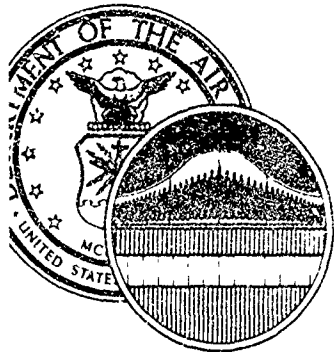


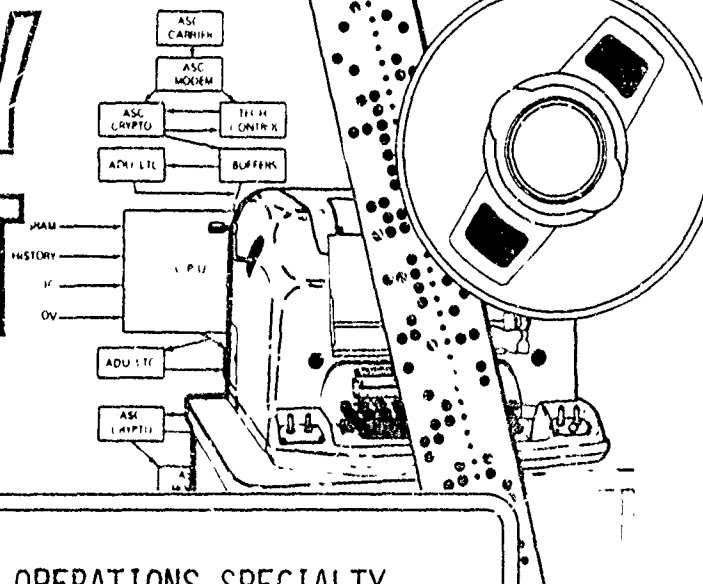
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UNITED STATES AIR FORCE

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OCCUPATIONAL SURVEY REPORT



TELECOMMUNICATIONS OPERATIONS SPECIALTY

(AFS 291X0) AND AUTOMATIC DIGITAL

SWITCHING SPECIALTY (AFS 295X0)

AFPT 90-291-447

NOVEMBER 1982

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

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DISTRIBUTION FOR

AFSC 291X0/295X0 OSR AND SUPPORTING DOCUMENTS

	<u>OSR</u>	<u>JOB INV</u>	<u>ANL EXT</u>	<u>TNG EXT</u>
AFHRL/LRT	1	1	1m	1m/1h
AFHRL/MODS	2	6	1m	1m
AFMEA/MEMD	1	1	1h	1
AFMPC/MPCHS	1	1		
AFMPC/MPCRPO	2			
AFMPC/MPCTAW2	2			
ARMY OCCUPATIONAL SURVEY BRANCH	1	1		
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HQ AFCC/LGMMT	1	1		
HQ AFCC/MPXT	3	3		2
HQ AFISC/DAP	1	1		
HQ ATC/TTQ	2	1		1
HQ ESC/DPTATC	1	1		
HQ ESC/DPTE/DO	2	2		1
HQ PACAF/DPAL	1	1		
HQ PACAF/DPAT	3	3		2
HQ SAC/DPAT	3	3		2
HQ SAC/LGMQ (ATCLO)	1	1		
HQ TAC/DPAT	3	3		2
HQ TAC/DPLATC	1	1		
HQ USAF/XOKC	1	1		
HQ USAF/MPPT	1	1		
HQ USAFE/DPAT	3	3		2
HQ USAFE/DPATC	1	1		
HQ USMC/OMU	1	1		
LMDC/AN	1			
NODAC	1	1		
3480 TCHTG/IT (GOODFELLOW AFB TX)	1	1		
3700 TCHTW/TTGX (SHEPPARD AFB TX)	8	2	2	7
3507 ACS/DPUI	1	1		
DET 3, 1141 USAFSAS/OJT				
APO NY 09084 (ATTN: MSGT MIDLICK)	1	1		
HQ AFRES/DPTIR (ROBINS AFB GA)	1	1		
ANGSC/TET (ANDREWS AFB MD)	1	1		
DCA/B323 WASHINGTON DC	1	1		
DIA/RCM4 WASHINGTON DC	1	1		
DIA/RHRT WASHINGTON DC	1	1		
HQ AFCC/XODN	1	1		
HQ AFCC/SAM (ATTN: CAPT HAMMEL)	1	1		

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PREFACE

This report presents the results of a detailed occupational survey of the Telecommunications Operations (AFS 291X0) and the Automatic Digital Switching (AFS 295X0) specialties. The project was directed by USAF Program Technical Training, Volume II, dated February 1981. Authority for conducting occupational surveys is contained in AFR 35-2. Computer products from which this report was produced are available for use by operations and training officials.

The survey instrument used in this project was developed by Captain Gary Patterson, Inventory Development Specialist. Computer support was provided by Sergeant Raymond Tackett. First Lieutenant Randall C. Agee analyzed the survey data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB Texas 78150.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel, as listed on the distribution page. Additional copies are available upon request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Branch (OMY), Randolph AFB Texas 78150.

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Chief, Occupational Analysis Branch
USAF Occupational Measurement
Center



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SUMMARY OF RESULTS

1. Survey Coverage: Job inventories were administered to 2,642 Telecommunications Operations (AFS 291X0) personnel and 503 Automatic Digital Switching (AFS 295X0) personnel assigned worldwide, representing 41 percent of the 291X0 specialty, and 70 percent of the 295X0 specialty. Eighty-five percent of AFS 291X0 and 92 percent of AFS 295X0 personnel were assigned to AFCC.
2. Analysis of Career Ladder Jobs: Nine clusters of jobs and six independent job types were identified within these two specialties. Nearly every job group performing technical activities contained personnel primarily of one specialty or the other, but not both. Technical jobs performed by AFS 291X0 incumbents involved processing, transmitting, receiving, and distributing message traffic, and operating telephone switchboards. Technical jobs performed by AFS 295X0 incumbents involved programming and operating communications computers, and controlling large volumes of message traffic with automatic routing and switching systems. The only functions performed by job groups where there was some overlap between the specialties, except for some message handling activities, involved supervision, administrative, and security responsibilities. Even in these groups, most members held AFS 291X0.
3. Analysis of Skill and Experience Groups: Apprentices and specialists in the 291X0 specialty performed primarily technical jobs. Members assumed supervisory responsibilities at the 7-skill level and concentrated on administrative and supervisory activities at the superintendent level. The pattern of career progression for AFS 295X0 personnel was similar to that of AFS 291X0, except that AFS 295X0 personnel concentrated more on technically oriented activities at the 7- and 9-skill levels than did AFS 291X0 incumbents. Overlap between jobs of members at the various stages of career progression was primarily one way; some message handling functions characteristic of AFS 291X0 were also performed by AFS 295X0 respondents but, as a general rule, the AFS 291X0 respondents did not operate the communications computers.
4. AFR 39-1 Specialty Descriptions: The AFR 39-1 Specialty Descriptions for both specialties were consistent with the findings of the survey data. The proposed revisions to the descriptions also appeared consistent with the findings, although refinements should be considered for consolidating and reorganizing paragraphs in the AFSC 29110/29130/29150 description.
5. Training: The current Specialty Training Standards (STS) and Plans of Instruction (POI) for entry-level courses were well supported by the survey results. The proposed STS consolidating the functions performed by both specialties was also matched with survey data. The computer printout should be useful in defining training requirements if the two specialties are merged. The consolidated STS is much longer than either current STS and could significantly expand required training.

6. CONUS vs Overseas: Hardly any differences were noted in either tasks performed or background and job satisfaction responses of AFS 29150 personnel assigned in the CONUS and overseas. Differences in tasks performed were found, though, between CONUS and overseas AFS 29170 groups. Part of these differences was a function of different types of AUTODIN equipment located at operational units inside and outside the CONUS. The other major difference was that most programming activities were performed by personnel assigned in the CONUS.

7. Implications: The findings of the study show that, while there is a degree of commonality between these two specialties, the overlap is in only one direction. Given that AFS 295X0 incumbents have already obtained a measure of skill in the activities of AFS 291X0 personnel, it is understandable that cross-utilization occurs in message handling activities. Since there were very few AFS 291X0 personnel in groups operating systems associated with AFS 295X0, the overlap is in one direction only. The absence of cross-utilization in both directions, from an occupational analysis perspective, is an indication that consolidation of these two specialties is not appropriate or is, at best, premature. As new equipment, such as Standard Remote Terminals and Optical Character Readers, is installed, a natural evolution toward more cross-utilization may occur. The consequences of merger and the resultant impacts upon assignments, efficiency of user organizations, and training programs should be examined in detail before such a decision is approved.

OCCUPATIONAL SURVEY REPORT
TELECOMMUNICATIONS OPERATIONS SPECIALTY (AFS 291X0)
AND
AUTOMATIC DIGITAL SWITCHING SPECIALTY (AFS 295X0)

INTRODUCTION

This is a report of an occupational survey of two related Air Force specialties: the Telecommunications Operations Specialty, and the Automatic Digital Switching Specialty, completed by the Occupational Analysis Branch, USAF Occupational Measurement Center, October 1982. The report was requested by the 3700 Technical Training Wing (TTGX), Sheppard Technical Training Center, for occupational survey data to use in revision of the basic resident technical training of AFS 291X0 personnel. Occupational survey data on AFS 295X0 personnel was requested by functional managers at HQ AFCC to examine the feasibility of merging these two specialties. The last survey of AFS 291X0 was published in February 1977, and the last survey of AFS 295X0 was published in December 1974. Since these reports were published, new equipment has been introduced into the field.

Background

The Communications Operations Career Field (AFS 29XXX) is composed of six career ladders. The two specialties included in this study, AFSSs 291X0 and 295X0, share common Chief Enlisted Managers (CEMs) with a third career ladder, the Ground Radio Operators specialty (AFS 293X3). Since the CEMs for AFSSs 291X0 and 295X0 are shared with AFS 293X3, they have been excluded from this study.

The Telecommunications Operations specialty (AFS 291X0) has had only one classification change since it was created 15 May 1951. Originally, the career ladder was named Communications Center specialty. On 31 May 1975, the name was changed to the Telecommunications Operations specialty. The AFSC number has remained unchanged since the specialty was formed.

Members of the Telecommunications Operations specialty are responsible for accepting and processing incoming and outgoing electrical record messages, operating telecommunications and cryptographic systems, and operating telephone switchboards. This activity generally includes ensuring message forms are accurate, recording receipt and transmission times, using encryption equipment and telecommunications equipment, such as teletypewriter, optical character reader, and cathode ray tube devices, and filing and maintaining records of communications traffic. Roughly 85 percent of personnel holding AFSC 291X0 are assigned to AFCC. Most of the remainder are distributed across six other major commands.

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Entry into the Telecommunications Operations specialty occurs primarily by graduation from Technical Training Course 3ABR29130 taught at Sheppard Technical Training Center. This course is nine weeks in length and produces approximately 1,050 graduates each year. Fifty-three percent of the AFS 291X0 respondents in this study entered the specialty by completing resident technical training. The remaining 47 percent entered AFS 291X0 in a variety of ways, such as retraining from another specialty, classification board action, and reenlisting after having prior service in USAF or from another branch of the service.

The Automatic Digital Switching specialty (AFS 295X0) was created as a non-lateral career ladder on 1 July 1967. On 1 March 1970, the 5-skill level was deleted and the specialty was designated a lateral career ladder, with entry limited to personnel who had been awarded a 5-skill level or higher in the 291X0 specialty. With this change, the name of the 7-skill level was changed from Automatic Digital Switching Supervisor to Automatic Digital Switching Technician.

Automatic Digital Switching personnel are responsible for operating a variety of communications computers, such as the Univac Set-8 (USET-8), the Automated Message Processing Exchange (AMPE), the Intermediate Capacity Automated Telecommunications System (ICATS), the Moderate Capacity Automated Telecommunications System (MCATS), and several other systems. These systems provide Telecommunications Centers with the capacity of transmitting large volumes of information using digital computer technology, magnetic storage, and automated routing and retrieval. AFS 295X0 personnel are involved with computer programming, maintaining magnetic media libraries, operating computer terminals and cryptographic equipment, and compiling and analyzing data on volume and accuracy of communications traffic. Ninety-two percent of personnel holding AFS 295X0 are assigned to AFCC. Most of the remaining personnel are assigned to SAC and ATC.

Entry into the Automated Digital Switching specialty is limited to personnel who have obtained at least a 5-skill level in the Telecommunications Operations specialty and who complete the mandatory Technical Training Course 4ALT29530 taught by a detachment of the 3750 Technical Training Group at Tinker AFB OK. This course is six weeks in length and produces approximately 120 graduates each year.

The remainder of this report will focus upon (1) survey methodology, (2) job structure within these two specialties, (3) analysis of skill level (DAFSC) and experience level (active Federal military service and time in the career field), (4) comparisons of findings to AFK 39-1 Specialty Descriptions and previous surveys, (5) examinations of classification and training issues, (6) comparisons of CONUS and overseas groups, and (7) the implications of the findings for these two specialties.

SURVEY METHODOLOGY

The USAF occupational analysis program provides users with information on what Air Force people are doing on their jobs. The methods currently used are the result of research undertaken by the Air Force Human Resources Laboratory (AFHRL) in 1956. The process of occupational analysis involves three steps. First, a job inventory is developed, containing a comprehensive listing of tasks and relevant background questions about members of the specialty. Next, the job inventory is administered to a statistically selected sample of members in the specialties. The data are then processed by computer and analyzed to provide a variety of summary products for users.

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-291-447. A tentative task list was formulated in visits with the technical schools to include tasks suggested by the Specialty Training Standards (STSS) and other career ladder documents. The tentative task list was refined and validated by subsequent visits to operational units at Tinker AFB OK, Lowry AFB CO, Peterson AFB CO, Offutt AFB NE, McDill AFB FL, Kelly AFB TX, and Randolph AFB TX. Additionally, the list was reviewed by the team of NCOs visiting USAFOMC in May 1981 to write the Specialty Knowledge Tests (SKT) used in the Weighted Airman Promotion System (WAPS). From these visits, a final task list was developed. It contained 744 tasks organized into 24 duties. The background section in the job inventory included questions such as job satisfaction, job title, amount of time spent typing, length of time spent awaiting security clearance, size of duty section, and type of facility supported.

Survey Administration

From October 1981 through February 1982, job inventories were mailed to all AFS 291X0 and 295X0 personnel eligible to participate in this survey. The mailing list was created from Uniform Airman Record (UAR) data tapes maintained by AFHRL. This listing included all 3-, 5-, 7- and 9-skill level AFS 291X0 personnel and all 3-, 7- and 9-skill level AFS 295X0 personnel, except for individuals on their jobs less than six weeks, scheduled to retire within six months, or scheduled for a PCS move within six months. Due to the relatively large number of AFS 291X0 personnel, a 50 percent stratified random sample of eligible incumbents was selected. All eligible AFS 295X0 personnel were selected to receive booklets. There were 4,191 members on the mailing list, assigned to 121 operational units worldwide. Seventy-five percent (3,145 members) completed and returned booklets. As job inventories were returned, they were quality reviewed. The booklets were then scanned by computer and stored for future use. The final sample represents 41 percent of the 6,505 members assigned to the 291X0 specialty and 70 percent of the 716 members assigned to the 295X0 specialty. Tables 1 and 2 show distribution of members assigned to each using major command (MAJCOM) and the representation of MAJCOMs in the sample obtained for both specialties.

Tables 3 and 4 show the distribution of members in each career ladder for time in service and paygrade. These figures are based on information extracted from the UAR as of August 1981.

TABLE 1

COMMAND REPRESENTATION OF 291X0 PERSONNEL

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AFCC	85	77
ESC	3	3
TAC	2	3
USAFE	2	3
AFSC	2	2
SAC	1	3
ATC	1	1
OTHER	4	8

TOTAL 291X0 ASSIGNED - 6,505

TOTAL 291X0 SAMPLED - 2,642

PERCENT SAMPLED - 41%

TABLE 2

COMMAND REPRESENTATION OF 295X0 PERSONNEL

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AFCC	92	91
SAC	3	2
ATC	1	1
OTHER	4	6

TOTAL 295X0 ASSIGNED - 716

TOTAL 295X0 SAMPLED - 503

PERCENT SAMPLED - 70%

TABLE 3
MILITARY EXPERIENCE DISTRIBUTION OF SAMPLE

	<u>MONTHS TOTAL ACTIVE MILITARY SERVICE</u>					
	<u>1-48</u>	<u>49-96</u>	<u>97-144</u>	<u>145-192</u>	<u>193-240</u>	<u>241+</u>
PERCENT OF 291X0 ASSIGNED	52	16	10	7	9	6
PERCENT OF 291X0 SAMPLE	47	18	14	8	8	6

	<u>MONTHS IN CAREER FIELD</u>					
	<u>1-48</u>	<u>49-96</u>	<u>97-144</u>	<u>145-192</u>	<u>193-240</u>	<u>241+</u>
PERCENT OF 295X0 ASSIGNED	13	18	19	19	22	9
PERCENT OF 295X0 SAMPLE	13	18	21	18	21	9

TABLE 4
PAYGRADE DISTRIBUTION OF SAMPLE

	<u>AIRMAN</u>	<u>E-4</u>	<u>E-5</u>	<u>E-6</u>	<u>E-7</u>	<u>E-8</u>	<u>E-9</u>
PERCENT OF 291X0 ASSIGNED	24	33	24	11	5	2	1
PERCENT OF 291X0 SAMPLE	22	34	25	12	5	2	*
PERCENT OF 295X0 ASSIGNED	4	18	39	24	12	2	1
PERCENT OF 295X0 SAMPLE	3	19	40	24	11	3	*

*DENOTES LESS THAN ONE PERCENT

Data Processing and Analysis

A package of interrelated computer programs, called Comprehensive Occupational Data Analysis Program (CODAP), form the basis for USAF Occupational Analysis. The initial product of CODAP is the job description.

The job incumbent, in filling out a job inventory, checks each task performed, and then rates each task checked on a nine-point scale ranging from one (very small amount of time spent) to nine (very large amount of time spent), with a rating of five representing an average amount of time spent performing a task. All of an individual's ratings are assumed to account for 100 percent of his or her time on the job. By summing all of the ratings, dividing each rating by the total, and multiplying the results by 100, the relative percent time spent for each task is obtained. This job description can then be compared to job descriptions of others in the sample. Other CODAP programs may be used to produce summaries of tasks performed and time spent by various groups within the sample.

One important CODAP product is the hierarchical clustering program. This program groups members together by the similarity of tasks performed and time spent. The result of the clustering program is a graphic presentation of jobs within an Air Force specialty. The basic unit is the job type, a group of individuals performing many of the same tasks and spending similar amounts of time on those tasks. Clusters are groups of two or more job types similar enough to group together, but with each job type having some unique characteristics. Independent job types are groups of individuals performing similar tasks, but are too dissimilar to other job groups to be grouped into any cluster. By using the hierarchical clustering program, patterns of jobs within a specialty are identified.

The Job Difficulty Index (JDI), computed by a formula developed at AFHRL, allows for the comparisons of the relative difficulty among job groups in a study. This index combines several factors, including the average number of tasks performed by members, the relative amount of time spent on those tasks, and the relative difficulty of the tasks performed. AFHRL research has demonstrated that using these factors to calculate a JDI provides a reliable rank ordering of jobs in terms of relative difficulty or complexity. The JDI values are statistically adjusted (standardized) so the average JDI is equal to 13. This facilitates comparisons among the jobs within the specialty.

Another option in the CODAP system is to group respondents according to some background characteristic, such as duty AFSC (skill level), paygrade, experience group (Total Active Federal Military Service), or major command of assignment. By creating composite job descriptions, comparisons can be made between groups. The occupational analysis can address a variety of training or utilization questions by analyzing these composite job descriptions.

A third important CODAP product is the listing of pertinent background information on any group for which a job description has been created. This product will show percentages of responses of the group to questions of job

satisfaction, test equipment used, types of systems supported, work area assigned, courses attended, or any other background question built into the job inventory.

Task Factor Administration

In addition to collecting information on tasks being performed and time spent on tasks, the USAF Occupational Analysis process also collects other types of information about tasks called task factors. The two most commonly collected task factors are task difficulty and training emphasis. These data are collected by having experienced personnel in the field review the task list, rating the relative difficulty or the degree of emphasis which should be placed upon each task for first-enlistment training. These booklets are then processed separately from job inventories. This information is used in a number of different analyses discussed in more detail within this report.

Task Difficulty: Each senior NCO completing a task difficulty booklet was asked to rate each task on a nine-point scale from extremely low to extremely high difficulty relative to the other tasks. Difficulty was defined as the length of time required for an average member to learn to perform that task.

Fifty-four NCOs holding AFS 291X0 completed task difficulty booklets. As a measure of confidence in their ratings, a statistic called the interrater reliability coefficient was calculated for their responses. The resulting reliability coefficient obtained was .92, considered acceptable by normal reliability criterion. Fifty-four NCOs holding DAFSC 295X0 also completed booklets. Their reliability coefficient was .94, indicating that these 54 raters also had an acceptable level of agreement on ratings given to tasks in the list.

To compare across the combined sample of AFS 291X0 and 295X0 respondents, the task difficulty responses of the AFS 291X0 and 295X0 raters were combined. An acceptable level of agreement (reliability coefficient of .97) was found among 106 of the 108 raters.

For each group of raters, the responses were processed to produce an ordered listing of all tasks in terms of their relative difficulty. Finally, the ratings were adjusted to give an average difficulty rating of 5.0 with a standard deviation of 1.0. Thus, tasks with ratings of 6.0 or higher could be considered as above average in difficulty.

Training Emphasis: Individuals selected to complete training emphasis booklets were asked to rate all of the tasks on a ten-point scale from zero (indicating no training is required) to nine (indicating that extremely concentrated training is required). Training emphasis is a rating of tasks indicating which areas should receive emphasis in structured training for first-enlistment personnel. Structured training includes resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal on-the-job training (OJT), or any other organized training method.

The interrater reliability for the 60 AFS 291X0 raters was quite acceptable (.97). The average training emphasis was 1.57 with a standard deviation of 1.72. Tasks receiving ratings of 3.29 or higher may be considered to have relatively high training emphasis.

Training emphasis ratings were requested from senior NCOs holding AFS 295X0; however, there was insufficient agreement among the respondents to meet acceptable reliability criterion. Lack of agreement usually occurs because of diversity in the equipment used and because of differences in raters' opinions about which systems and responsibilities are important for training.

ANALYSIS OF CAREER LADDER JOBS

An analysis of the tasks performed and time spent on those tasks by the 3,145 respondents resulted in identifying nine clusters of jobs and six independent job types within the Telecommunications Operations and Automatic Digital Switching specialties. Figure 1 is a graphic representation of the way these 15 groups were organized.

There were two large groupings of jobs which could be described as functionally related groups, accounting for nine of the job groups identified. The remaining six groups did not appear functionally related. The first two clusters and one independent job type were functionally related by their supervisory and administrative responsibilities. The next three clusters and three independent job types were functionally related to one another through the performance of operational activities. The remaining four clusters and two independent job types were distinct from the previous functional groups, performing operations tasks on specialized systems, and performing support services, such as technical training and developing computer programs for automatic digital systems.

To focus upon the technical aspects of jobs performed by members of these two specialties, job groups in the remainder of this section will be discussed in the following order:

OPERATIONS FUNCTIONAL AREA:

- I. COMMCENTER OPERATIONS CLUSTER (GRP242, N=1,207)
 - A. Telecom Operators (GRP637, N=869)
 - B. Telecom Operations and Operator Maintenance Personnel (GRP626, N=10)
 - C. Telecom Operations OJT Personnel (GRP760, N=16)
 - D. Streamliner Operators (GRP699, N=43)
 - E. Message Preparation Personnel (GRP510, N=12)
- II. DIGITAL GRAPHICS OPERATORS INDEPENDENT JOB TYPE (GRP458, N=16)
- III. AUTOMATIC DIGITAL OPERATIONS CLUSTER (GRP255, N=121)
 - A. Operator Maintenance Personnel (GRP566, N=11)
 - B. First-Line Automatic Digital Operations Supervisors (GRP893, N=21)
 - C. AMPE Operators (GRP1065, N=11)
 - D. MCATS Operators (GRP625, N=16)
 - E. USET-8 Operators (GRP849, N=19)
 - F. ICATS Operators (GRP775, N=15)
- IV. COMMUNICATIONS CENTER SWITCHBOARD OPERATORS INDEPENDENT JOB TYPE (GRP294, N=10)

FIGURE 1



INDICATES
CLUSTERS



INDICATES
INDEPENDENT
JOB TYPES



INDICATES
JOB TYPES

OPERATIONS
FUNCTIONAL AREA

MANAGEMENT FUNCTIONAL
AREA

TELECOMM OPERATIONS FUNCTIONAL AREA

GROUPS NOT FUNCTIONALLY RELATED TO
OTHER FUNCTIONAL AREAS

MANAGERS
(GRP189, N=370)

TRAFFIC ANALYSIS
(GRP249, N=11)

COMSEC CUSTODIANS
(GRP321, N=197)

COMM CENTER OPERATIONS
(GRP242, N=1,207)

DIGITAL GRAPHICS OPERATORS
(GRP458, N=16)

AUTOMATIC DIGITAL SYSTEMS
OPERATIONS (GRP255, N=121)

COMM CENTER SWITCHBOARD
OPERATORS (GRP294, N=10)

MOBILE COMMS OPERATORS
(GRP319, N=9)

AUTODIN OPERATIONS
(GRP252, N=72)

COMM COMPUTER OPERATIONS
(GRP114, N=104)

AFSATCOM OPERATORS
(GRP617, N=16)

BASE SWITCHBOARD OPERATIONS
(GRP238, N=173)

TECHNICAL TRAINERS
(GRP335, N=17)

LIAISON
(GRP165, N=52)

PROGRAMMERS
(GRP096, N=59)

TOTAL
SAMPLE
(N=3,145)

- V. MOBILE COMMUNICATIONS INDEPENDENT JOB TYPE (GRP319, N=9)
- VI. AUTODIN OPERATIONS CLUSTER (GRP252, N=72)
 - A. CONUS AUTODIN Operators (GRP679, N=44)
 - B. Overseas AUTODIN Operators (GRP499, N=19)

OTHER TECHNICAL JOB GROUPS:

- VII. COMMUNICATIONS COMPUTER OPERATIONS CLUSTER (GRP114, N=104)
 - A. NORAD 427M/CSS Operators (GRP698, N=12)
 - B. Automatic Digital Weather Switch (ADWS) Operators (GRP622, N=39)
 - C. SATIN Operators (GRP818, N=16)
- VIII. AFSATCOM OPERATORS INDEPENDENT JOB TYPE (GRP617, N=16)
- IX. BASE SWITCHBOARD OPERATIONS CLUSTER (GRP238, N=173)
 - A. Base Switchboard Operators (GRP612, N=111)
 - B. Voice Communications Operators (GRP745, N=36)
- X. TECHNICAL TRAINING INDEPENDENT JOB TYPE (GRP335, N=17)
- XI. LIAISON CLUSTER (GRP165, N=52)
 - A. Staff Functional Managers (GRP562, N=15)
 - B. Guard and Reserve Liaison Technical Advisors (GRP674, N=11)
- XII. PROGRAMMERS CLUSTER (GRP096, N=59)
 - A. Central Programming Personnel (GRP683, N=32)
 - B. On-Site Programmers (GRP591, N=10)

MANAGEMENT FUNCTIONAL AREA:

- XIII. SUPERVISION AND ADMINISTRATION CLUSTER (GRP189, N=370)
 - A. Communications Operations Superintendents (GRP620, N=20)
 - B. Base Telecom Operations NCOICs (GRP733, N=17)
 - C. Training NCOs (GRP581, N=10)
 - D. Communications Center NCOICs (GRP685, N=101)
 - E. COMSEC Supervisors (GRP742, N=32)
 - F. First-Line Telecommunications Supervisors (GRP764, N=72)
 - G. NCOICs Telephone Switchboard Operations (GRP727, N=24)
 - H. Traffic Service Superintendents (GRP428, N=11)

XIV. TRAFFIC ANALYSIS CLUSTER (GRP249, N=111)

- A. Traffic Handling and Traffic Analysis Personnel (GRP654, N=11)
- B. Junior Telecom Traffic Analysis Clerks (GRP712, N=11)
- C. Traffic Analysis Supervisors (GRP765, N=23)
- D. Telecom Traffic Analysis Clerks (GRP756, N=16)
- E. Automatic Digital Traffic Analysis NCOICs (GRP805, N=12)

XV. COMSEC ACCOUNTANT INDEPENDENT JOB TYPE (GRP321, N=197)

These 15 job groups accounted for 2,534 respondents (81 percent of the sample). The remaining 19 percent did not group with any cluster or job type because of either the unique job they performed or the manner in which they perceived their jobs. Some of the job titles held by members not grouping include: NASA Communications Security Operator, Training NCO, OJT Monitor, NCOIC Stan-Eval Section, WWMCCS Input Analyst, Washfax Operator, TARE Fleet Center Operator, Government Circuit Accounts Manager, Washington/ Moscow Communications Link Superintendent, Ancillary Training Monitor, German Liaison, Mobility Control Center Controller, and Issue Clerk.

Descriptions of Major Jobs

The first six jobs discussed in this report were functionally related to one another by the substantial proportion of each groups' job time devoted to handling messages.

I. COMMCENTER OPERATIONS CLUSTER (GRP242). These 1,207 respondents comprised the largest group of Telecommunications Operations personnel. As a group, they spent 54 percent of their job time concentrating on message processing tasks. Their job in communications centers was to receive message forms, stamp filing times and special handling instructions on the message forms, convert messages into paper tapes or computer cards, and maintain logs and records of messages processed. Some tasks representative of the jobs performed by these members included:

- prepare service messages
- stamp messages with special handling, precedence, or classification
- proofread or correct teletype tapes, page copies, or header and EOT cards
- stamp filing time on outgoing messages
- assign routing indicators
- report circuit outages

Within this large group of 1,207 respondents were five distinct but related groups. The largest of these, Telecom Personnel (GRP637), with 869 members, performed a broad range of message handling and general communications activities, averaging 66 tasks per member. Another group, the Telecom Operations and Operator Maintenance Personnel (GRP626), with

10 members, spent a substantial amount of job time performing operator maintenance on various items of equipment, such as card punches, card readers, and teletypewriters, in addition to their message handling responsibilities. Their jobs were somewhat narrower than the previous group, with an average of 41 tasks performed by each member. The Telecom Operations OJT Personnel (GRP760), with 16 members, acted as supervisors and on-the-job (OJT) trainers, in addition to their other responsibilities. Ninety-four percent indicated they supervised others, and all indicated they conduct OJT. In addition, 35 percent of their job time was concentrated in message handling tasks. A very specialized group, the Streamliner Operators (GRP699), with 43 members, spent 44 percent of their job time on tasks related to the Streamliner communications system. Eighty-six percent were assigned overseas, and 95 percent indicated their jobs required access to specially compartmented information. The fifth group within this cluster, the Message Preparation Personnel (GRP510), with 12 members, was responsible for preparing messages for transmission by using off-line cryptographic equipment, preparing headers and end-of-transmission (EOT) cards, and proofreading cards, tapes, and page copies.

Background information and job characteristics of these job types can be found in the Appendices to this report.

II. DIGITAL GRAPHICS OPERATORS INDEPENDENT JOB TYPE (GRP458). These 16 respondents formed a distinct group characterized by a 35 percent concentration of their job time on tasks related to operating the Air Force Digital Graphics System (AFDIGS) within the Offutt Weather Facsimile Switching Center (WFSC) (see Table 5). Their jobs involved the reduction of weather maps to digital data and transmission of this weather information to users. Sixty-two percent of these respondents held AFS 291X0, with the remainder holding AFS 295X0 (see Table 8). Some tasks characteristic of the jobs performed by these respondents include:

- monitor transmission of weather maps
- transmit chart status forms by optical scanner
- answer field message requests for transmission of weather charts by optical scanner
- make entries on DD Form 1753, Master Station Logs
- prepare service messages
- perforate message tapes
- digitize paper weather maps from optical scanners onto ID-50 computer discs

III. AUTOMATIC DIGITAL OPERATIONS CLUSTER (GRP255). The responsibilities of these 121 respondents focused on the operation of four types of communications computers which use digital technology to store, retrieve, and route message traffic into and out of communications centers. Their largest concentration of job time, (25 percent), was on tasks related to message handling (see Table 5). An additional 23 percent of job time, though, was concentrated in performing general communications functions.

Seventy-one percent of these 121 respondents held AFS 295X0. Relative to the first two groups discussed in this section, jobs performed by the Automatic Digital Operations personnel appeared substantially broader. The average number of tasks performed by each member was 102 tasks (see Table 8). Some tasks characteristic of members of this cluster included:

- make entries on history tape or disc pack labels
- prepare service messages
- mount or dismount magnetic media
- make entries on DD Form 1753, Master Station Logs
- perform operator maintenance on magnetic tape devices
- maintain DD Form 1766, Outgoing Service Message Logs, or files
- send messages using visual display terminals (VDT)

Six distinct job types were found within the Automatic Digital Operations cluster. Members of four job types specialized on operation of one of four digital communications computer systems. With these systems, compatible digital communications computers were linked directly into specialized networks, allowing for large volumes of data traffic to be transmitted without overburdening the communications channels carrying general message traffic. First, AMPE Operators (GRP1065), with 11 members, operated the Automated Message Processing Exchange system (AMPE). The MCATS Operators (GRP625), with 16 members, operated the Moderate Capacity Automated Telecommunications Systems (MCATS). The 19 members of the USET-8 Operators (GRP849) group operated the Univac Set-8 computer system (USET-8). ICATS Operators (GRP775), with 15 members, operated the Intermediate Capacity Automated Telecommunications System (ICATS). Members of each of these job groups spent from 19 to 24 percent of job time operating their specialized system. For all four groups, the remaining job time primarily was spent performing message handling and general communications functions.

Two of the six job groups in this cluster did not specialize on a particular system, but rather, were differentiated by a specialized function. The First-Line Automatic Digital Operations Supervisors (GRP893), with 21 members, spent a substantial proportion of their job time (27 percent) performing first-line supervisory and training activities, although 46 percent of their job time was spent in the two duties (processing messages and general communications functions) in common with the previous four groups. The final group, the Operator Maintenance Personnel (GRP566), with 11 members, also spent a large amount of time (56 percent) on processing messages and general communications functions; however, the tasks that were most characteristic of this group involved operator maintenance of communications equipment.

Background information, time spent on duties, and tasks performed by members of these job types can be found in the appendices to this report.

IV. COMMUNICATIONS CENTER SWITCHBOARD OPERATORS
INDEPENDENT JOB TYPE (GRP294). This group of 10 respondents were rather unusual within the pattern of jobs found in these two AFSCs. A second cluster of switchboard operators, who appeared to perform much the same job, will be discussed later in this section. These ten respondents, however, formed an independent job type with both message handling responsibilities and switchboard operations responsibilities. Twenty-eight percent of their job time was devoted to operating non-mobile telephone switchboards, and 33 percent of their job time was taken up by message handling and general communications functions (see Table 5). Some of the tasks characteristic of Communications Center Switchboard Operators included:

- accept and connect calls according to their precedence
- process telephone conference calls
- place outgoing calls to distant stations using trunks
- answer supervisory lights
- stamp time of transmission on outgoing messages
- monitor high precedence or emergency calls

V. MOBILE COMMUNICATIONS INDEPENDENT JOB TYPE (GRP319). These nine members spent 26 percent of their job time operating mobile communications units (see Table 5). They were responsible for setting up, guarding, and operating mobile communications equipment (vans). Seventy-eight percent of these respondents held AFS 29150. Some of the tasks characteristic of Mobile Communications Personnel included:

- load or unload mobile communications equipment, publications, directives, or supplies
- set up or dismantle mobile communications equipment
- guard mobile communications secure areas
- make entries on AF Forms 1022, COMMCEN Message Register
- stamp time of transmission on outgoing messages
- maintain mobile administrative support kits
- operate tactical ground communications AN/TGC-27 vans

VI. AUTODIN OPERATIONS CLUSTER (GRP252). This was the last major job group identified within the Operations Functional Area. These 72 members were responsible for operating equipment and maintaining records of traffic within the Automatic Digital Network (AUTODIN) I in the CONUS, and the Overseas Automatic Digital Network (AUTODIN) (see Table 6). Ninety-seven percent of the respondents in this cluster held AFSC 295X0 (see Table 9). Some of the tasks most characteristic of AUTODIN Operations Personnel included:

- make entries on center on-line and off-line work requests
- make entries on alternate routing records
- make entries on magnetic disc pack logs
- operate printers in AUTODIN I
- perform AUTODIN I off-line message recovery

operate high speed printers in AUTODIN I
place AUTODIN I channels in or out of service
direct AUTODIN I messages to intercept

Within this cluster of 72 members, there were two distinct job groups. Forty-four respondents grouped into the CONUS AUTODIN Operators (GRP679) group. They were responsible for operating and controlling traffic flow through leased AUTODIN equipment within the CONUS. The Overseas AUTODIN Operators (GRP499) performed tasks related to the coordination of government-owned AUTODIN equipment overseas. There was little difference in breadth of these two jobs, with members of the CONUS group performing an average of 79 tasks and members of the overseas group averaging 71 tasks. The overseas group was slightly more senior, with members averaging 66 months in the career field compared with 41 months in the career field for the CONUS group. More details on these job types may be found in the Appendix.

