The CTS is generally supported by the survey data. 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 August 2001, was also reviewed and is generally well supported.
- 5. <u>Job Satisfaction Analysis</u>: In general, job satisfaction among most 2E2X1 personnel was good. Members of the Computer Switch Maintenance Independent Job and STRATCOM Maintenance Technician Independent Job had relatively low job satisfaction ratings, but both groups are very small.
- 6. Retention Dimensions: Members in three TAFMS groups (1-48 months' TAFMS, 49-96 months' TAFMS, and 97+ months' TAFMS) agreed on several factors potentially influencing their decision to reenlist or separate. The top factor for reenlistment across all TAFMS groups was job security, while retirement benefits, military lifestyle, pay and allowances, and off-duty education or training opportunities were major influences for two of the three TAFMS groups. The three TAFMS groups were in even more agreement concerning the top factors for separation, which included recognition of efforts and military lifestyle.

#### INTRODUCTION

## Air Force Occupational Measurement Squadron (AFOMS)

## Occupational Analysis Program

Simply put, our mission is to provide occupational data for decision makers, 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 include every function that career field members perform by working with technical training personnel and operational subject-matter experts (SMEs) to produce a task list that is complete and understandable to the typical job incumbent. The SMEs write each task to the same level of specificity across duty areas, and no task is duplicated in the task list.

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, such as Career Field Managers (CFMs) and technical school personnel, may request.

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 or fewer assigned members. For career ladders larger than 3,000 members, we select a random sample of half of the eligible members, and for very large career ladders we may sample one-third of all the eligible members. Return rates (the percentage of completed, usable surveys we receive back from the field) generally run between 50% - 70% or greater. All this combines to produce very large and very representative samples in almost every study we conduct, compared 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.

Responding to the JI can be somewhat time-consuming when the number of tasks is large, but it is a simple process. Respondents are asked to examine each task and select each task that they perform in their present job. They are then asked to rate each task they chose on a scale of 1 to 9

(unchosen tasks are given a 0 rating), according to how much relative time they spend performing that task in their present job, compared to all the other tasks in the inventory. These ratings are converted into estimates of actual relative job time spent performing each task.

## 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 forms groups of survey respondents according to the similarity of their 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.

<u>The Training Extract</u> -- AFOMS survey data are essential to technical training personnel. 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 1 to 9 scale (tasks not rated by the respondent are assigned a "0" rating). 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 "1" rating 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, and the result is a TE rating for each task.

The TD survey also contains the full task list and requests that respondents rate each task with which they are familiar 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 average TD rating 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 the likely most appropriate training setting and approach for providing training for that task. ATIs allow training developers quickly to 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 who evaluate current training efficiency and effectiveness in order to propose and approve changes to 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 also reviewed and appropriately revised in light of the survey data to reflect the jobs being performed by the career ladder members.

Part of the process of compiling the Training Extract involves the *CTS matching* process, during which technical school personnel match JI tasks to CTS elements; that is, they tell us what particular task or tasks correspond to each CTS element when it is covered in training. This is especially useful when CTS 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 CTS element that previously has been trained only to a knowledge level. JI, TE, and TD data, combined in the form of the ATI, are important 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 tend to be high in all four of our primary indices -- PMP, PTS, TD, and TE -- exactly the kinds of tasks that one would generally consider job-essential and that should form the basis for test questions. 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 is sent a survey containing a list of the 150-200 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 into 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.

<u>The Occupational Survey Report</u> -- This document, the 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. Tables following the narrative show depth with regard to these factors and implications. Where appropriate, highlights of the tables are contained in the body.

# OCCUPATIONAL SURVEY REPORT (OSR) COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC SYSTEMS (AFSC 2E2X1)

This is a report of an occupational survey of the Computer, Network, Switching and Cryptographic 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. Effective 31 October 2000, the 2E2X1 (Electronic Computer and Switching Systems) and 2E3X1 (Secure Communications Systems) career fields merged into one with the new title of Computer, Network, Switching and Cryptographic Systems (AFSC 2E2X1). This is the first study of the new career field.

## Career Ladder Background

According to the Specialty Description in AFMAN 36-2108, *Enlisted Classification*, dated 31 October 2002, Computer, Network, Switching and Cryptographic Systems personnel sustain network infrastructure, cryptographic equipment, and deployable switching systems in fixed and deployed environments. They also sustain and operate systems through effective troubleshooting, repair, diagnostics, and system performance analysis.

The initial technical training school for this AFSC is located at Keesler AFB MS. Following the prerequisite 48-day Common Electronic Principles course (E3AQR2E231-481) at Keesler AFB, members attend the E3ABR2E231 002, Computer, Network, Switching and Cryptographic Systems Apprentice course, which is 75 academic days and provides graduates with the knowledge and skills for the following principles and activities:

• Teaches data communications, general computer maintenance repairs, network concepts, operating systems/applications software, telephone switching systems, information transport devices, IDNX, ATM, and multiplexers. Hands-on training is provided on computer repair, operational checks, fault isolation, etc., using a sophisticated computer system as training vehicle.

Entry into AFSC 2E2X1 requires an Armed Forces Vocational Aptitude Battery (ASVAB) "Electronic" score of 67 and a Strength requirement of "J" (weight lift of 60 lb). Normal color vision as defined in AFI 48-123, *Medical Examination and Standards*, is required. Personnel must be qualified to operate a government vehicle according to AFI 24-301, *Vehicle Operations*. For award and retention in this AFSC, personnel must be eligible for a Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

#### SURVEY METHODOLOGY

## **Inventory Development**

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Occupational Survey Study Number (OSSN) 2508, dated February 2002. During the development of the comprehensive task list, 59 subject-matter experts from nine operational bases and one training unit were interviewed. The resulting JI contains a comprehensive listing of 1,357 tasks grouped under 25 duty headings and a background section. This background section requests such information as base of assignment, command of assignment, and standard background questions, including job title, reenlistment/separation factors, deployments and TDYs, work schedule, and functional area. Additional background items concerned maintenance level assigned, prior AFSC (if appropriate), courses completed, Air Defense and Warning Strategic Communications (STRATCOM) configuration items maintained, configuration items maintained, tactical or mobile systems configuration items maintained, Air Force Satellite Control Network (AFSCN) configuration items maintained, computer operating systems used or operated, computer system processors maintained, computer system peripherals maintained, test equipment used or operated, cryptographic equipment used or maintained and ancillary equipment used or maintained. (The complete survey is available on the CD containing the products from this study.)

BASE	REASON FOR VISIT
Keesler AFB MS	Technical Training School
Shaw AFB SC	Supports Command and Control and flying operations
Tinker AFB OK	Supports deployable communications, computer systems, navigational aids, and air traffic control services
Offutt AFB NE	Focus on STRATCOM tasks
Peterson AFB CO	Supports 21 <sup>st</sup> Space Wing
Buckley AFB CO	Defense Support Program (DSP) and Space- Based Infrared System (SBIRS)
F.E. Warren AFB WY	Strategic missile unit
Indian Springs AF Aux NV	Predator System
Langley AFB VA	Ensures readiness for worldwide war-fighting missions
Lackland AFB TX	Primarily in support of the Basic Electronic Principles Course

## 2E2X1 Survey Administration

From February to May 2002, the survey control monitor at the technical training school and operational bases administered the inventory to all eligible DAFSC 2E231, 2E251, 2E271, and 2E291 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 displays the survey distribution by paygrade groups. Table 3 shows the final sample distribution by skill level. Table 4 displays the component characteristics for the AD, ANG, and AFRC members in the final sample.

TABLE 1

MAJCOM REPRES	SENTATION OF TOT.	AL SAMPLE
COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
ACC	21	23
USAFE	5	5
PACAF	5	5
AMC	4	4
AETC	4	5
AIA	6	8
AFMC	3	2
AFSPC	4	5
OTHER**	7	7
ANG	33	31
AFRC	8	5
TOTAL ASSIGNED*		4,084
TOTAL ELIGIBLE		3,389
TOTAL SURVEYS MAILED		3,352
TOTAL IN SAMPLE		1,636
PERCENT OF ASSIGNED	IN SAMPLE	40
PERCENT OF ELIGIBLE	IN SAMPLE	48
PERCENT OF MAILED II	N SAMPLE	49

<sup>\*</sup> As of Feb 02

<sup>\*\*</sup> Highest percentages in "Other" include Air Force Elements Europe, Air Force Elements Defense Information Systems Agency, Air Force Elements United States Atlantic Command Air Force Elements (other), and Air Force Pentagon Communications Agency

TABLE 2

Columns may not add up to 100

due to rounding

PAYGRADE DISTRIBUTION OF SAMPLE PERCENT OF PERCENT OF **SAMPLE PAYGRADE** ASSIGNED 7 3 E-1 - E-321 22 E-4 E-5 30 32 24 E-6 24 17 E-7 15 2 E-8 2 SKILL-LEVEL DISTRIBUTION OF SAMPLE PERCENT OF PERCENT OF **SAMPLE ASSIGNED** SKILL LEVEL 8 10 2E231 51 2E251 50 38 2E271 39 2 2E291

\* Indicates less than 1%

TABLE 3

Columns may not add up to 100 due to rounding

TABLE 4

COMPON	ENT CHARAC	TERISTICS	
	AD	ANG	AFRC
ASSIGNED	2,417	1,343	324
SURVEYED	1,980	1,147	225
SAMPLE	1,055	499	82
% OF SURVEYED	53	44	36

The Command, Paygrade, Skill-Level distributions and component characteristics 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.

#### **2E2X1 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 <u>Job</u>. 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 <u>Cluster</u>. Jobs not falling within any cluster are identified as <u>Independent Jobs (IJs)</u>. 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 2E2X1 career ladder.

## Specialty Jobs

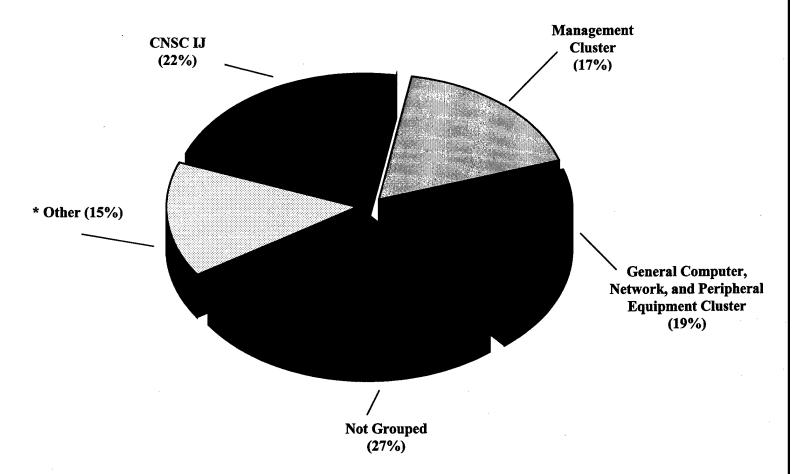
Based on the analysis of tasks performed and the amount of time spent performing each task, two clusters and ten independent jobs were identified within the Computer, Network, Switching and Cryptographic Systems career ladder. Figure 1 shows this job structure. A written outline of the job structure follows. The stage (STG) number shown beside each title refers to computer-generated tracking information of no importance to the reader. The letter "N" represents the number of members in each group. Tables 5-18 (at the end of this report, following the narrative) provide detailed descriptions of the clusters and jobs listed below, including demographic information and representative tasks that members perform. In addition, the tables show some distinguishing tasks performed by members of jobs identified within clusters.

- I. MANAGEMENT CLUSTER (STG 69, N=270)
  - A. TRAINING JOB (STG 300, N=17)
  - B. QUALITY ASSURANCE JOB (STG 336, N=10)
  - C. MAINTENANCE SUPPORT JOB (STG 385, N=18)
  - D. NCOIC JOB (STG 458, N=132)
- II. GENERAL COMPUTER, NETWORK, AND PERIPHERAL EQUIPMENT CLUSTER (STG 109, N=319)
  - A. SMALL COMPUTER MAINTENANCE TECHNICIAN JOB (STG 240, N=273)
  - B. INFRASTRUCTURE TECHNICIAN JOB (STG 277, N=27)

- III. JOINT SURVEILLANCE SYSTEM (JSS) IJ (STG 243, N=48)
- IV. COMPUTER SWITCH MAINTENANCE IJ (STG 309, N=16)
- V. AIRCRAFT COMPUTER MAINTAINER IJ (STG 402, N=30)
- VI. INTEL ENGINEERING AND INSTALLATION (E&I) IJ (STG 474, N=13)
- VII. TACTICAL COMM TECHNICIAN IJ (STG 445, N=19)
- VIII. TACTICAL SWITCH MAINTENANCE IJ (STG 348, N=10)
- IX. COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC (CNSC) IJ (STG 338, N=365)
- X. STRATCOM MAINTENANCE TECHNICIAN IJ (STG 412, N=18)
- XI. CRYPTO MAINTENANCE TECHNICIAN IJ (STG 249, N=58)
- XII. SECURE TELEPHONE SWITCH TECHNICIAN IJ (STG 387, N=10)

<u>Table 19</u>, at the end of this narrative, displays time spent on duties by the members within these clusters and jobs.

## IDENTIFIED JOB STRUCTURE AND PERCENTAGES OF TOTAL SURVEY SAMPLE (N=1,636)



#### \*Other includes:

- Joint Surveillance System (JSS) IJ (3%)
- Computer Switch Maintenance IJ (1%)
- Aircraft Computer Maintainer IJ (2%)
- Intel E&I IJ (1%)
- Tactical Comm Technician IJ (1%)
- Tactical Switch Maintenance IJ (1%)
- STRATCOM Maintenance Technician IJ (1%)
- Crypto Maintenance Technician IJ (4%)
- Secure Telephone Switch Technician IJ (1%)

### FIGURE 1

## Members Not Grouped

- Remaining 27% 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 jobs, such as Intel Support, CCI Maintenance, Satellite Systems Technician, and Network Integrator
  - 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

The results of the specialty job analysis were compared to the last two OSRs, Electronic Computer and Switching Systems (formerly 2E2X1) and Secure Communications Systems (formerly 2E3X1) dated July 1998 and October 1998, respectively. Some of the previously identified jobs did not match some of the jobs of the current survey. These jobs from the former 2E2X1 AFSC include Headquarters Staff NCO IJ, Combat Communications NCOIC Job within the Combat Communications Cluster, and the General Troubleshooting Job within the General Computer and Switching Maintenance Cluster. Jobs from the former 2E3X1 AFSC that did not match the current study were Safety/Security Management IJ, Mobile/Tactical Management Job within the Management/Staff Cluster and the COMSEC Control Job, the Depot Maintenance Job, the Red Switch Technician Job, and the Line Supervision Job within the Cryptographic and Telecommunications Cluster.

Overall nature of the 2E2X1 career ladder has not changed much since the previous studies;
 still a very heterogeneous career ladder with small pockets of members performing jobs that
 are more focused

<u>Table 20</u> shows the clusters and jobs identified in this study compared to the previous studies conducted in 1998.