The next six job groups presented were not functionally related either to each other or to the Operations or Management functional areas.

VII. COMMUNICATIONS COMPUTER OPERATIONS CLUSTER (GRP114). The 104 members of this cluster were responsible for operating one of three communications systems. The factor that distinguished these respondents from the previous groups was the relatively lower amount of job time, (nine percent), devoted to processing messages (see Table 6). The main characteristic among these 104 members was the amount of job time concentrated on general communications functions (22 percent of job time), such as making entries on logs and performing operator maintenance on equipment, and on managing the magnetic media used in operating these communications computer systems. Ninety-six percent of these respondents were in the 295X0 specialty (see Table 9). Some of the tasks characteristic of personnel in the Communications Computer Operations Cluster included:

- make entries on DD Form 1753, Master Station Log
- mount or dismount magnetic media
- maintain DD Form 1772, Magnetic Tape Library Record and Perpetual History (LRA)
- remove or file magnetic media
- purge magnetic media
- run magnetic media parity checks

Within this cluster of 104 respondents were three distinct job types, differentiated by the type of system they operated. The NORAD 427M/CSS Operators (GRP698), with 12 members, spent 27 percent of their job time operating the 427M/Communications System Segments (CSS). Their jobs involved monitoring and controlling traffic through a system that provided air defense warning data to various USAF users. The Automatic Digital Weather Switch (ADWS) Operators (GRP622), with 39 members, spent 36 percent of their job time operating equipment associated with the ADWS system. The job performed by this group was quite distinct from the previously discussed

Digital Graphics Operator group. Members of this group were responsible for operating consoles which monitor and control traffic and equipment within the ADWS system, but spent very little job time (seven percent) in actually preparing and handling message traffic. The SATIN Operators (GRP818), with 16 members, spent 37 percent of their job time operating equipment associated with the SAC Total Information Network (SATIN) and the Strategic Air Command and Control System (SACCS). The SATIN Operators group had the highest average number of tasks per member (116 tasks), with the ADWS Operators averaging 63 tasks, and the NORAD 427M/CSS Operators averaging 92 tasks. Additional details on the job types within the Communications Computer Operations cluster may be found in the Appendix.

VIII. AFSATCOM OPERATORS INDEPENDENT JOB TYPE (GRP617). The 16 respondents in this group were responsible for operating equipment associated with the Air Force Satellite Communications (AFSATCOM) system. Sixty-one percent of their job time was spent performing activities such as monitoring traffic passing through the AFSATCOM network, commanding satellites and equipment into specific configurations, and responding to various signals from the AFSATCOM network (see Table 6). Some of the tasks characteristic of the jobs performed by AFSATCOM Operators included:

- monitor Channel 3 on applicable satellites for reconnaissance traffic
- monitor Channels 1 and 3 on applicable satellites for emergency action messages
- orient antennas to proper look angles in AFSATCOM
- process "FOXTROT" messages in AFSATCOM
- respond to "HOTLINE" calls in AFSATCOM
- recognize and report meaconning intrusion jamming and interference (MIJI) incidents in AFSATCOM

IX. BASE SWITCHBOARD OPERATIONS CLUSTER (GRP238). The responsibilities of these 173 respondents concentrated on telephone switchboard operations, tasks taking up 68 percent of their job time (see Table 6). Another group of ten respondents, the Communications Center Switchboard Operators, was discussed earlier in this report. Members of the Base Switchboard Operations cluster were quite distinct from the previous group in that less than one percent of their job time involved message handling tasks--a large component of the jobs performed by the Communications Center Switchboard group. Some tasks characteristic of these respondents included:

- accept and connect calls according to their precedence
- place calls from distant stations to subscribers
- place calls between subscribers
- answer supervisory lights
- maintain status boards on locations of commanders
- maintain DD Form 1194, Toll Ticket
- place calls within the AUTOSEVOCOM network

Two distinct job types were identified within this cluster, distinguished primarily by the amount of time spent on switchboard activities and supervisory activities. The Base Switchboard Operators (GRP612), with 111 members, spent 79 percent of their job time on switchboard activities, averaging only 19 tasks per member. The Voice Communications Operators (GRP745), with 36 members, spent 47 percent of their job time in switchboard activities, but also spent 31 percent of their time performing supervisory and training functions. They averaged 43 tasks per member. Only 31 percent of the Voice Communications Operators were in their first enlistment compared to 65 percent in the Base Switchboard Operators job type. More details describing members of these two job types may be found in the Appendix.

X. TECHNICAL TRAINING INDEPENDENT JOB TYPE (GRP335). These 17 members formed the first of three non-operational, but non-management, job groups. The primary responsibilities of these respondents was to provide technical training and to counsel and evaluate students' progress. These activities accounted for 51 percent of these members' job time, (see Table 6), with an average of 15 tasks performed by each member. Seventy-one percent held DAFSC 291X0 and the rest held DAFSC 295X0 (see Table 9). Eighty-two percent were assigned to ATC. Some of the tasks characteristic of the Technical Training group included:

- score tests
- write test questions
- conduct resident course classroom training
- administer tests
- evaluate progress of resident course students

XI. LIAISON CLUSTER (GRP165). The 52 members of this cluster were responsible for performing staff actions such as coordinating policies and directives, performing inspections for compliance with standards, and providing guidance for subordinate echelon communications centers. Forty percent of their job time was concentrated on tasks related to inspecting and evaluating (see Table 7). None of these personnel were in their first enlistment. Seventy-nine percent were in the 291X0 specialty (see Table 10). Some tasks characteristic of the Liaison Cluster included:

- perform staff technical assistance visits
- evaluate inspection reports or procedures
- perform staff studies, surveys, or special reviews
- provide technical communications guidance to
 - host units or command
- review operational logs or reports

Two distinct job groups were identified within this cluster. The Staff Functional Managers (GRP562), with 15 members, were primarily responsible for performing coordination and review of policies, directives, and procedures, and for evaluating compliance with performance standards. Seventy-three percent indicated they were assigned to MAJCOM, Defense Communications Areas (DCAs), or Communications Divisions. The Guard and

Reserve Liaison Technical Advisors (GRP674), with 11 members, were assigned to various USAF Reserve or Air National Guard communications centers. Their functions primarily were to ensure that the centers were kept at a constant state of readiness. Their major responsibilities included inspection of safety, security, and emergency programs. In addition, they also provided technical assistance to the Reserve or Guard personnel at their assigned centers. Members of both groups held average paygrades of E-7, and both groups averaged in excess of 16 years active duty. One-third of the Staff Functional Managers were in the 265X0 specialty. All of the Guard and Reserve Technical Advisors were in the 291X0 specialty. Additional information on the job types within the Liaison Cluster may be found in the Appendix.

XII. PROGRAMMERS CLUSTER (GRP096). The 59 members of this cluster were responsible for developing computer programs and correcting deficiencies in existing programs, enabling the various digital computer communications systems to operate. Sixty-seven percent of this group's time on the job was devoted to programming tasks (see Table 7). Some of the tasks characteristic of these respondents included:

- code software patches
- analyze software deficiencies
- correct program deficiencies in existing software during system lifecycle
- test and implement program patches
- interpret computer codes
- correct program deficiencies discovered during program evaluation tests (PET)
- prepare inputs for program documentation

There were two job types identified within this cluster. The Central Programming Personnel (GRP683), with 32 members, performed the majority of programming for communications computers. Eighty percent of their job time was spent in programming tasks. Half of these members were assigned to the Air Force Communications Computer Programming Center (AFCCPC), at Tinker AFB. The On-Site Programmers (GRP591), with 10 members, performed a slightly different job. Forty-five percent of their job time was devoted to programming. An additional 14 percent of their time was spent operating the USET-8 system. Thus, it appears that these members have primary programming responsibilities, but also have secondary responsibilities of performing other activities associated with digital communications computer systems. Other details on these job types may be found in the Appendix to this report.

The next three major job groups were distinct from the twelve previously discussed groups in that all three were functionally related through the commonality of supervision and training responsibilities.

XIII. SUPERVISION AND ADMINISTRATION CLUSTER (GRP189). The 370 members of this cluster performed a variety of supervisory and administrative functions. Sixty-three percent of their job time was devoted to supervision, administration, and training functions (see Table 7). Some of the tasks characteristic of members in this cluster include:

- counsel personnel on personal or military-related matters
- prepare APRs
- establish performance standards for subordinates
- establish organizational policies or communications operating instructions
- write correspondence
- indorse APRs
- supervise telecommunications operations specialists (AFSC 29150)

Nine separate job types were differentiated within this cluster. Most of these differences, however, were in the amounts of time spent on various tasks, instead of actual differences in the jobs themselves. Only three of the nine job types were unique enough to warrant discussion. COMSEC Supervisors (GRP742), with 32 members, in addition to performing their supervisory functions, devoted 33 percent of their job time concentrating on security tasks. The First-line Telecommunications Supervisors (GRP764), with 72 members, spent 28 percent of their job time on message handling and general communications functions. The NCOICs Telephone Switchboard Operations (GRP727), with 24 members, spent 24 percent of their job time performing switchboard operations tasks, in addition to their supervisory and training responsibilities. Additional data from members of all nine job types are included in the Appendix.

XIV. TRAFFIC ANALYSIS CLUSTER (GRP249). These 111 members, in addition to performing some supervision and training functions, concentrated 33 percent of their job time managing software and performing procedures analysis (see Table 7). Much of their job involved maintaining records of traffic volume, reviewing previously transmitted messages for accuracy, and evaluating the quality of performance within communications systems. Seventy-seven percent were in the 291X0 specialty. Some tasks characteristic of the Traffic Analysis cluster included:

- perform daily reviews of previous days' traffic
- review daily traffic logs or files
- maintain general message files
- maintain address indicator group (AIG) files
- analyze and evaluate statistical data to determine message handling effectiveness
- compile statistics of messages that contain errors
- review messages for mishandling

Five distinct job types were distinguished within this cluster. Four of these job types were differentiated primarily by the breadth of their jobs, as measured by the average number of tasks performed. All four job types were

composed almost exclusively of AFS 291X0 personnel. The fifth group, the Automatic Digital Traffic Analysis NCOICs (GRP805), with 12 members, were exclusively AFS 295X0 personnel. In addition to performing the traffic analysis functions, these members also performed tasks related to automatic digital systems operations. Additional information on these five job types may be found in the Appendix.

XV. COMSEC ACCOUNTANTS INDEPENDENT JOB TYPE (GRP321). The 197 members of this job group were responsible for maintaining records on cryptographic materials, handling classified messages, and ensuring physical security of communications operations areas. They were also responsible for ensuring the proper destruction of classified waste. Ninety-nine percent were in the 291X0 specialty. Some of the tasks characteristic of the COMSEC Accountants group included:

- inventory accountable COMSEC materials
- make page checks
- destroy classified waste
- witness destruction of classified waste
- issue COMSEC materials
- maintain administrative COMSEC account records
- prepare classified documents for mailing
- perform courier functions

TABLE 5

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB GROUPS

DUTIES	COMM CENTER OPERATIONS CLUSTER (N=1,207)	DIGITAL GRAPHICS OPERATORS (N=16)	AUTOMATIC DIGITAL OPERATIONS CLUSTER (N=121)	COMM CENTER SWITCHBOARD OPERATORS (N=10)	MOBILE COMMS OPERATORS (N=9)
A ORGANIZING AND PLANNING	3	3	4	4	7
B DIRECTING AND IMPLEMENTING	6	9	8	8	11
C INSPECTING AND EVALUATING	1	2	2	2	4
D TRAINING	2	3	3	4	5
E PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	14	11	23	14	9
F MANAGING SOFTWARE AND PERFORMING PROCEDURES ANALYSIS	3	2	3	3	4
G MAINTAINING MAGNETIC MEDIA	*	*	8	*	0
H PROCESSING MESSAGES	54	27	25	19	25
I MAINTAINING SECURITY	12	6	7	9	9
J OPERATING NON-MOBILE TELEPHONE SWITCHBOARDS	2	*	1	28	0
K PROGRAMMING COMMUNICATIONS COMPUTERS	*	0	*	*	0
L OPERATING MOBILE COMMUNICATIONS UNITS	*	0	*	6	26
M OPERATING UNIVAC SET-8 (USET-8) SYSTEMS	*	0	4	0	0
N OPERATING INTERMEDIATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (ICATS)	*	0	4	*	0
O OPERATING MODERATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (MCATS)	*	0	3	0	0
P OPERATING AUTOMATIC DIGITAL WEATHER SWITCH (ADWS) SYSTEMS	*	0	*	0	0
Q OPERATING 427M/COMMUNICATIONS SYSTEM SEGMENTS (427M/CSS)	*	0	0	0	0
R OPERATING THE STRATEGIC AIR COMMAND AUTOMATED TOTAL INFORMATION NETWORK (SATIN) AND STRATEGIC AIR COMMAND AND CONTROL SYSTEM (SACCS)	*	0	*	0	0
S OPERATING AUTOMATED MESSAGE PROCESSING EXCHANGE (AMPE)	*	0	2	*	0

TABLE 5 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB GROUPS

DUTIES	COMM CENTER OPERATIONS CLUSTER (N=1,207)	DIGITAL GRAPHICS OPERATORS (N=16)	AUTOMATIC DIGITAL OPERATIONS CLUSTER (N=121)	COMM CENTER SWITCHBOARD OPERATORS (N=10)	MOBILE COMMS OPERATORS (N=9)
T OPERATING STREAMLINER SYSTEMS	*	0	*	0	0
U OPERATING AUTOMATIC DIGITAL NETWORK (AUTODIN) I	*	0	*	0	0
V OPERATING OVERSEAS AUTOMATIC DIGITAL NETWORK (AUTODIN) SWITCHING CENTERS	*	0	0	0	0
W OPERATING THE AIR FORCE DIGITAL GRAPHICS SYSTEM (AFDIGS) WITHIN THE OFFUTT WEATHER FACSIMILE SWITCHING CENTERS (WFSC)	*	35	*	*	0
X OPERATING THE AIR FORCE SATELLITE COMMUNICATIONS SYSTEM (AFSATCOM)	*	0	0	0	0

*INDICATES LESS THAN ONE PERCENT OF TIME SPENT

TABLE 6

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB GROUPS

DUTIES	AUTODIN OPERATIONS CLUSTER (N=72)	COMM COMPUTER OPERATIONS CLUSTER (N=104)	AFSATCOM OPERATORS (N=16)	BASE SWITCHBOARD OPERATIONS CLUSTER (N=173)	TECHNICAL TRAINERS (N=17)
A ORGANIZING AND PLANNING	2	3	2	5	*
B DIRECTING AND IMPLEMENTING	4	7	7	7	4
C INSPECTING AND EVALUATING	*	2	1	2	1
D TRAINING	*	3	2	2	51
E PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	22	22	7	10	17
F MANAGING SOFTWARE AND PERFORMING PROCEDURES ANALYSIS	4	4	1	1	0
G MAINTAINING MAGNETIC MEDIA	10	13	0	*	0
H PROCESSING MESSAGES	23	9	7	*	17
I MAINTAINING SECURITY	3	3	11	4	9
J OPERATING NON-MOBILE TELEPHONE SWITCHBOARDS	*	*	*	68	0
K PROGRAMMING COMMUNICATIONS COMPUTERS	*	1	*	0	*
L OPERATING MOBILE COMMUNICATIONS UNITS	0	-	*	*	0
M OPERATING UNIVAC SET-8 (USET-8) SYSTEMS	0	*	0	0	0
N OPERATING INTERMEDIATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (ICATS)	0	0	0	0	0
O OPERATING MODERATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (MCATS)	0	0	0	0	0
P OPERATING AUTOMATIC DIGITAL WEATHER SWITCH (ADWS) SYSTEMS	0	14	0	0	0
Q OPERATING 427M/COMMUNICATIONS SYSTEM SEGMENTS (427M/CSS)	0	5	0	*	0
R OPERATING THE STRATEGIC AIR COMMAND AUTOMATED TOTAL INFORMATION NETWORK (SATIN) AND STRATEGIC AIR COMMAND AND CONTROL SYSTEM (SACCS)	0	12	0	*	0
S OPERATING AUTOMATED MESSAGE PROCESSING EXCHANGE (AMPE)	0	0	0	0	0

TABLE 6 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB GROUPS

DUTIES	AUTODIN OPERATIONS CLUSTER (N=72)	COMM COMPUTER OPERATIONS CLUSTER (N=104)	AFSATCOM OPERATORS (N=16)	BASE SWITCHBOARD OPERATIONS CLUSTER (N=173)	TECHNICAL TRAINERS (N=17)
T OPERATING STREAMLINER SYSTEMS	*	*	0	*	0
U OPERATING AUTOMATIC DIGITAL NETWORK (AUTODIN) I	22	0	0	0	0
V OPERATING OVERSEAS AUTOMATIC DIGITAL NETWORK (AUTODIN) SWITCHING CENTERS	9	0	0	0	0
W OPERATING THE AIR FORCE DIGITAL GRAPHICS SYSTEM (AFDIGS) WITHIN THE OFFUTT WEATHER FACSIMILE SWITCHING CENTERS (WFSC)	0	*	0	0	0
X OPERATING THE AIR FORCE SATELLITE COMMUNICATIONS SYSTEM (AFSATCOM)	0	0	61	*	0

*INDICATES LESS THAN ONE PERCENT OF TIME SPENT

TABLE 7

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB GROUPS

DUTIES	LIAISON CLUSTER (N=52)	PROGRAMMERS CLUSTER (N=59)	SUPERVISION AND ADMINISTRATION CLUSTER (N=370)	TRAFFIC ANALYSIS CLUSTER (N=111)	COMSEC ACCOUNTANTS (N=197)
A ORGANIZING AND PLANNING	13	2	20	10	6
B DIRECTING AND IMPLEMENTING	24	6	19	10	8
C INSPECTING AND EVALUATING	40	2	14	8	5
D TRAINING	6	2	10	5	4
E PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	3	5	8	9	6
F MANAGING SOFTWARE AND PERFORMING PROCEDURES ANALYSIS	7	5	5	33	1
G MAINTAINING MAGNETIC MEDIA	0	2	*	*	*
H PROCESSING MESSAGES	*	*	6	16	6
I MAINTAINING SECURITY	6	*	12	7	63
J OPERATING NON-MOBILE TELEPHONE SWITCHBOARDS	*	*	2	*	*
K PROGRAMMING COMMUNICATIONS COMPUTERS	*	67	*	*	*
L OPERATING MOBILE COMMUNICATIONS UNITS	*	*	*	*	*
M OPERATING UNIVAC SET-8 (USET-8) SYSTEMS	*	3	*	*	0
N OPERATING INTERMEDIATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (ICATS)	*	*	*	*	*
O OPERATING MODERATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (MCATS)	*	0	*	0	0
P OPERATING AUTOMATIC DIGITAL WEATHER SWITCH (ADWS) SYSTEMS	0	*	*	0	0
Q OPERATING 427M/COMMUNICATIONS SYSTEM SEGMENTS (427M/CSS)	0	0	*	0	0
R OPERATING THE STRATEGIC AIR COMMAND AUTOMATED TOTAL INFORMATION NETWORK (SATIN) AND STRATEGIC AIR COMMAND AND CONTROL SYSTEM (SACCS)	*	0	*	*	0
S OPERATING AUTOMATED MESSAGE PROCESSING EXCHANGE (AMPE)	*	2	*	*	0

TABLE 7 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB GROUPS

DUTIES	LIAISON CLUSTER (N=52)	PROGRAMMERS CLUSTER (N=59)	SUPERVISION AND ADMINISTRATION CLUSTER (N=370)	TRAFFIC ANALYSIS CLUSTER (N=111)	COMSEC ACCOUNTANTS (N=197)
T OPERATING STREAMLINER SYSTEMS	*	0	*	*	0
U OPERATING AUTOMATIC DIGITAL NETWORK (AUTODIN) I	*	2	*	1	0
V OPERATING OVERSEAS AUTOMATIC DIGITAL NETWORK (AUTODIN) SWITCHING CENTERS	*	0	0	*	*
W OPERATING THE AIR FORCE DIGITAL GRAPHICS SYSTEM (AFDIGS) WITHIN THE OFFUTT WEATHER FACSIMILE SWITCHING CENTERS (WFSC)	0	0	*	*	0
X OPERATING THE AIR FORCE SATELLITE COMMUNICATIONS SYSTEM (AFSATCOM)	0	0	*	0	*

*INDICATES LESS THAN ONE PERCENT OF TIME SPENT

TABLE 8

BACKGROUND INFORMATION ON JOB GROUPS

	COMM CENTER OPERATIONS CLUSTER	DIGITAL GRAPHICS OPERATORS	AUTOMATIC DIGITAL OPERATIONS CLUSTER	COMM CENTER SWITCHBOARD OPERATORS	MOBILE COMMS OPERATORS
NUMBER MEMBERS:	1,207	16	121	10	9
AVERAGE NUMBER TASKS PERFORMED:	60	67	102	71	60
AVERAGE DIFFICULTY PER UNIT TIME SPENT:	4.01	4.37	4.28	4.18	4.57
JOB DIFFICULTY INDEX:	12.3	14.0	17.9	14.3	14.1
AVERAGE GRADE:	E-4	E-4	E-5	E-4	E-4
DUTY AFSC: (PERCENT)					
29130	22	37	1	30	11
29150	69	25	21	60	78
29170	8	0	7	10	11
29190	0	0	0	0	0
29530	1	25	45	0	0
29570	0	13	26	0	0
29590	0	0	0	0	0
AVERAGE NUMBER MONTHS IN PRESENT JOB:	20	18	19	16	23
AVERAGE NUMBER MONTHS IN CAREER FIELD:	50	30	56	40	63
AVERAGE NUMBER MONTHS ACTIVE FEDERAL MILITARY SERVICE:	58	63	100	49	76
PERCENT IN FIRST-ENLISTMENT:	63	63	22	90	33
PERCENT ASSIGNED OVERSEAS:	41	19	18	30	22
PERCENT SUPERVISING:	31	37	45	30	44
AVERAGE NUMBER SUBORDINATES:	2.7	3.7	4.3	2.3	3.0

TABLE 9

BACKGROUND INFORMATION ON JOB GROUPS

	AUTODIN OPERATIONS CLUSTER	COMM COMPUTER OPERATIONS CLUSTER	AFSATCOM OPERATORS	BASE SWITCHBOARD OPERATIONS CLUSTER	TECHNICAL TRAINERS
NUMBER MEMBERS:	72	104	16	173	17
AVERAGE NUMBER TASKS PERFORMED:	74	72	46	25	15
AVERAGE DIFFICULTY PER UNIT TIME SPENT:	4.34	4.49	4.69	4.05	4.67
JOB DIFFICULTY INDEX:	15.1	15.3	12.7	7.6	8.1
AVERAGE GRADE:	E-5	E-5	E-4, E-5	E-4	E-5
DUTY AFSC: (PERCENT)					
29130	3	1	6	18	6
29150	0	2	88	67	59
29170	0	1	6	15	6
29190	0	0	0	0	0
29530	62	60	0	0	23
29570	35	36	0	0	0
29590	0	0	0	0	0
AVERAGE NUMBER MONTHS IN PRESENT JOB:	19	17	17	16	25
AVERAGE NUMBER MONTHS IN CAREER FIELD:	45	43	57	60	84
AVERAGE NUMBER MONTHS ACTIVE FEDERAL MILITARY SERVICE:	112	118	67	66	101
PERCENT IN FIRST-ENLISTMENT:	24	17	31	55	24
PERCENT ASSIGNED OVERSEAS:	26	26	63	15	0
PERCENT SUPERVISING:	14	33	50	33	0
AVERAGE NUMBER SUBORDINATES:	4.7	2.8	1.9	3.1	0

TABLE 10

BACKGROUND INFORMATION ON JOB GROUPS

	LIAISON CLUSTER	PROGRAMMERS CLUSTER	SUPERVISION AND ADMINISTRATION CLUSTER	TRAFFIC ANALYSIS CLUSTER	CO-SEC. ACCOUNTANT
NUMBER MEMBERS:	52	59	370	111	197
AVERAGE NUMBER TASKS PERFORMED:	26	33	112	68	43
AVERAGE DIFFICULTY PER UNIT TIME SPENT:	5.75	6.27	5.17	4.9	4.70
JOB DIFFICULTY INDEX:	13.1	15.9	20.7	16.2	12.2
AVERAGE GRADE:	E-6,E-7	E-5,E-6	E-6	E-5	E-5
DUTY AFSC: (PERCENT)					
29130	0	0	3	4	4
29150	4	5	22	55	64
29170	64	3	53	18	29
29190	11	0	11	0	2
29530	2	22	0	8	0
29570	13	65	8	15	1
29590	6	5	2	0	0
AVERAGE NUMBER MONTHS IN PRESENT JOB:	20	19	17	15	19
AVERAGE NUMBER MONTHS IN CAREER FIELD:	180	79	155	82	98
AVERAGE NUMBER MONTHS ACTIVE FEDERAL MILITARY SERVICE:	214	167	173	108	105
PERCENT IN FIRST-ENLISTMENT:	0	7	7	29	31
PERCENT ASSIGNED OVERSEAS:	29	10	41	32	42
PERCENT SUPERVISING:	8	17	84	41	31
AVERAGE NUMBER SUBORDINATES:	1.7	2.3	6.9	2.5	2.0

Breadth and Difficulty of AFS 291X0 and 295X0 Jobs

As mentioned in the SURVEY METHODOLOGY section, the Job Difficulty Index (JDI) provides a method of ranking jobs in terms of the relative order of difficulty. Comparisons of job difficulty include not only the difficulty level of tasks, but also the average number of tasks performed. Further, the JDI is weighted to give credit for the relative time spent on more difficult tasks.

The two most difficult jobs in this study, as measured by the JDI, were the Supervision and Administration cluster, with a JDI of 20.7, and the Automatic Digital Operations cluster, with a JDI of 17.9 (see Table 11). The average number of tasks performed by both of these groups were substantially higher than for other groups in this study. Additionally, the average task difficulty per unit time spent (ATDPUTS) for Supervision and Administration Personnel was higher than for most of the other groups. Other groups performing difficult tasks included the Programmers cluster (with an ATDPUTS score of 6.27) and the Liaison cluster (with an ATDPUTS score of 5.75). The tasks performed by these two groups were more difficult than tasks performed by most groups; however, the average numbers of tasks performed were lower than for most groups.

Two groups had JDI scores substantially lower than most job groups in this study. The Base Switchboard Operations cluster had a JDI score of 7.6, and the Technical Training Independent Job Type had a JDI score of 8.1. The Base Switchboard Operations group received the lowest score due to two factors: members of this group performed relatively few tasks (25) and the difficulty levels of those tasks were relatively low (ATDPUTS score of 4.05). The Technical Training personnel also performed relatively few tasks (15), but the difficulty level of those tasks was higher than for eight other job groups.

Job Satisfaction and Background Information on Job Groups

The responses to background questions revealed little cross-utilization of AFS 291X0 and AFS 295X0 personnel in the ten job groups performing technical activities. Five groups, the Commcenter Operations, the Communications Center Switchboard Operators, the Mobile Communications Operators, the AFSATCOM Operators, and the Base Switchboard Operations groups contained, almost exclusively, AFS 291X0 personnel (See Tables 8 through 11). Three groups, the AUTODIN Operations, the Communications Computer Operations, and the Programmers clusters contained, almost exclusively, AFS 295X0 respondents. The only technical job groups containing members of both AFSCs were the Digital Graphics Operators and the Automatic Digital Operations groups. Six of the 16 members of the Digital Graphics Independent Job Type held AFS 295X0. Thirty-five of the 121 members of the Automatic Digital Operations cluster held AFS 291X0, and these respondents were concentrated in the Supervisors Job Type (15 members), and in the MCATS Operators Job Type (seven members). The remaining 13 AFS 291X0 personnel grouped within the cluster, but not with any specific job type.

Within the non-technical groups, such as the Supervision and Administration, the Technical Training, the Traffic Analysis, and the Liaison groups, there was some cross-utilization, but all were made up predominantly of AFS 291X0 personnel.

The most senior groups were the Liaison, Supervision and Administration, and Programmers clusters, with 214, 173, and 167 months total active federal military service (TAFMS), respectively. The Communications Center Switchboard Operators and the Communications Center Operations personnel had the lowest average TAFMS, with 49 and 58 months, respectively. The Communications Center Switchboard Operators group also had the highest concentration (90 percent) of first-enlistment personnel.

Wide variations were noted in job satisfaction responses of members in these 15 groups (see Tables 12-14). The highest percentages of positive responses were noted among the more senior groups. Technical Trainers responded most positively, with all members indicating their jobs used their talents well, and 94 percent indicating their training was used well and they were satisfied with the sense of accomplishment they gained from their jobs. The Technical Trainers also had the highest percentage planning to reenlist (88 percent). Other groups with high percentages of positive job satisfaction responses included the Programmers, Supervision and Training, and Liaison clusters. The percentages of these three groups planning to reenlist were somewhat low (63, 53, and 42 percent, respectively). These figures are deceptive, though, since substantial proportions of each group indicated they had reached the point of retirement (22, 29, and 39 percent, respectively).

The group with the lowest percentages of positive job satisfaction responses was the Mobile Communications group. Fifty-six percent indicated that they would not reenlist, and although 67 percent acknowledged that their jobs used their training well, the same proportion indicated that their jobs used their talents little or not at all and that they were dissatisfied with the sense of accomplishment gained from their jobs. Only 33 percent indicated that their jobs were interesting. The Digital Graphics group also had fairly low percentages in job interest and sense of accomplishment gained from their jobs. More important, though, this group had the highest percentage indicating that their training was used little or not at all, and this is one of the two groups containing a substantial mixture of AFS 291X0 and AFS 295X0 personnel. The only other group indicating they felt their jobs utilize their training little or not at all (60 percent) was the Base Switchboard Operations group. This was the group with the lowest job difficulty index.

TABLE 11

JOB DIFFICULTY INDEX VALUES FOR JOB GROUPS
(IN ORDER OF JDI)

JOB GROUPS	JDI	ATDPTS	AVERAGE NUMBER TASKS PERFORMED	PERCENT AFS 291X0 IN JOB GROUP	PERCENT AFS 295X0 IN JOB GROUP
XIII SUPERVISION AND ADMINISTRATION CLUSTER	20.7	5.17	112	90	10
III AUTOMATIC DIGITAL OPERATIONS CLUSTER	17.9	4.28	102	29	71
XIV TRAFFIC ANALYSIS CLUSTER	16.2	4.90	68	77	23
XII PROGRAMMERS CLUSTER	15.9	6.27	33	8	92
VII COMMUNICATIONS COMPUTER OPERATIONS CLUSTER	15.3	4.49	72	4	96
VI AUTODIN OPERATIONS CLUSTER	15.1	4.34	74	3	97
IV COMMUNICATIONS CENTER SWITCHBOARD OPERATORS INDEPENDENT JOB TYPE	14.3	4.18	71	100	0
V MOBILE COMMUNICATIONS INDEPENDENT JOB TYPE	14.1	4.57	60	100	0
II DIGITAL GRAPHICS OPERATORS INDEPENDENT JOB TYPE	14.0	4.37	67	62	38
XI LIAISON CLUSTER	13.1	5.75	26	79	21
VIII AFSATCOM OPERATORS INDEPENDENT JOB TYPE	12.7	4.69	46	100	0
I COMCENTER OPERATIONS CLUSTER	12.3	4.01	60	99	1
XV COMSEC ACCOUNTANT INDEPENDENT JOB TYPE	12.2	4.70	43	99	1
X TECHNICAL TRAINING INDEPENDENT JOB TYPE	8.1	4.67	15	71	29
IX BASE SWITCHBOARD OPERATIONS CLUSTER	7.6	4.05	25	100	0

TABLE 12

JOB SATISFACTION INFORMATION FOR JOB GROUPS

	COMMCENTER OPERATIONS CLUSTER (N=1,207)	DIGITAL GRAPHICS OPERATORS (N=16)	AUTOMATIC DIGITAL OPERATIONS CLUSTER (N=121)	COMMCENTER SWITCHBOARD OPERATORS (N=10)	MOBILE COMMS OPERATORS (N=9)
<u>I FIND MY JOB:</u>					
INTERESTING	43	44	67	40	33
SO-SO	25	12	15	50	22
DULL	30	44	18	10	44
<u>MY JOB UTILIZES MY TALENTS:</u>					
FAIRLY WELL TO PERFECTLY	60	44	68	50	33
VERY LITTLE OR NOT AT ALL	39	56	31	50	67
<u>MY JOB UTILIZES MY TRAINING:</u>					
FAIRLY WELL TO PERFECTLY	80	31	62	80	67
VERY LITTLE OR NOT AT ALL	19	69	38	20	22
<u>THE SENSE OF ACCOMPLISHMENT GAINED FROM MY JOB LEAVES ME:</u>					
SATISFIED	42	19	56	40	33
AMBIVALENT	21	25	10	20	0
DISSATISFIED	36	56	33	40	67
<u>MY REENLISTMENT INTENTIONS ARE:</u>					
YES OR PROBABLY YES	51	50	73	40	33
NO OR PROBABLY NO	46	44	25	50	56
NO, I WILL RETIRE WITH AT LEAST 20 YEARS ACTIVE MILITARY SERVICE	2	6	2	10	11

NOTE: COLUMNS MAY NOT TOTAL 100 PERCENT DUE TO "NO RESPONSE"

TABLE 13

JOB SATISFACTION INFORMATION FOR JOB GROUPS

	AUTODIN OPERATIONS CLUSTER (N=72)	COMM COMPUTER OPERATIONS CLUSTER (N=104)	AFSATCOM OPERATORS (N=16)	BASE SWITCHBOARD OPERATIONS CLUSTER (N=173)	TECHNICAL TRAINERS (N=17)
<u>I FIND MY JOB:</u>					
INTERESTING	61	54	50	42	82
SO-SO	21	23	31	26	6
DULL	17	23	19	32	12
<u>MY JOB UTILIZES MY TALENTS:</u>					
FAIRLY WELL TO PERFECTLY	76	64	69	42	100
VERY LITTLE OR NOT AT ALL	24	36	31	57	0
<u>MY JOB UTILIZES MY TRAINING:</u>					
FAIRLY WELL TO PERFECTLY	82	61	56	39	94
VERY LITTLE OR NOT AT ALL	18	39	44	60	6
<u>THE SENSE OF ACCOMPLISHMENT GAINED FROM MY JOB LEAVES ME:</u>					
SATISFIED	57	49	56	39	94
AMBIVALENT	14	12	31	18	6
DISSATISFIED	29	39	13	42	0
<u>MY REENLISTMENT INTENTIONS ARE:</u>					
YES OR PROBABLY YES	68	55	50	54	88
NO OR PROBABLY NO	21	25	50	41	11
NO, I WILL RETIRE WITH AT LEAST 20 YEARS ACTIVE MILITARY SERVICE	10	10	0	5	0

NOTE: COLUMNS MAY NOT TOTAL 100 PERCENT DUE TO "NO RESPONSE"

TABLE 14

JOB SATISFACTION INFORMATION FOR JOB GROUPS

	LIAISON CLUSTER (N=52)	PROGRAMMERS CLUSTER (N=59)	SUPERVISION AND ADMINISTRATION CLUSTER (N=370)	TRAFFIC ANALYSIS CLUSTER (N=111)	COMSEC ACCOUNTANTS (N=197)
<u>I FIND MY JOB:</u>					
INTERESTING	83	91	70	62	72
SO-SO	8	3	15	23	15
DULL	6	5	14	12	9
<u>MY JOB UTILIZES MY TALENTS:</u>					
FAIRLY WELL TO PERFECTLY	75	86	79	83	73
VERY LITTLE OR NOT AT ALL	23	14	21	17	25
<u>MY JOB UTILIZES MY TRAINING:</u>					
FAIRLY WELL TO PERFECTLY	73	83	80	87	65
VERY LITTLE OR NOT AT ALL	27	17	20	13	34
<u>THE SENSE OF ACCOMPLISHMENT GAINED FROM MY JOB LEAVES ME:</u>					
SATISFIED	73	85	67	63	68
AMBIVALENT	6	2	9	17	12
DISSATISFIED	21	14	23	19	18
<u>MY REENLISTMENT INTENTIONS ARE:</u>					
YES OR PROBABLY YES	42	63	53	59	62
NO OR PROBABLY NO	19	15	17	31	29
NO, I WILL RETIRE WITH AT LEAST 20 YEARS ACTIVE MILITARY SERVICE	39	22	29	9	8

NOTE: COLUMNS MAY NOT TOTAL 100 PERCENT DUE TO "NO RESPONSE"

Summary

There were nine clusters and six independent job types identified in the analysis of the job structure of the Telecommunications Operations and Automatic Digital Switching specialties. These 15 job groups were organized into three broad groupings. First, there were three clusters and three independent job groups functionally related through their message handling responsibilities. This collection of six groups accounted for half of the respondents in this study, including members of both AFSCs. Second, there were four clusters and six independent job types, all of which were not functionally related to the previous job groups. Finally, there were two clusters and one independent job type functionally related to one another by their management activities. Each of these 15 groups performed rather sharply differentiated jobs with little overlap of the responsibilities, except for the six groups which shared message handling responsibilities.

The analysis of job structure provides the first opportunity to evaluate the suggested merger of the 291X0 and 295X0 specialties. Ten of the 15 job groups were clearly differentiated as either AFS 291X0 or 295X0 job groups, with each made up of at least 90 percent of the members holding the same AFSC. Ignoring the Supervision and Administration, Traffic Analysis, Liaison, COMSEC Accountant, and Technical Training groups for the moment, only two groups showed any evidence of AFS 291X0 and 295X0 personnel performing the same jobs. Sixty-two percent of the Digital Graphics Operators held AFS 291X0, while 38 percent held AFS 295X0 (see Table 11). In the Automatic Digital Operations cluster, 29 percent held AFS 291X0 and 71 percent held AFS 295X0 (see Table 11). Information in the Appendix to this report indicates that the AFS 291X0 personnel in the Automatic Digital Operations cluster were concentrated in the Supervisors and MCATS Operators job types. These findings indicated that, except for groups performing management, liaison, training, and traffic analysis functions, there is relatively little evidence that members of these two specialties were performing the same job. This finding raises a basic question of whether a merger of the 291X0 and 295X0 specialties is really justified.

ANALYSIS OF SKILL AND EXPERIENCE GROUPS

Overview

Information obtained in this survey was also examined on the basis of skill level and experience (time in career field or time in service) for members of these two career ladders. These analyses provide several useful products. Examining tasks performed by members based on duty AFSCs provides an opportunity to evaluate the accuracy and comprehensiveness of the AFR 39-1 Specialty Descriptions for career ladders being surveyed. This analysis also provides an opportunity to evaluate career progression within a specialty. Examining experience groups provides an opportunity to evaluate job satisfaction across important phase points of the enlisted member's service. Further, the experience analysis provides an opportunity for a detailed examination of the tasks performed and background characteristics of first-enlistment personnel. This first-enlistment analysis can have substantial impact upon training and classification issues.

This section will begin with a review of the tasks and duties of each skill level group, with a comparison of the findings to the AFR 39-1 Specialty Descriptions. This will be followed by a comparison of survey findings to the proposed Specialty Descriptions that merge the responsibilities of AFSs 291X0 and 295X0, concluding with an examination of responses to background questions of interest to training and management personnel. The next subsection will examine experience patterns of AFS 291X0 and 295X0 personnel, followed by a review of job satisfaction responses of members by experience groups. The last subsection will focus on the jobs of AFS 291X0 personnel in their first-enlistment and of AFS 295X0 personnel in their first four years in the career field.

AFS 291X0 Skill Level Groups

DAFSCs 29130 and 29150: Little difference was found in the tasks performed or in the relative percent time spent on duties by the 3-skill level (apprentice) and 5-skill level (specialist) Telecommunications Operations personnel. Forty-seven percent of the apprentice's job time was concentrated on message processing activities, such as preparing service messages, proofreading messages, and stamping messages with filing times, classifications, or special handling instructions (see Tables 15 and 16). Five-skill level specialists concentrated 36 percent of their job time on message processing tasks. There were only 29 tasks on which the difference between the percentages of apprentices and specialists performing was at least 10 percent. Five message processing tasks were performed by greater percentages of apprentices. Twenty-four tasks were performed by greater percentages of specialists. Examples of these tasks, shown in Table 17, indicate that the characteristics distinguishing specialists from apprentices were the specialists' greater involvement in security and training activities. Since the differences between apprentices and specialists were small, members of both groups have been combined and referred to as specialists for the remainder of this section.

TABLE 15

PERCENT TIME SPENT ON DUTIES BY AFS 291X0 PERSONNEL

DUTY	DAFSC		
	29130/29150 (N=2,002)	29170 (N=579)	29190 (N=60)
A ORGANIZING AND PLANNING	6	15	21
B DIRECTING AND IMPLEMENTING	7	16	22
C INSPECTING AND EVALUATING	2	11	23
D TRAINING	3	8	6
E PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	13	9	5
F MANAGING SOFTWARE AND PERFORMING PROCEDURES AND ANALYSIS	4	5	3
G MAINTAINING MAGNETIC MEDIA	0	0	0
H PROCESSING MESSAGES	38	13	2
I MAINTAINING SECURITY	14	16	15
J OPERATING NON-MOBILE TELEPHONE SWITCHBOARDS	7	4	0
K PROGRAMMING COMMUNICATIONS COMPUTERS	0	0	0
L OPERATING MOBILE COMMUNICATIONS UNITS	0	0	0
M OPERATING UNIVAC SET-8 (USET-8) SYSTEMS	0	0	0
N OPERATING INTERMEDIATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (ICATS)	0	0	0
O OPERATING MODERATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (MCATS)	0	0	0
P OPERATING AUTOMATIC DIGITAL WEATHER SWITCH (ADWS) SYSTEMS	0	0	0
Q OPERATING 427M/COMMUNICATIONS SYSTEM SEGMENTS (427M/CSS)	0	0	0
R OPERATING THE STRATEGIC AIR COMMAND AUTOMATED TOTAL INFORMATION NETWORK (SATIN) AND STRATEGIC AIR COMMAND AND CONTROL SYSTEM (SACCS)	0	0	0
S OPERATING AUTOMATED MESSAGE PROCESSING AND EXCHANGE SYSTEM (AMPE)	0	0	0
T OPERATING STREAMLINER SYSTEMS	0	0	0
U OPERATING AUTOMATIC DIGITAL NETWORK (AUTODIN) I	0	0	0
V OPERATING OVERSEAS AUTOMATIC DIGITAL NETWORK (AUTODIN) SWITCHING CENTERS	0	0	0
W OPERATING THE AIR FORCE DIGITAL GRAPHICS SYSTEM (AFDIGS) WITHIN THE OFFUTT WEATHER FACSIMILE SWITCHING CENTER (WFSC)	0	0	0
X OPERATING THE AIR FORCE SATELLITE COMMUNICATIONS SYSTEM (AFSATCOM)	0	0	0

NOTE: SOME COLUMNS DO NOT TOTAL 100 PERCENT BECAUSE OF ROUNDING TO NEAREST PERCENT.

TABLE 16

REPRESENTATIVE TASKS PERFORMED BY DAFSC 29130 AND 29150 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=2,002)
H281 PREPARE SERVICE MESSAGES	64
I311 DESTROY CLASSIFIED WASTE	63
H284 PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	61
H304 STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	61
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	59
H303 STAMP FILING TIMES ON OUTGOING MESSAGES	59
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOGS	56
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	55
I313 INVENTORY ACCOUNTABLE COMSEC MATERIAL	55
H264 MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	54
H306 STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	54
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	54
H273 NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGES RECEIPT	54
H293 REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	53
I312 ESCORT VISITORS THROUGH FACILITIES	52
H305 STAMP TIME OF RECEIPT ON INCOMING MESSAGES	52
H274 PERFORATE MESSAGE TAPES	51
H288 REPRODUCE MESSAGES FOR DISTRIBUTION	49
E186 PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS	48
E168 NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	47
H256 DISTRIBUTE GENERAL MESSAGES	47
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	47
I330 PERFORM PHYSICAL SECURITY INSPECTIONS OF FACILITIES	45
H278 PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	44
B39 CONDUCT SHIFT CHANGE BRIEFINGS	43
I326 MAKE PAGE CHECKS	42

TABLE 17

EXAMPLE TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 29130 AND DAFSC 29150
(PERCENT PERFORMING)

TASKS	DAFSC		DIFFERENCE
	29130 (N=621)	29150 (N=1,581)	
H305 STAMP TIME OF RECEIPT ON INCOMING MESSAGES	63	49	+14
H309 VERIFY CARD COUNT ON CARD COUNTING MACHINES	49	36	+13
H278 PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	54	41	+13
H304 STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	71	58	+13
H303 STAMP FILING TIMES ON OUTGOING MESSAGES	69	57	+12
* * * * *	*	*	*
I310 CHANGE LOCK COMBINATIONS	6	17	-11
I330 PERFORM PHYSICAL SECURITY INSPECTIONS OF FACILITIES	37	48	-11
B77 SUPERVISE APPRENTICE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29130)	15	29	-14
B71 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	7	21	-14
I336 SIGN RECEIPTS FOR CLASSIFIED MATERIALS	13	28	-15
D131 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	5	20	-15
I313 INVENTORY ACCOUNTABLE COMSEC MATERIALS	43	59	-16
B39 CONDUCT SHIFT CHANGE BRIEFINGS	30	47	-17
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	8	25	-17
C107 PREPARE APRs	5	24	-19
D115 CONDUCT OJT	14	33	-19

NOTE: THERE WERE ONLY FIVE TASKS PERFORMED BY AT LEAST 10 PERCENT MORE APPRENTICES THAN SPECIALISTS. THERE WERE 24 TASKS PERFORMED BY 10 PERCENT MORE SPECIALISTS THAN APPRENTICES.

DAFSC 29170: The jobs of 7-skill level Telecommunications Operations personnel (supervisors) differed markedly from the specialist jobs. Supervisors spent 42 percent of their job time on supervisory activities, such as preparing personnel performance reports, interpreting policies, coordinating with users, determining work priorities, and establishing performance standards (see Tables 15 and 18). This increase in supervisory activities was accompanied by a substantial reduction in relative time spent on message processing activities (only 13 percent of the supervisors' job time). There were 154 tasks identified where differences in percentages of specialists and supervisors performing was at least 10 percent. Examples of these differentiating tasks are shown in Table 19. Forty-nine tasks, primarily message processing tasks, such as proofreading messages, stamping filing times, and preparing service messages, were performed by greater percentages of specialists. Examples of the 105 tasks performed by greater proportions of 7-skill level respondents included conducting OJT, supervising others, maintaining training records, establishing policies, and establishing performance standards.

The shift to supervisory responsibilities was shown somewhat in the concentrations of personnel in the job groups identified in the ANALYSIS OF CAREER LADDER JOBS section. The group with the largest number of DAFSC 29170 personnel was the Supervision and Administration cluster, containing 152 of the 579 7-skill level respondents (see Table 35). The only other large group of DAFSC 29170 personnel was in the Commcenter Operations cluster, with 97 supervisors. Yet, in both of these job groups the 7-skill level personnel were less than a majority. The only group in which the supervisors made up the majority was the Liaison group, where 33 of the 41 members held DAFSC 29170.

DAFSC 29190: The jobs of the 9-skill level Telecommunications Operations personnel (superintendents) showed an even greater concentration of job time in supervisory activities than was seen in the jobs of 7-skill level respondents. Among the superintendents, 66 percent of their job time was centered on supervisory activities, such as counseling personnel, preparing performance evaluations, inspecting facilities and programs, drafting staff studies, and establishing policies (see Tables 15 and 20). One hundred and fifty tasks were identified on which there were differences of at least 10 percent between the percentages of 7- and 9-skill level personnel performing. Examples of these tasks have been displayed in Table 21. Eighty-one tasks were performed by greater percentages of 7-skill level personnel. Included in these tasks were message processing, security, training, and general communications activities. In contrast, the 69 tasks performed by greater percentages of 9-skill level personnel involved managerial and inspection activities. Twenty-three of the 60 DAFSC 29190 respondents were found in the Supervision and Administration cluster. This constituted the largest concentration of superintendents in any of the job groups discussed in the ANALYSIS OF CAREER LADDER JOBS section. An even larger number, 26 members, did not group with any specific group. This was probably due to the unique positions that very senior personnel often occupy. Some of the job titles reported by 9-skill level members not grouping with others included Superintendent of Software Systems Engineering at the Computer Programming Center, Superintendent of the Washington/Moscow Communications Link at the Pentagon, Staff Telecommunications Systems Analyst at HQ AFCC, and Message Review Analyst in the Office of the Joint Chiefs of Staff.

TABLE 18

REPRESENTATIVE TASKS PERFORMED BY DAFSC 29170 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=579)
I312 ESCORT VISITORS THROUGH FACILITIES	67
C107 PREPARE APRS	62
B41 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	58
B74 ORIENT NEWLY ASSIGNED PERSONNEL	57
I311 DESTROY CLASSIFIED WASTE	57
B71 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	52
I313 INVENTORY ACCOUNTABLE COMSEC MATERIALS	52
A1 ASSIGN PERSONNEL TO DUTY STATIONS	52
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	51
B82 SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	50
I337 VERIFY ENTRY AUTHORIZATION OF VISITORS	50
B85 WRITE CORRESPONDENCE	49
A13 DETERMINE WORK PRIORITIES	48
I330 PERFORM PHYSICAL SECURITY INSPECTIONS OF FACILITIES	48
D115 CONDUCT OJT	48
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	48
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	47
A24 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	47
A10 COORDINATE WITH USERS OR MAINTENANCE AGENCIES ON PLANNED CIRCUIT OUTAGES OR EQUIPMENT MALFUNCTIONS	44
I336 MAKE PAGE CHECKS	43
D131 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	43
C109 REVIEW OPERATIONAL LOGS OR REPORTS	42
A38 SCHEDULE LEAVES OR PASSES	42
I310 CHANGE LOCK COMBINATIONS	42
I336 SIGN RECEIPTS FOR CLASSIFIED MATERIALS	41
E195 TYPE ADMINISTRATIVE MATERIAL SUCH AS CORRESPONDENCE, FORMS, OR REPORTS	41

TABLE 19

EXAMPLE TASKS WHICH BEST DIFFERENTIATE BETWEEN THE COMBINED
DAFSC 29130 AND 29150 PERSONNEL AND THE DAFSC 29170 PERSONNEL
(PERCENT PERFORMING)

TASKS	DAFSC		DIFFERENCE
	COMBINED 29130/29150 (N=2,002)	29170 (N=1,581)	
H284 PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	61	29	+32
H303 STAMP FILING TIMES ON OUTGOING MESSAGES	59	28	+31
H281 PREPARE SERVICE MESSAGES	64	35	+29
H273 NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	54	25	+29
H288 REPRODUCE MESSAGES FOR DISTRIBUTION	49	21	+28
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	54	27	+27
H274 PERFORATE MESSAGE TAPES	51	28	+23
* * * * *			
A10 COORDINATE WITH USERS OR MAINTENANCE AGENCIES ON PLANNED CIRCUIT OUTAGES OR EQUIPMENT MALFUNCTIONS	27	44	-17
I336 SIGN RECEIPTS FOR CLASSIFIED MATERIALS	24	41	-17
A13 DETERMINE WORK PRIORITIES	30	48	-18
D115 CONDUCT OJT	29	48	-19
B84 SUPERVISE TELECOMMUNICATIONS OPERATIONS SUPERVISORS (AFSC 29170)	2	22	-20
B82 SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	27	50	-23
D131 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	17	42	-25
C103 INDORSE AIRMEN PERFORMANCE REPORTS (APR)	7	33	-26
A21 ESTABLISH COMMUNICATIONS CENTER POLICIES	8	35	-27
C109 REVIEW OPERATIONAL LOGS OR REPORTS	15	42	-27
C92 EVALUATE INSPECTION REPORTS OR PROCEDURES	5	32	-27
A24 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	14	47	-33
B71 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	18	52	-34
C107 PREPARE APRs	21	62	-41

NOTE: THERE WERE 49 TASKS PERFORMED BY AT LEAST 10 PERCENT MORE AFSCs 29130/29150 PERSONNEL THAN SUPERVISORS. THERE WERE 105 TASKS PERFORMED BY AT LEAST 10 PERCENT MORE SUPERVISORS THAN AFSCs 29130/29150 PERSONNEL.

TABLE 20
REPRESENTATIVE TASKS PERFORMED BY DAFSC 29190 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=60)
B71 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	78
B41 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	77
B74 ORIENT NEWLY ASSIGNED PERSONNEL	75
C107 PREPARE APRs	73
I312 ESCORT VISITORS THROUGH FACILITIES	73
B85 WRITE CORRESPONDENCE	72
C103 INDORSE APRs	68
C92 EVALUATE INSPECTION REPORTS OR PROCEDURES	68
E197 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	68
C89 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	67
C108 REVIEW DISCREPANCY REPORTS	67
A24 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	67
C104 INSPECT FACILITIES	65
A13 DETERMINE WORK PRIORITIES	65
A12 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	65
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	63
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	63
C98 EVALUATE SECURITY PROGRAMS	62
B84 SUPERVISE TELECOMMUNICATIONS OPERATIONS SUPERVISORS (AFSC 29170)	62
C87 DRAFT STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	62
I311 DESTROY CLASSIFIED WASTE	62
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	62
A38 SCHEDULE LEAVES OR PASSES	62
I330 PERFORM PHYSICAL SECURITY INSPECTIONS OF FACILITIES	60
A23 ESTABLISH ORGANIZATIONAL POLICIES OR COMMUNICATIONS OPERATING INSTRUCTIONS	60
C109 REVIEW OPERATIONAL LOGS OR REPORTS	58
I336 SIGN RECEIPTS FOR CLASSIFIED MATERIALS	58
I337 VERIFY ENTRY AUTHORIZATION OF VISITORS	58

TABLE 21

EXAMPLE TASKS WHICH BEST DISTINGUISH BETWEEN DAFSC 29170
AND DAFSC 29190 PERSONNEL
(PERCENT PERFORMING)

TASKS	DAFSC		DIFFERENCE
	29170 (N=579)	29190 (N=60)	
H281 PREPARE SERVICE MESSAGES	35	3	+32
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	38	7	+31
H254 ASSIGN ROUTING INDICATORS	30	2	+28
B39 CONDUCT SHIFT CHANGE BRIEFINGS	31	5	+26
D115 CONDUCT OJT	48	23	+25
B82 SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	50	26	+24
H306 STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	25	3	+22
I325 MAKE CRYPTOGRAPHIC CHANGES	23	5	+18
H283 PROCESS LIMITED DISTRIBUTION OR SPECIAL CATEGORY MESSAGES	24	6	+18
E167 NOTIFY CONTRACT MAINTENANCE EQUIPMENT OUTAGES	24	7	+17
D116 COUNSEL TRAINEES ON TRAINING PROGRESS	47	33	+14
H259 INITIATE ELECTRICAL TRACER ACTIONS	13	1	+12
* * * * *			
B83 SUPERVISE TELECOMMUNICATIONS OPERATIONS SUPERINTENDENTS (AFSC 29190)	2	13	-11
A25 ESTABLISH PROCEDURES FOR DOCUMENT SECURITY AND CONTROL	24	42	-18
B41 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	58	77	-19
A23 ESTABLISH ORGANIZATIONAL POLICIES OR COMMUNICATIONS OPERATING INSTRUCTIONS	37	60	-23
C89 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	38	66	-28
C108 REVIEW DISCREPANCY REPORTS	38	67	-29
C103 INDORSE AIRMEN PERFORMANCE REPORTS (APR)	33	68	-35
C104 INSPECT FACILITIES	29	65	-36
C87 DRAFT STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	24	61	-37
B84 SUPERVISE TELECOMMUNICATIONS OPERATIONS SUPERVISORS (AFSC 29170)	22	61	-39

NOTE: THERE WERE 81 TASKS PERFORMED BY AT LEAST 10 PERCENT MORE SUPERVISORS THAN SUPERINTENDENTS. THERE WERE 69 TASKS PERFORMED BY AT LEAST 10 PERCENT MORE SUPERINTENDENTS THAN SUPERVISORS.

Comparisons of Findings to AFS 291X0 AFR 39-1 Specialty Descriptions

The results of the skill level and job structure analyses were compared with AFR 39-1 Specialty Descriptions, dated 1 January 1982, for the Telecommunications Operations specialty. The descriptions in AFR 39-1 were intended to portray, in broad terms, the tasks and duties performed by members of the various skill level groups of a career ladder. There were three descriptions applicable to AFS 291X0. One described jobs of AFSCs 29110, 29130, and 29150. The other two descriptions covered AFSCs 29170 and 29190.

The tasks and duties contained in the three descriptions were well supported by the findings of this occupational survey. The descriptions satisfactorily related the progression from technical operator activities performed by apprentice and specialist skill levels to the progressively more concentrated supervisory and managerial activities of the 7- and 9-skill level descriptions. The descriptions also captured the primary responsibilities of the major job groups which were manned primarily by AFS 291X0 personnel. Only one incongruence was identified between the descriptions, as written, and the data obtained in this survey. The three descriptions place the COMSEC Accountant responsibilities with the DAFSC 29170 and 29190 levels, but not at the DAFSC 29110/29130/29150 levels. The findings of the ANALYSIS OF CAREER LADDER JOBS section showed, however, that 132 of the 197 members of this job group (67 percent) held DAFSC 29130 or 29150.

AFS 295X0 Skill Level Groups

DAFSC 29530: The jobs of Automatic Digital Switching Specialists differed markedly from the jobs of Telecommunications Operations Personnel. With DAFSC 29530 personnel, only 17 percent of their job time was devoted to processing messages and 19 percent on performing general communications functions. The remaining 64 percent of time on the job was spread across a variety of responsibilities, including supervision and training (15 percent), managing software, maintaining magnetic media, performing procedures and analysis (15 percent), security tasks (five percent), programming computers (five percent), and operating digital communications computers (more than 21 percent of job time (see Table 22). The communications computer systems which accounted for the largest proportions of job time were the Automatic Digital Weather Switch (ADWS) system (accounting for five percent of all specialists' job time), Automatic Digital Network (AUTODIN) 1 (five percent), the UNIVAC Set-8 (USET-8) system (three percent), and the Strategic Air Command Automated Total Information Network (SATIN) and the Strategic Air Command and Control System (SACCS) (three percent). This picture may be misleading; however, since, AFS 295X0 was such a diverse career ladder. In effect, the specialists had quite discrete jobs, due to the equipment they were assigned to operate. The major commonality among their jobs involved message handling, maintenance of magnetic media, and managing software. Tasks performed by DAFSC 29530 personnel included making entries on logs, forms, and labels; retrieving messages; mounting, dismounting, and filing magnetic media; and performing operator maintenance on card punches, high speed printers, and magnetic tape devices (see Table 23).

The three job groups identified in the ANALYSIS OF CAREER LADDER JOBS section with the greatest concentration of DAFSC 29530 respondents were the Communications Center Computer Operations, Automatic Digital Operations, and the AUTODIN Operations clusters (see Table 35). Each of these clusters contained two or more job groups which were differentiated primarily by the type of system operated.

DAFSC 29570: As seen in the Telecommunications Operations specialty, the change in jobs from DAFSC 29530 to 29570 (technician) was marked by a decline in the amount of job time devoted to processing message (nine percent of the technician's job time) and an increase in the time spent (33 percent) on supervisory functions (see Table 27). The diversity among the jobs seen with the specialists changed very little at the technician level. Tasks performed by technicians included mounting and dismounting magnetic media, coordinating with users or maintenance agencies, preparing personnel performance evaluations, counseling personnel, and analyzing system printouts (see Table 24). Ninety tasks were found on which the percentages of DAFSC 29530 and 29570 personnel performing were greater than 10 percent. The 49 tasks performed by greater percentages of specialists tended to be the more technical tasks, such as preparing service messages; removing or filing magnetic media; and making entries on forms, records, files, and work requests. In contrast, tasks performed by greater percentages of technicians were more supervisory and managerial, such as coordinating with users, counseling trainees and other personnel, drafting staff studies, preparing performance reports, and reviewing operational reports (see Table 25).

For the most part, DAFSC 29570 respondents were concentrated in the same job groups where the specialists were found. Three additional job groups, though, also had substantial numbers of 7-skill level personnel. There were 38 technicians in the Programmers cluster, 27 technicians in the Supervision and Administration cluster, and 17 technicians in the Traffic Analysis cluster (see Table 35).

DAFSC 29590: The Automatic Digital Switching Superintendents (DAFSC 29590) concentrated an even greater percentage of their job time (62 percent) on supervision, training, and managerial activities (refer to Table 22). They also spent a greater proportion of their job time (15 percent) on programming computers than did either the specialists or technicians. Tasks characteristic of the jobs performed by superintendents included writing correspondence, drafting staff studies, preparing or indorsing personnel performance reports, coordinating with DOD agencies, civilian contractors, and others, and establishing policies (see Table 26). The 94 tasks performed by at least a 10 percent greater proportion of technicians than superintendents primarily involved tasks related to maintaining magnetic media and performing general communications activities. The 85 tasks performed by the superintendents, on the other hand, were of a more managerial nature, including such activities as coordinating procedures with customer agencies, drafting changes to operating publications, and reviewing (indorsing) personnel performance reports (see Table 27).

The bulk of DAFSC 29590 personnel were found in three job groups identified by the ANALYSIS OF CAREER LADDER JOBS section. Those groups were the Supervision and Administration, Programmers, and Liaison clusters (see Table 36).

TABLE 22

PERCENT TIME SPENT ON DUTIES BY AFS 295X0 PERSONNEL

DUTY	DAFSC		
	29530 (N=241)	29570 (N=245)	29590 (N=17)
A ORGANIZING AND PLANNING	4	10	19
B DIRECTING AND IMPLEMENTING	6	11	21
C INSPECTING AND EVALUATING	2	7	17
D TRAINING	3	5	5
E PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	19	13	4
F MANAGING SOFTWARE AND PERFORMING PROCEDURES AND ANALYSIS	6	7	7
G MAINTAINING MAGNETIC MEDIA	9	5	0
H PROCESSING MESSAGES	17	9	0
I MAINTAINING SECURITY	5	6	7
J OPERATING NON-MOBILE TELEPHONE SWITCHBOARDS	0	0	0
K PROGRAMMING COMMUNICATIONS COMPUTERS	5	13	15
L OPERATING MOBILE COMMUNICATIONS UNITS	0	0	0
M OPERATING UNIVAC SET-8 (USET-8) SYSTEMS	3	1	0
N OPERATING INTERMEDIATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (ICATS)	1	0	0
O OPERATING MODERATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (MCATS)	0	0	0
P OPERATING AUTOMATIC DIGITAL WEATHER SWITCH (ADES) SYSTEMS	5	2	0
Q OPERATING 427M/COMMUNICATIONS SYSTEM SEGMENTS (427CSS)	1	1	0
R OPERATING THE STRATEGIC AIR COMMAND AUTOMATED TOTAL INFORMATION NETWORK (SATIN) AND STRATEGIC AIR COMMAND AND CONTROL SYSTEMS (SACCS)	3	2	0
S OPERATING AUTOMATED MESSAGE PROCESSING AND EXCHANGE SYSTEM (AMPE)	1	1	0
T OPERATING STREAMLINER	0	0	0
U OPERATING AUTOMATIC DIGITAL NETWORK (AUTODIN) I	5	3	2
V OPERATING OVERSEAS AUTOMATIC DIGITAL NETWORK (AUTODIN) SWITCHING CENTERS	2	1	0
W OPERATING THE AIR FORCE DIGITAL GRAPHICS SYSTEM (AFDIGS) WITHIN THE OFFUTT WEATHER FACSIMILE SWITCHING CENTER (WFSC)	0	0	0
X OPERATING THE AIR FORCE SATELLITE COMMUNICATIONS SYSTEM (AFSATCOM)	0	0	0

NOTE: SOME COLUMNS DO NOT TOTAL 100 PERCENT BECAUSE OF ROUNDING TO NEAREST PERCENT.

TABLE 23

REPRESENTATIVE TASKS PERFORMED BY DAFSC 29530 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=241)
E158 MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	67
H281 PREPARE SERVICE MESSAGES	61
G247 MOUNT OR DISMOUNT MAGNETIC MEDIA	58
H290 RETRIEVE MESSAGES	58
G243 MAINTAIN DD FORM 1772, MAGNETIC TAPE LIBRARY RECORD AND PERPETUAL HISTORY	53
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	53
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	52
E150 MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	52
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	49
E149 MAKE ENTRIES ON CENTER EQUIPMENT OUTAGES LOGS	49
E169 PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	48
I312 ESCORT VISITORS THROUGH FACILITIES	48
E173 PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	48
G251 REMOVE OR FILE MAGNETIC MEDIA	47
B39 CONDUCT SHIFT CHANGE BRIEFINGS	46
I311 DESTROY CLASSIFIED WASTE	46
G242 INVENTORY MAGNETIC MEDIA	46
G246 MAKE ENTRIES ON DD FORM 1771, MAGNETIC TAPE LIBRARY PURGE RECORD	45
E164 MAKE ENTRIES ON RESTART OR RELOAD RECORDS	45
E170 PERFORM OPERATOR MAINTENANCE ON CARD READERS	45
E138 CHECK OPERATIONAL STATUS OF SPARE EQUIPMENT	43
G250 PURGE MAGNETIC MEDIA	43
H264 MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	42
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	42
E177 PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	41

TABLE 24

REPRESENTATIVE TASKS PERFORMED BY DAFSC 29570 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=245)
I312 ESCORT VISITORS THROUGH FACILITIES	55
B74 ORIENT NEWLY ASSIGNED PERSONNEL	50
G247 MOUNT OR DISMOUNT MAGNETIC MEDIA	45
I311 DESTROY CLASSIFIED WASTE	44
C107 PREPARE APRs	44
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	44
E158 MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	42
H281 PREPARE SERVICE MESSAGES	41
A13 DETERMINE WORK PRIORITIES	40
F202 ANALYZE SYSTEM PRINTOUTS	39
B41 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	39
H290 RETRIEVE MESSAGES	38
A10 COORDINATE WITH USERS OR MAINTENANCE AGENCIES ON PLANNED CIRCUIT OUTAGES OR EQUIPMENT MALFUNCTIONS	38
B71 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	37
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	37
B78 SUPERVISE AUTOMATIC DIGITAL SWITCHING SPECIALISTS (AFSC 29530)	37
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	37
D115 CONDUCT OJT	36
A3 COORDINATE CIRCUIT ACTIVATIONS, DEACTIVATIONS, OR CHANGES WITH TECHNICAL CONTROL FACILITIES AND MAINTENANCE	35
C109 REVIEW OPERATIONAL LOGS OR REPORTS	35
B39 CONDUCT SHIFT CHANGE BRIEFINGS	34

TABLE 25

EXAMPLE TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 29530 AND DAFSC 29570 PERSONNEL
(PERCENT PERFORMING)

TASKS	DAFSC		DIFFERENCE
	29530 (N=241)	29570 (N=245)	
E158 MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	66	42	+24
H281 PREPARE SERVICE MESSAGES	61	41	+20
H290 RETRIEVE MESSAGES	58	33	+20
E150 MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	52	33	+19
G251 REMOVE OR FILE MAGNETIC MEDIA	47	29	+18
E164 MAKE ENTRIES ON RESTART OR RELOAD RECORDS	45	28	+17
H296 SEND OR RECEIVE ACKNOWLEDGEMENT FOR HIGH PRECEDENCE MESSAGES	29	13	+16
E173 PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	48	33	+15
H298 SEND OR RECEIVE MESSAGES USING MAGNETIC TAPE TERMINAL STATION EQUIPMENT	30	16	+14
E190 PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	37	24	+13
G253 RUN MAGNETIC MEDIA PARITY ERROR CHECKS	27	14	+13
E160 MAKE ENTRIES ON LOGS FOR LOCAL CUSTOMER MAGNETIC TAPE FILES	23	16	+12
* * * * *			
F211 COORDINATE WITH SUBSCRIBERS ON OPERATIONAL AND PROCEDURAL PROBLEMS	20	31	-11
I337 VERIFY ENTRY AUTHORIZATION OF VISITORS	25	37	-12
A8 COORDINATE SPECIAL MESSAGE HANDLING PROCEDURES WITH CUSTOMER AGENCIES	7	19	-12
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	18	32	-14
C109 REVIEW OPERATIONAL LOGS OR REPORTS	20	34	-14
B78 SUPERVISE AUTOMATIC DIGITAL SWITCHING SPECIALISTS (AFSC 29530)	22	37	-15
C87 DRAFT STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	4	21	-17
B41 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	21	39	-18
B71 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	19	37	-18
B80 SUPERVISE AUTOMATIC DIGITAL SWITCHING TECHNICIANS (AFSC 29570)	4	25	-21
C107 PREPARE APRs	17	44	-27

NOTE: THERE WERE 49 TASKS PERFORMED BY AT LEAST 10 PERCENT MORE SPECIALISTS THAN TECHNICIANS. THERE WERE 41 TASKS PERFORMED BY AT LEAST 10 PERCENT MORE TECHNICIANS THAN SPECIALISTS.