#### 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**

#### <u>Jobs</u>

Table 21 - Distribution of skill-level members across career ladder clusters and jobs:

- General Computer, Network, and Peripheral Equipment Cluster and CNSC Independent Job appear as two of the top three jobs across 3-, 5-, and 7-skill levels
- Relatively high proportion of 3-skill-level members identified in Crypto Maintenance Technician Independent Job when compared to 5-, 7-, and 9-skill-level members
- Most of 3-skill-level members and 5-skill-level members in General Computer,
   Network, and Peripheral Equipment Cluster
- Majority of DAFSC 2E271 members in CNSC Independent Job and Management Cluster
- Overwhelming majority of 9-skill-level members identified in the Management Cluster

#### **Duties**

<u>Table 22</u> – Time spent on duties by members of skill-level groups:

- Members at 3-, 5-, and 7-skill levels spend majority of their time performing tasks in Duty A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities)
- Members at 3-, 5-, and 7-skill levels spend majority of their time across technical Duty Areas A through E, with the exceptions of 5-skill-level members beginning to spend time in Duty Y (Performing Management and Supervisory Activities) and 7skill-level members spending 19% of their time on Duty Y tasks
- 9-skill-level members spend the majority of their time performing tasks in Duty Y (Performing Management and Supervisory Activities)

### <u>AD</u>

#### **Duties**

## <u>Table 23</u> – Time spent on duties by AD members of skill-level groups:

- Similar to the total sample, AD members at 3- and 5-skill levels spend their time across the technical Duty Areas A through E. AD 5-skill-level members also spend some time in Duty Y (Performing Management and Supervisory Activities)
- 7- and 9-skill-level members spend a significant amount of their time in Duty Y (Performing Management and Supervisory Activities)

#### **Tasks**

## Table 24 – Tasks performed by AD 2E231 members:

Tasks being performed by highest percentages of 3-skill-level members (63% and below) indicate that career ladder members are performing tasks such as inspecting batteries and inventorying and removing and replacing equipment

## <u>Table 25</u> – Tasks performed by AD 2E251 members:

■ Tasks being performed by highest percentages of 5-skill-level members are very similar to tasks being performed by 3-skill-level members, but the 5-skill-level members start picking up general training tasks in Duty X and some supervisory tasks in Duty Y

## <u>Table 26</u> – Tasks performed by AD 2E271 members:

Heavy emphasis on supervisory and managerial activities at this skill level

## <u>Table 27</u> – Tasks performed by AD 2E291 members:

- Performing tasks such as writing, developing, and evaluating -- tasks one would expect to see at this skill level
- Perform lowest average number of tasks for all skill levels across all components

## **ANG**

#### **Duties**

# <u>Table 28</u> – Time spent on duties by ANG members of skill-level groups:

■ Like AD 5-skill levels, ANG 5- and 7-skill-level members spend most of their time on tasks in technical Duty Areas A through E, with the majority falling in Duty A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities) and Duty B (Performing General Alignment, Fault Isolation, and Preventive Maintenance Inspection (PMI)) Activities

#### **Tasks**

Table 29 - Tasks performed by ANG 2E251 members

<u>Table 30</u> – Tasks performed by ANG 2E271 members:

 Average 208 tasks, which is the highest average number of tasks among every skill level in every component

<u>Table 31</u> – Tasks performed by ANG 2E291 members

#### **AFRC**

#### **Duties**

<u>Table 32</u> – Time spent on duties by AFRC members of skill-level groups:

- AFRC members at both skill levels spend more of their time performing tasks in Duty A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities)
- AFRC 5-skill-level members spend significantly more time Maintaining Computers, Network, and Peripheral Equipment (Duty E) than AFRC 7-skill-level members and AD and ANG 5-skill-level members

#### Tasks

Table 33 - Tasks performed by AFRC 2E251 members

<u>Table 34</u> – Tasks performed by AFRC 2E271 members:

 Emergence of tasks in Duty X (Performing Training Activities) and Duty W (Performing Mobility and Contingency Activities) when compared to AFRC 5-skill-level members

#### 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=257 (16% of sample)

<u>Jobs</u>

Figure 2 – Distribution of first-enlistment personnel across specialty clusters and jobs:

Increase of 5% in Crypto Maintenance Technician Independent Job and decrease of 10% in the CNSC Independent Job when compared to the total sample (Figure 1)

**Duties** 

<u>Table 35</u> – Relative time spent on duties

Tasks

<u>Table 36</u> – Representative tasks performed

**Equipment** 

<u>Table 37</u> – Test equipment used or operated:

 Multimeters and digital voltmeters are used or operated most among first-enlistment personnel

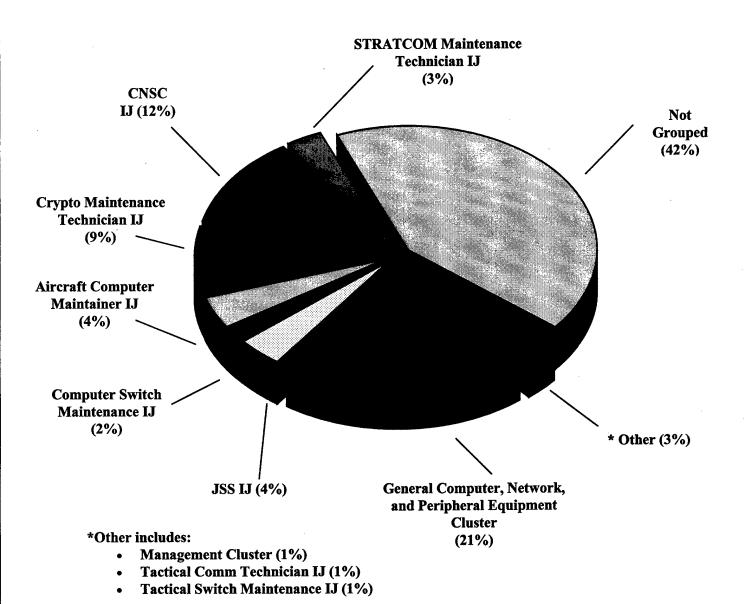
<u>Table 38</u> – Cryptographic equipment used or maintained:

KG-84 series cryptographic equipment used or maintained most

Table 39 – Ancillary equipment used or maintained:

High percentage of first-enlistment personnel using or maintaining STU III telephones

## DISTRIBUTION OF AFSC 2E2X1 FIRST-ENLISTMENT PERSONNEL ACROSS SPECIALTY JOBS (N=257)



#### 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 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 2E2X1 members (generally E-6 or E-7 craftsmen) completed either a training emphasis (TE) or task difficulty (TD) survey. These training documents (CTS and POI) were reviewed by matching survey tasks to CTS and POI elements, then examining task performance, TE, and TD data for the matched tasks.

#### 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.

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

- Eighty-eight DAFSC 2E2X1 senior noncommissioned officers (NCOs) rated tasks in the inventory on a scale from 0 (no training required) to 9 (extremely high training emphasis)
- Average TE rating was 1.72 with a standard deviation of 1.22
  - If a task has a TE rating at least one standard deviation above the mean, that is, of at least 2.94, it is probably important to provide new personnel with formal training on that task

## <u>Table 40</u> – Tasks with highest TE ratings:

Most tasks with high TE ratings are from Duty A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities) and Duty E (Maintaining Computers, Network, and Peripheral Equipment) and involve performing operational checks and isolating malfunction activities

# <u>Task Difficulty (TD)</u> — amount of time needed to learn to perform that task satisfactorily:

- One-hundred DAFSC 2E2X1 senior NCOs rated the difficulty of tasks in the 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

## <u>Table 41</u> – 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 A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities) and Y (Performing Management and Supervisory Activities) received the highest TD ratings, but they have low TE ratings
- Unlike tasks with high TE ratings, many tasks with high 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 2E2X1 TRAINING DOCUMENTS REFLECT?

## Course Training Standard (CTS) Analysis

Technical school personnel from the 338th Training Squadron (338 TRS), Keesler AFB MS, 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." As stated above, several tasks not referenced to the CTS with at least 20% of the first-job or first-enlistment members performing should be reviewed by training personnel for possible addition to the CTS.

<u>Table 42</u> – Examples of unsupported CTS elements along with the tasks matched to those items:

- Tasks matched to CTS elements were being performed by less than 20% of job incumbents in their first job or first enlistment
- A complete listing of CTS elements with tasks matched to elements can be found in the CTS report in the Training Extract

<u>Table 43</u> – Examples of tasks not referenced to CTS elements with 20% or more members performing:

A complete listing of tasks not referenced to the CTS can be found at the end of the CTS report in Training Extract; these tasks should be reviewed for possible addition to CTS

Overall, the CTS is generally supported by the survey data.

## 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.

<u>Table 44</u> – Examples of POI unsupported objectives along with the tasks matched to those objectives:

- Tasks matched to POI objectives were being performed by less than 30% of job incumbents in their first job or first enlistment
- A complete listing of POI objectives and tasks matched to those objectives can be found in the POI report in the Training Extract; these POI objectives should be reviewed for possible revision

<u>Table 45</u> – Examples of tasks not referenced to POI objectives with 30% or more members performing:

 A complete listing of tasks not referenced to the POI can be found at the end of the POI report in the Training Extract; these tasks should be reviewed for possible addition to POI

Overall, the POI is generally supported by the survey data.

#### **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

<u>Table 46</u> – Job satisfaction data by job groups identified in **2E2X1 JOB STRUCTURE** section of this report:

- Intel E&I Independent Job has the highest job satisfaction ratings
- Computer Switch Maintenance IJ and STRATCOM Maintenance Technician IJ report low job satisfaction overall compared to the remaining jobs and clusters, but both are very small proportions of the sample

<u>Table 47</u> displays comparative job satisfaction data between the current 2E2X1 OSR data and members from other 2E AFSCs surveyed in the previous 12 months. (Only two AFSCs met this criterion – AFSC 2E1X1, Satellite, Wideband, and Telemetry Systems and 2E1X2, Meteorological and Navigation Systems.) The results from the comparison data are summarized below:

- Overall, job satisfaction ratings for the 2E2X1 members are slightly lower compared to the 2E1X1 and 2E1X2 members
  - 2E2X1 members report somewhat lower satisfaction across all three TAFMS groups regarding perceived use of training and sense of accomplishment from job

<u>Table 48</u> displays job satisfaction data for the AD, ANG, and AFRC members. The results for the three components are summarized below:

 Job satisfaction ratings for the ANG members are higher than the AD and AFRC members, especially for job interest, perceived use of training, and sense of accomplishment from job

#### **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

<u>Table 49</u> – 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 49
  - Job security appeared for each of the three TAFMS groups as one of the top two reasons for reenlisting
  - Retirement benefits, military lifestyle, pay and allowances, and off-duty education or training opportunities were major influences on reenlistment for two of the three TAFMS groups

#### Separation

<u>Table 50</u> – 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 50
  - Military lifestyle and recognition of efforts appeared for each of the three TAFMS groups as top reasons for separating
  - Pay and allowances, bonus or special pay, and civilian job opportunities are among the top four factors that may influence the respondents' decisions to separate for two of the three TAFMS groups

# TABLE 5

# MANAGEMENT CLUSTER (STG 69) N=270 (17% of TOTAL SAMPLE)

## DEMOGRAPHICS

Average Time in Present Job	31 months	
Average TAFMS	202 months	
Predominant Paygrade	E-7	40%
Skill Levels	2E251	31%
	2E271	59%
	2E291	8%
Former AFSCs	2E2X1	63%
	2E3X1	33%

		PERCENT
		<b>MEMBERS</b>
<b>TASKS</b>	AVERAGE NUMBER OF TASKS PERFORMED 63	PERFORMING
Y1318	Counsel subordinates concerning personal matters	70
Y1356	Write recommendations for awards or decorations	68
Y1337	Evaluate personnel for compliance with performance standards	67
Y1343	Inspect personnel for compliance with military standards	63
Y1320	Determine or establish work assignments or priorities	62
Y1315	Conduct supervisory performance feedback sessions	62
Y1344	Interpret policies, directives, or procedures for subordinates	61
Y1355	Write or indorse military performance reports	60
X1290	Brief personnel concerning training programs or matters	59
Y1313	Conduct self-inspections or self-assessments	59
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	58
Y1357	Write replies to inspection reports	58
X1294	Counsel trainees on training progress	56
Y1317	Conduct supervisory orientations for newly assigned personnel	56
X1303	Evaluate progress of trainees	55
X1295	Determine training requirements	55
Y1333	Establish performance standards for subordinates	55
U1226	Maintain administrative files	55
Y1350	Schedule personnel for TDY assignments, leaves, or passes	55
Y1326	Develop or establish work schedules	54
Y1335	Evaluate inspection report findings or inspection procedures	53
X1293	Conduct on-the-job training (OJT)	53
X1305	Maintain training records or files	52
Y1338	Evaluate personnel for promotion, demotion, reclassification, or special awards	52
Y1342	Initiate actions required due to substandard performance of personnel	52
Y1319	Determine or establish logistics requirements, such as personnel, equipment, tools, parts,	50
	supplies, or workspace	
U1235	Write minutes of briefings, conferences, or meetings	49
Y1310	Assign personnel to work areas or duty positions	49
Y1316	Conduct safety inspections of equipment or facilities	48
X1302	Evaluate effectiveness of training programs, plans, or procedures	47
U1216	Compile data for records, reports, logs, or trend analyses	47

## TABLE 6

## JOBS IDENTIFIED WITHIN MANAGEMENT CLUSTER

# TRAINING JOB (STG 300) N=17 (6% OF CLUSTER)

#### **DEMOGRAPHICS**

Average Time in Present Job	44 months	
Average TAFMS	183 months	
Predominant Paygrades	E-5	35%
	E-7	35%
Predominant Skill Level	2E271	53%
Former AFSCs	2E2X1	65%
	2E3X1	35%

#### DISTINGUISHING TASKS

X1303	Evaluate progress of trainees
X1297	Develop training programs, plans, or procedures
X1305	Maintain training records or files
X1295	Determine training requirements
X1299	Develop or procure training materials or aids
X1293	Conduct on-the-job training (OJT)
X1290	Brief personnel concerning training programs or matters
X1294	Counsel trainees on training progress
X1304	Inspect training materials or aids for operation or suitability
X1302	Evaluate effectiveness of training programs, plans, or procedures
X1307	Prepare job qualification standards (JQSs)
X1296	Develop formal course curricula, plans of instruction (POIs), or specialty training
	standards (STSs)
X1292	Conduct formal course classroom training
X1301	Evaluate training methods or techniques of instructors
X1300	Establish or maintain study reference files
X1308	Write training reports
X1289	Administer or score tests
X1298	Develop written tests
X1306	Personalize lesson plans
X1291	Complete student entry or withdrawal forms

# QUALITY ASSURANCE JOB (STG 336) N=10 (4% OF CLUSTER)

#### **DEMOGRAPHICS**

Average Time in Present Job	20 months	
Average TAFMS	153 months	
Predominant Paygrade	E-5	50%
Predominant Skill Level	2E251	70%
Former AFSCs	2E2X1	40%
	2E3X1	30%

#### DISTINGUISHING TASKS

Y1336	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program
A0124	Perform quality control (QC) or technical inspections
V1239	Evaluate serviceability of equipment tools, parts or supplies
Y1314	Conduct staff assistance visits, inspections or audits
U1219	Establish or maintain automated technical order management systems (ATOMS) accounts
A0054	Inspect communications-electronic (C-E) equipment for physical damage
X1302	Evaluate effectiveness of training programs, plans or procedures
X1308	Write training reports
T1200	Analyze core automated maintenance systems (CAMS), G081, or access generated data

# MAINTENANCE SUPPORT JOB (STG 385) N=18 (7% OF CLUSTER)

#### **DEMOGRAPHICS**

Average Time in Present Job	23 months	
Average TAFMS	164 months	
Predominant Paygrade	E-5	39%
Skill Levels	2E251	50%
	2E271	50%
Former AFSCs	2E2X1	78%
	2E3X1	17%

#### DISTINGUISHING TASKS

T1215	Verify accuracy of CAMS, GO81, or access generated database daily inputs
T1213	Update personnel data files in CAMS, GO81, or access generated databases
T1214	Update workcenter training reports in CAMS, GO81, or access generated databases
T1208	Retrieve CAMS, GO81, or access generated database listings or reports

# NCOIC JOB (STG 458) N=132 (49% OF CLUSTER)

#### **DEMOGRAPHICS**

Average Time in Present Job	29 months		
Average TAFMS	229 m	229 months	
Predominant Paygrade	E-7	53%	
Predominant Skill Level	2E251	69%	
Former AFSCs	2E2X1	63%	
	2E3X1	36%	

## DISTINGUISHING TASKS

Top tasks are same as tasks performed by cluster

## TABLE 7

# GENERAL COMPUTER, NETWORK, AND PERIPHERAL EQUIPMENT CLUSTER (STG 109) N=319 (19% of TOTAL SAMPLE)

## DEMOGRAPHICS

Average Time in Present Job	41 months 117 months	
Average TAFMS		
Predominant Paygrade	E-5	35%
Skill Levels	2E231	8%
	2E251	57%
	2E271	35%
Former AFSCs	2E2X1	70%
	2E3X1	18%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 112	PERCENT MEMBERS PERFORMING
IASKS	AVERAGE NUMBER OF TASKS FERG ORMED 112	
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	86
E0562	Operationally check NICs	85
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	83
E0549	Isolate NIC malfunctions	82
E0560	Operationally check laptop computers	82
E0563	Operationally check printers	81
E0570	Remove and replace NICs	81
A0088	Operationally check local area networks (LANs)	79
E0544	Isolate desktop computer malfunctions	78
E0557	Operationally check desktop computers	78
E0547	Isolate laptop computer malfunctions	78
E0571	Remove or replace desktop computer subassemblies	77
E0550	Isolate printer malfunctions	76
E0573	Remove or replace hubs	75
E0559	Operationally check hubs	74
B0227	Isolate LAN component malfunctions, such as routers, servers, or hubs	68
E0565	Operationally check routers	68
E0546	Isolate hub malfunctions	. 67
E0581	Remove or replace switches	67
C0410	Remove or replace printers	67
A0098	Operationally check printers	66
E0574	Remove or replace laptop computer subassemblies	65
C0390	Remove or replace keyboards	65
E0578	Remove or replace routers	64
E0552	Isolate router malfunctions	61
A0087	Operationally check keyboards	61
E0569	Operationally check switches	60
E0576	Remove or replace printer subassemblies	58
D0452	Isolate malfunctions to cables	58
B0303	Isolate malfunctions to printers	57
X1293	Conduct on-the-job training (OJT)	54

## JOBS IDENTIFIED WITHIN GENERAL COMPUTER, NETWORK, AND PERIPHERAL EQUIPMENT CLUSTER

### SMALL COMPUTER MAINTENANCE TECHNICIAN JOB (STG 240) N=273 (86% OF CLUSTER)

### **DEMOGRAPHICS**

Average Time in Present Job	43 months	
Average TAFMS	123 m	onths
Predominant Paygrade	E-5	37%
Predominant Skill Level	2E251	58%
Former AFSCs	2E2X1	69%
	2E3X1	19%

### DISTINGUISHING TASKS

E0560	Operationally check laptop computers
E0557	Operationally check desktop computers
E0544	Isolate desktop computer malfunctions
E0571	Remove or replace desktop computer subassemblies
E0547	Isolate laptop computer malfunctions
A0089	Operationally check LAN components, such as routers, servers, hubs, network
	interface controllers (NICs), or workstations
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or
	workstations
A0088	Operationally check local area networks (LANs)
E0574	Remove or replace laptop computer subassemblies

### INFRASTRUCTURE TECHNICIAN JOB (STG 277) N=27 (8% OF CLUSTER)

### **DEMOGRAPHICS**

Average Time in Present Job	27 months	
Average TAFMS	93 months	
Predominant Paygrade	E-4	37%
Predominant Skill Level	2E251	52%
Former AFSCs	2E2X1	85%
	2E3X1	7%

### DISTINGUISHING TASKS

E0381	Remove of replace switches
E0578	Remove or replace routers
B0227	Isolate LAN component malfunctions, such as routers, servers, or hubs
E0573	Remove or replace hubs
E0552	Isolate router malfunctions

### JOINT SURVEILLANCE SYSTEM (JSS) INDEPENDENT JOB (STG 243) N=48 (3% of TOTAL SAMPLE)

51	.4
34 1110	onths
68 m	onths
E-5	38%
E-4	35%
2E231	8%
2E251	71%
2E271	21%
1%	
9/0	
	68 m E-5 E-4 2E231 2E251 2E271

m . avra	ATTER ACTUAL CREEK OF THAT OF THAT OF THE CONTROL O	PERCENT MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 131	PERFORMING
4.0007	On anationally, about mayor gymnling	92
A0097 C0409	Operationally check power supplies  Remove or replace power supplies	92
C0409 C0390	Remove or replace keyboards	90
A0142	Remove or replace fan or blower assemblies	90
A0142 A0098	Operationally check printers	88
B0301	Isolate malfunctions to power supplies	85
B0301 B0325	Perform PMIs on cabinets, racks, or subfloors	83
A0063	Isolate system malfunctions to major system components	81
B0345	Perform PMIs on power supplies	81
B0343 B0322	Perform PMIs on blowers or cooling fans	81
B0322 B0195	Adjust or align power supplies	81
A0034	Connect or disconnect power, power panels, or equipment leads	81
C0379	Remove or replace electronic circuit cards or printed circuit boards (PCBs)	79
A0087	Operationally check keyboards	79
A0057	Inspect cabinets for corrosion	79
B0329	Perform PMIs on display equipment, such as CRTs	77
A0116	Perform equipment power-up or power-down procedures	77
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	77
A0020	Bench check power supplies	77
C0386	Remove or replace fuses	77
B0333	Perform PMIs on keyboards	75
B0333	Isolate malfunctions to keyboards	75
A0053	Inspect cables for corrosion	75
B0239	Isolate power supply malfunctions	73
A0024	Clean facilities	71
A0118	Perform general electrostatic discharge (ESD) procedures	71
C0410	Remove or replace printers	71
A0027	Clean or lubricate equipment, other than IDFs	69
A0140	Remove or replace cabinet minor hardware	67
D0452	Isolate malfunctions to cables	67
B0226	Isolate keyboard component malfunctions	67
B0240	Isolate printer malfunctions	67
B0336	Perform PMIs on maintenance or operator panels or consoles	65
	<u>-</u>	

### COMPUTER SWITCH MAINTENANCE INDEPENDENT JOB (STG 309) N=16 (1% of TOTAL SAMPLE)

55 months	
47 mo	
E-4	44%
2E231	31%
2E251	44%
2E271	25%
2E2X1	81%
2E3X1	19%
	47 me E-4 2E231 2E251 2E271 2E2X1

		PERCENT
m . cc	AMERICAN AND OF THE OWN DEPTON AND 144	MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 166	PERFORMING
40116	D. C	94
A0116	Perform equipment power-up or power-down procedures	9 <del>4</del> 94
A0053	Inspect cables for corrosion	88 88
A0034	Connect or disconnect power, power panels, or equipment leads	
A0160	Test circuits for grounds, opens, or shorts	88
A0063	Isolate system malfunctions to major system components	88
A0118	Perform general electrostatic discharge (ESD) procedures	88
A0049	Inspect batteries for corrosion	88
A0097	Operationally check power supplies	88
B0239	Isolate power supply malfunctions	81
A0087	Operationally check keyboards	81
A0146	Remove or replace wiring	81
A0064	Isolate system malfunctions to transmission lines	81
A0107	Operationally check test equipment	81
A0024	Clean facilities	· 75
B0290	Isolate malfunctions to maintenance or operator panels or consoles	75
A0035	Coordinate dispatches with maintenance control	75
A0079	Operationally check cryptographic equipment	75
A0098	Operationally check printers	75
A0056	Inspect frames for corrosion	75
A0036	Coordinate equipment or system repairs with technical controllers	75
A0001	Analyze equipment outages or malfunction reports	75
A0038	Coordinate systems operation with distant stations to verify equipment operation	75
A0127	Perform strapping options on equipment	75
A0055	Inspect electronic drawers for corrosion	75
A0031	Configure circuit paths for data lines	69
B0267	Isolate malfunctions to cryptographic equipment	69
C0409	Remove or replace power supplies	69
C0390	Remove or replace keyboards	69

### AIRCRAFT COMPUTER MAINTAINER INDEPENDENT JOB (STG 402) N=30 (2% of TOTAL SAMPLE)

Average Time in Present Job	44 months	
Average TAFMS	88 months	
Predominant Paygrade	E-4	37%
Skill Levels	2E231	23%
	2E251	60%
	2E271	17%
Former AFSCs	2E2X1	90%
	2E3X1	0%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 140	PERCENT MEMBERS PERFORMING
•		07
A0116	Perform equipment power-up or power-down procedures	97
F0688	Perform preflight inspections on keyboards	93
A0087	Operationally check keyboards	93
C0390	Remove or replace keyboards	93
A0083	Operationally check display equipment	90
F0686	Perform preflight inspections on display equipment	87
F0690	Perform preflight inspections on maintenance or operator panels or consoles	87
T1209	Review aircraft flight or maintenance records, such as AFTO Forms 781-series	87
V1242	Inventory equipment, tools, parts, or supplies	87
B0301	Isolate malfunctions to power supplies	87
A0140	Remove or replace cabinet minor hardware	87
A0097	Operationally check power supplies	87
C0409	Remove or replace power supplies	83
A0113	Perform data destruct procedures	83
C0410	Remove or replace printers	83
A0146	Remove or replace wiring	83
A0063	Isolate system malfunctions to major system components	80
F0603	Connect external power to aircraft	80
F0602	Connect external cooling to aircraft	80
B0285	Isolate malfunctions to keyboards	80
T1207	Perform time compliance technical order (TCTO) inspections	80
A0098	Operationally check printers	80
A0118	Perform general electrostatic discharge (ESD) procedures	80
A0093	Operationally check multiplexers	80
T1204	Initiate or annotate aircraft flight or maintenance records, such as AFTO Forms 781-series	77
B0221	Isolate display equipment malfunctions, such as CRTs	77
B0274	Isolate malfunctions to display equipment, such as CRTs	77
A0142	Remove or replace fan or blower assemblies	77
C0402	Remove or replace multiplexers	77
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	73
C0375	Remove or replace display equipment, such as CRTs	73

## INTEL ENGINEERING AND INSTALLATION (E&I) INDEPENDENT JOB (STG 474) N=13 (1% of TOTAL SAMPLE)

Average Time in Present Job	34 months	
Average TAFMS	128 months	
Predominant Paygrade	E-5	54%
Skill Levels	2E231	8%
	2E251	77%
	2E271	15%
Former AFSCs	2E2X1	31%
	2E3X1	69%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 176	PERCENT MEMBERS PERFORMING
IASKS	AVERAGE NOMBER OF TASKS FERG ORMED 170	The ordina
D0492	Remove or replace cable runs	100
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	100
C0396	Remove or replace modems	100
A0111	Perform bit error rate tests (BERTs)	92
A0093	Operationally check multiplexers	92
A0046	Fabricate support items, cables, or connectors	92
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	92
N1005	Operationally check modems, ASUs, CSUs, or DSUs	92
N1004	Isolate modem, ASU, CSU, or DSU malfunctions	92
E0578	Remove or replace routers	92
C0402	Remove or replace multiplexers	92
B0227	Isolate LAN component malfunctions, such as routers, servers, or hubs	85
B0269	Isolate malfunctions to data lines	85
D0452	Isolate malfunctions to cables	85
D0442	Fabricate or modify cable installations	85
B0295	Isolate malfunctions to multiplexers	85
A0139	Reconfigure equipment racks	85
A0107	Operationally check test equipment	85
A0079	Operationally check cryptographic equipment	85
E0552	Isolate router malfunctions	85
A0031	Configure circuit paths for data lines	85
O1017	Configure multiplexers	85
O1019	Operationally check multiplexers	85
A0127	Perform strapping options on equipment	85
V1237	Coordinate maintenance of equipment with on-base agencies	85
N1013	Remove or replace modems, ASUs, CSUs, or DSUs	85
N1010	Program modems, ASUs, CSUs, or DSUs for system operations	85
C0371	Remove or replace cryptographic equipment	85
L0860	Operationally check KG-194-series equipment	85
A0118	Perform general electrostatic discharge (ESD) procedures	85
A0034	Connect or disconnect power, power panels, or equipment leads	85
B0236	Isolate multiplexer malfunctions	<b>77</b>

### TACTICAL COMM TECHNICIAN INDEPENDENT JOB (STG 445) N=19 (1% of TOTAL SAMPLE)

Average Time in Present Job	40 months	
Average TAFMS	125 months	
Predominant Paygrade	E-5 54%	
Skill Levels	· 2E231	16%
	2E251	47%
	2E271	37%
Former AFSCs	2E2X1	58%
	2E3X1	32%

		PERCENT
		MEMBERS
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 163	PERFORMING
V1202	Conduct on the job training (OIT)	100
X1293 W1288	Conduct on-the-job training (OJT) Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	100
		95
A0116 W1287	Perform equipment power-up or power-down procedures	95
	Set up or tear down shelters Erect tents	95
W1264		95
W1272	Perform camouflage procedures	95
W1274	Perform chemical warfare agent decontamination procedures	89
W1282	Prepare equipment for deployments	89
T1210	Review preventive maintenance schedules	89
W1271	Pack or palletize mobility or contingency equipment for shipment or movement	89
V1242	Inventory equipment, tools, parts, or supplies	89
C0371	Remove or replace cryptographic equipment	89
W1265	Inspect mobility bags or kits	84
A0024	Clean facilities	84
A0054	Inspect communications-electronics (C-E) equipment for physical damages	84
W1277	Perform pallet buildup activities	84
W1262	Don or doff chemical warfare personal protective clothing	84
A0079	Operationally check cryptographic equipment	84
W1273	Perform camp security	84
B0267	Isolate malfunctions to cryptographic equipment	79
A0063	Isolate system malfunctions to major system components	
X1305	Maintain training records or files	79 70
X1294	Counsel trainees on training progress	79 70
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	79 70
B0354	Perform PMIs on tactical switchboards	79 70
A0034	Connect or disconnect power, power panels, or equipment leads	79
A0057	Inspect mobilizers for corrosion	79
P1064	Load variables using KYK-13s	79
A0112	Perform corrosion control procedures on equipment or supplies	79
B0247	Isolate tactical switchboard malfunctions	<b>79</b>
D0483	Perform inspections of cables, cable troughs, or connectors, other than for corrosion	79

### TACTICAL SWITCH MAINTENANCE INDEPENDENT JOB (STG 348) N=10 (1% of TOTAL SAMPLE)

Average Time in Present Job	44 months		
Average TAFMS	82 months		
Predominant Paygrade	E-5 70%		
Skill Levels	2E231	20%	
	2E251	60%	
	2E271	20%	
Former AFSCs	2E2X1	80%	
	2E3X1	10%	

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 173	PERCENT MEMBERS PERFORMING
D0511	Remove or replace handsets	100
D0520	Remove or replace twisted-pair cables	100
D0514	Remove or replace jumpers	100
A0116	Perform equipment power-up or power-down procedures	90
P1064	Load variables using KYK-13s	90
D0512	Remove or replace headsets	90
D0452	Isolate malfunctions to cables	90
A0097	Operationally check power supplies	90
D0439	Connect or disconnect inside cables to or from connecting blocks or junction boxes	80
X1293	Conduct on-the-job training (OJT)	80
A0046	Fabricate support items, cables, or connectors	80
A0085	Operationally check electronic line circuits	80
W1287	Set up or tear down shelters	80
W1264	Erect tents	80
A0054	Inspect communications-electronics (C-E) equipment for physical damages	80
A0077	Operationally check call processing circuits	80
D0479	Operationally check singleline telephones	80
A0080	Operationally check dial circuits	80
B0284	Isolate malfunctions to junction boxes	80
A0034	Connect or disconnect power, power panels, or equipment leads	80
W1288	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	80
D0480	Perform cable operational tests	80
C0361	Remove or replace batteries	80
D0477	Operationally check headsets	80
A0160	Test circuits for grounds, opens, or shorts	80
A0024	Clean facilities	80
D0516	Remove or replace singleline telephones	80
D0476	Operationally check handsets	80
D0465	Isolate malfunctions to singleline telephones	80
D0536	Terminate cables by soldering	80
D0533	Terminate cables with punch-down devices	80
A0087	Operationally check keyboards	80
D0438	Connect or disconnect fiber optic cables to or from interface equipment	70
<b>B</b> 0247	Isolate tactical switchboard malfunctions	70
C0422	Remove or replace tactical switchboard components	70

### COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC (CNSC) INDEPENDENT JOB (STG 338) N=365 (22% of TOTAL SAMPLE)

Average Time in Present Job	56 months	
Average TAFMS	82 months	
Predominant Paygrades	E-6	32%
	E-5	30%
Skill Levels	2E231	20%
	2E251	60%
	2E271	20%
Former AFSCs	2E2X1	58%
	2E3X1	30%

		PERCENT MEMBERS
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 321	PERFORMING
A0116	Perform equipment power-up or power-down procedures	89
V1242	Inventory equipment, tools, parts, or supplies	88
A0054	Inspect communications-electronics (C-E) equipment for physical damages	88
X1293	Conduct on-the-job training (OJT)	87
A0118	Perform general electrostatic discharge (ESD) procedures	86
A0079	Operationally check cryptographic equipment	85
D0452	Isolate malfunctions to cables	82
A0053	Inspect cables for corrosion	82
A0024	Clean facilities	81
A0063	Isolate system malfunctions to major system components	81
A0046	Fabricate support items, cables, or connectors	79
V1239	Evaluate serviceability of equipment, tools, parts, or supplies	77
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies	77
A0098	Operationally check printers	77
C0371	Remove or replace cryptographic equipment	77
A0146	Remove or replace wiring	76
A0112	Perform corrosion control procedures on equipment or supplies	76
C0390	Remove or replace keyboards	76
C0410	Remove or replace printers	76
X1305	Maintain training records or files	75
V1241	Initiate requisitions for equipment, tools, parts, or supplies	75
C0409	Remove or replace power supplies	75
C0386	Remove or replace fuses	75
V1243	Issue or log turn-ins of equipment, tools, parts, or supplies	74
A0127	Perform strapping options on equipment	74
X1294	Counsel trainees on training progress	73
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	73
B0267	Isolate malfunctions to cryptographic equipment	73
A0034	Connect or disconnect power, power panels, or equipment leads	73
A0087	Operationally check keyboards	73
V1240	Identify and report equipment or supply problems	72

### STRATCOM MAINTENANCE TECHNICIAN INDEPENDENT JOB (STG 412) N=18 (1% of TOTAL SAMPLE)

Average Time in Present Job	45 months		
Average TAFMS	71 months		
Predominant Paygrade	E-4 50%		
Skill Levels	2E231	33%	
	2E251	61%	
	2E271	6%	
Former AFSCs	2E2X1	78%	
	2E3X1	11%	

		PERCENT MEMBERS
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 232	PERFORMING
40004	on a new	100
A0024	Clean facilities	100
D0433	Bench check headsets	100
D0432	Bench check handsets	100
D0448	Isolate handset malfunctions	100
D0449	Isolate headset malfunctions	100
D0447	Isolate ESA malfunctions	100
D0511	Remove or replace handsets	100
D0512	Remove or replace headsets	94
F0623	Isolate launch control facility (LCF) or LF telephone malfunctions	94
F0662	Operationally check LCF or LF telephones	94 94
D0476	Operationally check handsets	94 94
D0477	Operationally check headsets	94 94
D0496	Remove or replace ESAs	•
B0322	Perform PMIs on blowers or cooling fans	94
D0482	Perform ESA continuity checks	94
C0386	Remove or replace fuses	94
A0020	Bench check power supplies	94
C0409	Remove or replace power supplies	94
A0142	Remove or replace fan or blower assemblies	94
F0596	Bench check summary fault units (SFUs)	94
F0595	Bench check red DC patches	94
A0146	Remove or replace wiring	94
F0714	Remove or replace SFUs	94
F0712	Remove or replace red DC patches	94
D0462	Isolate malfunctions to headsets	89
<b>D</b> 0460	Isolate malfunctions to handsets	89
B0301	Isolate malfunctions to power supplies	89
D0445	Inspect ESAs for corrosion	89
F0592	Bench check jackboxes, other than alarm jackboxes	89
C0396	Remove or replace modems	89
F0665	Operationally check red DC patches	89
F0673	Penetrate or depart WS-133A gates or launch support buildings (LSBs)	83
A0097	Operationally check power supplies	83
A0054	Inspect communications-electronics (C-E) equipment for physical damages	83
A0160	Test circuits for grounds, opens, or shorts	83

### CRYPTO MAINTENANCE TECHNICIAN INDEPENDENT JOB (STG 249) N=58 (4% of TOTAL SAMPLE)

Average Time in Present Job	29 months		
Average TAFMS	67 months		
Predominant Paygrade	E-4 48%		
Skill Levels	2E231	36%	
•	2E251	48%	
	2E271	16%	
Former AFSCs	2E2X1	31%	
	2E3X1	67%	

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 151	PERCENT MEMBERS PERFORMING
A0079	Operationally check cryptographic equipment	98
L0853	Operationally check KG-84-series equipment	93
L0808	Isolate KG-84-series malfunctions	91
L0938	Remove or replace KG-84-series equipment	91
B0218	Isolate cryptographic equipment malfunctions	88
P1064	Load variables using KYK-13s	88
B0267	Isolate malfunctions to cryptographic equipment	84
A0127	Perform strapping options on equipment	84
A0011	Bench check cryptographic equipment	83
L0869	Operationally check KIV-7-series equipment	83
S1188	Load cryptographic variables	81
L0824	Isolate KIV-7-series malfunctions	81
P1059	Load variables using KOI-18s	78
P1079	Operationally check KYK-13 equipment	78
P1057	Load variables using CYZ-10s	76
L0837	Load variables to KG-type cryptographic equipment	76
C0371	Remove or replace cryptographic equipment	76
X1293	Conduct on-the-job training (OJT)	72
V1242	Inventory equipment, tools, parts, or supplies	72
A0118	Perform general electrostatic discharge (ESD) procedures	72
L0954	Remove or replace KIV-7-series equipment	72
A0024	Clean facilities	71
A0049	Inspect batteries for corrosion	71
P1053	Isolate KYK-13 malfunctions	71

## SECURE TELEPHONE SWITCH TECHNICIAN INDEPENDENT JOB (STG 387) N=10 (1% of TOTAL SAMPLE)

Average Time in Present Job	101 months	
Average TAFMS	155 months	
Predominant Paygrade	E-5 40%	
Skill Levels	2E251	30%
	2E271	70%
Former AFSCs	2E2X1	0%
	2E3X1	90%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 106	PERCENT MEMBERS PERFORMING
		100
A0079	Operationally check cryptographic equipment	100
L0853	Operationally check KG-84-series equipment	100
L0808	Isolate KG-84-series malfunctions	100
L0895	Perform PMIs on KG-84-series equipment	100
L0938	Remove or replace KG-84-series equipment	100
A0011	Bench check cryptographic equipment	100
J0777	Perform loopback tests or self-tests on AN/UGC-144s	90
J0774	Configure AN/UGC-144s for use with KG-84A/Cs	90
J0776	Operationally check AN/UGC-144 equipment	90
J0775	Isolate AN/UGC-144 malfunctions	90
C0371	Remove or replace cryptographic equipment	90
J0780	Remove or replace AN/UGC-144s	90
W1277	Perform pallet buildup activities	90
W1282	Prepare equipment for deployments	90
J0773	Configure AN/UGC-144s for Mode I or Mode II operation	80
B0218	Isolate cryptographic equipment malfunctions	- 80
S1188	Load cryptographic variables	80
J0778	Perform PMIs on AN/UGC-144s	80
W1272	Perform camouflage procedures	80
P1079	Operationally check KYK-13 equipment	80
C0410	Remove or replace printers	80
B0267	Isolate malfunctions to cryptographic equipment	70
P1064	Load variables using KYK-13s	. 70
M0997	Remove or replace KY-68/78s	70
M0969	Isolate KY-68/78 malfunctions	70
J0779	Remove or replace AN/UGC-144 batteries	70
P1059	Load variables using KOI-18s	70
W1287	Set up or tear down shelters	70
A0127	Perform strapping options on equipment	70
W1264	Erect tents	70
R1140	Disconnect signal cables	70
R1157	Install printers	70

TABLE 19

# AVERAGE PERCENT TIME SPENT ON DUTIES BY 2E2X1 CLUSTERS AND JOBS

DUTIES	MGMT CLUSTER (N=270) (STG 69)	GEN COMP NETWORK & PERI EQUIP CLUSTER (N=319) (STG 109)	JSS IJ (N=48) (STG 243)	COMPUTER SWITCH MAINT IJ (N=16) (STG 309)
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC	6	. 21	34	43
MAINTENANCE ACTIVITIES  B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE	2	13	26	23
MAINTENANCE INSPECTION (PMI) ACTIVITIES C REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRAPTOCHAPITIC FOLIMMENT OF COMPONENTS	1	<b>9</b> .	11	6
D MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	yaang (	6	'n	6
	1	25	ю	2
	*	*		*
MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL	0 (	* (	0 +	* 1
H MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) FOTIPMENT	>	<b>&gt;</b>	*	*
I MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS	0	0	0	0
IELEI YPEWKI IEK (FRCI) EQUIPMEN I I MAINTAINING ANTIGC-144 COMMUNICATIONS TERMINALS	*	*	0	0
K MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	0	0	*	0
	<b>-</b>	7	<b></b>	4
M MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT N MAINTAINING MODEM ANALOG SERVICE LINIT (ASIT) CHANNEL SERVICE LINIT (CSIT)	* *	*	* *	
		•		>
O MAINTAINING MULTIPLEXERS	*	*		1
	*	<b>-</b>	_	m ·
Q MAINTAINING SECURE DIGITAL SWITCHES	* c	* ‹		* <del>-</del>
K FENTORMING ENGINEERING AND INSTALLATION ACTIVITIES C DEDECORANG ORDERATOR ACTIVITIES	7 -	o c	n <del>-</del>	<b>→ *</b>
	. •	7 -		*
U PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	6	. 2	1 7	-
ACTIVITIES				
	5	2	2	*
	5	2	*	-
PERFORMING TRAINING ACTIVITIES	15	4	က	*
Y PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES  * Indicates lass than 10.	43	'n	2	*
. Indicates less than 1 /0				

indicates less than 1% Columns may not add up to 100 due to rounding

TABLE 19 (CONTINUED)

# AVERAGE PERCENT TIME SPENT ON DUTIES BY 2E2X1 CLUSTERS AND JOBS

COMPUTER   INTEL TACTICAL MAINT   E&1 COMM TECH		AIRCRAFT	AFT			TACTICAL	
Ch=30  (N=19)   (N=		COMPU MAII IJ	)TER NT	INTEL E&I IJ	TACTICAL COMM TECH IJ	SWITCH MAINT IJ	CNSC
TICHING, AND         22         25         20         25           TION, AND PREVENTIVE         19         13         14         14           IETWORK, SWITCHING, AND         11         4         7         7           EQUIPMENT         1         4         7         7           EREAL EQUIPMENT         1         4         1         2           ATCOM) EQUIPMENT         14         4         1         2           ATCOM, EQUIPMENT         14         0         8         1           INAL EQUIPMENT         1         4         8         22           INAL EQUIPMENT         1         0         8         0         8           COMMUNICATIONS         0         8         0         8         3         3           SOMMUNICATIONS         0         8         0         8         3         3           INTERS         0         8         0         8         0         8           INTERS         1         4         8         1         1           MENT         2         4         8         1         1           ATTITES         3         4         8	S	(N=3) (N=3)	(0) 402)	(N=13) (STG 474)	(N=19) (STG 445)	(N=10) (STG 348)	(N=365) (STG 338)
TION, AND PREVENTIVE         19         13         14         14           JETWORK, SWITCHING, AND         11         4         7         7           GOUPMENT         3         11         8         22           EQUIPMENT         14         0         *         1           HEAL EQUIPMENT         4         1         2           INAL EQUIPMENT         6         *         0         *           FRIC TELETYPEWRITER         0         *         0         *         *           COMMUNICATIONS         0         *         0         *         *         *           COMMUNICATIONS         0         *         0         *	PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, ANI			25	20	25	20
ETWORK, SWITCHING, AND         11         4         7         7           EQUIPMENT         1         4         1         2           TERAL EQUIPMENT         14         0         **         1           ATCOM) EQUIPMENT         *         0         **         1           IINAL EQUIPMENT         *         0         **         *           COMMUNICATIONS         0         *         0         **           MINALS         0         *         0         **           MINALS         0         *         0         **           CERS         0         *         0         **           MINALS         0         *         0         **           IC EQUIPMENT         *         0         *         3           INT         0         *         *         1           INT         0         *         *         *           INT         0         *         *         *           INT         *         *         *         *           INT         *         *         *         *           MENT         *         *         * <td>PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PR</td> <td></td> <td></td> <td>13</td> <td>14</td> <td>14</td> <td>14</td>	PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PR			13	14	14	14
EQUIPMENT         3         11         8         22           HERAL EQUIPMENT         1         4         1         2           ATCOM) EQUIPMENT         *         0         *         1           FFIC TELETYPEWRITER         0         0         *         1           FFIC TELETYPEWRITER         0         *         0         *           COMMUNICATIONS         0         *         0         *           CHANNEL SERVICE UNIT         0         *         *         2           CHANNEL SERVICE UNIT         0         *         *         *           CTIVITIES         3         7         1           CHANNEL SERVICE UNIT         0         *         *         *           CHANNEL SERVICE UNIT         0         *         *         *	٠,٠	TCHING, AND		4	7	7	9
HERAL EQUIPMENT  1	MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	3		11	∞	22	6
ATICOM) EQUIPMENT  INAL EQUIPMENT  FICT TELETYPEWRITER  COMMUNICATIONS  O  **  **  **  **  **  **  **  **  **	MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIP			4 (	<b></b> - 1	7 -	vo (
FFIC TELETYPEWRITER 0 0 0 **  COMMUNICATIONS 0 **  MINALS  MINALS  WINALS  ERS  IIC EQUIPMENT  U), CHANNEL SERVICE UNIT  U), CHANNEL SERVICE UNIT  O	MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUI MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EOUIPA			<b>-</b> •	* *	<b>*</b>	7 *
COMMUNICATIONS         *         0         *         *           MINALS         0         *         0         *           ERS         0         *         0         *           IIC EQUIPMENT         *         6         5         3           INT         0         *         2         2           INT         0         *         1         1           U), CHANNEL SERVICE UNIT         0         *         *         *           U), CHANNEL SERVICE UNIT         0         6         4         2           MENT         0         6         4         2           MENT         0         6         4         2           CTIVITIES         3         7         3         4           CTIVITIES         7         1         6         *           CHIVITIES         4         3         3         3           CTIVITIES         3         1         5         2           ATTIES         6         7         1         1           CTIVITIES         6         7         7         1	MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYI	EWRITER 0		0	0	*	*
ERS       0       0       1				*	0	*	*
ERS  ERS  IC EQUIPMENT  IC EQUIPMENT  O), CHANNEL SERVICE UNIT  O), CHANNEL SERVICE UNIT  O), CHANNEL SERVICE UNIT  O)  A  MENT  CTIVITIES  CTI	TELETYPEWRITER (FRCT) EQUIPMENT			•	•	•	÷
IIC EQUIPMENT       *       6       5       3         INT       0       *       2       2         INT       0       4       *       1         MENT       2       5       *       *         MENT       0       6       4       2         CTIVITIES       3       7       3       4         CTIVITIES       7       1       6       *         CTIVITIES       3       3       3       *         CTIVITIES       4       3       3       2         CTIVITIES       6       7       1       6         CTIVITIES       6       7       1       5       2	MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS MAINTAINING AN/UYK-83A/85A TACTICAL COMPLITERS			> *	- C	<b>→</b> *	<b>: +</b> ×
U), CHANNEL SERVICE UNIT 0	MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMEN	* L		9	Ś	<u>د</u>	4
U), CHANNEL SERVICE UNIT 0 4 * 1  U), CHANNEL SERVICE UNIT 0 4 * 1   MENT  CTIVITIES  CTIVITIES  CHINICAL ORDER (TO) SYSTEM 2 3 3 3 4  CTIVITIES  CTIVITIE	MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	0		*	2	2	
MENT       2       5       *	MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL			4	*	_	
PMENT  ** 0  ** 0  ** * * * * * * * * * * *	(CSC), AND DATA SERVICE ON I (DSC) EQUI MENT MAINTAINING MULTIPLEXERS	2		2	*	*	1
CTIVITIES       *       *       *       *         VITIES       2       1       2       1         CHNICAL ORDER (TO) SYSTEM       2       3       3       *         ACTIVITIES       4       3       3       2         VITIES       2       *       10       6         ACTIVITIES       5       2       *         ACTIVITIES       6       6       7       1	MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	0		9	4	2	٣
VITIES       3       4         VITIES       7       1       2       1         CHNICAL ORDER (TO) SYSTEM       2       3       3       *         ACTIVITIES       4       3       3       2         VITIES       3       1       6       6         ACTIVITIES       6       6       7       1	MAINTAINING SECURE DIGITAL SWITCHES	*		0	*	*	*
VITIES  ACTIVITIES  ACTIVITIES	PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	m ·		7	က	4	4
ACTIVITIES  ACTIVI	PERFORMING OPERATOR ACTIVITIES	2 -		<u></u> ,	7	<del></del>	7
ACTIVITIES  ACTIVI	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES  PEPPOPMING GENEPAL ADMINISTRATIVE AND TECHNICAL ORD			- 6	9 "	* *	m n
ACTIVITIES 4 3 3 2 2	ACTIVITIES			)	n		ŋ
VITIES 2 * 10 6 3 1 5 2 ACTIVITIES 6 6 7 1	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4		ĸ	3	2	က
ACTIVITIES 6 6 7 1	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2		* •	10	9	<b>с</b>
	PERFORMING TRAINING ACTIVITIES PERFORMING MANAGEMENT AND STIPERVISORY ACTIVITIES	<i>*</i>		v	v L	7 -	4 0
	* Indicates less than 1%			>	•	•	`