TABLE 26

REPRESENTATIVE TASKS PERFORMED BY DAFSC 29590 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=17)
B58 WRITE CORRESPONDENCE	71
C87 DRAFT STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	71
A29 PLAN BRIEFINGS	59
A11 DETERMINE BUDGET OR FINANCIAL REQUIREMENTS	59
C107 PREPARE APRs	53
C103 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	53
B74 ORIENT NEWLY ASSIGNED PERSONNEL	53
A9 COORDINATE WITH CONTRACT PERSONNEL ON GOVERNMENT CONTRACTS	47
A6 COORDINATE EQUIPMENT INSTALLATION OR RELOCATION WITH ENGINEERING AND INSTALLATION	47
C89 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	47
B71 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	47
B41 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	47
A28 ESTIMATE COMMUNICATIONS TRAFFIC LOADS	47
C91 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	47
A21 ESTABLISH COMMUNICATIONS CENTER POLICIES	47
A24 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	47
A36 PREPARE JOB DESCRIPTIONS	47
A8 COORDINATE SPECIAL MESSAGE HANDLING PROCEDURES WITH CUSTOMER AGENCIES	47
A19 DEVELOP WORK METHODS OR PROCEDURES	47
A12 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	47
A4 COORDINATE COMMUNICATIONS COMPUTER SYSTEM DEVELOPMENT WITH OTHER DOD AGENCIES AND CIVILIAN CONTRACTORS	47
I312 ESCORT VISITORS THROUGH FACILITIES	47

TABLE 27

EXAMPLE TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 29570 AND DAFSC 29590 PERSONNEL
(PERCENT PERFORMING)

TASKS	DAFSC		DIFFERENCE
	29570 (N=245)	29590 (N=17)	
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOGS	44	0	+44
G247 MOUNT OR DISMOUNT MAGNETIC MEDIA	45	6	+39
H281 PREPARE SERVICE MESSAGES	41	6	+35
E177 PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	32	0	+32
D115 CONDUCT OJT	36	6	+30
E164 MAKE ENTRIES ON RESTART AND RELOAD RECORDS	29	0	+29
F202 ANALYZE SYSTEM PRINTOUTS	39	12	+27
G250 PURGE MAGNETIC MEDIA	24	0	+24
G252 REPAIR MAGNETIC TAPES	24	0	+24
H260 INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	23	0	+23
H280 PREPARE PAPER TAPE EQUIPMENT FOR OPERATION	20	0	+20
* * * * *			
B84 SUPERVISE TELECOMMUNICATIONS OPERATIONS			
SUPERVISORS (AFSC 29570)	5	17	-12
I314 ISSUE COMSEC MATERIALS	4	18	-14
B76 PROVIDE TECHNICAL COMMUNICATIONS GUIDANCE TO HOST			
UNITS OR COMMANDS	13	29	-16
B42 DIRECT AUTOMATED DATA PROCESSING EQUIPMENT (ADPE)			
FUNCTIONS	12	29	-17
B63 DRAFT RECOMMENDED CHANGES TO OPERATING PUBLICATIONS	20	41	-21
C95 EVALUATE PROCEDURES AND ANALYSIS FUNCTIONS	14	41	-27
A8 COORDINATE SPECIAL MESSAGE HANDLING PROCEDURES			
WITH CUSTOMER AGENCIES	20	47	-27
A4 COORDINATE COMPUTER SYSTEMS DEVELOPMENT WITH			
OTHER DOD AGENCIES AND CIVILIAN CONTRACTORS	17	47	-30
A21 ESTABLISH COMMUNICATIONS CENTER POLICIES	12	47	-35
C103 INDORSE AIRMEN PERFORMANCE REPORTS (APR)	17	53	-36
C87 DRAFT STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	21	70	-49

NOTE: THERE WERE 94 TASKS PERFORMED BY AT LEAST 10 PERCENT MORE TECHNICIANS THAN BY SUPERINTENDENTS. THERE WERE 85 TASKS PERFORMED BY AT LEAST 10 PERCENT MORE SUPERINTENDENTS THAN BY TECHNICIANS.

Comparisons of Findings to AFS 295X0
AFR 39-1 Specialty Descriptions

The results of the AFS 295X0 skill level and job structure analyses were compared with the AFR 39-1 Specialty Descriptions, dated 1 January 1982, for the Automatic Digital Switching specialty. As mentioned earlier, these descriptions were designed to provide a broad outline of the tasks and duties performed by members for each skill level within a specialty. There were two descriptions in AFR 39-1 applicable to the 295X0 specialty; one for AFSCs 29510/29530/29570, and one for AFSCs 29590/29100. The descriptions, as currently written, accurately reflected the tasks and duties being performed by the Automatic Digital Switching personnel responding to this study. In the event that a merger of AFSS 291X0 and 295X0 does not take place, the current descriptions should be adequate as written, at least for the short term.

Comparison Between AFS 291X0 and 295X0 Personnel

Since a proposal has been made to merge the Telecommunications Operations and the Automatic Digital Switching specialties, comparisons were made of the time spent on duties and the tasks performed by members at each skill level for these two specialties. These comparisons revealed some overlap in the direction of some AFS 295X0 personnel performing tasks and duties commonly associated with AFS 291X0, but negligible overlap in the direction of AFS 291X0 personnel performing tasks and duties commonly associated with AFS 295X0 incumbents. The overlap was most noticeable at the specialist level. The tasks and duties performed by members of the two specialties at the 7- and 9-skill levels were more similar than at the specialist level due to increases in time devoted to supervisory and training responsibilities. Figure 2 graphically demonstrates the relative proportions of job time spent on supervisory activities, AFS 291X0 duties, and AFS 295X0 duties for each of the skill level groups. Note that the increase in time spent on supervisory activities for AFS 291X0 personnel was more dramatic than for AFS 295X0 personnel, an indication that the more senior AFS 295X0 incumbents continued to perform technical functions to a greater degree than did the senior AFS 291X0 personnel. Also note that the AFS 291X0 personnel spent only three to five percent of their job time involved with duties related to AFS 295X0, but the AFS 295X0 respondents spent substantial amounts of time (from 11 to 41 percent) involved with AFS 291X0 duties. A more detailed comparison was made at the task level for specialists in both AFSCs.

AFSC 29130/29150 vs AFSC 29530: The area of greatest commonality between respondents at the specialist level involved message handling tasks, such as preparing service messages, stamping filing times, stamping transmission times, and making entries on logs and forms. Tasks such as these accounted for 38 percent of job time for AFSC 29130/29150 respondents, and 17 percent of job time for AFSC 29530 personnel. An area of apparent overlap involved the general communications tasks. AFSC 29530 personnel reported spending 19 percent of their job time on general communications tasks while AFSC 39130/29150 respondents spent 13 percent of their job time in this area. Closer examination revealed, however, that most of the general communications tasks performed by AFS 29530 respondents were related to the operation of automatic digital systems, while general communications tasks

performed by AFSC 29130/29150 personnel were related to communications center operations. Examples of general communications tasks performed by AFSC 29130/29150 personnel included making entries on master station logs, performing operator maintenance on teletypewriters, and notifying personnel of after duty high precedence messages. Examples of general communications tasks performed by AFSC 29530 personnel included making entries on history tape or disc pack labels, performing operator maintenance on high speed printers, card readers, and magnetic tape devices, and making entries on restart or reload records.

Proposed AFR 39-1 Specialty Description

A proposed revision of AFR 39-1 Specialty Descriptions was prepared by HQ AFCC/XODN, dated 30 June 1981. This proposal was compared with the current Specialty Descriptions and with data obtained in this Occupational Survey.

At the helper/apprentice/specialist level, there were very few differences between the current descriptions and the proposal for merger. Each of the current descriptions (for AFSCs 29110/29130/29150 and for AFSCs 29510/29530/29570) contained six paragraphs, five addressing technical duties and responsibilities, and one addressing supervision and training activities. The proposed description contained eleven paragraphs describing tasks and duties of the proposed new AFSC. Ten of the paragraphs covered the technical responsibilities now performed by members of both specialties and one paragraph described their training and supervision activities. Since the current descriptions were consistent with the findings of this survey, the content of the proposed description should be satisfactory if AFSs 291X0 and 295X0 are merged.

While the content adequately describes the jobs performed by these two specialties, two questions should be raised regarding the specialist description: first, is the format of the new description acceptable, and second, could the contents be better integrated? Regarding format, the paragraph describing supervision and training activities is sandwiched between the current technical responsibilities of the two specialties, rather than at the end of the "tasks and duties" section of the description. Moving supervision and training may make the description more readable, and may also avoid the subtle suggestion that the two sets of responsibilities are different. Regarding the second point, integration: it may be possible to reduce the number of paragraphs by combining paragraphs of like responsibilities from the AFS 291X0 and 295X0 areas of the new description. Subject-matter specialists are encouraged to review closely the specialist description to see if the current paragraphs can be better integrated.

The proposed description of the merged AFSC 29170, in contrast with the previously discussed description, appeared very well integrated and concise. Perhaps this was due to the primarily supervisory nature of the 7-skill level position. There should be little change in the role of current AFSC 29170 personnel under the proposed description. Substantial changes were apparent from the current AFSC 29570 description, however. Since the AFS 295X0 has been a lateral specialty, the tasks and duties of 7-skill level personnel were included with the helper and apprentice skill levels. This

resulted in the 7-skill level job being described as primarily technical in nature. With the proposed change, the focus of jobs held by 7-skill level personnel has shifted to a more supervisory and managerial nature.

The proposed descriptions of the AFSCs 29190/2910C and AFSCs 29590/29100 were nearly identical to begin with and little change was noted.

Overall, the proposed descriptions appeared to satisfactorily cover the activities of both specialties.

Background Information on AFS 291X0 and 295X0 Personnel

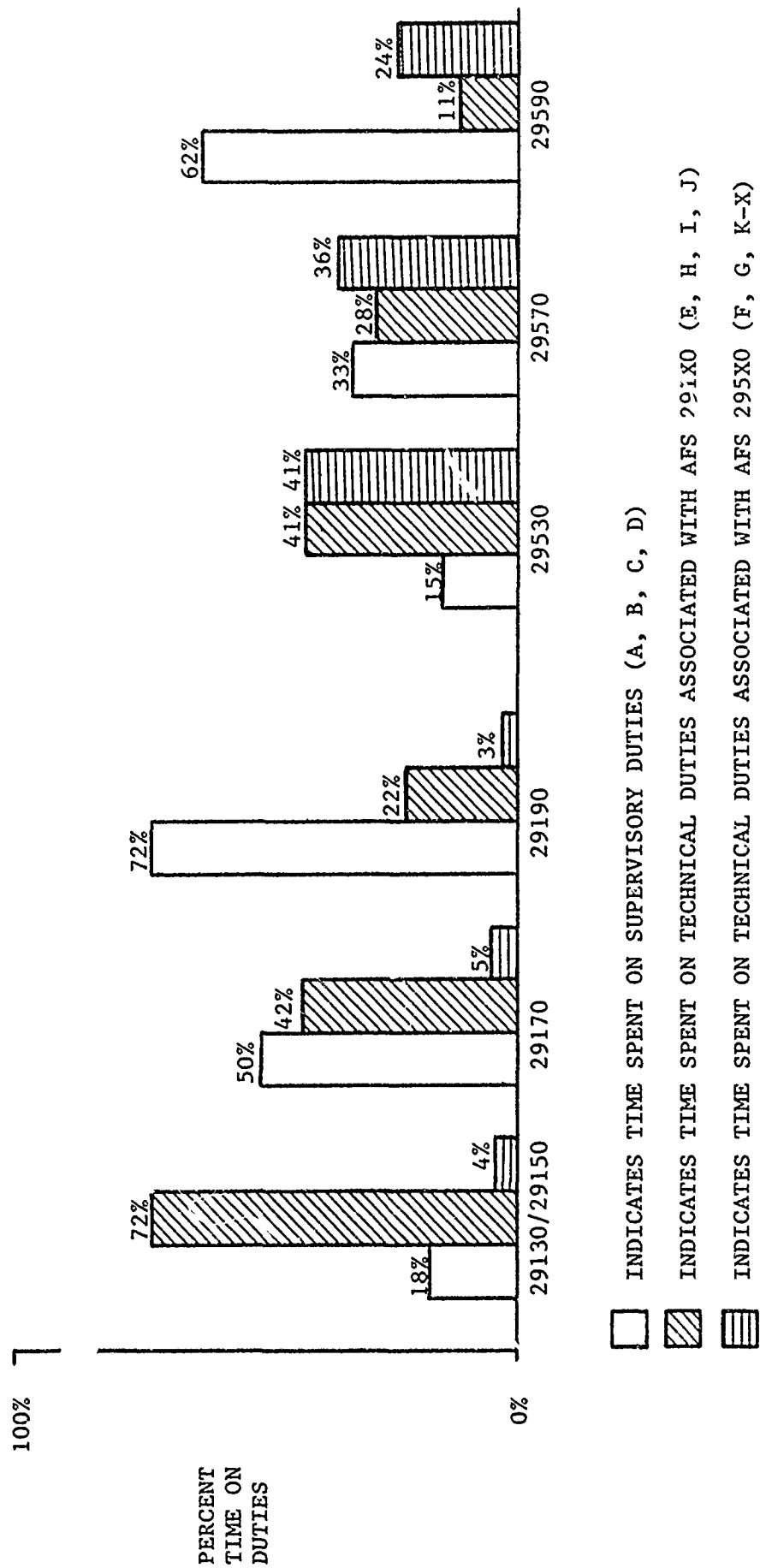
In addition to the standard background items that appear in all USAFOMC occupational surveys, several questions were included to address specific interests of AFS 291X0 and 295X0 training and management personnel. Tables 28 and 32 contain basic background information on AFSCs 291X0 and 295X0, respectively. Information obtained through two of the non-standard questions also appear in these two tables.

One question of interest across both specialties involved the need for access to specially compartmented information (SCI). As required by the AFR 39-1 Specialty Descriptions, all members of both specialties are routinely given Top Secret security clearances. This is done to ensure that any member holding these AFSCs can handle information with classifications that high without creating a technical compromise situation. Within the two specialties, however, there are groups which service organizations that deal with specially compartmented information. Responses indicated that the proportions of each skill level group whose jobs require clearance to SCI ranged from 32 percent for DAFSC 29590 personnel to 48 percent of the DAFSC 29570 personnel. Comparatively, the 295X0 specialty had a higher proportion than the 291X0 specialty requiring access to information of this nature.

Information on the other non-standard question involved the relative size of work centers. Responses from members of the two specialties (see Tables 28 and 32) indicated that AFS 295X0 personnel generally worked in larger duty sections than did members holding AFS 291X0. For instance, 75 percent of AFSCs 29130 and 29150, 73 percent of AFSC 29170, and 55 percent of AFSC 29190 indicated their duty sections contained less than 25 members, compared to 47 percent of AFSC 29530, 51 percent of AFSC 29570, and 65 percent of AFSC 29590 respondents. Members of both specialties with lower skill levels indicated working in smaller duty sections than did the 9-skill level respondents. Thirty-six percent of the AFSC 29590 respondents indicated their sections contained 40 or more workers, and 23 percent of the AFSC 29190 respondents worked in sections containing 45 or more workers.

Of more specific interest to managers and trainers of AFS 291X0, three questions were included in the background section of this survey to investigate the length of time new arrivals into the specialty have to wait for their final Top Secret clearance, the length of time new arrivals into the specialty via directed duty assignments (DDA) spend in on-the-job training (OJT) before award of the 3-skill level, and the proportions of job time spent by the skill level groups operating teletypewriters.

FIGURE 2.
RELATIVE PERCENT TIME SPENT ON GROUPS OF DUTIES BY SKILL LEVEL GROUPS



The responses of the 2,002 incumbents holding AFSCs 29130 and 29150 were examined to determine, first, the proportion who had received their clearance; and second, of those who had received their clearance, how long had they waited at their first duty assignment before the clearance was granted. Ninety-six percent had received their clearance (see Table 29). Fifty-five percent reported their clearance had arrived less than five months after their arrival.

The responses of the same group (AFSC 29130 and 29150 personnel) were also examined to determine, first, the proportion of incumbents who had attended the airman basic resident (ABR) technical training course and the proportion with DDA from basic training to their first duty station; and second, of those who were assigned DDA, how long the incumbents were at their first assignment before their 3-skill level was awarded. Given that Course 3ABR29130 is nine weeks in length, the important question was whether substantial proportions of DDA incumbents took more time in OJT than the ABR students spent in their technical training course. Table 30 shows that 54 percent of the AFSC 29130/29150 personnel earned their 3-skill level by attending the ABR course, and 40 percent earned their 3-skill level after DDA to their first assignment. Six percent did not respond. Of those who received DDA from basic training, 18 percent were granted their apprentice-skill level in less than eight weeks, but 59 percent took 12 weeks or more to earn their apprentice-skill level. Grouping the distribution differently, however, shows that the largest proportion in any eight-week period was the 8 to 16 week group, i.e., 47 percent earned their 3-skill level between 8 and 16 weeks after arriving DDA. The bulk of DDA incumbents took longer to be awarded their 3-skill level, but a substantial proportion of DDA incumbents took no more than seven additional weeks longer than the nine weeks of the ABR course.

The third background question, usage of teletypewriter equipment, was designed to examine patterns of usage by members of AFSC 29130, 29150, and 29170 groups; and, of those who used the equipment, to show what proportion of their job time was spent operating teletypewriters. Table 31 shows a pattern of declining usage of teletypewriters as skill level increases, from 80 percent of 3-skill level incumbents operating, through 74 percent of 5-skill level respondents operating, to only 46 percent of the 7-skill level members operating teletypewriters. The same general trend was evident in the time spent operating by each group. Forty-three percent of the 3-skill level personnel used teletypewriters during less than 20 percent of their job time. At the 5-skill level, 49 percent used teletypewriters during less than 20 percent of their job time, and at the 7-skill level, 65 percent used the equipment during less than 20 percent of their job time.

Comparisons Among TAFMS and T1CF Groups

In nonlateral Air Force specialties, experience is usually defined by the number of months total active military service (TAFMS), and groupings of respondents are made by first-job (1 to 24 months TAFMS), first-enlistment (1 to 48 months TAFMS), second-enlistment (49 to 96 months TAFMS), and career (97 or more months TAFMS). TAFMS is not the best measure of experience for lateral specialties, since entrance into the specialty usually

does not occur until an individual has obtained the 5-skill level, and the number of months TAFMS for the individual often varies upon entry into the career field. For this reason, experience is defined for lateral career fields by the number of months time in the career field (TICF), with the groupings made by first-job (1 to 24 months TICF), first four years in the field (1 to 48 months TICF), second four years in the field (49 to 96 months TICF), and career (97 or more months TICF). Analysis of tasks performed and time spent on duties by experience groups in the 291X0 and the 295X0 specialties closely parallel the findings of the analysis of duty AFSC groups for these two specialties.

Job Satisfaction

An important part of the analysis of experience groups within any Occupational Survey Report involves the job satisfaction of members. Reported job interest, perceived utilization of talents and training, satisfaction with sense of accomplishment gained, and expressed reenlistment intentions of AFS 291X0 respondents by experience group are presented in Table 33. Similar information for the AFS 295X0 respondents are shown in Table 34.

Responses to job satisfaction questions of AFS 291X0 personnel generally were positive, with percentages of members responding positively to most questions tending to increase as experience increased. The only exception to this trend was on the question of how well members felt their jobs used their training. Responses were essentially the same in all three enlistment groups (72 percent).

The responses to job satisfaction questions for AFS 295X0 experience groups was fairly positive. The percentages responding positively to each of the questions increased slightly as experience increased, a pattern commonly found in lateral specialties. The only exception to this pattern occurred on the question of job interest. Sixty-four percent of the first-TICF respondents indicated that their jobs were interesting, compared to 72 percent of the second-TICF group. This substantial increase may have been a function of the incumbents' exposure to increased diversity of systems and responsibilities as their time in the career field increased. In the career group, positive responses to the job interest question declined to 69 percent. This decline may have been a function of the increasingly managerial nature of jobs they performed.

An apparent discrepancy from the pattern occurred on the question of reenlistment intentions. The first- and second-TICF groups had 66 and 70 percent, respectively, indicating they planned to reenlist. In contrast, only 48 percent of the career group planned to reenlist. Forty percent of the career group, however, had reached the retirement point in their careers. Thus, the apparent decline in percent planning to reenlist probably does not represent a discrepancy from the pattern of increasingly positive responses to job satisfaction questions.

TABLE 28

BACKGROUND INFORMATION FOR AFE 291X0 GROUPS

	DAFSC		
	29130/29150	29170	29190
NUMBER MEMBERS:	2002	579	60
AVERAGE NUMBER TASKS PERFORMED:	53	62	59
AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT	4.21	4.92	5.45
JOB DIFFICULTY INDEX:	11.7	15.2	16.7
AVERAGE GRADE:	E-4	E-6	E-8
PERCENT SUPERVISING:	26%	67%	73%
AVERAGE NUMBER SUBORDINATES	2.7	5.5	6.7
AVERAGE NUMBER MONTHS IN PRESENT JOB:	18	17	22
AVERAGE NUMBER MONTHS IN CAREER FIELD:	49	166	245
AVERAGE NUMBER MONTHS ACTIVE FEDERAL MILITARY SERVICE:	57	179	253
PERCENT ASSIGNED OVERSEAS:	38%	38%	32%
PERCENT HOLDING JOBS THAT REQUIRE CLEARANCE TO SPECIALLY COMPARTMENTED INFORMATION:	42%	40%	40%
NUMBER OF PEOPLE ASSIGNED TO DUTY SECTION: (PERCENT RESPONDING)			
LESS THAN 10	26%	36%	30%
10 TO 14	23%	21%	13%
15 TO 19	15%	10%	7%
20 TO 24	11%	6%	5%
25 TO 29	8%	7%	3%
30 TO 34	6%	6%	7%
35 TO 39	6%	6%	3%
40 TO 44	4%	3%	7%
45 OR MORE	7%	7%	23%

TABLE 29

AFS 291X0 BACKGROUND INFORMATION:
MONTHS AT FIRST DUTY STATION AWAITING
FINAL TOP SECRET CLEARANCE

	PERCENT OF COMBINED DAFSC 29130/29150 RESPONDING (N=2,002)
PERCENT WHO HAVE RECEIVED FINAL CLEARANCE:	96
PERCENT WHO HAVE NOT RECEIVED FINAL CLEARANCE:	4
FOR RESPONDENTS WHO HAVE RECEIVED FINAL CLEARANCE, NUMBER OF MONTHS AT FIRST DUTY STATION AWAITING CLEARANCE (PERCENT RESPONDING)	
LESS THAN ONE MONTH	28
1 MONTH OR MORE, BUT LESS THAN 3 MONTHS	27
3 MONTHS OR MORE, BUT LESS THAN 5 MONTHS	17
5 MONTHS OR MORE, BUT LESS THAN 7 MONTHS	12
7 MONTHS OR MORE, BUT LESS THAN 9 MONTHS	7
9 MONTHS OR MORE, BUT LESS THAN 11 MONTHS	3
11 MONTHS OR MORE	6

TABLE 30

AFS 291X0 BACKGROUND INFORMATION:
 EFFECT OF DIRECTED DUTY ASSIGNMENT (DDA) ON TIME
 REQUIRED TO OBTAIN 3-SKILL LEVEL
 (DAFSCs 29130 AND 29150, N=2,002)

PERCENT OBTAINING 3-SKILL LEVEL BY:	PERCENT OF COMBINED DAFSC 29130/29150 RESPONDING
TECHNICAL TRAINING COURSE 3ABR29130	54%
ON-THE-JOB TRAINING, DDA FROM BASIC	45%
NO RESPONSE	6%
FOR DDA RESPONDENTS, NUMBER WEEKS OJT TO OBTAIN 3-SKILL LEVEL (PERCENT RESPONDING)	
LESS THAN 4 WEEKS	4%
4 WEEKS OR MORE, BUT LESS THAN 8 WEEKS	14%
8 WEEKS OR MORE, BUT LESS THAN 12	23%
12 WEEKS OR MORE, BUT LESS THAN 16	24%
16 WEEKS OR MORE, BUT LESS THAN 18	12%
18 WEEKS OR MORE, BUT LESS THAN 20	6%
20 WEEKS OR MORE	17%

TABLE 31

AFS 291X0 BACKGROUND INFORMATION:
WORK TIME SPENT OPERATING TELETYPEWRITER

	PERCENT RESPONDING		
	DAFSC 29130 (N=421)	DAFSC 29150 (N=1,581)	DAFSC 29170 (N=579)
PERCENT OPERATING TELETYPEWRITER	80	74	46
PERCENT NOT OPERATING TELETYPEWRITER	20	26	54
PERCENT OF JOB TIME SPENT OPERATING TELETYPEWRITER			
LESS THAN 10 PERCENT	26	30	49
AT LEAST 10 PERCENT BUT LESS THAN 20 PERCENT	17	19	16
AT LEAST 20 PERCENT BUT LESS THAN 30 PERCENT	15	14	8
AT LEAST 30 PERCENT BUT LESS THAN 40 PERCENT	11	10	7
AT LEAST 40 PERCENT BUT LESS THAN 50 PERCENT	8	8	4
AT LEAST 50 PERCENT BUT LESS THAN 60 PERCENT	10	7	6
60 PERCENT OR MORE	13	12	10

TABLE 32

BACKGROUND INFORMATION FOR 295X0 DAFSC GROUPS

	DAFSC		
	29530	29570	29590
NUMBER MEMBERS	241	245	17
AVERAGE NUMBER TASKS PERFORMED:	65	63	50
AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT:	4.53	5.11	5.88
JOB DIFFICULTY INDEX:	14.3	16.0	16.8
AVERAGE GRADE:	E-4,E-5	E-6	E-8
PERCENT SUPERVISING:	18	45	53
AVERAGE NUMBER SUBORDINATES:	2.9	4.3	10.8
AVERAGE NUMBER MONTHS IN PRESENT JOB:	15	20	25
AVERAGE NUM. MONTHS IN CAREER FIELD:	36	85	125
AVERAGE NUMBER MONTHS ACTIVE FEDERAL MILITARY SERVICE:	94	179	236
PERCENT ASSIGNED OVERSEAS:	17	21	23
PERCENT HOLDING JOBS THAT REQUIRE CLEARANCE TO HANDLE SPECIAL COMPARTMENTED INFORMATION:	44	48	35
NR PEOPLE IN DUTY SECTION			
LESS THAN 10	18	29	41
10 TO 14	16	11	0
15 TO 19	5	9	12
20 TO 24	8	2	12
25 TO 29	12	7	0
30 TO 34	10	11	0
35 TO 39	13	8	0
40 TO 44	6	6	18
45 OR MORE	9	9	18

TABLE 33

JOB SATISFACTION INFORMATION FOR AFS 291X0 PERSONNEL
(PERCENT RESPONDING)

	MONTHS TAFMS			
	1-24	1-48	49-96	97+
	291X0 (N=390)	291X0 (N=1,230)	291X0 (N=473)	291X0 (N=938)
<u>PERCENT FINDING JOBS:</u>				
INTERESTING	49	42	51	66
SO-SO	21	26	22	16
DULL	28	30	25	17
<u>PERCENT WHO FEEL JOB USES THEIR TALENTS:</u>				
FAIRLY WELL TO PERFECTLY	58	56	62	73
VERY LITTLE OR NOT AT ALL	40	43	38	27
<u>PERCENT WHO FEEL JOB USES THEIR TRAINING:</u>				
FAIRLY WELL TO PERFECTLY	77	72	72	72
VERY LITTLE OR NOT AT ALL	21	26	28	28
<u>HOW SATISFIED ARE YOU WITH THE SENSE OF ACCOMPLISHMENT GAINED FROM JOB:</u>				
SATISFIED	46	42	47	63
AMBIVALENT	21	20	16	12
DISSATISFIED	31	37	36	25
<u>REENLISTMENT INTENTIONS:</u>				
YES OR PROBABLY YES	37	41	60	67
NO OR PROBABLY NO	60	57	39	11
NO, I WILL RETIRE WITH 20 YEARS ACTIVE FEDERAL MILITARY SERVICE	0	0	0	21

NOTE: COLUMNS MAY NOT SUM TO 100 PERCENT DUE TO NO RESPONSE

TABLE 34

JOB SATISFACTION INFORMATION FOR AFS 295X0 PERSONNEL
(PERCENT RESPONDING)

	MONTHS TICS			
	1-24 295X0 (N=155)	1-48 295X0 (N=258)	49-96 295X0 (N=116)	97+ 295X0 (N=128)
<u>PERCENT FINDING JOBS:</u>				
INTERESTING	66	64	72	69
SO-SO	15	16	10	18
DULL	17	19	17	12
<u>PERCENT WHO FEEL JOB USES THEIR TALENTS:</u>				
FAIRLY WELL TO PERFECTLY	69	70	71	74
VERY LITTLE OR NOT AT ALL	30	29	28	26
<u>PERCENT WHO FEEL JOB USES THEIR TRAINING:</u>				
FAIRLY WELL TO PERFECTLY	63	63	64	73
VERY LITTLE OR NOT AT ALL	36	36	36	27
<u>HOW SATISFIED ARE YOU WITH THE SENSE OF ACCOMPLISHMENT GAINED FROM JOB:</u>				
SATISFIED	54	54	59	67
AMBIVALENT	15	17	5	7
DISSATISFIED	30	29	35	26
<u>REENLISTMENT INTENTIONS:</u>				
YES OR PROBABLY YES	63	66	70	48
NO OR PROBABLY NO	33	28	13	12
NO, I WILL RETIRE WITH 20 YEARS ACTIVE FEDERAL MILITARY SERVICE	0	5	16	40

NOTE: COLUMNS MAY NOT SUM TO 100 PERCENT DUE TO NO RESPONSE

AFS 291X0 First-Enlistment Personnel

The jobs and tasks performed by AFS 291X0 first-enlistment personnel were examined closely to provide a point of reference for examining the training documents in the next section of this report.

Over half (747 members) of the 1,230 first-enlistment AFS 291X0 respondents grouped with the Commcenter Operations cluster (see Table 36). The second largest concentration (95 members) grouped with the Base Switchboard Operations cluster. The remaining 388 members either grouped with other job groups, such as the COMSEC Accountant and Traffic Analysis groups, or performed unique jobs which did not group together as described in the ANALYSIS OF CAREER LADDER JOBS section of this report. These job groups are graphically displayed in Figure 3. As a result of the similarity of tasks performed by the large group of Commcenter Operations personnel, it is understandable that the greatest proportion of job time (57 percent) of all AFS 291X0 first-enlistment respondents concentrated in message processing and general communications functions. Forty-three tasks accounted for 50 percent of the job time for all first-enlistment personnel. Twenty-seven of these 43 tasks involved processing messages (see Table 37). Examples included stamping filing times, transmission times, receipt times, classification, and special handling instructions on incoming and outgoing messages, reproducing and distributing messages, and preparing service messages. Security and general communications tasks accounted for 12 of the 43 tasks. Examples of security tasks included destroying classified waste, inventorying COMSEC materials, and performing physical security inspections. Some of the general communications functions included performing operator maintenance on teletypewriters, making entries on logs and forms, and notifying addressees of high precedence message receipt. While telephone switchboard tasks did not account for substantial proportions of the entire AFS 291X0 first-enlistment groups time on individual tasks, these switchboard tasks did account for much of the job time for roughly 20 percent of the group. Examples of tasks performed by first-enlistment AFS 291X0 personnel may be found in Table 37.

AFS 295X0 Personnel in the First Four Years in the Career Field

In most Air Force Specialties, the tasks and duties performed by first-enlistment personnel constitute the largest proportion of training needs. In the case of lateral specialties, where entry is limited to personnel who have obtained at least a 5-skill level in a designated specialty, the examination of tasks and duties of first-enlistment incumbents is inappropriate. A more useful measure for training requirements for lateral specialties involves the tasks and duties performed by members within their first four years in the career field (first-TICF). This subsection will examine the jobs and tasks performed by AFS 295X0 first-TICF respondents.

In contrast to the pattern of first-enlistment AFS 291X0 respondents, members of the AFS 295X0 first-TICF group were not concentrated primarily in one job group, but rather, grouped primarily into three job groups (see Table 36). Seventy-one of the 258 first-TICF AFS 295X0 respondents grouped with the Communications Computer Operations cluster. Another 52 members grouped with the Automatic Digital Operations cluster, and 47 other

members grouped with the AUTODIN Operations cluster. The remaining 87 members either were members of smaller groups or performed such unique jobs which did not group together. As a result of this pattern of job groupings, the percent of job time on specific duties was not as concentrated as was seen in the AFS 291X0 discussion. The two duty groupings of tasks accounting for the largest proportion of AFS 295X0 first-TICF respondents time on the job (34 percent) was, again, performing general communications functions and handling messages (see Table 38). Other duties accounting for their job time included maintaining magnetic media (eight percent), managing software and performing procedures and analysis (seven percent), and programming (five percent). In addition, time spent on duties related to each communications computer system, which differentiated the various jobs accounted for from one to four percent of job time for the whole group.

There were 103 tasks which accounted for 50 percent of the job time of AFS 295X0 first-TICF respondents, considerably more than the number for AFS 291X0 first-enlistment personnel. Again, this is due to the diversity of AFS 295X0 jobs and the concentration of AFS 291X0 first-enlistment personnel in one major job group. Examples of tasks performed by the greatest percentages of AFS 295X0 first-TICF personnel are presented in Table 38. Most are of a general nature, such as preparing service messages, making entries on forms and logs, destroying classified waste, performing operator maintenance on card punches, printers, and magnetic tape devices, and mounting, dismounting, filing, and purging magnetic media. Tasks related to operating equipment specific to job groups, such as monitoring and controlling traffic and equipment from AUTODIN I or USET-8 consoles, evaluating off-line printouts, operating transfer switches in ADWS, and performing program dump or RADAY change procedures in ICATS, MCATS, USET-8, etc., had substantially smaller percentages of the AFS 295X0 first TICF personnel performing.