TABLE 19 (CONTINUED)

# AVERAGE PERCENT TIME SPENT ON DUTIES BY 2E2X1 CLUSTERS AND JOBS

	STRATCOM MAINT TECH IJ (N=18)	CRYPTO MAINT TECH IJ (N=58)	SECURE TELE SWITCH TECH II (N=10)
DUTIES	(STG 412)	(STG 249)	(STG 387)
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	25	25	22
B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	15	6	7
C. REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC FOLIPMENT OR COMPONENTS	<b>∞</b>	4	9
	18	7	4
	_	4	2
F MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	17	* 1	<b></b> (
G MAINTAINING AN/UGC: 74 COMMUNICATIONS TERMINAL EQUIPMENT	• *		<b>-</b>
	*	0	00
EQUIPMENT	¥	*	٥
J MAINTAINING AN/TOK-144 COMMUNICATIONS TERMINALS V MAINTAINING AN/TIXE 83 4/854 TACTICAT COMPITTERS	• *	÷ •	o c
L MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	7	13	· =
	*	3	4
	*	3	
DATA SERVICE UNIT (DSU) EQUIPMENT	*	_	c
P MAINTAINING CRYPTOGRAPHIC ANCILLARY EOUIPMENT	7	. 0	) <i>L</i>
MAINTAINING SECURE DIGITAL SWITCHES	*	*	*
R PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	2	8	9
	-	<del></del>	7
	, 2	7	•
	(	4	- (
V PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES W PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	N *	4 0	7 1
	2	1 74	7
	e.	8	2
* Indicates less than 1%			
Columns may not add up to 100 due to rounding			

TABLE 20

# SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1998 SURVEYS

	1000 CIIDVEV	
	ELECTRONIC COMPUTER AND	1998 SURVEY
PRESENT SURVEY	SWITCHING SYSTEMS	SECURE COMMUNICATIONS SYSTEMS
(N=1,636)	(N=1,929)	(N=1,155)
MANAGEMENT CLUSTER	SUPERVISORY CLUSTER	MANAGEMENT/STAFF CLUSTER
- Training Job - Onality Assurance Joh	IECHNICAL IRAINING INSTRUCTOR DOTTAL ITY ASSURANCE II	FORMAL IRAINING IS
- Maintenance Support Job	JOB CONTOLLER IJ	OUALITY CONTROL IJ
- NCOIC Job	*	MANAGEMENT/STAFF CLUSTER
		- Maintenance Support Job
GENERAL COMPUTER, NETWORK, AND PERIPHERAL EQUIPMENT CLUSTER	SMALL COMPUTER AND PERIPHERAL EQUIPMENT MAINTENANCE CLUSTER	SMALL COMPUTER MAINTENANCE IJ
- Infrastructure Technician Job	NETWORK ADMINISTRATION CLUSTER	LAN ADMINISTRATION IJ
	- Network Maintenance Job	· · · · · · · · · · · · · · · · · · ·
JOINT SURVEILLANCE SYSTEM (JSS) IJ	*	*
COMPUTER SWITCH MAINTENANCE IJ	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER	*
AIRCRAFT COMPUTER MAINTAINER IJ	GENERAL COMPUTER AND SWITCHING	*
	MAINTENANCE CLUSTER	
	- Airborne Computer Maintenance Job	
INTEL ENGINEERING AND INSTALLATION	NETWORK ADMINISTRATION CLUSTER	ENGINEERING AND INSTALLATION IJ
(EQL) IJ	- INCEMOIR HISTAINAND JOO	
TACTICAL COMM TECHNICIAN IJ	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER	CRYPTOGRAPHIC AND TELECOMMUNICATIONS CLUSTER
	- Tactical/Mobile Operations Job	- Mobile Tactical Technician Job
TACTICAL SWITCH MAINTENANCE IJ	COMBAT COMMUNICATIONS CLUSTER - Telephone Switch Maintenance Job	*
COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC (CNSC) II	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER	*
STRATCOM MAINTENANCE TECHNICIAN IJ	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER STB ATCOM Technician Ich	*
II INVIOLATIONAL HOMENIA AND CHARLES	* STINATOUNT TECHNICIAN JOU	CBYDTOCD A BITTO AND TELE ECONARION AND AND AND AND AND AND AND AND AND AN
CKYFIO MAIN I ENANCE I ECHNICIAN IJ	•	CLUSTER
		- Secure Communications Technician Job
SECURE TELEPHONE SWITCH TECHNICIAN IJ	*	*
	HEADQUARTERS STAFF NCO IJ	MANAGEMENT/STAFF CLUSTER
		- Supermissing 300

# TABLE 20 (CONTINUED)

# SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1998 SURVEYS

	or the second of	
	1998 SURVEY	
	ELECTRONIC COMPUTER AND SWITCHING	1998 SURVEY
PRESENT SURVEY	SYSTEMS	SECURE COMMUNICATIONS SYSTEMS
(N=1,636)	(N=1,929)	(N=1,155)
*	COMBAT COMMUNICATIONS CLUSTER	*
	- Combat Communications NCOIC Job	
*	GENERAL COMPUTER AND SWITCHING	*
	MAINTENANCE CLUSTER	
	- General Troubleshooting Job	
*	*	SAFETY/SECURITY MANAGEMENT IJ
*	*	MANAGEMENT/STAFF CLUSTER
		- Mobile/Tactical Management Job
*	*	CRYPTOGRAPHIC AND
		TELECOMMUNICATIONS CLUSTER
		- COMSEC Control Job
		- Depot Maintenance Job
		- Red Switch Technician Job
		- Line Supervision Job

<sup>\*</sup> Indicates cluster/job not found in study

TABLE 21

DISTRIBUTION OF AFSC 2E2X1 SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS (PERCENT IN EACH JOB)

	2E231 (N=156)	2E251 (N=833)	2E271 (N=619)	2E291 (N=26)
		=		
MANAGEMENT CLUSTER	2	10	26	85
GENERAL COMPUTER, NETWORK, AND PERIPHERAL EQUIPMENT CLUSTER	17	22	18	0
JOINT SURVEILLANCE SYSTEM INDEPENDENT JOB	ო	4	2	0
COMPUTER SWITCH MAINTENANCE INDEPENDENT JOB	ю	1	-	0
AIRCRAFT COMPUTER MAINTAINER INDEPENDENT JOB	S	2	-	0
INTEL E&I INDEPENDENT JOB	1	-	0	0
TACTICAL COMM TECHNICIAN INDEPENDENT JOB	7	<del></del>	1	0
TACTICAL SWITCH MAINTENANCE INDEPENDENT JOB	-	-	0	0
CNSC INDEPENDENT JOB	13	20	29	4
STRATCOM MAINTENANCE TECHNICIAN INDEPENDENT JOB	4	-	0	0
CRYPTO MAINTENANCE TECHNICIAN INDEPENDENT JOB	14	33	7	0
SECURE TELEPHONE SWITCH TECHNICIAN INDEPENDENT JOB	0	0	1	0
NOT GROUPED	35	33	19	11
Columns may not add up to 100 due to rounding				

TABLE 22

TIME SPENT ON DUTIES BY MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)

DITTES		2E231 (N=156)	2E251 (N=833)	2E271 (N=619)	2E291 (N=26)
⋖	PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND	26	25	20	7
	CRYPTOGRAPHIC MAINTENANCE ACTIVITIES				
B	PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE	15	13	6	_
	MAINTENANCE INSPECTION (PMI) ACTIVITIES				
ပ	REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING,	7	9	જ	-
	AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS				
Ω	MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	6	∞	9	7
Щ	MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	7	6	7	*
Ţ	MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	က	2	1	*
Ŋ	MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	*	*	0
Η	MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER	*	*	*	0
	(TRTT) EQUIPMENT				
_	MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS	*	*	*	0
	TELETYPEWRITER (FRCT) EQUIPMENT				
'n	MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	*	*	*.
¥	MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	0	*	*	0
L	MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	9	4	m	*
Z	MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	2	-	-1	*
Z	MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE	-	1	_	1
	UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT				
0	MAINTAINING MULTIPLEXERS	1	<del></del>		*
Д	MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	4	E	7	*
Ö	MAINTAINING SECURE DIGITAL SWITCHES	*	*	*	0
~	PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	m	ĸ	ĸ	2
S	PERFORMING OPERATOR ACTIVITIES	7	2	-	*
H	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	7	ĸ	ec	4
D	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO)	m	m	5	6
	SYSTEM ACTIVITIES				
>	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	<b>ო</b>	3	ю	Š
≱	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2	m	4	5
×	PERFORMING TRAINING ACTIVITIES	2	4	7	7
Y	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	7	∞	19	26
	Columns may not add up to 100 due to rounding				

Columns may not add up to 100 due to rounding

TABLE 23

# TIME SPENT ON DUTIES BY AD MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)

į		AD 2E231	AD 2E251	AD 2E271	AD 2E291
DUTIES		(N=155)	(coc=N)	(CIS=N)	(61=NI)
<b>∢</b>	PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC	26	22	14	3
<b>m</b>	MAINTENANCE ACTIVITIES  PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE PERFORMING GENERAL STREETS	15	11	9	0
ပ	INSPECTION (FMJ) ACTIVITIES  REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND	7	5	2	*
6	CKYPIOGRAPHIC EQUIPMENT OR COMPONENTS MAINTAINING CABLES WIBING AND ASSOCIATED BOILIDMENT	0	7	(r	2
) m	MAINTAINING CABLES, WINNEY, AND ASSOCIATED EXCITATION MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	, _		o <b>v</b> o	*
ш	MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	က	2	*	0
Ö	MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	*	*	0
Н	MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT)	*	*	*	0
-	EQUIPMENT MAINTAINING AN/IGC.141.SERIFS FIXFD-RECORD COMMINICATIONS TELETYPEWRITER	*	*	0	0
4	(FRCT) FOURMENT			1	•
-	MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	*	*	0
×	MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	*	*	0	0
T	MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	9	4	2	0
Σ	MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	2		*	0
Z	MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND	-	1		-
	DATA SERVICE UNIT (DSU) EQUIPMENT		,		,
0		,	<del></del> -	*	0
д	MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	4	က	-	*
0	MAINTAINING SECURE DIGITAL SWITCHES	*	*	*	0
′ ≃	PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3	3	8	2
S	PERFORMING OPERATOR ACTIVITIES	2	1	-	*
H	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	2	4	4	3
D	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	က	4	∞	6
>	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3	3	4	4
*	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2	3	4	S
×	PERFORMING TRAINING ACTIVITIES	2	9	6	5
>	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	7	11	31	63
	* Indicates less than 1% Columns may not add up to 100 due to rounding				

TABLE 24

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E231 PERSONNEL

		MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 136	(N=155)
A0118	Perform general electrostatic discharge (ESD) procedures	63
A0024	Clean facilities	59
A0079	Operationally check cryptographic equipment	58
A0116	Perform equipment power-up or power-down procedures	57
V1242	Inventory equipment, tools, parts, or supplies	54
A0053	Inspect cables for corrosion	54
D0452	Isolate malfunctions to cables	52
A0034	Connect or disconnect power, power panels, or equipment leads	52
A0063	Isolate system malfunctions to major system components	50
B0218	Isolate cryptographic equipment malfunctions	50
L0853	Operationally check KG-84-series equipment	50
C0371	Remove or replace cryptographic equipment	50
C0409	Remove or replace power supplies	49
L0938	Remove or replace KG-84-series equipment	49
A0001	Analyze equipment outages or malfunction reports	48
A0098	Operationally check printers	48
A0049	Inspect batteries for corrosion	47
A0046	Fabricate support items, cables, or connectors	46
L0808	Isolate KG-84-series malfunctions	46
A0146	Remove or replace wiring	46
A0127	Perform strapping options on equipment	46
A0036	Coordinate equipment or system repairs with technical controllers	45
X1293	Conduct on-the-job training (OJT)	45
C0390	Remove or replace keyboards	45
P1064	Load variables using KYK-13s	45
A0112	Perform corrosion control procedures on equipment or supplies	45
A0054	Inspect communications-electronics (C-E) equipment for physical damages	45
B0267	Isolate malfunctions to cryptographic equipment	44
C0386	Remove or replace fuses	44
C0361	Remove or replace batteries	44
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies	43
C0410	Remove or replace printers	43
A0087	Operationally check keyboards	42
A0011	Bench check cryptographic equipment	41
A0097	Operationally check power supplies	41
A0038	Coordinate systems operation with distant stations to verify equipment operation	40
S1188	Load cryptographic variables	40
B0239	Isolate power supply malfunctions	40
L0837	Load variables to KG-type cryptographic equipment	40
P1059	Load variables using KOI-18s	39
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	39
B0240	Isolate printer malfunctions	39
B0301	Isolate malfunctions to nower supplies	39

## TABLE 25 REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E251 PERSONNEL

		MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 129	(N=565)
771000		<b>£</b> 0
X1293	Conduct on-the-job training (OJT)	58
A0116	Perform equipment power-up or power-down procedures	57
A0118	Perform general electrostatic discharge (ESD) procedures	56 54
V1242	Inventory equipment, tools, parts, or supplies	54 52
A0024	Clean facilities	53
A0079	Operationally check cryptographic equipment	49
A0054	Inspect communications-electronics (C-E) equipment for physical damages	49
D0452	Isolate malfunctions to cables	48
A0046	Fabricate support items, cables, or connectors	47 4 <b>7</b>
A0063	Isolate system malfunctions to major system components	47 4.5
A0001	Analyze equipment outages or malfunction reports	45
X1305	Maintain training records or files	45
A0034	Connect or disconnect power, power panels, or equipment leads	45
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies	44
C0390	Remove or replace keyboards	44
X1294	Counsel trainees on training progress	43
A0098	Operationally check printers	43
C0410	Remove or replace printers	43
V1239	Evaluate serviceability of equipment, tools, parts, or supplies	41
E0563	Operationally check printers	41
A0087	Operationally check keyboards	40
A0089	Operationally check LAN components, such as routers, servers, hubs, network	39
	interface controllers (NICs), or workstations	
Y1318	Counsel subordinates concerning personal matters	39
E0550	Isolate printer malfunctions	38
A0146	Remove or replace wiring	38
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	37
Y1315	Conduct supervisory performance feedback sessions	37
Y1343	Inspect personnel for compliance with military standards	37
B0303	Isolate malfunctions to printers	37
T1213	Update personnel data files in CAMS, GO81, or access generated databases	36
X1295	Determine training requirements	36
P1064	Load variables using KYK-13s	36
X1303	Evaluate progress of trainees	. 35
T1214	Update workcenter training reports in CAMS, GO81, or access generated databases	35
Y1337	Evaluate personnel for compliance with performance standards	34
A0088	Operationally check local area networks (LANs)	34
<b>B</b> 0207	Discriminate between hardware and software failures	34
C0379	Remove or replace electronic circuit cards or printed circuit boards (PCBs)	34
A0038	Coordinate systems operation with distant stations to verify equipment operation	34
E0562	Operationally check NICs	33
Y1356	Write recommendations for awards or decorations	33
E0544	Isolate desiston computer malfunctions	32

# TABLE 26 REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E271 PERSONNEL

		MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 128	(N=315)
Y1356	Write recommendations for awards or decorations	73
Y1355	Write or indorse military performance reports	68
Y1318	Counsel subordinates concerning personal matters	68
Y1320	Determine or establish work assignments or priorities	64
Y1343	Inspect personnel for compliance with military standards	64
Y1344	Interpret policies, directives, or procedures for subordinates	63
Y1337	Evaluate personnel for compliance with performance standards	62
Y1315	Conduct supervisory performance feedback sessions	62
Y1350	Schedule personnel for TDY assignments, leaves, or passes	61
X1293	Conduct on-the-job training (OJT)	60
Y1357	Write replies to inspection reports	59
X1295	Determine training requirements	58
Y1317	Conduct supervisory orientations for newly assigned personnel	58
U1226	Maintain administrative files	57
Y1326	Develop or establish work schedules	57
Y1333	Establish performance standards for subordinates	57
X1294	Counsel trainees on training progress	57
Y1338	Evaluate personnel for promotion, demotion, reclassification, or special awards	56
Y1342	Initiate actions required due to substandard performance of personnel	56
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	55
Y1313	Conduct self-inspections or self-assessments	55
Y1319	Determine or establish logistics requirements, such as personnel, equipment, tools,	55
	parts, supplies, or workspace	
X1290	Brief personnel concerning training programs or matters	54
X1303	Evaluate progress of trainees	54
A0001	Analyze equipment outages or malfunction reports	54 53
Y1310	Assign personnel to work areas or duty positions	53 53
X1305	Maintain training records or files	52 50
Y1340	Implement safety or security programs	50 50
Y1325	Develop or establish work methods or procedures	49
X1297	Develop training programs, plans, or procedures	49 49
Y1352	Write job or position descriptions	49 49
V1242	Inventory equipment, tools, parts, or supplies	48
Y1335	Evaluate inspection report findings or inspection procedures	46 47
U1235	Write minutes of briefings, conferences, or meetings	47
Y1327	Dispatch crews to work projects	47
Y1339	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	46
U1224	Initiate or maintain standby rosters or workcenter pyramid recall rosters	46
V1239	Evaluate serviceability of equipment, tools, parts, or supplies  Review drafts of supplements or changes to directives, such as policy directives,	45
Y1349	instructions, or manuals	
Y1347	Review budget requirements	45
V1316	Conduct safety inspections of equipment or facilities	44

# TABLE 27 REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E291 PERSONNEL

		MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 45	(N=19)
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	84
Y1319	Determine or establish logistics requirements, such as personnel, equipment, tools,	79
	parts, supplies, or workspace	
Y1344	Interpret policies, directives, or procedures for subordinates	79
Y1356	Write recommendations for awards or decorations	79
Y1318	Counsel subordinates concerning personal matters	<b>7</b> 9
Y1349	Review drafts of supplements or changes to directives, such as policy directives, instructions, or manuals	74
Y1337	Evaluate personnel for compliance with performance standards	74
Y1357	Write replies to inspection reports	74
Y1315	Conduct supervisory performance feedback sessions	74
Y1350	Schedule personnel for TDY assignments, leaves, or passes	74
Y1338	Evaluate personnel for promotion, demotion, reclassification, or special awards	68
Y1347	Review budget requirements	68
Y1310	Assign personnel to work areas or duty positions	68
Y1355	Write or indorse military performance reports	63
Y1343	Inspect personnel for compliance with military standards	63
Y1320	Determine or establish work assignments or priorities	63
Y1328	Draft budget requirements	63
Y1352	Write job or position descriptions	. 63
Y1335	Evaluate inspection report findings or inspection procedures	63
Y1331	Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)	58
Y1333	Establish performance standards for subordinates	58
Y1325	Develop or establish work methods or procedures	58
Y1353	Write staff studies, surveys, or routine reports, other than training or inspection reports	53
V1240	Identify and report equipment or supply problems	53
U1226	Maintain administrative files	53
Y1339	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	53
Y1336	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	53
Y1351	Write inspection reports	47
X1290	Brief personnel concerning training programs or matters	47
X1302	Evaluate effectiveness of training programs, plans, or procedures	42
Y1329	Draft host-tenant or interservice agreements	37
Y1330	Draft supplements or changes to directives, such as policy directives, instructions, or manuals	32
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	84
Y1319	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	79
Y1344	Interpret policies, directives, or procedures for subordinates	79
Y1356	Write recommendations for awards or decorations	79
Y1318	Counsel subordinates concerning personal matters	79
Y1349	Review drafts of supplements or changes to directives, such as policy directives, instructions, or manuals	74

TABLE 28

TIME SPENT ON DUTIES BY ANG MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)

<b>DU</b> T	TIES	ANG 2E251 (N=231)	ANG 2E271 (N=259)	ANG 2E291 (N=7)
A	PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	31	26	16
В	PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	17	13	5
C	REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR	8	7	2
D	COMPONENTS MAINTAINING CABLES, WIRING, AND ASSOCIATED	10	9	1
Е	EQUIPMENT MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL	10	9	1
F	EQUIPMENT MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM)	2	1	*
G	EQUIPMENT MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	*	0
Н	MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT		*	0
I	MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	*	*	0
J	MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	1	*
K	MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	*	*	0
L	MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	3	3	*
M	MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	1	1	*
N	MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT	1	. 1	0
O	MAINTAINING MULTIPLEXERS	1	1	*
P	MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	2	3	0
Q	MAINTAINING SECURE DIGITAL SWITCHES	*	*	Ö
	PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3	3	*
S	PERFORMING OPERATOR ACTIVITIES	2	1	*
T	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1	2	6
_	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	1	2	7
V	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	2	6
	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2	4	6
	PERFORMING TRAINING ACTIVITIES	1	4	12
	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES * Indicates less than 1%	1	6	37

# TABLE 29 REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E251 PERSONNEL

		PERCENT
		MEMBERS
TO A CITE C	AVERAGE AVIAMEN OF WAVE DEPENDATED 150	PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 159	(N=231)
C0390	Remove or replace keyboards	71
A0087	Operationally check keyboards	68
A0098	Operationally check printers	67
A0024	Clean facilities	66
A0116	Perform equipment power-up or power-down procedures	65
A0034	Connect or disconnect power, power panels, or equipment leads	65
A0097	Operationally check power supplies	64
C0410	Remove or replace printers	62
E0563	Operationally check printers	61
A0053	Inspect cables for corrosion	61
A0063	Isolate system malfunctions to major system components	60
A0054	Inspect communications-electronics (C-E) equipment for physical damages	60
C0409	Remove or replace power supplies	60
A0118	Perform general electrostatic discharge (ESD) procedures	58
A0001	Analyze equipment outages or malfunction reports	57
C0379	Remove or replace electronic circuit cards or printed circuit boards (PCBs)	56
B0239	Isolate power supply malfunctions	56
A0146	Remove or replace wiring	56
B0285	Isolate malfunctions to keyboards	55
D0452	Isolate malfunctions to cables	54
E0550	Isolate printer malfunctions	53
B0303	Isolate malfunctions to printers	53
A0046	Fabricate support items, cables, or connectors	52
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or	52
	covers	
A0083	Operationally check display equipment	52
E0557	Operationally check desktop computers	51
A0089	Operationally check LAN components, such as routers, servers, hubs, network	51
	interface controllers (NICs), or workstations	
A0015	Bench check keyboards	51
A0099	Operationally check processors	51
B0240	Isolate printer malfunctions	51
E0544	Isolate desktop computer malfunctions	50
A0020	Bench check power supplies	50
V1242	Inventory equipment, tools, parts, or supplies	50
E0571	Remove or replace desktop computer subassemblies	48
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or	48
	workstations	
A0088	Operationally check local area networks (LANs)	48
E0560	Operationally check laptop computers	48
B0301	Isolate malfunctions to power supplies	48
A0142	Remove or replace fan or blower assemblies	48
C0398	Remove or replace mouse devices	48
C0361	Remove or replace batteries	47
A0021	Bench check printers	46

# TABLE 30 REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E271 PERSONNEL

		PERCENT MEMBERS
		PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 208	(N=259)
TABLES	AT EMICE ITOMOBER OF THOSE PER CHARLES	
X1293	Conduct on-the-job training (OJT)	64
A0098	Operationally check printers	64
A0024	Clean facilities	62
C0390	Remove or replace keyboards	56
A0087	Operationally check keyboards	56
A0054	Inspect communications-electronics (C-E) equipment for physical damages	56
A0116	Perform equipment power-up or power-down procedures	56
C0410	Remove or replace printers	56
E0563	Operationally check printers	53
A0063	Isolate system malfunctions to major system components	53
C0409	Remove or replace power supplies	53
A0097	Operationally check power supplies	53
V1242	Inventory equipment, tools, parts, or supplies	51
A0046	Fabricate support items, cables, or connectors	51
A0040 A0146	Remove or replace wiring	51
A0053	Inspect cables for corrosion	51
E0550	Isolate printer malfunctions	49
A0034	Connect or disconnect power, power panels, or equipment leads	49
A0001	Analyze equipment outages or malfunction reports	49
	Perform general electrostatic discharge (ESD) procedures	47
A0118 D0452	Isolate malfunctions to cables	47
	Operationally check LAN components, such as routers, servers, hubs, network	47
A0089	interface controllers (NICs), or workstations	
D0240		47
B0240 X1305	Isolate printer malfunctions  Maintain training records or files	47
		44
A0021	Bench check printers	44
A0079	Operationally check cryptographic equipment	42
A0015	Bench check keyboards Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	42
W1288	Remove or replace electronic circuit cards or printed circuit boards (PCBs)	42
C0379	Remove or replace electronic circuit catus of printed circuit boards (1 625)  Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	42
C0403	Isolate malfunctions to printers	42
B0303	Operationally check local area networks (LANs)	42
A0088 E0544	Isolate desktop computer malfunctions	42
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or	64
<b>D</b> 0280	workstations	
A0160	Test circuits for grounds, opens, or shorts	64
A0020	Bench check power supplies	62
A0020 A0049	Inspect batteries for corrosion	56
	Remove or replace mouse devices	56
C0398		56
E0557	Operationally check desktop computers	56
A0083	Operationally check display equipment	56
E0560	Operationally check laptop computers  Don or doff chemical warfare personal protective clothing	53
W1262		53
X1293	Conduct on-the-job training (OJT)	33

## TABLE 31 REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E291 PERSONNEL

		MEMBERS
		PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 114	(N=7)
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	86
Y1333	Establish performance standards for subordinates	86
Y1337	Evaluate personnel for compliance with performance standards	86
Y1338	Evaluate personnel for promotion, demotion, reclassification, or special awards	71
Y1315	Conduct supervisory performance feedback sessions	71
A0166	Verify authorized modifications of C-E equipment	71
Y1320	Determine or establish work assignments or priorities	71
Y1341	Initiate personnel action requests	71
X1302	Evaluate effectiveness of training programs, plans, or procedures	71
Y1318	Counsel subordinates concerning personal matters	71
V1240	Identify and report equipment or supply problems	71
Y1310	Assign personnel to work areas or duty positions	71
Y1343	Inspect personnel for compliance with military standards	71
X1293	Conduct on-the-job training (OJT)	71
Y1350	Schedule personnel for TDY assignments, leaves, or passes	71
X1295	Determine training requirements	71
Y1356	Write recommendations for awards or decorations	71
Y1339	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	71
X1294	Counsel trainees on training progress	71
Y1357	Write replies to inspection reports	71
X1290	Brief personnel concerning training programs or matters	71
A0071	Monitor circuit operations	71
Y1331	Establish organizational policies, such as operating instructions (OIs) or standard	57
	operating procedures (SOPs)	
A0035	Coordinate dispatches with maintenance control	<b>5</b> 7
X1297	Develop training programs, plans, or procedures	57
X1306	Personalize lesson plans	57
Y1344	Interpret policies, directives, or procedures for subordinates	57
Y1352	Write job or position descriptions	57
T1199	Adjust daily maintenance plans to meet operational commitments	57
Y1327	Dispatch crews to work projects	57
U1224	Initiate or maintain standby rosters or workcenter pyramid recall rosters	57
Y1355	Write or indorse military performance reports	57
V1237	Coordinate maintenance of equipment with on-base agencies	57
V1245	Maintain organizational equipment or supply records	57
U1226	Maintain administrative files	57
V1238	Develop equipment checklists	57
U1225	Initiate requests for temporary duty (TDY) orders	57
Y1326	Develop or establish work schedules	57
A0001	Analyze equipment outages or malfunction reports	57
Y1336	Evaluate job hazards or compliance with Air Force Occupational Safety and Health	57
	(AFOSH) program	
X1299	Develop or procure training materials or aids	57
T1200	Analyze core automated maintenance system (CAMS), GO81, or access generated data	57
V1335	Evaluate inspection report findings or inspection procedures	57

TABLE 32

TIME SPENT ON DUTIES BY AFRC MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)

DUT	TIES	AFRC 2E251 (N=37)	AFRC 2E271 (N=45)
-	<del></del>		
A	PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	27	25
В	PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	12	10
C	REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR	7	6
D	COMPONENTS MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	7	8
E	MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	23	14
F	MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	2	2
G	MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	0
H	MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT	*	*
I	MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	*	*
J	MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	*
	MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	*	*
	MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	1	0
М	MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	*	*
N	MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT	1	. 0
^	(DSU) EQUIPMENT MAINTAINING MULTIPLEXERS	*	0
O P	MAINTAINING MOLTIFLEXERS  MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	1	*
-	MAINTAINING SECURE DIGITAL SWITCHES	*	*
	PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3	2
	PERFORMING OPERATOR ACTIVITIES	2	0
	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1	2
	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	1	2
V	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	3
	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	3	6
	PERFORMING TRAINING ACTIVITIES	2	9
	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES *Indicates less than 1%	3	9
	Columns may not add up to 100 due to rounding		