FIGURE 3

DISTRIBUTION OF FIRST-ENLISTMENT AFSC 291X0 PERSONNEL
BY JOB GROUP
(N=1,230)

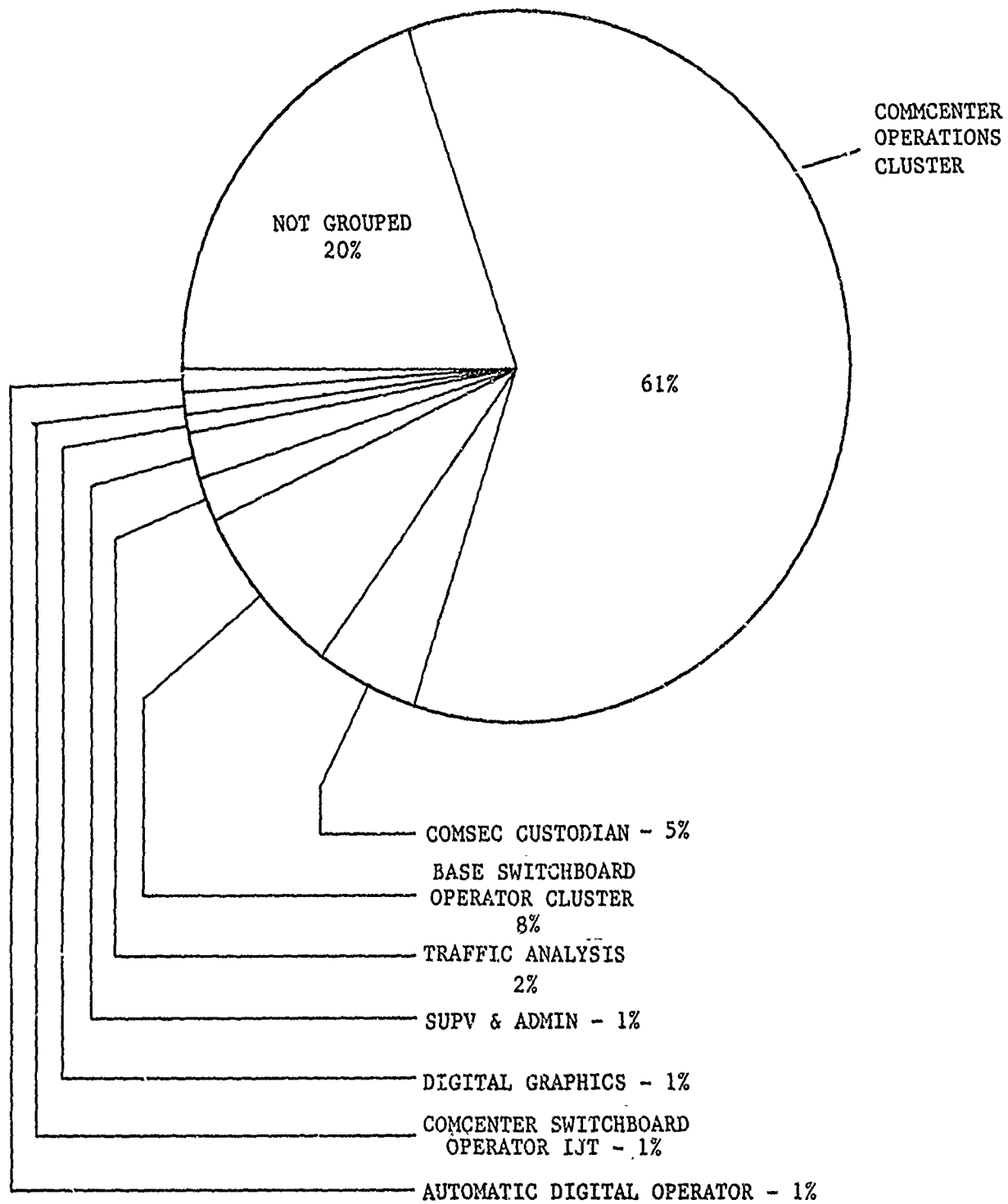


TABLE 35

DISTRIBUTION BY JOB GROUP FOR EACH DUTY AFSC
(NUMBER MEMBERS)

	DAFSC 291X0				DAFSC 295X0		
	29130 (N=421)	29150 (N=1,581)	29170 (N=579)	29190 (N=60)	29530 (N=241)	29570 (N=245)	29590 (N=17)
<u>OPERATIONS FUNCTIONAL AREA</u>							
I COMCENTER OPERATIONS CLUSTER	264	832	97	1	11	2	0
II DIGITAL GRAPHICS OPERATORS INDEPENDENT JOB TYPE	6	4	0	0	4	2	0
III AUTOMATIC DIGITAL OPERATIONS CLUSTER	1	26	8	0	55	31	0
IV COMCENTER SWITCHBOARD OPERATORS INDEPENDENT JOB TYPE	3	6	1	0	0	0	0
V MOBILE COMMUNICATIONS INDEPENDENT JOB TYPE	1	7	1	0	0	0	0
VI AUTODIN CLUSTER	2	0	0	0	45	25	0
<u>JOB GROUPS NOT FUNCTIONALLY RELATED</u>							
VII COMMUNICATIONS COMPUTER OPERATIONS CLUSTER	1	2	1	0	62	38	0
VIII AFSATCOM OPERATORS INDEPENDENT JOB TYPE	1	14	1	0	0	0	0
IX BASE SWITCHBOARD OPERATIONS CLUSTER	32	115	26	0	0	0	0
X TECHNICAL TRAINING INDEPENDENT JOB TYPE	1	10	1	0	4	1	0
XI LIAISON CLUSTER	0	2	33	6	1	7	3
XII PROGRAMMERS CLUSTER	0	3	2	0	13	38	3
<u>MANAGEMENT FUNCTIONAL AREA</u>							
XIII SUPERVISION AND ADMINISTRATION CLUSTER	12	144	152	23	8	27	4
XIV TRAFFIC ANALYSIS CLUSTER	4	61	20	0	9	17	0
XV CONSEC ACCOUNTANT INDEPENDENT JOB TYPE	7	125	58	4	1	1	1
NOT GROUPED	86	230	178	26	28	56	6

TABLE 36

DISTRIBUTION BY JOB GROUP FOR EXPERIENCE GROUPS
(NUMBER MEMBERS)

	AFSC 291X0				AFSC 295X0			
	MONTHS ACTIVE MILITARY SERVICE				MONTHS IN CAREER FIELD			
	1-48 (N=1,230)	49-96 (N=437)	97+ (N=938)		1-48 (N=258)	49-96 (N=116)	97+ (N=128)	
<u>OPERATIONS FUNCTIONAL AREA:</u>								
I COMM CENTER OPERATIONS CLUSTER	747	234	213		7	5	1	
II DIGITAL GRAPHICS OPERATORS INDEPENDENT JOB TYPE	9	0	1		5	0	1	
III AUTOMATIC DIGITAL OPERATIONS CLUSTER	13	10	12		52	21	13	
IV COMM CENTER SWITCHBOARD OPERATORS INDEPENDENT JOB TYPE	9	0	1		0	0	0	
V MOBILE COMMUNICATIONS INDEPENDENT JOB TYPE	3	4	2		0	0	0	
VI AUTODIN OPERATIONS CLUSTER	1	0	1		47	12	11	
<u>JOB GROUPS NOT FUNCTIONALLY RELATED:</u>								
VII COMMUNICATIONS COMPUTER OPERATIONS CLUSTER	1	2	1		71	18	11	
VIII AFSATCOM OPERATORS INDEPENDENT JOB TYPE	5	7	4		0	0	0	
IX BASE SWITCHBOARD OPERATIONS CLUSTER	95	39	39		0	0	0	
X TECHNICAL TRAINING INDEPENDENT JOB TYPE	3	0	9		2	2	1	
XI LIAISON CLUSTER	0	2	39		1	2	8	
XII PROGRAMMERS CLUSTER	1	1	3		16	21	17	
<u>MANAGEMENT FUNCTIONAL AREA:</u>								
XIII SUPERVISION AND ADMINISTRATION CLUSTER	26	32	273		5	12	22	
XIV TRAFFIC ANALYSIS CLUSTER	31	17	37		14	3	9	
XV COMSEC ACCOUNTANT INDEPENDENT JOB TYPE	61	34	99		0	0	3	
NOT GROUPED	225	91	204		38	20	31	

TABLE 37

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
AFS 291X0 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=1,230)
H281 PREPARE SERVICE MESSAGES	68
H304 STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	66
H284 PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	66
H303 STAMP FILING TIMES ON OUTGOING MESSAGES	65
I311 DESTROY CLASSIFIED WASTE	63
H268 MAKE ENTRIES ON AF FORM 1022, COMMCEN MESSAGE REGISTER	61
H254 ASSIGN ROUTING INDICATORS	61
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	59
H306 STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	58
H273 NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	57
H264 MAINTAIN DD FORM 1765, INCOMING SERVICE LOG OR FILES	57
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE LOG OR FILES	57
H305 STAMP TIME OF RECEIPT ON INCOMING MESSAGES	56
H293 REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	54
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	54
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	54
H288 REPRODUCE MESSAGES FOR DISTRIBUTION	53
H274 PERFORATE MESSAGE TAPES	53
E168 NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	52
H256 DISTRIBUTE GENERAL MESSAGES	52
E190 PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	52
I313 INVENTORY ACCOUNTABLE COMSEC MATERIALS	51
H278 PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARD FOR DATA MESSAGES	50
E186 PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS	49

TABLE 38

REPRESENTATIVE TASKS PERFORMED BY DAFSC 295X0 PERSONNEL
WITH 1-48 MONTHS TIME IN CAREER FIELD

TASKS	PERCENT MEMBERS PERFORMING (N=258)
E158 MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	65
H281 PREPARE SERVICE MESSAGES	59
G247 MOUNT OR DISMOUNT MAGNETIC MEDIA	58
H290 RETRIEVE MESSAGES	56
G243 MAINTAIN DD FORM 1772, MAGNETIC TAPE LIBRARY RECORD AND PERPETUAL HISTORY	53
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	53
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	52
I312 ESCORT VISITORS THROUGH FACILITIES	52
E150 MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	48
G246 MAKE ENTRIES ON DD FORM 1771, MAGNETIC TAPE LIBRARY PURGE RECORD	47
I311 DESTROY CLASSIFIED WASTE	47
G242 INVENTORY MAGNETIC MEDIA	47
E149 MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	46
B39 CONDUCT SHIFT CHANGE BRIEFINGS	46
E169 PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	45
E173 PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	45
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	44
G251 REMOVE OR FILE MAGNETIC MEDIA	43
E138 CHECK OPERATIONAL STATUS OF SPARE EQUIPMENT	43
E170 PERFORM OPERATOR MAINTENANCE ON CARD READERS	43
E177 PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	41
E164 MAKE ENTRIES ON RESTART OR RELOAD RECORDS	41
H264 MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	40
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	40
G250 PURGE MAGNETIC MEDIA	40

TRAINING ANALYSIS

Occupational survey data is one of several sources of information which can be used to make training programs more relevant and meaningful to students. Three of the most commonly used types of occupational survey information are the percent of personnel performing tasks covered in the job inventory, the ratings of relative difficulty of tasks, and the ratings of relative emphasis for first-enlistment training. These data can be used in evaluating training documents such as Specialty Training Standard (STS) and the Plan of Instruction (POI).

For this study, the Sheppard Technical Training Center provided subject-matter specialists to match tasks in the job inventory with the paragraphs and subparagraphs of the current STS 291X0 and STS 295X0. Matches were also constructed between the job inventory and the POIs for Courses 3ABR29130 and 4ALT29530. Finally, a matching was constructed between the job inventory and the proposed new STS 291X0 for the merger of these two AFSCs. These matchings, along with the percent performing data and task difficulty and training emphasis ratings, have been forwarded to the Technical Training Center and MAJCOM training personnel for use in reviewing the training documents. A summary of this information will be discussed below.

The primary purpose for conducting this study was to provide occupational survey information for use in evaluating course 3ABR29130 at STTC and course 4ALT29530 at the technical training detachment at Tinker AFB OK. MAJCOM personnel became interested in the survey in terms of using the data to address the issue of merging the 291X0 and 295X0 specialties. Other areas of this report address the feasibility of merger; however, the training section may highlight some of the difficulties or points of concern in the event that a merger is decided upon by the Utilization and Training Workshop of November 1982.

The remainder of this section will contain three major parts. The Training Analysis will begin with an examination of the task difficulty ratings, the training emphasis ratings, the STS, and the entry course for AFS 291X0. The next part will examine the task difficulty, the STS, and the entry course POI for AFS 295X0. The concluding part will examine the survey data matched with the proposed STS for the new specialty if AFSS 291X0 and 295X0 are merged and an examination of the differences in task performance and difficulty ratings obtained from the two specialties under the current classification system.

AFS 291X0 Task Difficulty

The relative difficulty of each task in the inventory was assessed through ratings by 54 experienced Telecommunications Operations NCOs. Their ratings were processed to produce an ordered listing of all tasks in terms of their relative difficulty and were standardized to have an average difficulty of 5.0 (standard deviation equalled 1.0). (For a more complete description of these ratings, see the Task Factor Administration section in SURVEY METHODOLOGY.)

Tasks receiving the highest relative difficulty ratings primarily involved supervision, management, and coordination activities. Examples of these tasks included directing the design and development of communications computer systems, coordinating equipment installation, establishing communications center policies, evaluating budget requirements, and providing technical guidance to users. Most of these very difficult tasks were performed by relatively few AFS 291X0 respondents, and those who did perform them tended to be more senior personnel.

The AFS 291X0 senior NCOs rated all tasks in the job inventory, including tasks performed primarily by AFS 295X0 personnel. It is interesting to note that most of the tasks with average ratings (around 5.0) were related to AFS 295X0 systems. A few general communications functions and message handling tasks did receive average ratings, though. Examples included performing operator maintenance on optical character readers, card punches, and card readers, reviewing messages for mishandling, rerouting traffic under restoral plans, preparing service messages, and proofreading teletype tapes, page copies, or header and EOT cards. Tasks performed by AFS 291X0 personnel which received average difficulty ratings were generally performed by greater percentages of junior personnel than senior personnel.

Tasks with the lowest difficulty ratings involved some message handling, general communications functions, and telephone switchboard operations tasks. Some of the least difficult message handling tasks included stamping filing times and special handling instructions on incoming and outgoing messages, initiating channel checks, and making entries on forms. Examples of general communications functions tasks rated least difficult included picking up and storing supplies, performing quality control tests on local positions, and making entries on equipment utilization logs. Least difficult telephone switchboard tasks included placing calls between subscribers, taking peg counts, and placing calls from distant stations to subscribers. As with average difficulty tasks, these least difficult tasks generally were performed by greater percentages of more junior personnel.

AFS 291X0 Training Emphasis

An additional 60 experienced NCOs in the Telecommunications Operations specialty reviewed the task list, rating the degree of emphasis that should be placed on each task in first-enlistment training. Their ratings were processed to provide a rank order listing of tasks from high degree of emphasis to no training required. The average rating was 1.57 and the standard deviation was 1.72, so tasks receiving ratings of 3.29 or higher

were considered to have high training emphasis recommendations. (For a more complete description of these ratings, see the section on Task Factor Administration in SURVEY METHODOLOGY.)

There were 133 tasks in this inventory which received high training emphasis ratings. Thirty-nine percent (52 tasks) involved message handling activities. Nearly 20 percent (26 tasks) were general communications functions. The remaining 55 tasks involved maintaining security, managing software and performing procedures and analysis, operating telephone switchboards, supervision, and training. Examples of those high training emphasis tasks, presented in Table 39, show that the highest training priorities for senior NCOs in this specialty involved tasks such as the preparation of service messages, use of encryption equipment, performance of operator maintenance, manning telephone switchboards, and maintaining files and records. While most of these tasks received average or below difficulty ratings, it is interesting to note that most of the high training emphasis tasks were performed by substantial numbers of first-enlistment respondents.

Tasks receiving average training emphasis ratings (ratings in the neighborhood of 1.57) were performed by relatively few first-enlistment AFS 291X0 personnel. There appeared to be little functional commonality among average training emphasis tasks. The following duty groupings were represented in the tasks receiving average ratings: supervision and management, managing software and performing procedures and analysis, managing magnetic media, general communications functions, operating telephone switchboards, and operating mobile communications systems. Examples of these tasks included degaussing and destroying magnetic tapes, making entries on tape failure reports, guarding mobile communications secure areas, taking peg counts, and drafting recommended changes to publications.

Tasks receiving the very lowest training emphasis ratings included responsibilities associated with AFS 295X0. Nearly all of these involved the operation of communications systems such as ADWS, SATIN, and SACCS, 427M/CSS, MCATS, ICATS, USET-8, and AFSATC JM. The percentages of AFS 291X0 first-enlistment personnel performing these tasks were extremely low, generally two percent or lower.

TABLE 39

EXAMPLE TASKS RATED HIGH IN TRAINING EMPHASIS

TASKS	TRAINING EMPHASIS	TASK DIFFICULTY	PERCENT FIRST- ENLISTMENT PERFORMING (N=1,230)
H281 PREPARE SERVICE MESSAGES	7.65	4.78	68
H254 ASSIGN ROUTING INDICATORS	7.02	4.35	61
H284 PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	7.02	4.76	66
H283 PROCESS LIMITED DISTRIBUTION OR SPECIAL CATEGORY MESSAGES	6.40	5.79	43
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	6.33	4.26	59
I311 DESTROY CLASSIFIED WASTE	5.97	3.81	63
H292 REVIEW MESSAGES FOR MISHANDLING	5.80	4.64	41
H294 SEND MESSAGES USING OPTICAL CHARACTER READERS (OCR)	5.67	3.97	20
H279 PREPARE MESSAGES FOR ENCRYPTION	5.58	6.24	29
H282 PROCESS INCOMING ENCRYPTED MESSAGES FOR LOCAL DELIVERIES	5.58	6.26	26
E182 PERFORM OPERATOR MAINTENANCE ON PAPER TAPE READERS	5.52	4.38	32
E186 PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS	5.27	4.25	50
H305 STAMP TIME OF RECEIPT ON INCOMING MESSAGES	5.27	2.15	56
H255 CONFIGURE CRYPTOGRAPHIC EQUIPMENT FOR OPERATION	4.95	5.40	23
H289 REROUTE TRAFFIC UNDER RESTORAL PLANS	4.85	4.73	17
J339 ACCEPT AND CONNECT CALLS ACCORDING TO THEIR PRECEDENCE	4.33	3.24	23
F220 MAINTAIN GENERAL MESSAGE FILES	4.00	4.75	18
E183 PERFORM OPERATOR MAINTENANCE ON PATCH PANELS	3.98	4.28	13
J353 MAINTAIN DD FORM 1194 TOLL TICKET	3.82	3.94	10
F235 REPORT STRAGGLERS TO AUTODIN SWITCHING CENTER (ASC)	3.78	4.64	7
J360 PLACE CALLS WITHIN THE AUTOSEVOCOM NETWORK	3.62	4.43	14

NOTE: AVERAGE TRAINING EMPHASIS IS 1.57 AND THE STANDARD DEVIATION IS 1.72, SO TASKS RATED 3.29 OR HIGHER ARE CONSIDERED HIGH IN TRAINING EMPHASIS

AFS 291X0 Specialty Training Standard

The AFS 291X0 Specialty Training Standard (STS), dated February 1979, was compared with the survey data for first-job, first-enlistment, 5-, and 7-skill level Telecommunications Operations personnel. The review covered each paragraph measured by task performance or task knowledge standards using training emphasis, task difficulty, and percent members performing information. Generally, the paragraphs in this STS were well supported for retention in future revisions of the STS. The responsibilities of all the job groups containing AFS 291X0 personnel identified in the ANALYSIS OF CAREER LADDER JOBS section were covered by the STS.

The only area without tasks matched was in paragraph 4, titled "the use of Communications Publications." Although the sub-elements of this paragraph were measured by task knowledge and task performance standards, there were no supportive tasks matched to these sub-elements. The use of communications publications was not identified by specific tasks within the job inventory, since the use of these documents was considered part of other activities such as assigning classification, precedence, or routing indicators to message traffic. The absence of tasks matched to these sub-elements should not be construed as an indication that the STS is deficient.

The sub-elements of paragraph 12, DCS AUTODIN Computerized Terminal Operations, were matched with tasks performed by extremely low percentages of AFS 291X0 respondents. Many of the matched tasks involved activities commonly performed by AFS 295X0 personnel.

The sub-elements of paragraph 13, Switchboard Operations, were also matched with tasks performed by relatively low percentages of AFS 291X0 respondents, ranging from 3 to 23 percent of selected groups. This level of performance probably justifies the retention of these sub-elements in future revisions of the STS, but do not reflect a need to include these activities in the basic residence courses.

There were 21 tasks in the job inventory rated high in training emphasis which were not matched with any of the STS elements (see Table 10). Of these, only six were performed by substantial percentages of first-enlistment Telecommunications Operations personnel. Most of these tasks involved message handling, security, and general communications functions. It is recommended that subject-matter specialists review these unmatched tasks to determine if they indicate a need for creating additional paragraphs, or subparagraphs, for AFS 291X0 STS.

TABLE 40

TASKS RATED ABOVE AVERAGE IN TRAINING EMPHASIS
NOT REFERENCED TO STS 291X0

TASKS	TRAINING EMPHASIS	TASK DIFFICULTY	PERCENT FIRST- ENLISTMENT PERFORMING (N=1,230)
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LCG	5.48	4.30	54
I335 REVIEW MESSAGES FOR SECURITY VIOLATIONS	5.45	5.78	38
I337 VERIFY ENTRY AUTHORIZATION OF VISITORS	5.23	3.80	38
E190 PERFORM QUALITY CONTROL CHECKS ON LOCAL POSITIONS	5.13	3.56	52
B39 CONDUCT SHIFT CHANGE BRIEFINGS	5.07	4.09	38
H258 INITIATE DISREGARD NOTICES OR CANCELLATION NOTICES	4.63	3.74	28
I312 ESCORT VISITORS THROUGH FACILITIES	4.48	3.46	45
H290 RETRIEVE MESSAGES	4.47	4.52	28
B77 SUPERVISE APPRENTICE TELECOMMUNICATIONS SPECIALISTS (AFSC 29130)	4.45	5.90	21
F214 IMPLEMENT ROUTING INDICATOR DELETIONS, ADDITIONS, OR CHANGES	4.88	4.81	23
E149 MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	4.35	4.21	27
I324 MAINTAIN VISITOR REGISTERS	4.13	3.82	22
H297 SEND OR RECEIVE AUTODIN SYSTEM MESSAGES USING LOW SPEED TERMINAL EQUIPMENT, SUCH AS MODE V	4.10	4.37	19
H301 SEND OR RECEIVE MESSAGES USING SPECIAL PURPOSE NETWORKS	3.83	4.59	7
D119 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	3.82	5.08	15
E152 MAKE ENTRIES ON CENTER SHIFT SUPERVISOR CHECKLIST	3.80	4.08	14
I336 SIGN RECEIPTS FOR CLASSIFIED MATERIALS	3.80	3.73	21
J351 MAINTAIN STATUS BOARDS ON LOCATION OF COMMANDERS	3.70	4.05	11
J344 COORDINATE SWITCHBOARD CIRCUIT OR EQUIPMENT PROBLEMS WITH MAINTENANCE, TECHNICAL CONTROL, OR SUPPORT AGENCIES	3.58	4.50	12
E154 MAKE ENTRIES ON DAILY CIRCUIT AND EQUIPMENT STATUS RECORDS	3.45	4.15	14
I316 MAINTAIN AUTHORIZED ENTRANCE LISTS	3.32	4.45	11

NOTE: AVERAGE TRAINING EMPHASIS RATING = 1.57, S.D. = 1.72

3ABR29130 Plan Of Instruction

The Plan of Instruction (POI) for Course 3ABR29130, dated 5 January 1981, was also evaluated using a matching provided by training personnel between the criterion objectives (CO) of the POI and the tasks in the job inventory. The COs with performance measurements were evaluated using training emphasis, task difficulty, and percent of first-enlistment personnel responding.

Although many of the COs did not have tasks matched to them, the survey data appeared to be generally supportive of the overall POI content. In many cases where COs did not have tasks matched, the subject matter covered manual skills development. Such COs were included in Block II, Teletypewriting, and Block V, Unit 9, Mode I Terminal Operation. Thus, it appears that the survey data did not contradict retention of the contents of the current POI.

At the end of the matching, all tasks not matched to COs were listed in descending order of training emphasis ratings. Eighty-two tasks rated high in training emphasis (3.29 or higher) were not matched (see Table 41). Of these, 14 also were performed by at least 30 percent of the first-enlistment respondents. Most of these high training emphasis tasks involved security activities, such as performing emergency drills, escorting visitors, and performing security inspections; and message handling activities, such as making entries on registers, reporting equipment outages, and sending or receiving acknowledgements for messages. Training personnel are encouraged to review the computer printout closely, with particular attention to tasks not referenced to COs to determine if new areas should be added to the basic course.

TABLE 41

TASKS RATED ABOVE AVERAGE IN TRAINING EMPHASIS AND PERFORMED BY
AT LEAST 30 PERCENT OF FIRST-ENLISTMENT PERSONNEL,
NOT REFERENCED TO POI 3ABR29130

TASKS	TRAINING EMPHASIS	TASK DIFFICULTY	PERCENT FIRST- ENLISTMENT PERFORMING (N=1,230)
H271 MAKE ENTRIES ON AF FORM 1014, MESSAGE DELIVERY REGISTER	6.37	3.66	35
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	6.33	4.26	59
H270 MAKE ENTRIES ON DD FORM 1503, MESSAGE CORRECTION NOTICE	6.18	4.04	42
H296 SEND OR RECEIVE ACKNOWLEDGEMENTS FOR HIGH PRECEDENCE MESSAGES	5.70	3.81	44
I328 PERFORM EMERGENCY PROCEDURES DRILLS	5.52	5.01	35
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	5.48	4.30	54
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	5.30	3.56	54
I337 VERIFY ENTRY AUTHORIZATION OF VISITORS	5.23	3.80	38
H288 REPRODUCE MESSAGES FOR DISTRIBUTION	5.13	2.99	53
B39 CONDUCT SHIFT CHANGE BRIEFINGS	5.07	4.09	38
H267 MAKE ENTRIES ON AF FORM 1035, CHANNEL NUMBER SHEET	4.98	3.29	39
I330 PERFORM PHYSICAL SECURITY INSPECTION OF FACILITIES	4.90	4.99	42
I312 ESCORT VISITORS THROUGH FACILITIES	4.48	3.46	45
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	4.23	4.19	45

NOTE: AVERAGE TRAINING EMPHASIS = 1.57, S.D. = 1.72

AFS 295X0 Task Difficulty

The relative difficulty of each task in the inventory was also assessed through ratings by 54 experienced Automatic Digital Switching NCOs. Their ratings were processed separately from the AFS 291X0 ratings, but were processed by the same method. The task difficulty analysis produced an ordered listing of all tasks in terms of their relative difficulty according to the judgments of the AFS 295X0 NCOs. The listing was standardized to have an average difficulty rating of 5.0 and a standard deviation of 1.0. (Please refer to the Task Factor Administration section of SURVEY METHODOLOGY for a more complete description of task difficulty ratings.

Some of the tasks rated highest in difficulty were supervisory and managerial in nature, but most involved computer programming activities. Examples included designing software test procedures, correcting program deficiencies, preparing flowcharts, determining budget requirements, and coding software instructions. Tasks rated average in difficulty related to operating the various communications computers, such as recording register contents, performing program dump procedures, and monitoring and controlling traffic flow through ICATS, USET-8, ADWS, and 427M/CSS equipment. Tasks rated least difficult involved message handling, managing magnetic media, and general communications functions. These tasks included responsibilities such as stamping filing times, precedences, or handling instructions, making entries on forms and logs, and degaussing magnetic tapes.

Due to the diverse and specialized nature of the 295X0 career ladder, most of the tasks were performed by relatively few members. Tasks with the highest difficulty ratings generally were performed by the smallest percentages of respondents, with the more junior personnel (in the first-TICF group) having lower percentages performing than the more senior groups. The percentages performing average difficulty tasks were also fairly low. Tasks rated least difficult were performed by higher percentages; however, few of even the least difficult tasks were performed by greater than 50 percent of any experience group. With the least difficult tasks, there was a tendency for the more junior members to have higher percentages performing than the more senior groups.

AFS 295X0 Training Emphasis

An attempt was made to survey senior AFS 295X0 NCOs regarding which tasks should receive the greatest emphasis for training personnel entering the 295X0 specialty. Due to the diverse nature of the career ladder with its many specialized communications computer systems, insufficient agreement was found among the raters to be able to produce a listing of tasks ordered on the relative emphasis for training new personnel. This lack of agreement among AFS 295X0 raters may indicate some difficulty in selecting representative equipment and primary responsibilities on which technical training should be based.

AFS 295X0 Specialty Training Standard

The AFS 295X0 Specialty Training Standard (STS), dated March 1980, was compared with survey data for all AFS 295X0 first-job, first-TICF, 3-, and 7-skill level personnel. The review covered each paragraph measured by task performance or task knowledge standards, using task difficulty and percent members performing information. The tasks matched with many of the STS elements were performed by relatively few personnel, but with the degree of diversity generated by the many systems operated by AFS 295X0 personnel, the finding of low percentages performing should not be construed as an indication that any element of the STS should be deleted. Table 42 contains an example of an STS paragraph supported by several low performance tasks. Many of these tasks related to systems located at different units; and in all probability, individuals responding to any one task were not the same individuals responding to other tasks. Thus, although individual tasks were performed by relatively few individuals, the sum total of personnel performing tasks related to the STS element may be substantially higher, as shown by the estimate of percentages of groups performing tasks related to the STS element. Overall, the contents of the STS appear to be substantiated by this survey. The use of a generic structure, rather than using specific equipment, allows the STS to be flexible enough to deal with frequent changes in systems; yet, structures training requirements in a well organized way.

A review of tasks not referenced indicated the matching was very comprehensive and there was little reason to believe that any additions are necessary, assuming that the present classification system stands. Only seven tasks were not matched with STS elements, but were performed by substantial numbers of Automatic Digital Switching personnel (see Table 43). Two involved minor supervisory responsibilities; the remaining five primarily involved message handling activities. All seven received fairly low difficulty ratings, and were primarily the responsibilities of Telecommunications Operations personnel.

In the event of a decision by the Utilization and Training Conference not to merge the two AFSCs, the current 295X0 STS appears well structured. It is recommended, however, that subject-matter specialists closely examine the STS matching to determine whether any of the proficiency codes should be adjusted. This should be done with consideration of the diverse structure of jobs caused by the variety of systems operated and the low incidence of different systems being collocated.

TABLE 42

EXAMPLE STS PARAGRAPH AND SUPPORTING TASKS

	ALL 295X0	1ST JOB	1- 48M	29530	29570	TASK DIFFICULTY
7. STORE AND FORWARD COMMUNICATIONS SYSTEMS OPERATIONS						
7S. PERFORM STATISTICAL ROUTINES						
						4c
F209 COMPILE STATISTICS OF MESSAGES THAT CONTAIN ERRORS						
U660 RUN COMMUNICATIONS OPERATIONS PERFORMANCE SUMMARY						
(COMOPS) PROGRAMS AT RADAY CHANGE IN AUTODIN I						
R595 RUN SYSTEM ANALYSIS PROGRAMS AT RADAY CHANGE IN SPE	7.8	7.1	8.5	7.1	8.6	5.30
M449 RUN SYSTEM ANALYSIS PROGRAMS AT RADAY CHANGE IN USET-8	5.4	9.0	7.0	7.5	3.7	5.33
R594 RUN SYSTEM ANALYSIS PROGRAMS AT RADAY CHANGE IN SATIN	4.8	5.8	5.4	5.4	4.5	5.28
V621 RUN COMMUNICATIONS OPERATIONS PERFORMANCE SUMMARY	3.0	7.1	5.0	5.4	.8	5.00
(COMOPS) PROGRAMS AT RADAY CHANGE IN OVERSEAS AUTODIN	3.0	2.6	2.7	2.5	3.7	5.36
F523 RUN SYSTEM ANALYSIS PROGRAMS AT RADAY CHANGE IN ADWS	3.0	0	2.3	3.3	2.9	5.31
S622 RUN SYSTEM ANALYSIS PROGRAMS AT RADAY CHANGE IN AMPE	2.4	3.2	2.7	3.7	1.2	4.87
Q553 RUN SYSTEM ANALYSIS PROGRAMS AT RADAY CHANGE IN 427M/CSS	1.8	2.6	1.9	2.1	1.6	4.96
N473 RUN SYSTEM ANALYSIS PROGRAMS AT RADAY CHANGE IN ICATS	1.0	1.3	1.6	.4	1.6	4.63
	.6	1.9	1.2	1.2	0	5.05
ESTIMATE OF TOTAL PERCENTAGES PERFORMING TASKS RELATED TO THIS SYS ELEMENT:	33	41	38	39	29	5.11

TABLE 43

TASKS PERFORMED BY 30 PERCENT OR MORE OF AFS 295X0 FIRST-TICF
PERSONNEL NOT MATCHED TO STS 295X0

TASKS	TASK DIFFICULTY	PERCENT FIRST TICF PERFORMING (N=258)
B39 CONDUCT SHIFT CHANGE BRIEFINGS	3.50	46
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	3.49	44
E190 PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	3.24	36
H284 PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	4.58	33
H304 STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	2.77	32
H254 ASSIGN ROUTING INDICATORS	4.10	30
H303 STAMP FILING TIMES ON OUTGOING MESSAGES	2.39	30

4ALT29530 Plan Of Instruction

The Plan of Instruction (POI) for Course 4ALT29530, dated 9 September 1981, was also evaluated using a matching provided by training personnel between the criterion objectives (COs) of the POI and the tasks in the job inventory. Particular attention was placed on COs measured by performance criteria. Two of the areas in this POI measured by performance criteria were well supported by the findings of this survey. Units II, 10, and III, 3, were matched with many tasks with high percentages of the first-job and first-TICF groups performing. The first unit of instruction involved 18 hours of hands-on experience performing a variety of activities associated with the Univac Set-8 System. The second unit involved 18 hours of hands-on experience in the operations center of the Air Force Communications Computer Programming Center.

The only other unit of instruction measured by performance criteria, I, 8, a unit of instruction covering numbering systems and codes used by communications computers, was matched with tasks with low percents performing. The COs of this unit were tested by both written and performance measurements. The tasks associated with this unit were performed by fairly low percentages of first-job and first-TICF respondents, but difficulty ratings were fairly high.

There were 27 tasks not matched with the COs of this POI performed by substantial numbers of first-TICF respondents (see Table 44). Almost all appeared to be tasks customarily performed by AFS 291X0 personnel.

The 29530 POI appeared to be fairly well substantiated by the results of this survey. One area of the POI using performance tests had fairly low percentages of first-job and first-TICF groups performing related tasks, but had high difficulty ratings. Since the area is also tested by written criteria, there are insufficient grounds to recommend deleting the unit from the course. A substantial number of high performance tasks were unmatched but they appeared to relate more directly to AFS 291X0. In the event that the Utilization and Training Conference decides against the merger of these AFSCs, the current POI appears to satisfy current training requirements.

TABLE 44

TASKS PERFORMED BY 30 PERCENT OR MORE OF AFS 295X0
FIRST T1CF PERSONNEL NOT REFERENCED TO POI 4ALT29530

TASKS	PERCENT FIRST T1CF PERFORMING (N=258)	TASK DIFFICULTY
H281 PREPARE SERVICE MESSAGES	59	4.48
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	52	4.08
I312 ESCORT VISITORS THROUGH FACILITIES	52	3.24
E150 MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	48	3.54
E149 MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	46	3.62
E169 PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	45	3.82
E173 PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	45	3.87
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	44	3.49
E170 PERFORM OPERATOR MAINTENANCE ON CARD READERS	43	3.84
G250 PURGE MAGNETIC MEDIA	40	2.99
H264 MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	40	3.51
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	40	3.58
E159 MAKE ENTRIES ON INTERCEPT LOGS	38	3.01
E155 MAKE ENTRIES ON EQUIPMENT OUTAGE/MAINTENANCE RECORDS	38	3.62
E190 PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	36	3.24
H276 PREPARE CARD EQUIPMENT FOR OPERATION	36	3.69
B74 ORIENT NEWLY ASSIGNED PERSONNEL	34	4.26
E154 MAKE ENTRIES ON DAILY CIRCUIT AND EQUIPMENT STATUS RECORDS	34	3.36
H278 PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	33	3.84
H284 PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	33	4.58
E167 NOTIFY CONTRACT MAINTENANCE OF EQUIPMENT OUTAGES	33	3.35
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	33	3.16
D115 CONDUCT OJT	32	5.90
H304 STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	32	2.77
H254 ASSIGN ROUTING INDICATORS	30	4.10
I329 PERFORM INVENTORIES OF CLASSIFIED ACCOUNTABLE ITEMS OTHER THAN CRYPTOGRAPHIC MATERIALS	30	4.13
H303 STAMP FILING TIMES ON OUTGOING MESSAGES	30	2.39

Proposed AFS 291X0 Specialty Training Standard

In support of the proposed merger of AFS 291X0 and 295X0, a new Specialty Training Standard was drafted in July 1980. This proposed STS contained all of the paragraphs and subparagraphs of the current AFS 291X0 and 295X0 STSs. A matching was constructed by personnel at the Sheppard Technical Training Center of tasks in the job inventory to the proposed STS.

A review of the percentages of first-job and first-enlistment AFS 291X0 personnel and first-job and first-TICF AFS 295X0 personnel performing tasks matched to the proposed STS revealed a pattern of one-way overlap similar to the findings of the ANALYSIS OF CAREER LADDER JOBS and SKILL AND EXPERIENCE sections of this report. Tasks matched to elements of the proposed STS, which were taken from the message handling and general communications activities paragraphs of the 291X0 STS, were performed by substantial numbers of both AFS 291X0 and 295X0 personnel. Tasks matched to elements of the proposed STS, which were taken from the 295X0 STS related to operating the components of communications computers, were performed by substantial numbers of AFS 295X0 respondents, but by very few AFS 291X0 respondents.

In the event that these two AFSCs are merged, the proposed STS appears to be comprehensive in describing the training requirements of the new specialty. The matching of job inventory tasks to the proposed STS should be useful to subject-matter specialists in identifying the needed changes in current training programs which will be generated by the merger.

Comparison of Perceived Task Difficulty

The ratings of relative difficulty of tasks provided by senior NCOs from the 291X0 and 295X0 career ladders were processed separately and then compared. Some differences were found in the difficulty rankings provided by the two groups of raters. A computer printout has been prepared for subject-matter specialists showing these differences. Some caution should be exercised in applying task difficulty ratings information in any effort to consolidate training.

Summary

The analysis of current AFS 291X0 and 295X0 training did not indicate that major changes are required by current task performance data. In the event that the Utilization and Training Conference decides against consolidation of these two specialties, the current training documents will probably need little revision. If, however, the decision is in favor of consolidation, the proposed new STS appears to adequately describe the training requirements of the new AFSC. The survey data matched with the proposed STS should be useful to the Utilization and Training Conference in establishing proficiency codes for the new STS.

ANALYSIS OF CONUS AND OVERSEAS AFSC 29150 GROUPS

A comparison was made of the tasks performed and the background information for DAFSC 29150 respondents assigned in the CONUS and overseas. Hardly any differences were found between the two groups, either in percent performing tasks or in background responses. The background data in Table 45 show that the overseas group had a slightly higher average number of tasks performed (53 and 59 tasks, respectively); and, consequently, a slightly higher job difficulty index (11.7 and 12.6, respectively). CONUS personnel had been on the job slightly longer than the overseas group (21 and 19 months, respectively), but had slightly less total active military service experience (64 and 65 months, respectively). The only substantial difference in background question responses noted was that overseas personnel had a greater percentage of personnel whose jobs required access to specially compartmented information than did the CONUS groups (45 percent and 39 percent, respectively).

Relatively few tasks were performed by substantially greater percentages of either group. Table 46 contains a listing of those tasks where there was at least a ten percent difference in performance. Only 11 tasks were performed by a substantial proportion of overseas personnel and included message handling and security activities. There was only one task performed by substantially more CONUS personnel, and involved processing telephone calls.

Overall, it appeared that the jobs performed by Telecommunications Operations specialists were essentially the same.

TABLE 45

BACKGROUND INFORMATION ON DAFSC 29150 PERSONNEL ASSIGNED
IN THE CONUS AND OVERSEAS

	<u>CONUS</u>	<u>OVERSEAS</u>
NUMBER MEMBERS:	1,001	573
AVERAGE NUMBER TASKS PERFORMED:	53	59
AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT:	4.24	4.27
JOB DIFFICULTY INDEX:	11.7	12.6
AVERAGE GRADE:	E-4	E-4
PERCENT WHOSE JOBS REQUIRE ACCESS TO SPECIALLY COMPARTMENTED INFORMATION:	39	45
PERCENT SUPERVISING:	29	32
AVERAGE NUMBER OF SUBORDINATES:	2.9	2.6
AVERAGE NUMBER MONTHS IN PRESENT JOB:	21	19
AVERAGE NUMBER MONTHS IN CAREER FIELD:	57	58
AVERAGE NUMBER MONTHS ACTIVE FEDERAL MILITARY SERVICE:	64	65
PERCENT FINDING JOB INTERESTING:	47	46
PERCENT FEELING JOB USES TALENTS WELL:	60	60
PERCENT FEELING JOB USES TRAINING WELL:	69	75
PERCENT SATISFIED WITH SENSE OF ACCOMPLISHMENT GAINED FROM JOB:	46	46
PERCENT PLANNING TO REENLIST:	53	57

TABLE 46

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 29150
PERSONNEL ASSIGNED IN THE CONUS AND OVERSEAS
(PERCENT PERFORMING)

TASKS												CONUS (N=1,001)	OVERSEAS (N=573)	DIFFERENCE		
J362	PROCESS TELEPHONE CONFERENCE CALLS											17	7	+10		
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
H306	STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES											48	58	-10		
H274	PERFORATE MESSAGE TAPES											46	56	-10		
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION											54	66	-12		
I313	INVENTORY ACCOUNTABLE COMSEC MATERIALS											54	67	-13		
I335	REVIEW MESSAGES FOR SECURITY VIOLATIONS											35	48	-13		
H257	INITIATE CHANNEL CHECKS											27	40	-13		
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE											51	65	-14		
I326	MAKE PAGE CHECKS											38	53	-15		
H305	STAMP TIME OF RECEIPT ON INCOMING MESSAGES											44	59	-15		
I311	DESTROY CLASSIFIED WASTE											56	72	-16		
H267	MAKE ENTRIES ON AF FORM 1035, CHANNEL NUMBER SHEET											25	41	-16		

NOTE: THERE WERE ONLY 12 TASKS WHERE THE DIFFERENCE IN PERCENT MEMBERS PERFORMING OF THE CONUS AND OVERSEAS GROUPS WERE GREATER THAN TEN PERCENT.

ANALYSIS OF CONUS AND OVERSEAS AFSC 29570 GROUPS

The tasks performed and background responses of DAFSC 29570 personnel assigned in the CONUS and overseas were also compared. Unlike the findings of AFS 291X0, tangible differences were found in tasks performed between CONUS and overseas personnel. Thirty-one tasks were performed by greater percentages of CONUS personnel, and 33 tasks were performed by greater percentages of overseas respondents. Examples of tasks which showed the clearest differentiation between jobs of CONUS and overseas respondents are shown in Table 47.

Tasks distinguishing CONUS personnel primarily involved programming activities and operation of AUTODIN I equipment. Programming tasks performed by CONUS personnel included analyzing deficiencies, coding instructions, and providing documentation for communications computer software packages. Operation of AUTODIN I equipment involved initializing off-line routines and operating equipment such as high speed printers.

In contrast, the jobs of personnel assigned overseas involved operation of overseas AUTODIN, operating Automatic Digital Weather Systems, and managing magnetic media. The overseas AUTODIN activities included monitoring and controlling traffic, intercepting messages or performing on-line message recovery, and coordinating abnormal conditions with various agencies. ADWS activities included operating consoles and performing restarts of computer programs. Management of magnetic media involved purging and degaussing magnetic tapes and other media.

While there were substantial differences in jobs performed, the responses to background and job satisfaction questions were fairly similar (see Table 48). CONUS personnel performed a slightly higher average number of tasks (66 tasks compared to 57 tasks performed by overseas personnel), resulting in a slightly higher job difficulty index (16.3 and 14.7, respectively). Overseas personnel had slightly more experience as measured by time in the career field (94 months compared to 81 months for CONUS personnel), but slightly less experience as measured by total active federal military service (177 and 178 months, respectively). CONUS respondents had slightly higher percentages responding positively on perceived job interest, utilization of talents and training, and satisfaction with sense of accomplishment gained from their jobs. There was only one percent difference, however, between expressed intentions to reenlist between the groups, with 60 percent of CONUS and 59 percent of overseas respondents indicating they plan to reenlist.

Thus, while there appeared to be substantial differences in responsibilities of members assigned in the CONUS and overseas, the background and job satisfaction responses were generally the same.

TABLE 47

EXAMPLES OF TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 29570 PERSONNEL ASSIGNED IN THE CONUS AND OVERSEAS
(PERCENT PERFORMING)

TASKS	CONUS (N=189)	OVERSEAS (N=51)	DIFFERENCE
K367 ANALYZE SOFTWARE DEFICIENCIES	26	8	+18
I313 INVENTORY ACCOUNTABLE COMSEC MATERIALS	24	8	+16
F202 ANALYZE SYSTEM PRINTOUTS	43	27	+16
K369 CODE SOFTWARE INSTRUCTIONS	20	6	+14
K390 PREPARE OR UPDATE SOFTWARE FOR USER IMPLEMENTATION	16	2	+14
K374 CORRECT PROGRAM DEFICIENCIES IN EXISTING SOFTWARE DURING SYSTEM LIFECYCLE	17	4	+13
B81 SUPERVISE CIVILIANS	13	0	+13
U649 OPERATE HIGH SPEED PRINTERS IN AUTODIN I	13	0	+13
K393 PROVIDE DOCUMENTATION FOR OPERATORS' MANUALS	16	4	+12
H303 STAMP FILING TIMES ON OUTGOING MESSAGES	17	6	+11
U641 INITIALIZE OFF-LINE AUTODIN I ROUTINES	11	0	+11
E157 MAKE ENTRIES ON EQUIPMENT UTILIZATION LOGS	21	10	+11
U640 EVALUATE OFF-LINE PRINTOUTS IN AUTODIN I	13	2	+11
B44 DIRECT COMMUNICATIONS SECURITY PROCEDURES	12	2	+10
K387 PREPARE DETAILED PROGRAM FLOWCHARTS	10	0	+10
* * * * *	*	*	*
E148 MAKE ENTRIES ON CENTER CONFIGURATION LOGS	21	31	-10
G250 PURGE MAGNETIC MEDIA	23	33	-10
G239 DEGAUSS MAGNETIC TAPES	14	25	-11
P518 PERFORM RESTARTS IN ADWS	4	15	-11
P511 OPERATE CONSOLE MONITOR PRINTERS IN ADWS	4	16	-12
C109 REVIEW OPERATIONAL LOGS AND REPORTS	33	45	-12
B75 PERFORM STAFF TECHNICAL ASSISTANCE VISITS	12	25	-13
V665 DIRECT OVERSEAS AUTODIN MESSAGES TO INTERCEPT	0	18	-18
V676 PERFORM OVERSEAS AUTODIN ON-LINE MESSAGE RECOVERY	0	18	-18
V678 PLACE OVERSEAS AUTODIN CHANNELS IN OR OUT OF SERVICE	0	18	-18
V671 MONITOR AND CONTROL TRAFFIC FROM OVERSEAS AUTODIN CONSOLES	0	20	-20
V675 PERFORM OFF-LINE SERVICE ROUTINES IN OVERSEAS AUTODIN	0	20	-20
V664 COORDINATE OVERSEAS AUTODIN ABNORMAL CONDITIONS WITH DCA/ACOC OR OTHER AGENCIES	1	22	-21
V662 ALTERNATE ROUTE OVERSEAS AUTODIN TRAFFIC	0	22	-22
V666 EVALUATE OFF-LINE PRINTOUTS IN OVERSEAS AUTODIN	0	22	-22

TABLE 48

BACKGROUND INFORMATION ON DAFSC 29570 PERSONNEL ASSIGNED
IN THE CONUS AND OVERSEAS

	<u>CONUS</u>	<u>OVERSEAS</u>
NUMBER MEMBERS:	189	51
AVERAGE NUMBER TASKS PERFORMED:	66	57
AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT:	5.14	4.91
JOB DIFFICULTY INDEX:	15.3	14.7
AVERAGE GRADE:	E-6	E-6
PERCENT WHOSE JOBS REQUIRE ACCESS TO SPECIALLY COMPARTMENTED INFORMATION:	39	41
PERCENT SUPERVISING:	44	51
AVERAGE NUMBER OF SUBORDINATES:	4.6	3.1
AVERAGE NUMBER MONTHS IN PRESENT JOB:	20	19
AVERAGE NUMBER MONTHS IN CAREER FIELD:	81	94
AVERAGE NUMBER MONTHS ACTIVE FEDERAL MILITARY SERVICE:	178	177
PERCENT FINDING JOB INTERESTING:	73	67
PERCENT FEELING JOB USES TALENTS WELL:	77	71
PERCENT FEELING JOB USES TRAINING WELL:	68	63
PERCENT SATISFIED WITH SENSE OF ACCOMPLISHMENT GAINED FROM JOB:	68	57
PERCENT PLANNING TO REENLIST:	60	59

COMPARISON TO PREVIOUS AFS 291X0 SURVEYS

This is the third occupational survey conducted by the USAF Occupational Measurement Center of the Telecommunications Operations career ladder. The first report was published 28 October 1970, and the second was published 28 February 1977. The comparison between the findings of the first two reports revealed no major changes in the structure of jobs performed by AFS 291X0 personnel.

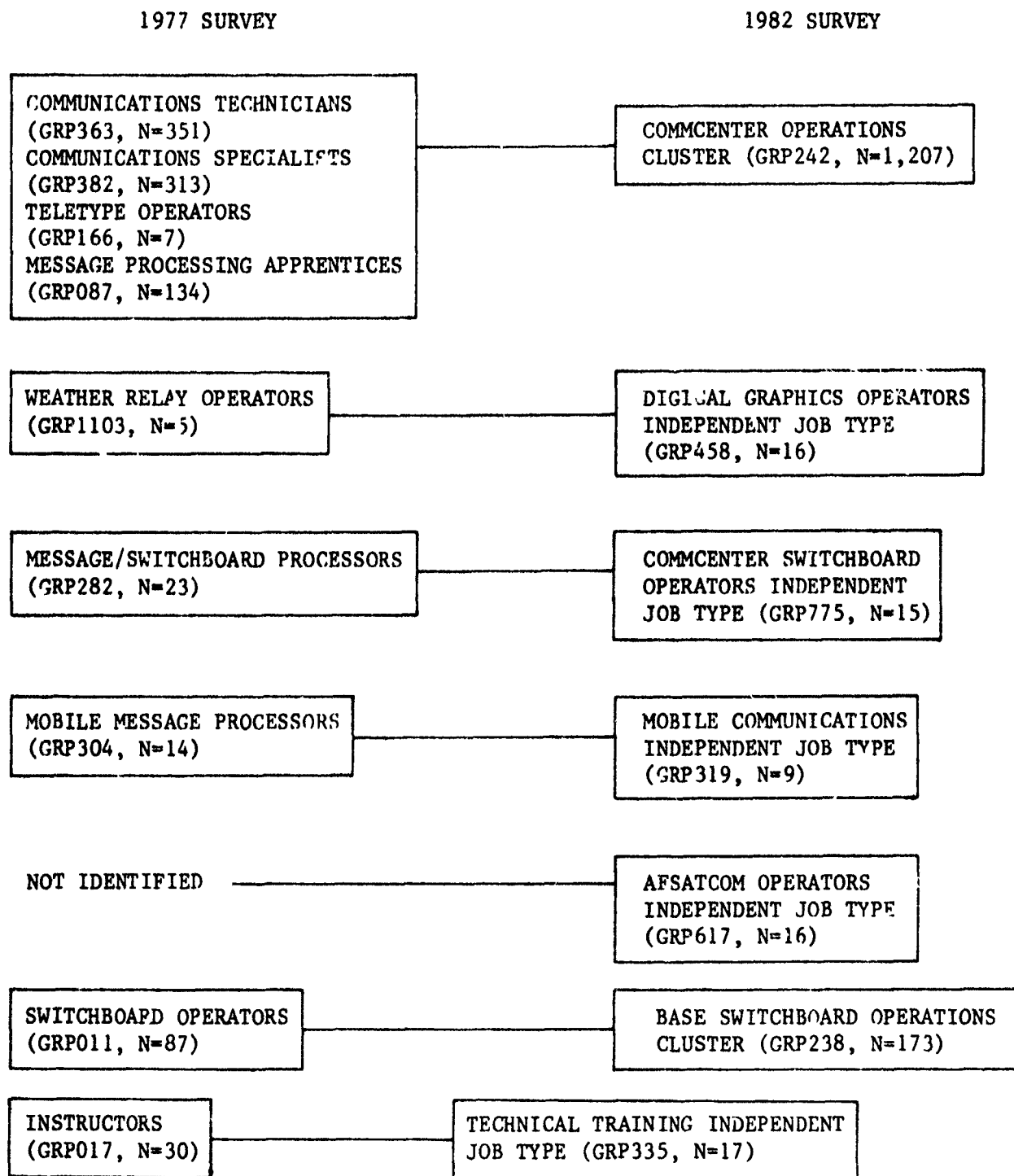
The job structure of AFS 291X0 personnel in the current study was compared with the structure of jobs identified in the 1977 study. Most of the jobs performed by respondents of the previous study were identified in the current study, with only a few variations (see Figure 4). The 1977 study identified four separate groups of personnel performing jobs which appeared to be equivalent to the jobs of respondents identified as the Commcenter Operations Cluster in the current survey. Also, three separate job groups were reported in 1977 which appeared to be equivalent to the jobs of Supervision and Administration personnel in the current report. One group found in the 1977 study, the Airborne Communications Specialists, were not identified by the current job structure analysis; and, one group in the current study, the AFSATCOM Operators Independent Job Type, was not found in the 1977 job structure. Overall, structure of the jobs currently performed have changed little over the past five years.

Comparisons of job satisfaction were also made, using the experience groups of AFS 291X0 personnel in the current survey and in the 1977 study. There was a decline with first-enlistment and career personnel in the percent of each group finding their jobs interesting (see Table 49). Perceptions of how well jobs use the talents and training of respondents changed very little. There were substantial declines among first- and second-enlistment personnel in expressed intention to reenlist. First-enlistment personnel planning to reenlist declined from 49 percent to 42 percent from 1977 to 1982. Percentages of second-enlistment personnel planning to reenlist declined even more dramatically, from 75 percent to 60 percent, over the previous five years. No change was noted, however, for respondents in their third and subsequent enlistments.

Overall, this comparison indicates that there has been relatively little change in the structure of jobs over the past five years, although job interest has declined somewhat for the most junior and most senior personnel, and percentages of first- and second-enlistment personnel planning to reenlist appeared to decline substantially.

FIGURE 4

COMPARISON OF JOB GROUPS IDENTIFIED IN 1977 AND 1982 SURVEYS



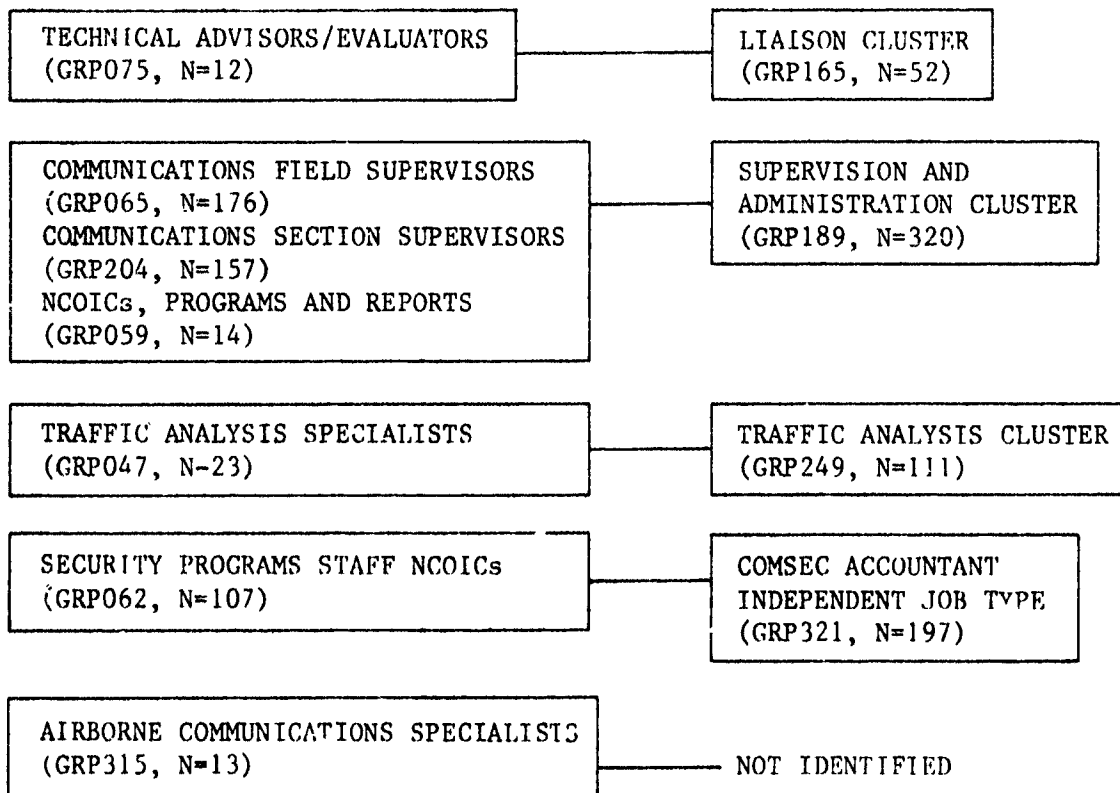


TABLE 49

AFS 291X0 JOB SATISFACTION: 1977 AND 1982
(PERCENT RESPONDING)

	FIRST-ENLISTMENT		SECOND-ENLISTMENT		CAREER	
	1977 (N=631)	1982 (N=1,230)	1977 (N=330)	1982 (N=473)	1977 (N=752)	1982 (N=938)
PERCENT FINDING JOB INTERESTING:	49	42	53	51	73	66
PERCENT FEELING JOB USES TALENTS WELL:	57	56	62	62	77	73
PERCENT FEELING JOB USES TRAINING WELL:	74	72	72	72	74	72
PERCENT PLANNING TO REENLIST:	49	41	75	60	67	67

COMPARISON TO PREVIOUS AFS 295X0 SURVEY

This is the second survey of the Automatic Digital Switching Specialty conducted by the USAF Occupational Measurement Center. The first report was published 4 December 1974.

Over the course of eight years, a number of procedural changes have been made in the methodology of occupational surveys. Many of the types of information obtained in the current study such as examining lateral AFSCs by time in the career field, were not investigated in the 1974 study. As a result, this section will focus only on the general comparison of job structure in the two studies.

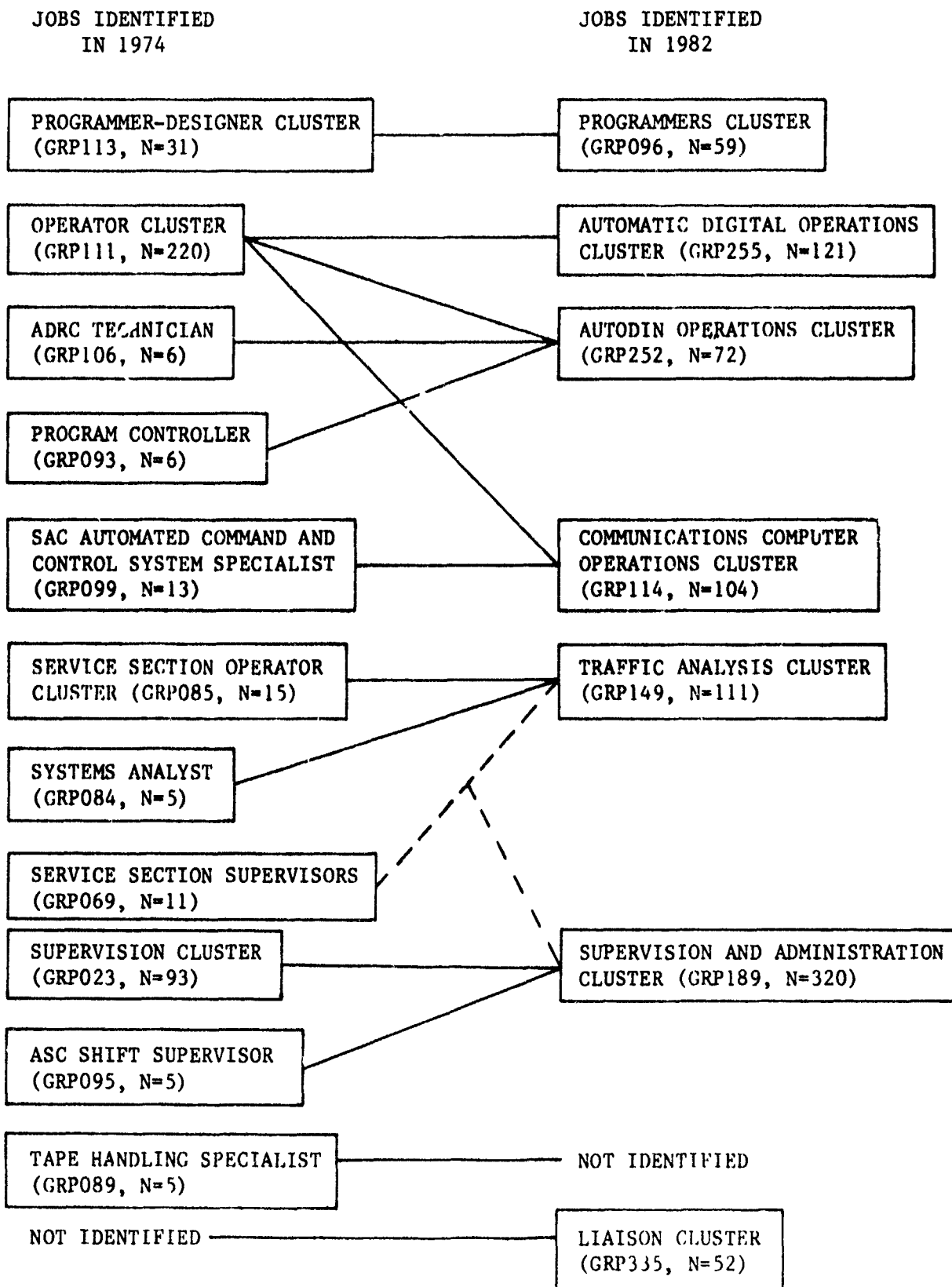
The inventory used in the current study differed from the previous one in two significant ways. First, the current inventory contains tasks of both the 291X0 and 295X0 specialties to examine the utility of merging these AFSCs, where the previous inventory only contained AFS 295X0 tasks. The second significant difference was that tasks in the previous inventory were grouped functionally, where the current inventory was organized around specific types of equipment. The changes in the inventory resulted in a substantially different, and probably more accurate, picture of the job structure in the Automatic Digital Switching specialty.

The previous survey identified four clusters of jobs and seven independent job types. In contrast, the current survey found seven clusters of jobs (see Figure 5). Only one group, the Programmers Cluster, was clearly identifiable in both studies. The three groups in the current study involved with operations, the Automatic Digital Operations, AUTODIN Operations, and Communications Computer Operations clusters, were apparently related to one cluster and three independent job types identified by the 1974 survey. The current Traffic Analysis Cluster was apparently related to one cluster and at least one (and possibly two) independent job types in the previous study. The 1974 study found a distinct cluster and two independent job types performing supervisory responsibilities. The current study also identified a supervisory group, but it is unlikely that the two groups were equivalent. Most first-line supervisors in the 1982 sample grouped as discrete job types within the three operations clusters, rather than forming a large supervision cluster. One group in the 1974 study, the Tape Handling Specialists, was not identified by the current study. The Liaison Cluster found in the current study was not found in the previous report.

It is debatable whether the differences noted between these reports represents an actual change in the structure of jobs or reflects the improvements made in the inventory. In either case, the reported structure is quite different in the current study and is much more equipment-oriented than was previously reported.

FIGURE 5

COMPARISON OF JOB GROUPS IDENTIFIED IN 1974 AND 1982 SURVEYS



IMPLICATIONS

The original issue prompting this survey was to obtain data for review of current training programs for these two AFSCs. During the course of this project another issue arose involving the utility of merging the Telecommunications Operations and Automatic Digital Switching specialties.

AFS 295X0 was developed as a lateral specialty to AFS 291X0 to provide personnel who operate communications systems technologically more complicated than equipment then in use by AFS 291X0 personnel. New systems, such as optical character readers and Standard Remote Terminals, are gradually being purchased and integrated into the AFS 291X0 inventory. The new equipment will increase automation of many telecommunications functions. As the new equipment is installed, a natural evolution toward more cross-utilization of members of these two specialties is expected. Currently, though, most of the job groups identified in this survey are performed by members of one specialty or the other, but not both. Except for supervisory and administrative responsibilities, the only commonality found within jobs of each specialty involved some message handling activities. Given that AFS 295X0 incumbents have demonstrated some competence at the AFS 291X0 specialist level before cross-training into the lateral 295X0 specialty, it is understandable that the AFS 295X0 respondents would be cross-utilized at times in AFS 291X0 functions. Most AFS 291X0 incumbents, however, have not had the training or opportunity to be cross-utilized on the communications computers of AFS 295X0. The result is that overlap between these specialties is in one direction only.

From an occupational analysis perspective, the absence of cross-utilization in both directions is an indication that consolidating these two specialties is not appropriate at this time. As the new equipment for AFS 291X0 becomes more widespread, merger may be more feasible. Any action to consolidate must also consider the impact on the Specialty Knowledge Testing for these AFSCs.

Review of the current AFR 39-1, Specialty Training Standards (STS), and Plans of Instruction (POI) appeared to accurately reflect the jobs performed and training requirements of both specialties.

For contingency purposes, AFCC and training officials have drafted proposed Specialty Descriptions and an STS. Review of the STS revealed that the responsibilities of the current AFS 295X0 were added to the AFS 291X0 STS. No coding was prepared to indicate the levels of training to be provided on either the current AFS 291X0 or AFS 295X0 activities. If the additional responsibilities are to be trained at current AFS 295X0 levels, the basic residence course will be extended considerably.

Currently, the Automatic Digital Switching specialty is designated as category "A" training, requiring all personnel to complete the lateral training program at Tinker AFB. The Telecommunications Operations specialty is designated as category "B" training, with roughly 45 percent of new personnel receiving initial training through directed duty assignments (DDA) to on-the-job training at operational units. The data indicated that there is only about a three-week difference in time required to achieve the 3-skill

level between the residence course graduates and DDA personnel. If the consolidation is approved, the category "B" designation for training should be closely evaluated. A change to category "A" would nearly double the current student flow of 1,050 trainees through the basic course annually.

The proposed changes to the AFR 39-1 Specialty Descriptions appeared to accurately reflect the jobs identified by this survey. Some reorganization and possibly some consolidation of paragraphs may be useful with the 29110/29130/29150 description.

The issues of AFSC consolidation, definition of STS proficiency code levels, designation of category of training, and minor revision of specialty descriptions should be addressed at the Utilization and Training Workshop scheduled in November 1982.

APPENDIX A

CHARACTERISTIC TASKS PERFORMED BY MEMBERS OF
INDEPENDENT JOB TYPES, CLUSTERS, AND JOB TYPES WITHIN CLUSTERS

TABLE A1
CHARACTERISTIC TASKS PERFORMED BY
THE COMMCENTER OPERATIONS CLUSTER
(GRP242)

TASKS	PERCENT MEMBERS PERFORMING (N=1,207)
H281 PREPARE SERVICE MESSAGES	95
H304 STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	90
H284 PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	89
H303 STAMP FILING TIMES ON OUTGOING MESSAGES	87
H254 ASSIGN ROUTING INDICATORS	86
H268 MAKE ENTRIES ON AF FORM 1022, COMMSEN MESSAGE REGISTER	85
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	85
H273 NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	82
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	81
H264 MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	81
H306 STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	80
I311 DESTROY CLASSIFIED WASTE	77
H274 PERFORMATE MESSAGE TAPES	77
H305 STAMP TIME OF RECEIPT ON INCOMING MESSAGES	77
H293 REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM. FOR ACCURACY	77
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	72
I313 INVENTORY ACCOUNTABLE COMSEC MATERIALS	71
H260 INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	70
E190 PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	70
H288 REPRODUCE MESSAGES FOR DISTRIBUTION	70
E168 NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	70
H256 DISTRIBUTE GENERAL MESSAGES	69
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	68
H278 PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	67
H280 PREPARE PAPER TAPE EQUIPMENT FOR OPERATION	64
H296 SEND OR RECEIVE ACKNOWLEDGEMENT FOR HIGH PRECEDENCE MESSAGES	61
H309 VERIFY CARD COUNT ON CARD COUNTING MACHINES	59
H292 REVIEW MESSAGES FOR MISHANDLING	58
I330 PERFORM PHYSICAL SECURITY INSPECTIONS OF FACILITIES	57
B39 CONDUCT SHIFT CHANGE BRIEFINGS	57

TABLE A2

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE TELECOM OPERATORS JOB TYPE
(GRP637, N=869)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
H	PROCESSING MESSAGES	53
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	14
I	MAINTAINING SECURITY	12
B	DIRECTING AND IMPLEMENTING	6
CHARACTERISTIC TASKS		PERCENT PERFORMING
H281	PREPARE SERVICE MESSAGES	98
H284	PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	95
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	94
H303	STAMP FILING TIMES ON OUTGOING MESSAGES	93
H268	MAKE ENTRIES ON AF FORM 1022, COMMEN MESSAGE REGISTER	92
H254	ASSIGN ROUTING INDICATORS	91
H273	NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	90
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	90
H306	STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	88
H264	MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	88
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	88
H293	REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	87
H274	PERFORATE MESSAGE TAPES	85
H305	STAMP TIME OF RECEIPT ON INCOMING MESSAGES	83
I311	DESTROY CLASSIFIED WASTE	83
H260	INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	78
H288	REPRODUCE MESSAGES FOR DISTRIBUTION	77
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	77
E169	NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	76
E190	PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	76
I313	INVENTORY ACCOUNTABLE COMSEC MATERIALS	75
H256	DISTRIBUTE GENERAL MESSAGES	75
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE	74
E186	PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS	74
H280	PREPARE PAPER TAPE EQUIPMENT FOR OPERATION	73
H278	PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	73
H283	PROCESS LIMITED DISTRIBUTION OR SPECIAL CATEGORY MESSAGES	71
H292	REVIEW MESSAGES FOR MISHANDLING	67
I312	ESCORT VISITORS THROUGH FACILITIES	67
H296	SEND OR RECEIVE ACKNOWLEDGEMENT FOR HIGH PRECEDENCE MESSAGES	66
H309	VERIFY CARD COUNT ON CARD COUNTING MACHINES	65
H270	MAKE ENTRIES ON DD FORM 1503, MESSAGE CORRECTION NOTICE	65
I330	PERFORM PHYSICAL SECURITY INSPECTIONS OF FACILITIES	64
B39	CONDUCT SHIFT CHANGE BRIEFINGS	62

TABLE A3

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE TELECOM OPERATIONS AND OPERATOR
MAINTENANCE PERSONNEL JOB TYPE
(GRP626, N=10)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
H	PROCESSING MESSAGES	57
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	24
I	MAINTAINING SECURITY	7
CHARACTERISTIC TASKS		PERCENT PERFORMING
H281	PREPARE SERVICE MESSAGES	100
E170	PERFORM OPERATOR MAINTENANCE ON CARD READERS	100
H288	REPRODUCE MESSAGES FOR DISTRIBUTION	90
H254	ASSIGN ROUTING INDICATORS	90
H284	PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	90
E169	PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	90
E186	PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS	90
E182	PERFORM OPERATOR MAINTENANCE ON PAPER TAPE READERS	90
H264	MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	80
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	80
E190	PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	80
H27 ²	PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	80
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	80
E181	PERFORM OPERATOR MAINTENANCE ON PAPER TAPE PUNCHES	80
I312	ESCORT VISITORS THROUGH FACILITIES	80

TABLE A4

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE TELECOM OPERATIONS OJT PERSONNEL JOB TYPE
(GRP760, N=16)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
H	PROCESSING MESSAGES	35
B	DIRECTING AND IMPLEMENTING	16
D	TRAINING	12
I	MAINTAINING SECURITY	12
CHARACTERISTIC TASKS		PERCENT PERFORMING
D115	CONDUCT OJT	100
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	100
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	100
I312	ESCORT VISITORS THROUGH FACILITIES	100
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	94
B39	CONDUCT SHIFT CHANGE BRIEFINGS	94
C107	PREPARE APRs	94
I313	INVENTORY ACCOUNTABLE COMSEC MATERIALS	94
D118	COUNSEL TRAINEES ON TRAINING PROGRESS	88
B71	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	88
H283	PROCESS LIMITED DISTRIBUTION OR SPECIAL CATEGORY MESSAGES	88
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	88
E168	NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	88
H281	PREPARE SERVICE MESSAGES	88
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE	88
I311	DESTROY CLASSIFIED WASTE	88
D119	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	81
H274	PERFORATE MESSAGE TAPES	81
D131	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	81
B42	COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED MATTERS	81
A24	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	81
B74	ORIENT NEWLY ASSIGNED PERSONNEL	81
H273	NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	81
B77	SUPERVISE APPRENTICE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29130)	75
B82	SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	75
I335	REVIEW MESSAGES FOR SECURITY VIOLATIONS	75
H293	REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	75
A13	DETERMINE WORK PRIORITIES	75
H303	STAMP FILING TIMES ON OUTGOING MESSAGES	75
A3	COORDINATE CIRCUIT ACTIVATIONS, DEACTIVATIONS, OR CHANGES WITH TECHNICAL CONTROL FACILITIES AND MAINTENANCE	75
I328	PERFORM EMERGENCY PROCEDURES DRILLS	75
H308	USE OFF-LINE CRYPTOGRAPHIC DEVICES TO ENCRYPT, DECRYPT, OR CHECK DECRYPTED MESSAGES	75

TABLE A5

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE STREAMLINER OPERATORS JOB TYPE
(GRP699, N=43)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
H	PROCESSING MESSAGES	44
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	14
T	OPERATING STREAMLINER SYSTEMS	13
I	MAINTAINING SECURITY	9
CHARACTERISTIC TASKS		PERCENT PERFORMING
T630	OPERATE OPTICAL CHARACTER READERS (OCR) IN STREAMLINER SYSTEMS	100
T633	PERFORM TAPE RECOVERIES IN STREAMLINER SYSTEMS	100
T629	OPERATE CATHODE-RAY TUBES (CRT) IN STREAMLINER SYSTEMS	98
H303	STAMP FILING TIMES ON OUTGOING MESSAGES	98
H294	SEND MESSAGES USING OPTICAL CHARACTER READERS (OCR)	95
H290	RETRIEVE MESSAGES	95
T628	LOAD OR UNLOAD MAGNETIC TAPES IN STREAMLINER SYSTEMS	93
H281	PREPARE SERVICE MESSAGES	93
T632	PERFORM STREAMLINER SYSTEM SWAPS	93
H293	REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	91
H273	NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	91
T626	INITIALIZE STREAMLINER SYSTEMS	91
H268	MAKE ENTRIES ON AF FORM 1022, COMMCEN MESSAGE REGISTER	88
H284	PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	88
I313	INVENTORY ACCOUNTABLE COMSEC MATERIALS	88
E168	NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	88
G239	DEGAUSS MAGNETIC TAPES	88
H271	MAKE ENTRIES ON AF FORM 1014, MESSAGE DELIVERY REGISTER FILES	86
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	84
T631	PERFORM STREAMLINER SYSTEM STARTUPS	84
E190	PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	84
H260	INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	81
H283	PROCESS LIMITED DISTRIBUTION OR SPECIAL CATEGORY MESSAGES	81
H274	PERFORATE MESSAGE TAPES	79
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	77