56

TABLE 33

REPRESENTATIVE TASKS PERFORMED BY AFRC DAFSC 2E251 PERSONNEL

7	ΓASKS	AVERAGE NUMBER OF TASKS PERFORMED 85	PERCENT MEMBERS PERFORMING (N=37)
	TIOILD	THE BUILDING THE STATE OF THE S	
I	E0563	Operationally check printers	70
	E0550	Isolate printer malfunctions	62
	C0390	Remove or replace keyboards	62
	<b>A</b> 0098	Operationally check printers	59
	30560	Operationally check laptop computers	57
	E0562	Operationally check NICs	54
	<b>A</b> 0087	Operationally check keyboards	54
	E0557	Operationally check desktop computers	51
	E0544	Isolate desktop computer malfunctions	51
	E0 <b>547</b>	Isolate laptop computer malfunctions	46
	<b>A</b> 0089	Operationally check LAN components, such as routers, servers, hubs, network	43
1	10007	interface controllers (NICs), or workstations	
1	E0570	Remove and replace NICs	43
	A0088	Operationally check local area networks (LANs)	41
	A0001	Analyze equipment outages or malfunction reports	41
	E0571	Remove or replace desktop computer subassemblies	41
	E0549	Isolate NIC malfunctions	41
	30301	Isolate malfunctions to power supplies	41
	E0576	Remove or replace printer subassemblies	41
	C0398	Remove or replace mouse devices	41
	<b>A</b> 0054	Inspect communications-electronics (C-E) equipment for physical damages	38
	30303	Isolate malfunctions to printers	38
	R1157	Install printers	38
	C0410	Remove or replace printers	38
	40034	Connect or disconnect power, power panels, or equipment leads	35
	E0568	Operationally check servers	35
	40097	Operationally check power supplies	35
	E0 <b>54</b> 6	Isolate hub malfunctions	35
	C0409	Remove or replace power supplies	35
	40024	Clean facilities	32
	30286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or	32
		workstations	
]	E0565	Operationally check routers	32
	<b>A</b> 0116	Perform equipment power-up or power-down procedures	32
	A0083	Operationally check display equipment	32
	30239	Isolate power supply malfunctions	32
	E0559	Operationally check hubs	32
]	E0578	Remove or replace routers	32
I	30285	Isolate malfunctions to keyboards	32
]	R1172	Perform pre-deployment actions	32
	B0240	Isolate printer malfunctions	32
	S1180	Configure workstations	30
	A0053	Inspect cables for corrosion	30
	V1242	Inventory equipment, tools, parts, or supplies	30
1	F0563	Operationally check printers	70

TABLE 34

REPRESENTATIVE TASKS PERFORMED BY AFRC DAFSC 2E271 PERSONNEL

		PERCENT
		<b>MEMBERS</b>
		PERFORMING
<b>TASKS</b>	AVERAGE NUMBER OF TASKS PERFORMED 104	(N=45)
E0563	Operationally check printers	64
A0098	Operationally check printers	64
E0544	Isolate desktop computer malfunctions	62
A0024	Clean facilities	56
X1305	Maintain training records or files	56
E0550	Isolate printer malfunctions	56
X1294	Counsel trainees on training progress	56
A0087	Operationally check keyboards	56
E0557	Operationally check desktop computers	53
E0571	Remove or replace desktop computer subassemblies	53
A0054	Inspect communications-electronics (C-E) equipment for physical damages	53
C0390	Remove or replace keyboards	53
E0560	Operationally check laptop computers	51
W1262	Don or doff chemical warfare personal protective clothing	51
W1288	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	51
C0410	Remove or replace printers	51
X1293	Conduct on-the-job training (OJT)	49
A0116	Perform equipment power-up or power-down procedures	49
B0303	Isolate malfunctions to printers	49
E0547	Isolate laptop computer malfunctions	47
B0285	Isolate malfunctions to keyboards	47
D0533	Terminate cables with punch-down devices	47
A0046	Fabricate support items, cables, or connectors	47
A0088	Operationally check local area networks (LANs)	47
E0549	Isolate NIC malfunctions	44
A0083	Operationally check display equipment	44
A0015	Bench check keyboards	42
X1303	Evaluate progress of trainees	42
X1290	Brief personnel concerning training programs or matters	42
X1290 X1295	Determine training requirements	42
A0089	Operationally check LAN components, such as routers, servers, hubs, network	42
AUUU	interface controllers (NICs), or workstations	
A0097	Operationally check power supplies	42
D0452	Isolate malfunctions to cables	42
A0021	Bench check printers	40
W1265	Inspect mobility bags or kits	40
E0570	Remove and replace NICs	40
Y1356	Write recommendations for awards or decorations	40
E0559	Operationally check hubs	40
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	40
	Counsel subordinates concerning personal matters	40
Y1318	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or	38
B0286	workstations	50
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies	38
V1240 E0563	Operationally check printers	64

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

		1-48 MONTHS'
		TAFMS
DUT	<u>IES</u>	(N=257)
A	PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	26
В	PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	15
С	REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS	7
D	MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	9
E	MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	9
F	MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	3
G	MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*
H	MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT	*
I	MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	*
J	MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*
K	MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	*
L	MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	5
M	MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	1
N	MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU),	1
14	AND DATA SERVICE UNIT (DSU) EQUIPMENT	
O	MAINTAINING MULTIPLEXERS	1
P	MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	3
Q	MAINTAINING SECURE DIGITAL SWITCHES	*
Ř	PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3
S	PERFORMING OPERATOR ACTIVITIES	2
Ť	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	2
Ū	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	3
	ACTIVITIES	
V	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3
W	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2
X	PERFORMING TRAINING ACTIVITIES	2
Y	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	2
	* Indicates less than 1%	
	Columns may not add up to 100 due to rounding	

## REPRESENTATIVE TASKS PERFORMED BY AFSC 2E2X1 FIRST-ENLISTMENT PERSONNEL (1–48 MONTHS' TAFMS)

		PERCENT MEMBERS
		PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 127	(N=257)
A0118	Perform general electrostatic discharge (ESD) procedures	61
A0024	Clean facilities	58
A0116	Perform equipment power-up or power-down procedures	58
A0079	Operationally check cryptographic equipment	53
A0053	Inspect cables for corrosion	53
A0034	Connect or disconnect power, power panels, or equipment leads	52
C0390	Remove or replace keyboards	51
D0452	Isolate malfunctions to cables	51
V1242	Inventory equipment, tools, parts, or supplies	, 50
A0098	Operationally check printers	50
A0063	Isolate system malfunctions to major system components	49
C0409	Remove or replace power supplies	49
A0001	Analyze equipment outages or malfunction reports	47
C0410	Remove or replace printers	47
A0046	Fabricate support items, cables, or connectors	46
A0087	Operationally check keyboards	46
C0371	Remove or replace cryptographic equipment	46
A0146	Remove or replace wiring	45
L0853	Operationally check KG-84-series equipment	44
A0097	Operationally check power supplies	44
A0054	Inspect communications-electronics (C-E) equipment for physical damages	44
X1293	Conduct on-the-job training (OJT)	43
A0049	Inspect batteries for corrosion	43
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies	42
B0218	Isolate cryptographic equipment malfunctions	42
L0938	Remove or replace KG-84-series equipment	42
B0301	Isolate malfunctions to power supplies	41
L0808	Isolate KG-84-series malfunctions	41
A0142	Remove or replace fan or blower assemblies	41
A0089	Operationally check LAN components, such as routers, servers, hubs, network	40
	interface controllers (NICs), or workstations	
A0127	Perform strapping options on equipment	40
C0386	Remove or replace fuses	40
A0036	Coordinate equipment or system repairs with technical controllers	39
E0563	Operationally check printers	39
B0267	Isolate malfunctions to cryptographic equipment	39
B0240	Isolate printer malfunctions	39
B0303	Isolate malfunctions to printers	39
P1064	Load variables using KYK-13s	38
C0379	Remove or replace electronic circuit cards or printed circuit boards (PCBs)	37
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or	37
40064	covers	37
A0064	Isolate system malfunctions to transmission lines	37 37
AIRTI	Bench check ctypioutablic edilibileni	ונ

TABLE 37

### TEST EQUIPMENT USED OR OPERATED BY 20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 2E2X1 PERSONNEL (PERCENT USING OR OPERATING)

TEST EQUIPMENT	(N=257)
Multimeters	62
Digital Voltmeters	56
Cable Testers	52
Oscilloscopes, Digital	51
Oscilloscopes, Analog	37
Loop Back Plugs	32
Fiber Optic Test Sets	30
Torque Wrenches	30
Laptop Computers	29
Network Analyzers	23

### TABLE 38

### CRYPTOGRAPHIC EQUIPMENT USED OR MAINTAINED BY 20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 2E2X1 PERSONNEL (PERCENT USING OR MAINTAINING)

CRYPTOGRAPHIC EQUIPMENT	(N=257)
KG-84 series	59
KOI-18s	43
KG-94 series	42
KYK-13s	41
KIV-7 series	35
KG-194 series	33
CYZ-10s	27
KY-58	21
KYK-15s	20

### ANCILLARY EQUIPMENT USED OR MAINTAINED BY 20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 2E2X1 PERSONNEL (PERCENT USING OR MAINTAINING)

ANCILLARY EQUIPMENT	(N=257)
STU III Telephones	44
Power Supplies	37
Modems, Digital	29
Modems, Fiber Optic	29
Routers	27
Switches, Ethernet	25
Network Interface Controllers (NICs)	24
Secure Telephone Equipment (STE)	24
Hubs	23

TABLE 40

AFSC 2E2X1 TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS

		L	מתית נית נית יתית מתית	מתומי יות	
			FERCENT MEMBI	IEMBERS MING	
			1-24	1-48	_
		ING	MOS	MOS	TSK
TASKS		EMP	TAFMS	TAFMS	DIF
A0063	Isolate system malfunctions to major system components	6.01	40	49	6.16
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers	5.80	24	40	6.23
	(NICs), or workstations				
A0079	Operationally check cryptographic equipment	2.67	52	53	4.53
A0088	Operationally check local area networks (LANs)	5.66	24	33	5.40
B0218	Isolate cryptographic equipment malfunctions	5.42	32	42	6.13
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	5.41	16	33	6.72
E0552	Isolate router malfunctions	5.26	20	23	6.72
A0118	Perform general electrostatic discharge (ESD) procedures	5.26	. 99	61	3.66
B0227	Isolate LAN component malfunctions, such as routers, servers, or hubs	5.25	16	26	7.37
B0207	Discriminate between hardware and software failures	5.24	24	32	6.62
A0064	Isolate system malfunctions to transmission lines	5.20	20	37	6.03
E0557	Operationally check desktop computers	5.12	16	24	4.92
B0267	Isolate malfunctions to cryptographic equipment	5.12	24	39	9.00
A0138	Read, interpret, or maintain circuit diagrams	5.12	20	32	6.38
D0452	Isolate maifunctions to cables	4.95	48	51	5.14
E0565	Operationally check routers	4.90	20	26	5.38
A0107	Operationally check test equipment	4.85	20	76	4.58
E0544	Isolate desktop computer malfunctions	4.83	28	28	90.9
A0116	Perform equipment power-up or power-down procedures	4.82	48	58	3.11
A0011	Bench check cryptographic equipment	4.81	40	37	5.03
E0549	Isolate NIC malfunctions	4.75	12	27	5.90
E0569	Operationally check switches	4.74	20	21	5.31
A0111	Perform bit error rate tests (BERTs)	4.74	28	27	5.45
E0560	Operationally check laptop computers	4.70	24	22	4.67
E0568	Operationally check servers	4.68	12	15	5.31
L0837	Load variables to KG-type cryptographic equipment	4.67	28	32	4.27

TE MEAN = 1.72; S.D. = 1.22; HIGH = 2.94

TABLE 41

AFSC 2E2X1 TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

			DI	PEDCENT MEMBEDS PEDEOBMING	ABED C DEI	PEODMINIC	,,	
			- 1	NCENT MEN	IDENS LE	N. OINMILING		
			1-24	1-48	3-	۶.	7-	
0/10 Y L		TSK	MOS	MOS	SKL	SKL	SKL	TNG
IASKS		nn	CIMITATI	CIVI TO I		1		-
A0157	Solder multilaver boards using microminiature soldering	8.73	0	2	2	_	_	1.10
A0156		8.13	0	3	т	7	8	1.64
A0155	Solder IC components using microministure soldering	8.11	0	т	ю	1	-	1.35
V1329	Draft host-tenant or interservice agreements	7.46	0	0	0	7	13	.91
B0227	Isolate LAN component malfunctions, such as routers, servers, or	7.37	16	26	26	30	23	5.25
	hubs							
S1197	Write program routines	7.22	0	7	7	-	7	98.
Y1328	Draft budget requirements	7.21	0	7	1	6	40	1.24
S1198	Write script files	7.18	0	4	ю	4	5	1.22
Y1331	Establish organizational policies, such as operating instructions (OIs)	7.05	0	m	4	13	40	1.30
	or standard operating procedures (SOPs)							
W1257	Determine cost factors for support agreements	7.03	4		ю	က	11	.57
E0555	Isolate server malfunctions	6.95	œ	16	11	21	19	4.31
W1258	Determine specific source of personnel requirements for deployment	6.92	0	7	-		6	.78
	manning documents							
E0556	Isolate switch malfunctions	6.91	16	19	15	24	21	4.35
W1253	Coordinate deployment of personnel with other MAJCOMs or joint	98.9	4	7	7	7	6	.73
	service commands						!	,
Y1347	Review budget requirements	98.9	4	0		œ	45	1.39
B0251	Isolate malfunctions to error in programming procedure	6.85	0	7	7	9	2	1.76
A0121	Perform network management procedures	6.84	20	16	14	17	20	3.89
A0126	Perform site survey evaluations	6.84	24	15	17	19	.62	2.14
E0548	Isolate network encryption system (NES) malfunctions	6.83	12	13	11	14	11	4.41
B0224	Isolate factory wiring faults	6.83	4	10	12	10	12	2.38
S1187	Interpret computer codes	6.82	16	6	<b>∞</b>	10	6	2.01
Y1355	Write or indorse military performance reports	6.80	0	2	4	32	89	2.06
W1256	Coordinate specific source of personnel requirements with appropriate	9.80	0	-			11	.85
	agencies $\frac{\text{agencies}}{\text{agencies}} = \frac{100. \text{ most most}}{100.  most most most most most most most most$							

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

TABLE 42

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

					ATI		7	11
				TSK			4.76	6.03
				ING	EMP*		1.80	3.53
ENT	ERS	MING	$1^{ST}$	ENL	(N=257)		12	12
PERCI	MEMBERS	PERFORMING	$1^{\mathrm{ST}}$	JOB	(N=25)		16	12
					UNIT LEARNING OBJECTIVE	9.2.3. Load firefly key	Task P1058. Load variables using firefly keys	11.2.2. Configure multiplexer for operation  Task O1017. Configure multiplexers
					UNIT	9.2.3.	Task	11.2.2. Task

Mean TE Rating = 1.72 Standard Deviation = 1.22 High TE = 2.94 Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00 \* \*