TABLE A6

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE MESSAGE PREPARATION PERSONNEL JOB TYPE
(GRP510, N=12)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
H	PROCESSING MESSAGES	58
I	MAINTAINING SECURITY	15
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	14
CHARACTERISTIC TASKS		PERCENT PERFORMING
H288	REPRODUCE MESSAGES FOR DISTRIBUTION	100
H281	PREPARE SERVICE MESSAGES	100
H308	USE OFF-LINE CRYPTOGRAPHIC DEVICES TO ENCRYPT, DECRYPT, OR CHECK DECRYPTED MESSAGES	100
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	92
H284	PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	92
H278	PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	92
H302	SEPARATE INCOMING MESSAGES FOR DISTRIBUTION OR COMMERCIAL REFILE	83
I313	INVENTORY ACCOUNTABLE COMSEC MATERIALS	83
H279	PREPARE MESSAGES FOR ENCRYPTION	83
H292	REVIEW MESSAGES FOR MISHANDLING	75
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE	75
I311	DESTROY CLASSIFIED WASTE	75
E168	NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	75
H296	SEND OR RECEIVE ACKNOWLEDGEMENT FOR HIGH PRECEDENCE MESSAGES	75
E190	PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	75
H309	VERIFY CARD COUNT ON CARD COUNTING MACHINES	75
I294	SEND MESSAGES USING OPTICAL CHARACTER READERS (OCR)	75
H282	PROCESS INCOMING ENCRYPTED MESSAGES FOR LOCAL DELIVERIES	75
E169	PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	75
H273	NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	67
H303	STAMP FILING TIMES ON OUTGOING MESSAGES	67

TABLE A7

CHARACTERISTIC TASKS PERFORMED BY
THE DIGITAL GRAPHICS OPERATORS INDEPENDENT JOB TYPE
(GRP458)

TASKS	PERCENT MEMBERS PERFORMING (N=16)
W692 MONITOR TRANSMISSION OF WEATHER MAPS	100
W706 TRANSMIT CHART STATUS FORMS BY OPTICAL SCANNER	100
W707 TRANSMIT RERUNS OF SCHEDULED WEATHER CHARTS	100
W709 TRANSMIT WEATHER MAPS MANUALLY USING OPTICAL SCANNERS	100
W714 ANSWER FIELD MESSAGE REQUESTS FOR TRANSMISSION OF WEATHER CHARTS BY OPTICAL SCANNER	100
W705 RECEIVE AND LOG IN WEATHER MAPS	94
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	94
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	94
H274 PERFORATE MESSAGE TAPES	88
W683 ANSWER FIELD MESSAGE REQUESTS FOR TRANSMISSION OF WEATHER CHARTS BY TELETYPE	88
W691 MAKE ENTRIES ON LOCAL TELETYPE WEATHER BULLETIN LOGS	88
W697 PERFORM OPERATOR MAINTENANCE ON ASR-28 TELETYPE EQUIPMENT	88
W687 DIGITIZE PAPER WEATHER MAPS FROM OPTICAL SCANNERS ONTO ID-50 COMPUTER DISCS	81
W708 TRANSMIT WEATHER MAPS MANUALLY USING KEYBOARD VIDEO DISPLAY TERMINALS (KVDT)	81
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	81
W686 COORDINATE SPECIAL WEATHER CHART SUPPORT WITH AIR FORCE GLOBAL WEATHER CENTRAL (AFGWC)	81
W688 LOAD MAGNETIC TAPES ONTO ID-50 COMPUTER DISCS	75
H264 MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	75
W685 CONFIGURE ID-50 COMPUTER COMPONENTS USING BUSS SWITCH PANELS	75
W703 PERFORM PHYSICAL SWITCH OF ID-50 COMPUTER COMPONENTS	75
W695 PERFORM OPERATOR MAINTENANCE ON ALDEN 9500 DMAF FACSIMILE RECEIVERS	75
W693 OPERATE BASE 16 HEXIDECIMAL SYSTEM SWITCH FOR INITIAL PROGRAM LOADS	69
W689 LOAD PROGRAM PAPER TAPES FOR BOOTSTRAP RELOADS	69

TABLE A8

CHARACTERISTIC TASKS PERFORMED BY
THE AUTOMATIC DIGITAL OPERATIONS CLUSTER
(GRP255)

TASKS	PERCENT MEMBERS PERFORMING (N=121)
E158 MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	88
H281 PREPARE SERVICE MESSAGES	87
H290 RETRIEVE MESSAGES	86
E169 PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	82
G247 MOUNT OR DISMOUNT MAGNETIC MEDIA	81
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	80
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	79
E170 PERFORM OPERATOR MAINTENANCE ON CARD READERS	78
E177 PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	77
E173 PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	77
B39 CONDUCT SHIFT CHANGE BRIEFINGS	75
E168 NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	75
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	74
H278 PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	73
H264 MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	72
G243 MAINTAIN DD FORM 1772, MAGNETIC TAPE LIBRARY RECORD AND PERPETUAL HISTORY	70
E138 CHECK OPERATIONAL STATUS OF SPARE EQUIPMENT	69
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	68
H276 PREPARE CARD EQUIPMENT FOR OPERATION	68
H273 NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	68
H298 SEND OR RECEIVE MESSAGES USING MAGNETIC TAPE TERMINAL STATION EQUIPMENT	67
G242 INVENTORY MAGNETIC MEDIA	67
E149 MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	67
H295 SEND MESSAGES USING VISUAL DISPLAY TERMINALS (VDT)	65
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	61
H254 ASSIGN ROUTING INDICATORS	60
H293 REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	58
I329 PERFORM INVENTORIES OF CLASSIFIED ACCOUNTABLE ITEMS OTHER THAN CRYPTOGRAPHIC MATERIALS	57
E167 NOTIFY CONTRACT MAINTENANCE OF EQUIPMENT OUTAGES	56
E155 MAKE ENTRIES ON EQUIPMENT OUTAGE/MAINTENANCE RECORDS	55
H272 MONITOR CONTROL UNITS AND RESPOND TO AUDIBLE OR VISUAL SIGNALS	55

TABLE A9

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE OPERATOR MAINTENANCE PERSONNEL JOB TYPE
(GRP566, N=11)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	38
H	PROCESSING MESSAGES	18
G	MAINTAINING MAGNETIC MEDIA	11
CHARACTERISTIC TASKS		PERCENT PERFORMING
E169	PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	100
E177	PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	100
E158	MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	100
E170	PERFORM OPERATOR MAINTENANCE ON CARD READERS	100
E184	PERFORM OPERATOR MAINTENANCE ON SYSTEM CONSOLES	100
G242	INVENTORY MAGNETIC MEDIA	91
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	82
E178	PERFORM OPERATOR MAINTENANCE ON MONITOR PRINTERS	82
E149	MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	82
E173	PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	82
E171	PERFORM OPERATOR MAINTENANCE ON CENTRAL PROCESSORS	82
H281	PREPARE SERVICE MESSAGES	82
E175	PERFORM OPERATOR MAINTENANCE ON MAGNETIC DISC UNITS	82
B72	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	73
E167	NOTIFY CONTRACT MAINTENANCE OF EQUIPMENT OUTAGES	73
G250	PURGE MAGNETIC MEDIA	73
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	73
H276	PREPARE CARD EQUIPMENT FOR OPERATION	73
H290	RETRIEVE MESSAGES	73
H278	PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	73
E190	PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	73
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE	73

TABLE A10

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE FIRST-LINE AUTOMATIC DIGITAL OPERATIONS SUPERVISORS JOB TYPE
(GRP893, N=21)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
A,B, C,D	SUPERVISION AND TRAINING	27
H	PROCESSING MESSAGES	27
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	19
CHARACTERISTIC TASKS		PERCENT PERFORMING
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	100
H281	PREPARE SERVICE MESSAGES	100
H276	PREPARE CARD EQUIPMENT FOR OPERATION	100
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	95
B72	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	95
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	95
H284	PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	95
H264	MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	95
H283	PROCESS LIMITED DISTRIBUTION OR SPECIAL CATEGORY MESSAGES	95
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	95
H268	MAKE ENTRIES ON AF FORM 1022, COMMEN MESSAGE REGISTER	95
I312	ESCORT VISITORS THROUGH FACILITIES	95
E169	PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	95
E170	PERFORM OPERATOR MAINTENANCE ON CARD READERS	95
B82	SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	90
B77	SUPERVISE APPRENTICE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29130)	90
H273	NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	90
B39	CONDUCT SHIFT CHANGE BRIEFINGS	90
H260	INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	90
D118	COUNSEL TRAINEES ON TRAINING PROGRESS	90
H290	RETRIEVE MESSAGES	90
E158	MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	90
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	90
B74	ORIENT NEWLY ASSIGNED PERSONNEL	90
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	90
H254	ASSIGN ROUTING INDICATORS	90
E190	PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	90
E186	PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS	90
H280	PREPARE PAPER TAPE EQUIPMENT FOR OPERATION	90
H309	VERIFY CARD COUNT ON CARD COUNTING MACHINES	90
E181	PERFORM OPERATOR MAINTENANCE ON PAPER TAPE PUNCHES	90
H278	PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	90
E182	PERFORM OPERATOR MAINTENANCE ON PAPER TAPE READERS	90

TABLE A11

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE AMPE OPERATORS JOB TYPE
(GRP1065, N=11)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
H	PROCESSING MESSAGES	27
S	OPERATING AUTOMATED MESSAGE PROCESSING EXCHANGE (AMPE)	20
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	19
CHARACTERISTIC TASKS		PERCENT PERFORMING
S610	PERFORM AMPE ON-LINE MESSAGE RECOVERIES	100
S616	READ AMPE GENERATED STATISTICS TO DETERMINE SYSTEM STATUS	100
S604	MONITOR AND CONTROL EQUIPMENT FROM AMPE SYSTEM CONSOLES	100
S605	MONITOR AND CONTROL TRAFFIC FROM AMPE SYSTEM CONSOLES	100
S606	OPERATE CONSOLE MONITOR PRINTERS IN AMPE	100
G243	MAINTAIN DD FORM 1772, MAGNETIC TAPE LIBRARY RECORD AND PERPETUAL HISTORY	100
H290	RETRIEVE MESSAGES	100
H281	PREPARE SERVICE MESSAGES	100
E158	MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	100
E190	PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	100
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	100
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	100
S597	ALTERNATE ROUTE AMPE TRAFFIC	100
E177	PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	100
S621	RESTART AMPE PROGRAMS	91
S615	PLACE AMPE REMOTES INTO OR OUT OF SERVICE	91
E149	MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	91
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	91
H294	SEND MESSAGES USING OPTICAL CHARACTER READERS (OCR)	91
G246	MAKE ENTRIES ON DD FORM 1771, MAGNETIC TAPE LIBRARY PURGE RECORD	91
E151	MAKE ENTRIES ON CENTER RECOVERY RECORDS	91
H291	REVIEW DD FORM 1392, DATA MESSAGEFORM, FOR ACCURACY	91
E159	MAKE ENTRIES ON INTERCEPT LOGS	91
H278	PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	91
H303	STAMP FILING TIMES ON OUTGOING MESSAGES	91
I312	ESCORT VISITORS THROUGH FACILITIES	91
H288	REPRODUCE MESSAGES FOR DISTRIBUTION	91
S599	DIRECT AMPE MESSAGES TO INTERCEPT	91
E170	PERFORM OPERATOR MAINTENANCE ON CARD READERS	91
E173	PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	91
H284	PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	91
H280	PREPARE PAPER TAPE EQUIPMENT FOR OPERATION	91
E169	PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	91
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	82

TABLE A12

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE MCATS OPERATORS JOB TYPE
(GRP625, N=16)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
H	PROCESSING MESSAGES	40
O	OPERATING MODERATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEM (MCATS)	19
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	13
CHARACTERISTIC TASKS		PERCENT PERFORMING
H294	SEND MESSAGES USING OPTICAL CHARACTER READERS (OCR)	100
H295	SEND MESSAGES USING VISUAL DISPLAY TERMINALS (VDT)	100
H264	MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	100
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	100
E169	PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	100
H268	MAKE ENTRIES ON AF FORM 1022, COMMCEN MESSAGE REGISTER	94
H254	ASSIGN ROUTING INDICATORS	94
H309	VERIFY CARD COUNT ON CARD COUNTING MACHINES	94
F168	NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	94
H293	REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	88
I311	DESTROY CLASSIFIED WASTE	88
H273	NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGES RECEIPT	88
I313	INVENTORY ACCOUNTABLE COMSEC MATERIALS	88
H296	SEND OR RECEIVE ACKNOWLEDGEMENT FOR HIGH PRECEDENCE MESSAGES	88
E158	MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	88
E170	PERFORM OPERATOR MAINTENANCE ON CARD READERS	88
H308	USE OFF-LINE CRYPTOGRAPHIC DEVICES TO ENCRYPT, DECRYPT, OR CHECK DECRYPTED MESSAGES	88
0499	TRANSMIT OR RECEIVE MCATS MAGNETIC TAPE DATA	81
0490	PERFORM MAGNETIC TAPE SEARCHES IN MCATS	81
H270	MAKE ENTRIES ON DD FORM 1503, MESSAGE CORRECTION NOTICE	81
0486	OPERATE MCATS AUTOMATIC MESSAGE FORMAT AND ROUTING (AMFAR) CORRECTION CONSOLES	81
0491	PERFORM MCATS ON-LINE MESSAGE RECOVERY	81
0483	MONITOR AND CONTROL MCATS EQUIPMENT	81
0482	LOAD OR RELOAD MCATS	81
H298	SEND OR RECEIVE MESSAGES USING MAGNETIC TAPE TERMINAL STATION EQUIPMENT	81
E190	PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	81

TABLE A13

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE USET-3 OPERATORS JOB TYPE
(GRP849, N=19)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
M	OPERATING UNIVAC SET-8 (USET-8) SYSTEMS	24
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	20
H	PROCESSING MESSAGES	18
CHARACTERISTIC TASKS		PERCENT PERFORMING
M450	TRANSMIT OR RECEIVE USET-8 MAGNETIC TAPE DATA	100
M443	PERFORM USET-8 RECOVERY PROGRAMS (REC)	100
M439	PERFORM HISTORY SEARCH ROUTINES IN USET-8	100
M445	PLACE USET-8 SYSTEM REMOTES INTO OR OUT OF SERVICE	100
M435	MONITOR AND CONTROL TRAFFIC FROM USET-8 SYSTEM CONSOLES	100
M434	MONITOR AND CONTROL EQUIPMENT FROM USET-8 SYSTEM CONSOLES	100
M433	LOAD OR RELOAD USET-8 SYSTEMS	100
M432	LOAD OFF-LINE PROGRAMS IN USET-8	100
M447	REPORT USET-8 CIRCUIT OR EQUIPMENT OUTAGES	100
G246	MAKE ENTRIES ON DD FORM 1771, MAGNETIC TAPE LIBRARY PURGE RECORD	100
M444	PLACE TRANSACTION SWITCHING CIRCUITS (TS) INTO OR OUT OF SERVICE IN USET-8	100
M428	EVALUATE OFF-LINE PRINTOUTS IN USET-8	100
M426	ALTERNATE ROUTE USET-8 SYSTEM TRAFFIC	100
M451	VERIFY ROUTINES IN USET-8	100
M440	PERFORM PRINT ROUTINES IN USET-8	100
M436	OPERATE HIGH SPEED PRINTERS IN USET-8	100
M448	RESTART USET-8 SYSTEMS	100
E168	NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	100
E169	PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	100
E170	PERFORM OPERATOR MAINTENANCE ON CARD READERS	100
M427	DIRECT USET-8 MESSAGES TO INTERCEPT	95
E160	MAKE ENTRIES ON LOGS FOR LOCAL CUSTOMER MAGNETIC TAPE FILES	95
G247	MAINTAIN DD FORM 1772, MAGNETIC TAPE LIBRARY RECORD AND PERPETUAL HISTORY	95
E158	MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	95
H290	RETRIEVE MESSAGES	95
M429	INITIATE COMMANDS TO PERFORM SYSTEM DRY-UP IN USET-8	95
M442	PERFORM TAPE MARK ROUTINES IN USET-8	95
I312	ESCORT VISITORS THROUGH FACILITIES	95
H294	SEND MESSAGES USING OPTICAL CHARACTER READERS (OCR)	95
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	89
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	89
E150	MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	89
E177	PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	89
M438	OPERATE TRANSFER SWITCHES IN USET-8	89
M437	OPERATE MONITOR PRINTERS IN USET-8	84
E159	MAKE ENTRIES ON INTERCEPT LOGS	84

TABLE A14

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE ICATS OPERATORS JOB TYPE
(GRP775, N=15)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
N	OPERATING INTERMEDIATE CAPACITY AUTOMATED TELECOMMUNICATIONS SYSTEMS (ICATS)	26
H	PROCESSING MESSAGES	24
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	23
CHARACTERISTIC TASKS		PERCENT PERFORMING
N474	TRANSMIT OR RECEIVE ICATS MAGNETIC TAPE DATA	100
N461	OPERATE CONSOLE MONITOR PRINTERS IN ICATS	100
N459	MONITOR AND CONTROL ICATS EQUIPMENT	100
N460	MONITOR AND CONTROL ICATS TRAFFIC	100
N457	LOAD OFF-LINE PROGRAMS OR ROUTINES IN ICATS	100
N466	PERFORM MAGNETIC TAPE SEARCHES IN ICATS	100
N458	LOAD OR RELOAD ICATS	100
N465	PERFORM ICATS OFF-LINE MESSAGE RECOVERY	100
N452	ALTERNATE ROUTE ICATS TRAFFIC	100
E158	MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	93
' 472	RESTART ICATS	93
G243	MAINTAIN DD FORM 1772, MAGNETIC TAPE LIBRARY RECORD AND PERPETUAL HISTORY	93
N462	OPERATE HIGH SPEED PRINTERS IN ICATS	93
N454	DIRECT ICATS MESSAGES TO INTERCEPT	93
N456	INSERT ICATS PROGRAM PATCHES	93
E160	MAKE ENTRIES ON LOGS FOR LOCAL CUSTOMER MAGNETIC TAPE FILES	87
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	87
E177	PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	87
N453	COORDINATE ICATS ABNORMAL CONDITIONS WITH OTHER AGENCIES	87
N467	PERFORM POWER-UP OR POWER-DOWN PROCEDURES IN ICATS	87
E164	MAKE ENTRIES ON RESTART OR RELOAD RECORDS	80
H290	RETRIEVE MESSAGES	80
E138	CHECK OPERATIONAL STATUS OF SPARE EQUIPMENT	80
G242	INVENTORY MAGNETIC MEDIA	80
N455	EVALUATE OFF-LINE PRINTOUTS IN ICATS	80
E169	PERFORM OPERATOR MAINTENANCE ON CARD PUNCHES	80
H280	PREPARE PAPER TAPE EQUIPMENT FOR OPERATION	80
H294	SEND MESSAGES USING OPTICAL CHARACTER READERS (OCR)	73
N464	PERFORM HISTORY TAPE RECOVERIES (HTR) IN ICATS	73
H298	SEND OR RECEIVE MESSAGES USING MAGNETIC TAPE TERMINAL STATION EQUIPMENT	73
H295	SEND MESSAGES USING VISUAL DISPLAY TERMINALS (VDT)	73
H288	REPRODUCE MESSAGES FOR DISTRIBUTION	73
N463	OPERATE TRANSFER SWITCHES IN ICATS	73
N468	PERFORM PROGRAM DUMP PROCEDURES IN ICATS	73
E181	PERFORM OPERATOR MAINTENANCE ON PAPER TAPE PUNCHES	73
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	67
E167	NOTIFY CONTRACT MAINTENANCE OF EQUIPMENT OUTAGES	67

TABLE A15

CHARACTERISTIC TASKS PERFORMED BY
THE COMMUNICATIONS CENTER SWITCHBOARD OPERATORS INDEPENDENT JOB TYPE
(GRP294)

TASKS	PERCENT MEMBERS PERFORMING (N=10)
J339 ACCEPT AND CONNECT CALLS ACCORDING TO THEIR PRECEDENCE	100
J362 PROCESS TELEPHONE CONFERENCE CALLS	100
J361 PLACE OUTGOING CALLS TO DISTANT STATIONS USING TRUNKS	90
J340 ANSWER SUPERVISORY LIGHTS	90
J358 PLACE CALLS FROM DISTANT STATIONS TO SUBSCRIBERS	90
J366 TEST SWITCHBOARD CIRCUITS	90
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	80
H306 STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	80
J359 PLACE CALLS USING RING DOWN TRUNKS	80
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	80
J354 MONITOR HIGH PRECEDENCE OR EMERGENCY CALLS	80
J357 PLACE CALLS BETWEEN SUBSCRIBERS	80
J352 MAINTAIN SWITCHBOARD INSTRUCTIONS FOR EMERGENCIES, SUCH AS FIRE, CRASH, OR ATTACK	80
I311 DESTROY CLASSIFIED WASTE	80
H304 STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	80
H305 STAMP TIME OF RECEIPT ON INCOMING MESSAGES	70
H288 REPRODUCE MESSAGES FOR DISTRIBUTION	70
H254 ASSIGN ROUTING INDICATORS	70
H281 PREPARE SERVICE MESSAGES	70
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	60
E186 PERFORM OPERATOR MAINTENANCE ON TLETYPEWRITERS	60
E190 PERFORM QUALITY CONTROL TESTS ON LOCAL POSITIONS	60
J344 COORDINATE SWITCHBOARD CIRCUIT OR EQUIPMENT PROBLEMS WITH MAINTENANCE, TECHNICAL CONTROL, OR SUPPORT AGENCIES	60
H303 STAMP FILING TIMES ON OUTGOING MESSAGES	60
J351 MAINTAIN STATUS BOARDS ON LOCATION OF COMMANDERS	50
J360 PLACE CALLS WITHIN THE AUTOSEVOCOM NETWORK	50
B59 DIRECT SWITCHBOARD OPERATIONS	50
J349 MAINTAIN LOGS OF CONTROL NUMBERS USED BY CUSTOMERS PLACING PRECEDENCE CALLS	50
E168 NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	50
J350 MAINTAIN MASTER TELEPHONE INFORMATION FILES FOR INFORMATION SYSTEMS	50
J353 MAINTAIN DD FORM 1194, TOLL TICKET	50
D115 CONDUCT OJT	50
J342 COMPILE INFORMATION FOR SWITCHBOARD TRAFFIC ROUTING DIAGRAMS	50

TABLE A16

CHARACTERISTIC TASKS PERFORMED BY
THE MOBILE COMMUNICATIONS INDEPENDENT JOB TYPE
(GRP319)

TASKS	PERCENT MEMBERS PERFORMING (N=9)
L402 LOAD OR UNLOAD MOBILE COMMUNICATIONS EQUIPMENT, PUBLICATIONS, DIRECTIVES, OR SUPPLIES	100
L425 SET UP OR DISMANTLE MOBILE COMMUNICATIONS EQUIPMENT	89
L401 GUARD MOBILE COMMUNICATIONS SECURE AREAS	89
H268 MAKE ENTRIES ON AF FORM 1022, COMMCEM MESSAGE REGISTER	89
H267 MAKE ENTRIES ON AF FORM 1035, CHANNEL NUMBER SHEET	89
H304 STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	89
H306 STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	89
H281 PREPARE SERVICE MESSAGES	89
L403 MAINTAIN MOBILE ADMINISTRATIVE SUPPORT KITS	78
L414 OPERATE TACTICAL GROUND COMMUNICATIONS AN/TGC-27 VANS	78
L405 OPERATE MOBILE COMMUNICATIONS CONVOY EQUIPMENT	78
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	78
I311 DESTROY CLASSIFIED WASTE	78
H254 ASSIGN ROUTING INDICATORS	78
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	78
H284 PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	78
H305 STAMP TIME OF RECEIPT ON INCOMING MESSAGES	78
H274 PERFORATE MESSAGE TAPES	67
I326 MAKE PAGE CHECKS	67
B82 SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	56
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	56
L423 PERFORM OPERATIONAL CHECKS OF MOBILE COMMUNICATIONS EQUIPMENT OTHER THAN CONVOY EQUIPMENT	56
L400 ERECT TACTICAL AIR BASE FACILITIES OF MOBILE COMMUNICATIONS UNITS	44
D115 CONDUCT OJT	44
L422 PERFORM OPERATIONAL CHECKS OF MOBILE COMMUNICATIONS CONVOY EQUIPMENT	44
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	44
C109 REVIEW OPERATIONAL LOGS OR REPORTS	44
L406 OPERATE MOBILE COMMUNICATIONS ENVIRONMENTAL CONTROL UNITS (ECU)	44
L411 OPERATE MOBILE WEATHER COMMUNICATIONS MODULE AN/TTC-76, AN/TTC-77, AN/TTC-76X, AND TMQ-28 VANS	33
L408 OPERATE MOBILE HIGH SPEED DSTE AN/TYC-8V3 EQUIPMENT	33

TABLE A17

CHARACTERISTIC TASKS PERFORMED BY
THE AUTODIN OPERATIONS CLUSTER
(GRP252)

TASKS	PERCENT MEMBERS PERFORMING (N=72)
E158 MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	96
H290 RETRIEVE MESSAGES	92
E150 MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	89
E159 MAKE ENTRIES ON INTERCEPT LOGS	88
E147 MAKE ENTRIES ON ALTERNATE ROUTING RECORDS	83
E161 MAKE ENTRIES ON MAGNETIC DISC PACK LABELS	78
H264 MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	78
E140 MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	76
H304 STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	76
E162 MAKE ENTRIES ON MAGNETIC DISC PACK LOGS	74
H266 MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	74
E148 MAKE ENTRIES ON CENTER CONFIGURATION LOGS	72
H306 STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	72
G247 MOUNT OR DISMOUNT MAGNETIC MEDIA	71
U651 OPERATE MONITOR PRINTERS IN AUTODIN I	69
G237 COORDINATE DISC FUNCTIONS WITH SYSTEM CONSOLE OPERATORS	69
H274 PERFORATE MESSAGE TAPES	69
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	68
U652 PERFORM AUTODIN I OFF-LINE MESSAGE RECOVERY	67
U641 INITIALIZE OFF-LINE AUTODIN I ROUTINES	67
U649 OPERATE HIGH SPEED PRINTERS IN AUTODIN I	67
U656 PLACE AUTODIN I CHANNELS IN OR OUT OF SERVICE	65
U654 PERFORM OFF-LINE SERVICE ROUTINES IN AUTODIN I	65
H305 STAMP TIME OF RECEIPT ON INCOMING MESSAGES	64
U639 DIRECT AUTODIN I MESSAGES TO INTERCEPT	63
U640 EVALUATE OFF-LINE PRINTOUTS IN AUTODIN I	61
U648 MONITOR AND CONTROL TRAFFIC FROM AUTODIN I CONSOLES	60
U647 MONITOR AND CONTROL EQUIPMENT FROM AUTODIN I CONSOLES	60
U634 ALTERNATE ROUTE AUTODIN I TRAFFIC	60

TABLE A18

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE CONUS AUTODIN OPERATORS JOB TYPE
(GRP679, N=44)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
U	OPERATING AUTOMATIC DIGITAL NETWORK (AUTODIN) I	33
H	PROCESSING MESSAGES	23
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	21
CHARACTERISTIC TASKS		PERCENT PERFORMING
U656	PLACE AUTODIN I CHANNELS IN OR OUT OF SERVICE	100
U639	DIRECT AUTODIN I MESSAGES TO INTERCEPT	100
U641	INITIALIZE OFF-LINE AUTODIN I ROUTINES	98
U649	OPERATE HIGH SPEED PRINTERS IN AUTODIN I	98
U651	OPERATE MONITOR PRINTERS IN AUTODIN I	98
E158	MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	98
U648	MONITOR AND CONTROL TRAFFIC FROM AUTODIN I CONSOLES	95
U647	MONITOR AND CONTROL EQUIPMENT FROM AUTODIN I CONSOLES	95
U634	ALTERNATE ROUTE AUTODIN I TRAFFIC	95
J653	PERFORM AUTODIN I ON-LINE MESSAGE RECOVERY	95
U652	PERFORM AUTODIN I OFF-LINE MESSAGE RECOVERY	93
H281	PREPARE SERVICE MESSAGES	93
U640	EVALUATE OFF-LINE PRINTOUTS IN AUTODIN I	93
U654	PERFORM OFF-LINE SERVICE ROUTINES IN AUTODIN I	93
H290	RETRIEVE MESSAGES	93
E159	MAKE ENTRIES ON INTERCEPT LOGS	89
E161	MAKE ENTRIES ON MAGNETIC DISC PACK LABELS	89
E150	MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	86
E147	MAKE ENTRIES ON ALTERNATE ROUTINGS RECORDS	84
H306	STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	84
U645	LOAD OFF-LINE PROGRAMS OR ROUTINES IN AUTODIN I	84
E148	MAKE ENTRIES ON CENTER CONFIGURATION LOGS	82
E149	MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	82
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	82
U650	OPERATE LOGIC OR CONFIGURATION SWITCHES IN AUTODIN I	82
U661	SELECT PROPER OFF-LINE SERVICE ROUTINES IN AUTODIN I	80
H264	MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	80
E162	MAKE ENTRIES ON MAGNETIC DISC PACK LOGS	80
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	77
H305	STAMP TIME OF RECEIPT ON INCOMING MESSAGES	77
U638	COORDINATE ON-LINE OR OFF-LINE FUNCTIONS IN AUTODIN I	77
G237	COORDINATE DISC FUNCTIONS WITH SYSTEM CONSOLE OPERATORS	77
U636	CONVERT DECIMAL, BINARY, OCTAL, AND HEXIDECIMAL NUMBERING SYSTEMS FOR AUTODIN I OPERATIONS	77
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	75
U659	RESTART AUTODIN I PROGRAMS	75
U646	LOAD OR RELOAD AUTODIN I ON-LINE PROGRAMS	75
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	73

TABLE A19

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE OVERSEAS AUTODIN OPERATORS JOB TYPE
(GRP499, N=19)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
V	OPERATING OVERSEAS AUTOMATIC DIGITAL NETWORK (AUTODIN) SWITCHING CENTERS	34
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	22
H	PROCESSING MESSAGES	17
CHARACTERISTIC TASKS		PERCENT PERFORMING
V671	MONITOR AND CONTROL TRAFFIC FROM OVERSEAS AUTODIN CONSOLES	100
V662	ALTERNATE ROUTE OVERSEAS AUTODIN TRAFFIC	100
V672	OPERATE HIGH SPEED PRINTERS IN OVERSEAS AUTODIN	100
V664	COORDINATE OVERSEAS AUTODIN ABNORMAL CONDITIONS WITH DCA/ACOC OR OTHER AGENCIES	100
V678	PLACE OVERSEAS AUTODIN CHANNELS IN OR OUT OF SERVICE	100
V665	DIRECT OVERSEAS AUTODIN MESSAGES TO INTERCEPT	100
V676	PERFORM OVERSEAS AUTODIN ON-LINE MESSAGE RECOVERY	100
V675	PERFORM OFF-LINE SERVICE ROUTINES IN OVERSEAS AUTODIN	100
V669	LOAD OR RELOAD OVERSEAS AUTODIN PROGRAMS	100
V680	RESTART OVERSEAS AUTODIN SYSTEMS	100
V674	OPERATE MONITOR PRINTERS IN OVERSEAS AUTODIN	95
H290	RETRIEVE MESSAGES	95
V670	MONITOR AND CONTROL EQUIPMENT FROM OVERSEAS AUTODIN CONSOLES	95
E150	MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	95
E158	MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	95
E159	MAKE ENTRIES ON INTERCEPT LOGS	89
E147	MAKE ENTRIES ON ALTERNATE ROUTING RECORDS	89
V667	INITIALIZE OFF-LINE OVERSEAS AUTODIN ROUTINES	89
V666	EVALUATE OFF-LINE PRINTOUTS IN OVERSEAS AUTODIN	89
V662	SELECT PROPER OFF-LINE SERVICE ROUTINES IN OVERSEAS AUTODIN	89
V673	OPERATE LOGIC OR CONFIGURATION SWITCHES IN OVERSEAS AUTODIN	89
H281	PREPARE SERVICE MESSAGES	39
E158	NOTIFY PERSONNEL OF AFTER DUTY HIGH PRECEDENCE MESSAGES	89
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	84
E152	MAKE ENTRIES ON CENTER SHIFT SUPERVISOR CHECKLISTS	84
E164	MAKE ENTRIES ON RESTART OR RELOAD RECORDS	84
H284	PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	79
E149	MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	79
H289	REROUTE TRAFFIC UNDER RESTORAL PLANS	74
E151	MAKE ENTRIES ON CENTER RECOVERY RECORDS	74
I311	DESTROY CLASSIFIED WASTE	74
H264	MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	68
V681	RUN COMMUNICATIONS OPERATING PERFORMANCE SUMMARY (OMOPS) PROGRAMS AT RADAY CHANGE IN OVERSEAS AUTODIN	68
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	68
H39	CONDUCT SHIFT CHANGE BRIEFINGS	68

TABLE A20

CHARACTERISTIC TASKS PERFORMED BY
THE COMMUNICATIONS COMPUTER OPERATIONS CLUSTER
(GRP114)

TASKS	PERCENT MEMBERS PERFORMING (N=104)
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	83
E158 MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	79
G247 MOUNT OR DISMOUNT MAGNETIC MEDIA	76
G243 MAINTAIN DD FORM 1772, MAGNETIC TAPE LIBRARY RECORD AND PERPETUAL HISTORY	70
G246 MAKE ENTRIES ON DD FORM 1771, MAGNETIC TAPE LIBRARY PURGE RECORD	70
E177 PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	67
G251 REMOVE OR FILE MAGNETIC MEDIA	65
E173 PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	64
B39 CONDUCT SHIFT CHANGE BRIEFINGS	63
G250 PURGE MAGNETIC MEDIA	63
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	63
E138 CHECK OPERATIONAL STATUS OF SPARE EQUIPMENT	63
E139 COMPLETE PROGRAM TAPE LABELS	62
G242 INVENTORY MAGNETIC MEDIA	61
E150 MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	60
H281 PREPARE SERVICE MESSAGES	56
G252 REPAIR MAGNETIC TAPES	56
E149 MAKE ENTRIES ON CENTER EQUIPMENT OUTAGE LOGS	52
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	51
G253 RUN MAGNETIC MEDIA PARITY ERROR CHECKS	48
E154 MAKE ENTRIES ON DAILY CIRCUIT AND EQUIPMENT STATUS RECORDS	48
E153 MAKE ENTRIES ON CENTER TAPE FAILURE REPORTS	48
F202 ANALYZE SYSTEM PRINTOUTS	44
A3 COORDINATE CIRCUIT ACTIVATIONS, DEACTIVATIONS, OR CHANGES WITH TECHNICAL CONTROL FACILITIES AND MAINTENANCE	42
P505 LOAD OFF-LINE PROGRAMS IN ADWS	40
P506 LOAD OR RELOAD ADWS SYSTEMS	39
P510 MONITOR AND CONTROL TRAFFIC FROM ADWS SYSTEM CONSOLES	38
P522 REPORT ADWS CIRCUIT OR EQUIPMENT OUTAGES	38
P511 OPERATE CONSOLE MONITOR PRINTERS IN ADWS	38