TABLE 43

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

		ING	1 <sup>ST</sup> JOB	1 <sup>ST</sup> ENL	TSK	
TASKS		EMP*	(N=25)	(N=257)	DIF**	ATI
D0452	Isolate malfunctions to cables	4.95	48	51	5.14	18
A0001	Analyze equipment outages or malfunction reports	4.14	36	47	5.37	12
A0138	Read, interpret, or maintain circuit diagrams	5.12	70	32	6.38	12
L0809	Isolate KG-94 series malfunctions	3.57	28	26	6.16	11
L0854	Operationally check KG-94 series equipment	3.41	28	27	4.52	11

Mean TE Rating = 1.72 Standard Deviation = 1.22 High TE = 2.94
 Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 44

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

			PERCENT 1	PERCENT MEMBERS			
			PERFORMING	RMING			
		I	l <sup>ST</sup>	$1^{ST}$			
		PERF	JOB	ENL	TNG	TSK	
UNIT	UNIT LEARNING OBJECTIVE	CODE	(N=25)	(N=257)	EMP DIF	1	ATI
VII.1.b.	VII.1.b. Using KAM 529 and a fill device, load Firefly key into a TSEC/KG194	PC					
Task	Task P1058. Load variables using firefly keys		16	12	1.80 4.76	4.76	7
,							
VIII.1.c.	VIII.1.c. Using an approved checklist, isolate a fault in the Norstar Switching System within 15 minutes	FC M					
Tasks	B0246. Isolate switchboard malfunctions, other than tactical switchboards		4	2	1.98	6.10	7
	B0310. Isolate malfunctions to switchboards, other than tactical switchboards		12	4	2.27	5.89	7

Mean TE Rating = 1.72 Standard Deviation = 1.22 High TE = 2.94 Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 45

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

ATI	5 13 13
TSK DIF**	1.78 2.81 2.05
1 <sup>ST</sup> ENL (N=257)	31 52 53
1 <sup>ST</sup> JOB (N=25)	32 52 48
TNG EMP*	2.52 3.98 3.16
83	<ul> <li>Clean or lubricate equipment, other than IDFs</li> <li>Connect or disconnect power, power panels, or equipment leads</li> <li>Inspect cables for corrosion</li> </ul>
TASKS	A0027 A0034 A0053

Mean TE Rating = 1.72 Standard Deviation = 1.22 High TE = 2.94 Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 46

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

	MGMT CLUSTER (N=270) (STG 69)	GEN COMP NETWORK & PERI EQUIP CLUSTER (N=319) (STG 109)	JSS IJ (N=48) (STG 243)	COMPUTER SWITCH MAINT IJ (N=16) (STG 309)	AIRCRAFT COMPUTER MAINT IJ (N=30) (STG 402)	INTEL E&I U (N=13) (STG 474)
EXPRESSED JOB INTEREST INTERESTING SO-SO DULL	68	82	59	38	48	92
	20	8	18	13	24	8
	12	10	24	50	28	0
PERCEIVED USE OF TALENTS EXCELLENT TO PERFECT FAIRLY WELL TO VERY WELL NONE TO VERY LITTLE	19	29	6	0	8	31
	60	60	59	63	60	54
	21	12	35	38	32	15
PERCEIVED USE OF TRAINING EXCELLENT TO PERFECT FAIRLY WELL TO VERY WELL NONE TO VERY LITTLE	10	12	12	0	8	15
	51	57	65	75	68	62
	39	32	24	25	24	23
SENSE OF ACCOMPLISHMENT FROM JOB SATISFIED NEUTRAL DISSATISFIED	64 12 24	77 9 14	71 12 18	25 25 50	56 24 20	85 0 15
YES OR PROBABLY YES NO OR PROBABLY NO WILL RETIRE Totals may not equal 100 due to rounding	50	48	35	50	09	62
	9	32	53	50	0	31
	41	20	12	0	0	8

TABLE 46 (CONTINUED)

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

	TACTICAL COMM TECH IJ (N=19) (STG 445)	TACTICAL SWITCH MAINT IJ (N=10) (STG 348)	CNSC IJ (N=365) (STG 338)	STRATCOM MAINT TECH IJ (N=18) (STG 412)	CRYPTO MAINT TECH IJ (N=58) (STG 249)	SECURE TELE SWITCH TECH IJ (N=10) (STG 387)
EXPRESSED JOB INTEREST INTERESTING SO-SO DULL	53 35 12	67 17 17	62 19 18	28 17 56	44 22 44 45	0 100 0
PERCEIVED USE OF TALENTS EXCELLENT TO PERFECT FAIRLY WELL TO VERY WELL NONE TO VERY LITTLE	0 76 24	0 100	13 67 19	11 50 39	14 44 42	0 0 100
PERCEIVED USE OF TRAINING EXCELLENT TO PERFECT FAIRLY WELL TO VERY WELL NONE TO VERY LITTLE	0 82 18	0 83 17	9 62 29	11 39 50	10 56 34	0 0 100
SENSE OF ACCOMPLISHMENT FROM JOB SATISFIED NEUTRAL DISSATISFIED	71 12 18	83 17 0	. 28	28 11 61	52 20 28	0 100 0
REENLISTMENT INTENTIONS YES OR PROBABLY YES NO OR PROBABLY NO WILL RETIRE Totals may not equal 100 due to rounding	<b>88</b> 9 9 .	100 0 0	50 22 29	56 44 0	54 42 4	100

TABLE 47

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 2E2X1 AND COMPARATIVE SAMPLE GROUP (PERCENT MEMBERS RESPONDING)

	1-48 MC TAF	1-48 MONTHS' TAFMS	49-96 M TAI	49-96 MONTHS' TAFMS	97+ MC	97+ MONTHS' TAFMS
	2002	COMP	2002	COMP	2002	COMP
	2E2X1 (N=257)	SAMPLE (N=444)	2E2X1 (N=198)	SAMPLE (N=184)	2E2X1 (N=600)	SAMPLE (N=562)
XPRESSED JOB INTEREST					:	į
INTERESTING	51	62	51	65	71	71
OS-OS	23	19	24	18	15	16
DULL	76	18	25	16	14	12
FRCEIVED USE OF TALENTS		•				
EXCELLENT TO PERFECT	13	∞	11	16	20	19
FAIRLY WELL TO VERY WELL	26	29	55	63	09	64
NONE TO VERY LITTLE	31	25	34	21	21	17
ED CERVED 11SE OF TED A INING						
EXCELLENT TO PERFECT	7	1	10	17	10	15
FAIRLY WELL TO VERY WELL	. 09	19	51	09	55	62
NONE TO VERY LITTLE	33	22	39	22	35	23
FINSE OF ACCOMPLISHMENT FROM TOB						
	52	58	54	62	4	89
NEUTRAL	18	14	21	14	12	12
DISSATISFIED	30	28	25	<b>74</b>	24	20
SEENI ISTMENT INTENTIONS		,				
YES OR PROBABLY YES	42	37	61	29	23	56
NO OR PROBABLY NO	26	63	38	41	6	7
WILL RETIRE	7	-	_	-	38	36

Comparative sample of only Communications-Electronics career ladders surveyed in the last 12 months - AFSCs 2E1X1 and 2E1X2

TABLE 48

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

	AD	ANG	AFRC
•	(N=1055)	(N=499)	(N=82)
EXPRESSED JOB INTEREST INTERESTING	62	84	56
SO-SO	19	10	26
DOLL	19	9	18
PERCEIVED USE OF TALENTS EXCELLENT TO PERFECT	16	. 115	7
FAIRLY WELL TO VERY WELL	58	73	61
NONE TO VERY LITTLE	26	12	32
PERCEIVED USE OF TRAINING			
EXCELLENT TO PERFECT	6	12	7
FAIRLY WELL TO VERY WELL	26	69	09
NONE TO VERY LITTLE	35	18	33
SENSE OF ACCOMPLISHMENT FROM JOB			
SATISFIED	59	75	26
NEUTRAL	15	13	17
DISSATISFIED	76	12	27
Totals may not equal 100 due to rounding			i

TABLE 49

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

·	1-48 MC TAF (N=1	MS	49-96 M TAF (N=	MS	(N=	MS
31 FACTORS LISTED IN ORDER OF APPEARANCE IN SURVEY Scale: 1 = Slight Influence; 2 = Moderate Influence; 3 = Strong Influence	Percent Selecting	Average	Percent Selecting	Average	Percent Selecting	Average
MILITARY LIFESTYLE	52	2.21	57	2.30	50	2.28
PAY AND ALLOWANCES	54	2.25	51	2.40	49	2.33
BONUS OR SPECIAL PAY	62	2.43	47	2.49	21	2.34
RETIREMENT BENEFITS	45	2.51	55	2.50	75	2.69
MILITARY-RELATED EDU & TRNG OPPORTUNITIES	61	2.37	51	2.37	39	2.12
OFF-DUTY EDU OR TRAINING OPPORTUNITIES	57	2.56	51	2.42	37	2.25
MEDICAL/ DENTAL CARE FOR AD MEMBER	54	2.49	50	2.33	47	2.34
MEDICAL/ DENTAL CARE FOR FAMILY MEMBERS	44	2.46	42	2.59	48	2.47
BASE HOUSING	15	1.75	19	2.09	17	1.87
BASE SERVICES	22	1.67	15	2.00	19	1.93
CHILDCARE NEEDS	9	2.00	15	2.33	8	2.20
SPOUSE'S CAREER	8	2.56	11	2.46	10	2.35
CIVILIAN JOB OPPORTUNITIES	20	2.45	15	1.83	9	2.28
EQUAL EMPLOYMENT OPPORTUNITIES	6	2.43	10	2.08	5	2.06
NUMBER OF PCS MOVES	11	2.33	17	2.38	18	2.20
LOCATION OF PRESENT ASSIGNMENT	13	2.29	28	2.35	31	2.23
NUMBER/DURATION OF TDYS OR DEPLOYMENTS	15	2.25	22	2.11	19	2.15
WORK SCHEDULE	28	1.87	22	2.04	25	2.15
ADDITIONAL DUTIES	7	2.00	6	1.71	8	1.72
JOB SECURITY	66	2.67	63	2.71	61	2.56
ENLISTED EVALUATION SYSTEM	1	2.00	7	1.75	6	2.00
PROMOTION OPPORTUNITIES	34	2.27	29	2.40	27	2.34
TRAINING/EXPERIENCE OF UNIT PERSONNEL	14	2.00	14	1.88	13	2.10
UNIT MANNING	5	2.00	6	1.86	5	2.00
UNIT RESOURCES	3	1.67	2	2.67	3	1.90
UNIT READINESS	0	0	2	2.50	2	2.00
RECOGNITION OF EFFORTS	19	1.86	16	1.95	18	1.95
ESPRIT DE CORPS/MORALE	18	2.45	27	2.42	25	2.28
LEADERSHIP OF IMMEDIATE SUPERVISOR	17	2.28	17	2.29	16	2.19
LEADERSHIP AT UNIT LEVEL	14	2.13	12	1.93	14	1.96
SENIOR AIR FORCE LEADERSHIP	7	2.25	3	1.75	8	2.00

### TOP 5 REASONS FOR MEMBERS REENLISTING BY TAFMS GROUP

1-48 MONTHS' TAFMS (N=109)	49-96 MONTHS' TAFMS (N=121)	97+ MONTHS' TAFMS (N=319)
JOB SECURITY	JOB SECURITY	RETIREMENT BENEFITS
BONUS OR SPECIAL PAY	MILITARY LIFESTYLE	JOB SECURITY
MILITARY-RELATED EDUCATION & TRAINING OPPORTUNITIES	RETIREMENT BENEFITS	MILITARY LIFESTYLE
OFF-DUTY EDUCATION OR TRAINING OPPORTUNITIES	OFF-DUTY EDUCATION OR TRAINING OPPORTUNITIES	PAY AND ALLOWANCES
MEDICAL OR DENTAL CARE FOR AD MEMBER	PAY AND ALLOWANCES	MEDICAL OR DENTAL CARE FOR FAMILY MEMBERS

TABLE 50

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

	<u> </u>					
	1-48 MONTHS' TAFMS (N=144)		49-96 MONTHS' TAFMS (N=75)		97+ MONTHS' TAFMS (N=55)	
31 FACTORS LISTED IN ORDER OF APPEARANCE IN SURVEY Scale: 1 = Slight Influence; 2 = Moderate Influence; 3 = Strong Influence	Percent Selecting	Average	Percent Selecting	Average	Percent Selecting	Average
MILITARY LIFESTYLE	53	2.18	59	2.20	53	1.72
PAY AND ALLOWANCES	61	2.36	25	2.33	62	2.32
BONUS OR SPECIAL PAY	16	2.22	40	2.40	40	2.45
RETIREMENT BENEFITS	8	1.45	16	2.08	27	2.27
MILITARY-RELATED EDU & TRNG OPPORTUNITIES	9	2.18	23	2.35	24	2.15
OFF-DUTY EDU OR TRAINING OPPORTUNITIES	17	2.40	27	2.35	16	2.44
MEDICAL/ DENTAL CARE FOR AD MEMBER	8	2.00	17	2.23	29	2.12
MEDICAL/ DENTAL CARE FOR FAMILY MEMBERS	6	1.88	19	2.43	29	2.62
BASE HOUSING	12	1.94	19	2.14	22	2.33
BASE SERVICES	9	1.77	13	2.10	11	1.67
CHILDCARE NEEDS	6	2,44	12	2.56	13	2.57
SPOUSE'S CAREER	9	2.54	12	2.56	27	2.53
CIVILIAN JOB OPPORTUNITIES	41	2.47	51	2.66	53	2.69
EQUAL EMPLOYMENT OPPORTUNITIES	4	2.33	3	3.00	5	1.33
NUMBER OF PCS MOVES	14	2.25	21	2.62	33	2.33
LOCATION OF PRESENT ASSIGNMENT	37	2.37	27	2.40	27	2.53
NUMBER/DURATION OF TDYS OR DEPLOYMENTS	23	2.48	28	2.76	38	2.48
WORK SCHEDULE	18	2.27	20	2.33	13	1.57
ADDITIONAL DUTIES	17	1.92	25	1.95	24	2.23
JOB SECURITY	6	1.67	4	2.00	5	1.00
ENLISTED EVALUATION SYSTEM	15	2.29	27	2.60	24	2.23
PROMOTION OPPORTUNITIES	20	2.10	20	2.20	23	2.44
TRAINING/EXPERIENCE OF UNIT PERSONNEL	26	2.00	24	2.17	25	2.29
UNIT MANNING	26	2.18	28	2.14	29	2.12
UNIT RESOURCES	17	2.33	16	1.58	27	2.00
UNIT READINESS	4	2.33	3	2.00	16	2.22
RECOGNITION OF EFFORTS	46	2.38	48	2.06	40	2.18
ESPRIT DE CORPS/MORALE	36	2.65	39	2.14	25	2.21
LEADERSHIP OF IMMEDIATE SUPERVISOR	22	2.61	25	2.47	22	2.08
LEADERSHIP AT UNIT LEVEL	23	2.24	37	2.50	27	2.53
SENIOR AIR FORCE LEADERSHIP	15	2.50	15	2.27	27	2.07

### TOP 5 REASONS FOR MEMBERS SEPARATING BY TAFMS GROUP

1-48 MONTHS' TAFMS (N=144)	49-96 MONTHS' TAFMS (N=75)	97+ MONTHS' TAFMS (N=55)
PAY AND ALLOWANCES	MILITARY LIFESTYLE	PAY AND ALLOWANCES
MILITARY LIFESTYLE	CIVILIAN JOB OPPORTUNITIES	CIVILIAN JOB OPPORTUNITIES
RECOGNITION OF EFFORTS	RECOGNITION OF EFFORTS	MILITARY LIFESTYLE
CIVILIAN JOB OPPORTUNITIES	BONUS OR SPECIAL PAY	BONUS OR SPECIAL PAY
LOCATION OF PRESENT ASSIGNMENT	ESPRIT DE CORPS/MORALE	RECOGNITION OF EFFORTS