TABLE A21

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE NORAD 427M/CSS OPERATORS JOB TYPE
(GRP698, N=12)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
Q	OPERATING 427M/COMMUNICATIONS SYSTEM SEGMENTS (427M/CSS)	27
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	22
G	MAINTAINING MAGNETIC MEDIA	14
H	PROCESSING MESSAGES	12
CHARACTERISTIC TASKS		PERCENT PERFORMING
Q534	MONITOR AND CONTROL 427M/CSS TRAFFIC	100
Q545	PLACE 427M/CSS TERMINALS INTO OR OUT OF SERVICE	100
Q535	OPERATE HIGH SPEED PRINTERS IN 427M/CSS	100
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	100
Q536	OPERATE NON-IMPACT PRINTERS IN 427M/CSS	100
Q544	PERFORM 427M/CSS ON-LINE MESSAGE RECOVERIES	100
Q526	DIRECT 427M/CSS MESSAGES TO INTERCEPT	100
G244	MAKE ENTRIES ON MAGNETIC DISC PACK PURGE RECORDS	100
Q524	ALTERNATE ROUTE 427M/CSS TRAFFIC	100
Q533	MONITOR AND CONTROL 427M/CSS EQUIPMENT	92
E173	PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	92
G251	REMOVE OR FILE MAGNETIC MEDIA	92
Q532	LOAD OR RELOAD 427M/CSS SYSTEMS	92
Q540	PERFORM MASTER RESTORE AND MASTER SAVE FOR OPERATIONAL EXECUTIVE PROGRAMS IN 427M/CSS	92
G248	PRELABEL MAGNETIC MEDIA	92
H257	INITIATE CHANNEL CHECKS	83
Q541	PERFORM PROGRAM DUMP PROCEDURES IN 427M/CSS	83
Q531	LOAD OFF-LINE PROGRAMS IN 427M/CSS PROCESSORS	83
G250	PURGE MAGNETIC MEDIA	83
Q529	INTERPRET 427M/CSS ERROR HANDLING ROUTINES	83
E175	PERFORM OPERATOR MAINTENANCE ON MAGNETIC DISC UNITS	83
E138	CHECK OPERATIONAL STATUS OF SPARE EQUIPMENT	75
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	75
Q549	RECORD CONTENTS OF REGISTERS FROM 427M/CSS CENTRAL PROCESSORS AND NOVA 840 MULTIPLEXERS (MUX)	75
E177	PERFORM OPERATOR MAINTENANCE ON MAGNETIC TAPE DEVICES	75
Q538	PERFORM AUDIT TRAILS IN 427M/CSS	75
Q551	RESTART 427M/CSS SUBSYSTEMS	75
G246	MAKE ENTRIES ON DD FORM 1771, MAGNETIC TAPE LIBRARY PURGE RECORD	75
Q548	POWER UP OR POWER DOWN 427M/CSS FOR SCHEDULED DOWNTIMES	75
Q525	COORDINATE 427M/CSS ABNORMAL CONDITIONS WITH OTHER AGENCIES	75
Q546	POWER DOWN 427M/CSS DURING AIR-CONDITIONING LOSSES	75
H296	SEND OR RECEIVE ACKNOWLEDGEMENT FOR HIGH PRECEDENCE MESSAGES	67
E162	MAKE ENTRIES ON MAGNETIC DISC PACK LOGS	67
Q550	RELAY INFORMATION BETWEEN COMMUNICATIONS CENTER SECTIONS WITHIN 427M/CSS SYSTEM	67
Q543	PERFORM SYSTEM CONFIGURATION CHANGES IN 427M/CSS USING DIGITAL SWITCHING PANELS	67
Q527	EVALUATE OFF-LINE PRINTOUTS IN 427M/CSS	67
G237	COORDINATE DISC FUNCTIONS WITH SYSTEM CONSOLE OPERATORS	67
G238	COORDINATE MAGNETIC TAPE FUNCTIONS WITH SYSTEM CONSOLE OPERATORS	67
Q555	TRANSMIT NORAD SPECIAL EXERCISE DATA IN 427M/CSS	67
Q537	OPERATE TRANSFER SWITCHES IN 427M/CSS	67
Q547	POWER DOWN 427M/CSS DURING EMERGENCIES	67

TABLE A22

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE ADWS OPERATORS JOB TYPE
(GRP622, N=39)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
P	OPERATING AUTOMATIC DIGITAL WEATHER SWITCH (ADWS) SYSTEMS	36
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	27
G	MAINTAINING MAGNETIC MEDIA	12
H	PROCESSING MESSAGES	7
CHARACTERISTIC TASKS		PERCENT PERFORMING
P506	LOAD OR RELOAD ADWS SYSTEMS	100
P505	LOAD OFF-LINE PROGRAMS IN ADWS	100
P514	OPERATE TRANSFER SWITCHES IN ADWS	100
P510	MONITOR AND CONTROL TRAFFIC FROM ADWS SYSTEM CONSOLES	97
P509	MONITOR AND CONTROL EQUIPMENT FORM ADWS SYSTEM CONSOLES	97
P522	REPORT ADWS CIRCUIT OR EQUIPMENT OUTAGES	97
P511	OPERATE CONSOLE MONITOR PRINTERS IN ADWS	97
P508	MAKE ENTRIES ON LINE SAVE (LISAVE) TAPE FORMS IN ADWS	97
P515	PERFORM ADWS RECOVERY PROGRAM	97
P518	PERFORM RESTARTS IN ADWS SYSTEMS	97
P503	INSERT ADWS PROGRAM PATCHES	97
P516	PERFORM EMERGENCY POWER UP OR POWER DOWN PROCEDURES IN ADWS SYSTEMS	97
P519	PLACE ADWS SYSTEM COMMUNICATIONS LINE TERMINALS (CLT) INTO OR OUT OF SERVICE	95
P512	OPERATE HIGH SPEED PRINTERS IN ADWS	92
P504	INSERT TEMPORARY CHANGES TO MANOP DISTRIBUTION LIBRARY (TTLIBE)	92
E150	MAKE ENTRIES ON CENTER ON-LINE AND OFF-LINE WORK REQUESTS	90
G246	MAKE ENTRIES ON DD FORM 1771, MAGNETIC TAPE LIBRARY PURGE RECORD	90
E158	MAKE ENTRIES ON HISTORY TAPE OR DISC PACK LABELS	87
P501	DIRECT ADWS MESSAGES TO INTERCEPT	85
G243	MAINTAIN DD FORM 1772, MAGNETIC TAPE LIBRARY RECORD AND PERPETUAL HISTORY	82
E153	MAKE ENTRIES ON CENTER TAPE FAILURE REPORTS	79
P513	OPERATE MAGNETIC DRUM UNITS IN ADWS	77
P517	PERFORM PROGRAM DUMP PROCEDURES IN ADWS	77
E148	MAKE ENTRIES ON CENTER CONFIGURATION LOGS	74
P502	EVALUATE OFF-LINE PRINTOUTS IN ADWS	74
P500	COORDINATE ADWS ABNORMAL CONDITIONS WITH WEATHER NETWORK DUTY OFFICER (WNDO)	69
P507	MAKE ENTRIES ON DEFERRED OUTPUT OR INPUT TAPE FORMS IN ADWS	56

TABLE A23

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE SATIN OPERATORS JOB TYPE
(GRP818, N=16)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
R	OPERATING THE STRATEGIC AIR COMMAND AUTOMATED TOTAL INFORMATION NETWORK (SATIN) AND STRATEGIC AIR COMMAND AND CONTROL SYSTEM (SACCS)	37
H	PROCESSING MESSAGES	18
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	17
CHARACTERISTIC TASKS		PERFORMING
R588	PROCESS AIRBORNE COMMAND POST (ABNCP) MESSAGES	100
R589	PROCESS MAGNETIC TAPES IN SATIN	100
R587	PREPARE VDTs TO MAKE MESSAGE CORRECTIONS	100
R570	MONITOR AND CONTROL EQUIPMENT FROM SATIN SYSTEM CONSOLES	100
R577	PERFORM MESSAGE RETRIEVALS IN SATIN	100
R572	MONITOR UNIVAC 70/45 CONSOLE PRINTOUTS	100
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	100
R575	OPERATE UNIVAC 70/752 VIDEO DATA TERMINALS (VDT)	100
R568	LOAD OFF-LINE UTILITY PROGRAMS IN SATIN OR SPE COMPUTERS	100
R557	ANALYZE SYSTEM NOTIFICATION MESSAGES IN STORED PROGRAM ELEMENTS (SPE)	100
R563	DIRECT SATIN MESSAGES TO INTERCEPT	100
R585	PERFORM UNIVERSAL ANALYSIS PROGRAM (UNAP) IN SPE	100
R580	PERFORM SPE TO SPE SYSTEM SWITCHOVERS IN SATIN	100
R590	READY SATIN PERIPHERAL DEVICES	100
R561	COORDINATE SATIN ABNORMAL CONDITIONS WITH TECHNICAL CONTROL	100
R558	CONTROL DATA PROCESSING SYSTEM (DPS) LINES IN SATIN	100
R582	PERFORM SYSTEM RESTARTS IN SATIN	100
R574	OPERATE UNIVAC 70/356 COMMUNICATIONS LINE SWITCHES	100
R567	LOAD OFF-LINE OR ON-LINE PROGRAMS IN UNIVAC 70/45	100
R584	PERFORM SYSTEM STARTUPS ON SPE IN SATIN	100
R583	PERFORM SYSTEM SHUTDOWNS IN SATIN	100
R556	ALTERNATE ROUTE SATIN TRAFFIC	100
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	100
R593	REMOVE DISCS FROM ON-LINE SYSTEMS IN SATIN	100
R579	PERFORM SPE DATA LOG (SDL) ERROR RECOVERY OPTIONS	100
H290	RETRIEVE MESSAGES	94
R571	MONITOR AND CONTROL SATIN TRAFFIC FLOW FROM SATIN CONSOLES	94
H295	SEND MESSAGES USING VISUAL DISPLAY TERMINALS (VDT)	94
R569	LOAD PROGRAMS IN SATIN	94
R564	EVALUATE OFF-LINE PRINTOUTS FROM SATIN OR SPE	94
R573	OPERATE UNIVAC 70/310 STANDARD INTERFACE SWITCHES	94
H298	SEND OR RECEIVE MESSAGES USING MAGNETIC TAPE TERMINAL STATION EQUIPMENT	88
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	88
R594	RUN SYSTEM ANALYSIS PROGRAMS AT RADAY CHANGE IN SATIN	88
R595	RUN SYSTEM ANALYSIS PROGRAMS AT RADAY CHANGE IN SPE	88
E160	MAKE ENTRIES ON LOGS FOR LOCAL CUSTOMER MAGNETIC TAPE FILES	88
E164	MAKE ENTRIES ON RESTART OR RELOAD RECORDS	88
G21	REMOVE OR FILE MAGNETIC MEDIA	81
R578	PERFORM ON-LINE OR OFF-LINE UNIVAC 1600 DUMP	81
R596	TERMINATE DATA PROCESSING SYSTEMS (DPS) RETRIEVALS	81
R559	CONTROL SACCS WARNING AND CONTROL SYSTEMS	75

TABLE A24

CHARACTERISTIC TASKS PERFORMED BY
THE AFSATCOM OPERATORS INDEPENDENT JOB TYPE
(GRP617)

TASKS	PERCENT MEMBERS PERFORMING (N=16)
X724 MONITOR CHANNEL 3 ON APPLICABLE SATELLITES FOR RECONNAISSANCE TRAFFIC	100
X725 MONITOR CHANNELS 1 OR 3 ON APPLICABLE SATELLITES FOR EMERGENCY ACTION MESSAGES (EAM)	100
X729 ORIENT ANTENNAS TO PROPER LOOK ANGLES IN AFSATCOM	100
X735 PROCESS "FOXTROT" MESSAGES IN AFSATCOM	100
X739 PROVIDE SUPPORT FOR TESTING OF OPERATIONAL SATELLITES	100
X727 MONITOR STATUS DISPLAY UNITS (SDU) IN AFSATCOM	94
X719 EXTRACT CALL SIGNS FOR PROPER MESSAGE ADDRESSING AND IDENTIFICATION IN AFSATCOM	94
X733 PERFORM OPERATOR MAINTENANCE ON AUTOMATIC SEND/RECEIVE (ASR) DEVICES IN AFSATCOM	94
X732 PERFORM DAILY SYSTEM CHECKS IN AFSATCOM	94
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	88
X718 ESTABLISH MULTIPLE SATELLITE RELAYS IN AFSATCOM	88
X737 PROVIDE SUPPORT FOR AIRCRAFT EMERGENCIES IN AFSATCOM	88
X743 RESPOND TO "HOTLINE" CALLS IN AFSATCOM	81
X723 MONITOR APPROPRIATE REPORT-BACK CHANNELS ON APPLICABLE SATELLITES	81
X710 ACQUIRE APPROPRIATE SATELLITES AT SCHEDULED TIMES	81
X721 MAINTAIN NETWORK DISCIPLINE FOR APPROPRIATE NETWORKS IN AFSATCOM	81
X738 PROVIDE SUPPORT FOR TERMINAL INSTALLATION TESTING IN AFSATCOM	81
X711 COMMAND SATELLITES INTO APPROPRIATE MODES	81
X741 RELAY TRAFFIC VIA SECURE VOICE IN AFSATCOM	81
X720 INITIATE TDM-2 TO COUNTER JAMMING INTRUSION OR INTERFERENCE IN AFSATCOM	81
X731 PERFORM CHALLENGE AND REPLY USING AUTHENTICATION SYSTEM IN AFSATCOM	75
I311 DESTROY CLASSIFIED WASTE	69
X736 PROCESS MESSAGES WITH TRANSMISSION AUTHENTICATORS FOR FORCE DIRECTION TRAFFIC IN AFSATCOM	69
X742 REPORT SPACE SEGMENT OUTAGES TO APPROPRIATE PRIMARY CONTROL CENTER IN AFSATCOM	69
X717 ENCODE/DECODE MESSAGES USING APPROPRIATE CODE BOOK IN AFSATCOM	69
X740 RECOGNIZE AND REPORT MEACONING INTRUSION JAMMING AND INTERFERENCE (MIJI) INCIDENTS IN AFSATCOM	69
X722 MAKE ENTRIES ON AFTEC FOLLOW-ON OPERATIONAL TEST AND EVALUATION (FOTE) LOGS IN AFSATCOM	63
X715 COORDINATE COMMUNICATIONS PROCEDURES FOR AFSATCOM WITH COMMAND NET CONTROL ELEMENT (CNCE)	63
I329 PERFORM INVENTORIES OF CLASSIFIED ACCOUNTABLE ITEMS OTHER THAN CRYPTOGRAPHIC MATERIALS	56
X744 TRANSMIT CURRENT EAM DURING BRAVO MONITOR PERIODS IN AFSATCOM	50

TABLE A25

CHARACTERISTIC TASKS PERFORMED BY
THE BASE SWITCHBOARD OPERATIONS CLUSTER
(GRP238)

TASKS	PERCENT MEMBERS PERFORMING (N=173)
J339 ACCEPT AND CONNECT CALLS ACCORDING TO THEIR PRECEDENCE	94
J358 PLACE CALLS FROM DISTANT STATIONS TO SUBSCRIBERS	89
J357 PLACE CALLS BETWEEN SUBSCRIBERS	88
J361 PLACE OUTGOING CALLS TO DISTANT STATIONS USING TRUNKS	86
J362 PROCESS TELEPHONE CONFERENCE CALLS	86
J340 ANSWER SUPERVISORY LIGHTS	80
J344 COORDINATE SWITCHBOARD CIRCUIT OR EQUIPMENT PROBLEMS WITH MAINTENANCE, TECHNICAL CONTROL, OR SUPPORT AGENCIES	79
J366 TEST SWITCHBOARD CIRCUITS	78
J354 MONITOR HIGH PRECEDENCE OR EMERGENCY CALLS	69
J363 REROUTE CALLS IN EVENT OF CIRCUIT FAILURES	68
J351 MAINTAIN STATUS BOARDS ON LOCATION OF COMMANDERS	61
J360 PLACE CALLS WITHIN THE AUTOSEVOCOM NETWORK	60
E163 MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	56
B39 CONDUCT SHIFT CHANGE BRIEFINGS	55
J353 MAINTAIN DD FORM 1194, TOLL TICKET	51
J359 PLACE CALLS USING RING DOWN TRUNKS	46
E185 PERFORM OPERATOR MAINTENANCE ON TELEPHONE SWITCHBOARD EQUIPMENT	44
J364 SUPERVISE MINIMIZE CONDITION ACTIONS	42
J352 MAINTAIN SWITCHBOARD INSTRUCTIONS FOR EMERGENCIES, SUCH AS FIRE, CRASH, OR ATTACK	36
J341 BOOK CALLS	35
A27 ESTABLISH TELECONFERENCE SERVICE	34
J345 GIVE CALL PROGRESS INFORMATION	33
B59 DIRECT SWITCHBOARD OPERATIONS	33

TABLE A26

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE SWITCHBOARD OPERATORS JOB TYPE
(GRP612, N=111)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
J	OPERATING NON-MOBILE TELEPHONE SWITCHBOARDS	79
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	8
CHARACTERISTIC TASKS		PERCENT PERFORMING
J339	ACCEPT AND CONNECT CALLS ACCORDING TO THEIR PRECEDENCE	98
J358	PLACE CALLS FROM DISTANT STATIONS TO SUBSCRIBERS	53
J357	PLACE CALLS BETWEEN SUBSCRIBERS	91
J361	PLACE OUTGOING CALLS TO DISTANT STATIONS USING TRUNKS	90
J362	PROCESS TELEPHONE CONFERENCE CALLS	86
J340	ANSWER SUPERVISORY LIGHTS	83
J344	COORDINATE SWITCHBOARD CIRCUIT OR EQUIPMENT PROBLEMS WITH MAINTENANCE, TECHNICAL CONTROL, OR SUPPORT AGENCIES	76
J366	TEST SWITCHBOARD CIRCUITS	76
J354	MONITOR HIGH PRECEDENCE OR EMERGENCY CALLS	72
J363	REROUTE CALLS IN EVENT OF CIRCUIT FAILURES	68
J351	MAINTAIN STATUS BOARDS ON LOCATION OF COMMANDERS	59
J360	PLACE CALLS WITHIN THE AUTOSEVOCOM NETWORK	59
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	50
J353	MAINTAIN DD FORM 1194, TOLL TICKET	48
J359	PLACE CALLS USING RING DOWN TRUNKS	45

TABLE A27

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE VOICE COMMUNICATIONS OPERATORS JOB TYPE
(GRP745, N=36)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
J	OPERATING NON-MOBILE TELEPHONE SWITCHBOARDS	47
A,B, C,D	SUPERVISION AND TRAINING	31
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	11
CHARACTERISTIC TASKS		PERCENT PERFORMING
J339	ACCEPT AND CONNECT CALLS ACCORDING TO THEIR PRECEDENCE	97
J357	PLACE CALLS BETWEEN SUBSCRIBERS	97
J344	COORDINATE SWITCHBOARD CIRCUIT OR EQUIPMENT PROBLEMS WITH MAINTENANCE, TECHNICAL CONTROL, OR SUPPORT AGENCIES	94
J366	TEST SWITCHBOARD CIRCUITS	94
J354	MONITOR HIGH PRECEDENCE OR EMERGENCY CALLS	94
J361	PLACE OUTGOING CALLS TO DISTANT STATIONS USING TRUNKS	92
J340	ANSWER SUPERVISORY LIGHTS	92
J358	PLACE CALLS FROM DISTANT STATIONS TO SUBSCRIBERS	92
J362	PROCESS TELEPHONE CONFERENCE CALLS	92
B39	CONDUCT SHIFT CHANGE BRIEFINGS	83
J363	REROUTE CALLS IN EVENT OF CIRCUIT FAILURES	81
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	78
E185	PERFORM OPERATOR MAINTENANCE ON TELEPHONE SWITCHBOARD EQUIPMENT	78
J364	SUPERVISE MINIMIZE CONDITION ACTIONS	72
J353	MAINTAIN DD FORM 1194, TOLL TICKET	69
J352	MAINTAIN SWITCHBOARD INSTRUCTIONS FOR EMERGENCIES, SUCH AS FIRE, CRASH, OR ATTACK	69
J359	PLACE CALLS USING RING DOWN TRUNKS	67
J360	PLACE CALLS WITHIN THE AUTOSEVOCOM NETWORK	67
J351	MAINTAIN STATUS BOARDS ON LOCATION OF COMMANDERS	67
B59	DIRECT SWITCHBOARD OPERATIONS	67
A27	ESTABLISH TELECONFERENCE SERVICE	67
D115	CONDUCT OJT	67
B74	ORIENT NEWLY ASSIGNED PERSONNEL	61
A10	COORDINATE WITH USERS OR MAINTENANCE AGENCIES ON PLANNED CIRCUIT OUTAGES OR EQUIPMENT MALFUNCTIONS	58
I312	ESCORT VISITORS THROUGH FACILITIES	56
A3	COORDINATE CIRCUIT ACTIVATIONS, DEACTIVATIONS, OR CHANGES WITH TECHNICAL CONTROL FACILITIES AND MAINTENANCE	53
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	53
D118	COUNSEL TRAINEES ON TRAINING PROGRESS	53
B82	SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	47

TABLE A28

CHARACTERISTIC TASKS PERFORMED BY
THE TECHNICAL TRAINING INDEPENDENT JOB TYPE
(GRP335)

TASKS	PERCENT MEMBERS PERFORMING (N=17)
D135 SCORE TESTS	100
D136 WRITE TEST QUESTIONS	100
D116 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	94
D112 ADMINISTER TESTS	94
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	88
D128 EVALUATE PROGRESS OF RESIDENT COURSE STUDENTS	76
H292 REVIEW MESSAGES FOR MISHANDLING	71
H284 PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	71
B72 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	71
E186 PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS	65
H287 REPORT CIRCUIT OR EQUIPMENT OUTAGES	65
E167 NOTIFY CONTRACT MAINTENANCE OF EQUIPMENT OUTAGES	59
E138 CHECK OPERATIONAL STATUS OF SPARE EQUIPMENT	59
E330 PERFORM PHYSICAL SECURITY INSPECTIONS OF FACILITIES	53

TABLE A29
CHARACTERISTIC TASKS PERFORMED BY
THE LIAISON CLUSTER
(GRP165)

TASKS	PERCENT MEMBERS PERFORMING (N=52)
B85 WRITE CORRESPONDENCE	77
B75 PERFORM STAFF TECHNICAL ASSISTANCE VISITS	71
C89 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	71
C87 DRAFT STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	69
C92 EVALUATE INSPECTION REPORTS OR PROCEDURES	62
C106 PERFORM STAFF STUDIES, SURVEYS, OR SPECIAL REVIEWS	62
C108 REVIEW DISCREPANCY REPORTS	60
C99 EVALUATE SUGGESTIONS	58
B71 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	56
C100 EVALUATE TECHNICAL PUBLICATIONS OR DIRECTIVES	52
I311 DESTROY CLASSIFIED WASTE	52
B76 PROVIDE TECHNICAL COMMUNICATIONS GUIDANCE TO HOST UNITS OR COMMANDS	50
A29 PLAN BRIEFINGS	42
C109 REVIEW OPERATIONAL LOGS OR REPORTS	42
C98 EVALUATE SECURITY PROGRAMS	40
C101 EVALUATE UNIT EMERGENCY PLANS	38
C95 EVALUATE PROCEDURES AND ANALYSIS FUNCTIONS	37
C104 INSPECT FACILITIES	37
A16 DEVELOP POLICIES FOR MANAGEMENT OF COMMUNICATIONS SYSTEMS	35
C97 EVALUATE SAFETY PROGRAMS	33

TABLE A30

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE STAFF FUNCTIONAL MANAGERS JOB TYPE
(GRP562, N=15)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
C	INSPECTING AND EVALUATING	30
B	DIRECTING AND IMPLEMENTING	28
A	ORGANIZING AND PLANNING	20
CHARACTERISTICS TASKS		PERCENT PERFORMING
B71	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100
B75	PERFORM STAFF TECHNICAL ASSISTANCE VISITS	100
C87	DRAFT STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	93
C89	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	93
B85	WRITE CORRESPONDENCE	87
C106	PERFORM STAFF STUDIES, SURVEYS, OR SPECIAL REVIEWS	87
I311	DESTROY CLASSIFIED WASTE	87
B76	PROVIDE TECHNICAL COMMUNICATIONS GUIDANCE TO HOST UNITS OR COMMANDS	73
C108	REVIEW DISCREPANCY REPORTS	73
A16	DEVELOP POLICIES FOR MANAGEMENT OF COMMUNICATIONS SYSTEMS	73
C99	EVALUATE SUGGESTIONS	73
A6	COORDINATE EQUIPMENT INSTALLATION OR RELOCATION WITH ENGINEERING AND INSTALLATION	73
A29	PLAN BRIEFINGS	67
C92	EVALUATE INSPECTION REPORTS OR PROCEDURES	60
B63	DRAFT RECOMMENDED CHANGES TO OPERATING PUBLICATIONS	53
C95	EVALUATE PROCEDURES AND ANALYSIS FUNCTIONS	47
C109	REVIEW OPERATIONAL LOGS OR REPORTS	47
A21	ESTABLISH COMMUNICATIONS POLICIES	47
F201	ANALYZE CIRCUIT AND EQUIPMENT OUTAGE REPORTS	47
C100	EVALUATE TECHNICAL PUBLICATIONS OR DIRECTIVES	47
A31	PLAN COMMUNICATIONS STATUS BOARDS OR CHARTS	47
A9	COORDINATE WITH CONTRACT PERSONNEL ON GOVERNMENT CONTRACTS	47
F200	ANALYZE AND EVALUATE STATISTICAL DATA TO DETERMINE MESSAGE HANDLING EFFECTIVENESS	40
A15	DEVELOP POLICIES FOR MANAGEMENT OF COMMON LONG HAUL CIRCUITS	40
C90	EVALUATE INCENTIVE PROGRAMS	40

TABLE A31

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE GUARD AND RESERVE LIAISON TECHNICAL
ADVISORS JOB TYPE
(GRP674, N=11)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
C	INSPECTING AND EVALUATING	56
B	DIRECTING AND IMPLEMENTING	15
D	TRAINING	14
A	ORGANIZING AND PLANNING	5
CHARACTERISTICS TASKS		PERCENT PERFORMING
C89	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	100
C98	EVALUATE SECURITY PROGRAMS	100
C108	REVIEW DISCREPANCY REPORTS	100
C97	EVALUATE SAFETY PROGRAMS	100
C92	EVALUATE INSPECTION REPORTS OR PROCEDURES	91
C109	REVIEW OPERATIONAL LOGS OR REPORTS	82
C101	EVALUATE UNIT EMERGENCY PLANS	82
D130	EVALUATE TRAINING METHODS OR TECHNIQUES	73
B85	WRITE CORRESPONDENCE	73
C94	EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT OR SUPPLIES	73
C100	EVALUATE TECHNICAL PUBLICATIONS OR DIRECTIVES	64
C96	EVALUATE PROCEDURES FOR STORAGE, INVENTORY, OR INSPECTION OF PROPERTY ITEMS	64
D119	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	64
B76	PROVIDE TECHNICAL COMMUNICATIONS GUIDANCE TO HOST UNITS OR COMMANDS	55
C95	EVALUATE PROCEDURES AND ANALYSIS FUNCTIONS	55
B75	PERFORM STAFF TECHNICAL ASSISTANCE VISITS	55
C102	EVALUATE WORK SCHEDULES	55
C104	INSPECT FACILITIES	55
E195	TYPE ADMINISTRATIVE MATERIALS SUCH AS CORRESPONDENCE, FORMS, OR REPORTS	55
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	45
C86	ANALYZE WORKLOAD REQUIREMENTS	45
C87	DRAFT STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	45
D127	EVALUATE OJT TRAINEES	45
C106	PERFORM STAFF STUDIES, SURVEYS, OR SPECIAL REVIEWS	36
C93	EVALUATE JOB DESCRIPTIONS	36
D129	EVALUATE SPECIALIZED TRAINING REQUIREMENTS	36

TABLE A32
CHARACTERISTIC TASKS PERFORMED BY
THE PROGRAMMERS CLUSTER
(GRP096)

TASKS	PERCENT MEMBERS PERFORMING (N=59)
K369 CODE SOFTWARE INSTRUCTIONS	93
K367 ANALYZE SOFTWARE DEFICIENCIES	88
K374 CORRECT PROGRAM DEFICIENCIES IN EXISTING SOFTWARE DURING SYSTEM LIFECYCLE	85
K396 TEST AND IMPLEMENT PROGRAM PATCHES	83
K368 CODE PROGRAM PATCHES	83
K381 INTERPRET COMPUTER CODES	81
K379 ENHANCE EXISTING COMPUTER PROGRAMS	81
K376 DESK-CHECK NEW SOFTWARE ROUTINES	81
K397 VALIDATE PROGRAM PATCHES	81
K390 PREPARE OR UPDATE SOFTWARE FOR USER IMPLEMENTATION	73
K382 OPERATE CARD PUNCH FOR SOFTWARE CHANGES	64
K393 PROVIDE DOCUMENTATION FOR OPERATORS' MANUALS	64
K372 CORRECT PROGRAM DEFICIENCIES DISCOVERED DURING PROGRAM EVALUATION TESTS (PET)	61
K392 PREPARE TEST DATA	58
K389 PREPARE INPUTS FOR PROGRAM DOCUMENTATION	54
K387 PREPARE DETAILED PROGRAM FLOWCHARTS	51
K370 COORDINATE COMPUTER SYSTEM FUNCTIONAL REQUIREMENTS WITH USERS	47
K386 PERFORM OPERATIONAL TEST AND ACCEPTANCE OF PROGRAM SOFTWARE	46
K380 IMPLEMENT SOFTWARE TEST PROCEDURES	44
K375 DESIGN SOFTWARE TEST PROCEDURES	44
F202 ANALYZE SYSTEM PRINTOUTS	42
K371 COORDINATE COMPUTER SYSTEM INTERFACE AND INTEGRATION REQUIREMENTS WITH USERS	42
K394 PROVIDE DOCUMENTATION FOR PROGRAMMERS' MANUALS	41
K373 CORRECT PROGRAM DEFICIENCIES DISCOVERED DURING INITIAL INSTALLATION	41
K391 PREPARE SOFTWARE DEFICIENCY REPORTS	39
K377 DETERMINE SOFTWARE RESOURCE REQUIREMENTS	39

TABLE A33

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE CENTRAL PROGRAMMING PERSONNEL JOB TYPE
(GRP683, N=32)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
K	PROGRAMMING COMPUTERS	80
CHARACTERISTIC TASKS		PERCENT PERFORMING
K368	CODE PROGRAM PATCHES	100
K369	CODE SOFTWARE INSTRUCTIONS	97
K374	CORRECT PROGRAM DEFICIENCIES IN EXISTING SOFTWARE DURING SYSTEM LIFECYCLE	97
K396	TEST AND IMPLEMENT PROGRAM PATCHES	97
K367	ANALYZE SOFTWARE DEFICIENCIES	94
K397	VALIDATE PROGRAM PATCHES	94
K379	ENHANCE EXISTING COMPUTER PROGRAMS	91
K381	INTERPRET COMPUTER CODES	84
K390	PREPARE OR UPDATE SOFTWARE FOR USER IMPLEMENTATION	78
K376	DESK-CHECK NEW SOFTWARE ROUTINES	78
K372	CORRECT PROGRAM DEFICIENCIES DISCOVERED DURING PROGRAM EVALUATION TESTS (PET)	75
K393	PROVIDE DOCUMENTATION FOR OPERATORS' MANUALS	69
K382	OPERATE KEYPUNCH FOR SOFTWARE CHANGES	66
K387	PREPARE DETAILED PROGRAM FLOWCHARTS	63
K389	PREPARE INPUTS FOR PROGRAM DOCUMENTATION	59
K392	PREPARE TEST DATA	59
K373	CORRECT PROGRAM DEFICIENCIES DISCOVERED DURING INITIAL INSTALLATION	53
K370	COORDINATE COMPUTER SYSTEM FUNCTIONAL REQUIREMENTS WITH USERS	50
K380	IMPLEMENT SOFTWARE TEST PROCEDURES	47
K371	COORDINATE COMPUTER SYSTEM INTERFACE AND INTEGRATION REQUIREMENTS WITH USERS	44
K388	PREPARE INITIAL SYSTEM FLOWCHARTS	44
K377	DETERMINE SOFTWARE RESOURCE REQUIREMENTS	41
K375	DESIGN SOFTWARE TEST PROCEDURES	41
K391	PREPARE SOFTWARE DEFICIENCY REPORTS	38
K386	PERFORM OPERATIONAL TEST AND ACCEPTANCE OF PROGRAM SOFTWARE	38
K394	PROVIDE DOCUMENTATION FOR PROGRAMMERS' MANUALS	34
F202	ANALYZE SYSTEM PRINTOUTS	34
K385	PERFORM ON SITE PERFORMANCE EVALUATION TESTING OF NEW COMMUNICATIONS COMPUTER SYSTEMS	34
K395	PROVIDE STAFF ASSISTANCE FOR SOFTWARE USERS	28
E173	PERFORM OPERATOR MAINTENANCE ON HIGH SPEED PRINTERS	25
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	22
F204	BUILD HOUSE OPERATING PROGRAM LIBRARY TAPES	19

TABLE A34

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE ON-SITE PROGRAMMERS JOB TYPE
(GRP591, N=10)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
K	PROGRAMMING COMPUTERS	45
M	OPERATING UNIVAC SET-8 (USET-8) SYSTEMS	14
F	MANAGING SOFTWARE AND PERFORMING PROCEDURES AND ANALYSIS	11
CHARACTERISTIC TASKS		PERCENT PERFORMING
K367	ANALYZE SOFTWARE DEFICIENCIES	100
K396	TEST AND IMPLEMENT PROGRAM PATCHES	100
K374	CORRECT PROGRAM DEFICIENCIES IN EXISTING SOFTWARE DURING SYSTEM LIFECYCLE	100
K390	PREPARE OR UPDATE SOFTWARE FOR USER IMPLEMENTATION	100
K379	ENHANCE EXISTING COMPUTER PROGRAMS	100
K381	INTERPRET COMPUTER CODES	100
K368	CODE PROGRAM PATCHES	100
K376	DESK-CHECK NEW SOFTWARE ROUTINES	100
K369	CODE SOFTWARE INSTRUCTIONS	100
K386	PERFORM OPERATIONAL TEST AND ACCEPTANCE OF PROGRAM SOFTWARE	90
K382	OPERATE KEYPUNCH FOR SOFTWARE CHANGES	90
K397	VALIDATE PROGRAM PATCHES	90
F202	ANALYZE SYSTEM PRINTOUTS	80
K393	PROVIDE DOCUMENTATION FOR OPERATORS' MANUALS	80
K371	COORDINATE COMPUTER SYSTEM INTERFACE AND INTEGRATION REQUIREMENTS WITH USERS	80
K370	COORDINATE COMPUTER SYSTEM FUNCTIONAL REQUIREMENTS WITH USERS	80
B43	DIRECT COMMUNICATIONS COMPUTER PROGRAMMING FUNCTIONS	70
B85	WRITE CORRESPONDENCE	70
F204	BUILD HOUSE OPERATING PROGRAM LIBRARY TAPES	70
K380	IMPLEMENT SOFTWARE TEST PROCEDURES	70
D134	PROVIDE ON-SITE OPERATOR TRAINING FOR NEW COMMUNICATIONS COMPUTER SYSTEMS	70
K372	CORRECT PROGRAMS DEFICIENCIES DISCOVERED DURING PROGRAM EVALUATION TESTS (PET)	70
K377	DETERMINE SOFTWARE RESOURCE REQUIREMENTS	70
G247	MOUNT OR DISMOUNT MAGNETIC MEDIA	70
I312	ESCORT VISITORS THROUGH FACILITIES	70
B58	DIRECT SOFTWARE MANAGEMENT FUNCTIONS	60
K385	PERFORM ON SITE PERFORMANCE EVALUATION TESTING OF NEW COMMUNICATIONS COMPUTER SYSTEMS	60
A13	DETERMINE WORK PRIORITIES	60
K395	PROVIDE STAFF ASSISTANCE FOR SOFTWARE USERS	60
F211	COORDINATE WITH SUBSCRIBERS ON OPERATIONAL AND PROCEDURAL PROBLEMS	60
K389	PREPARE INPUTS FOR PROGRAM DOCUMENTATION	60

TABLE A35

CHARACTERISTIC TASKS PERFORMED BY
THE SUPERVISION AND ADMINISTRATION CLUSTER
(GRP189)

TASKS	PERCENT MEMBERS PERFORMING (N=370)
B74 ORIENT NEWLY ASSIGNED PERSONNEL	92
B41 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED MATTERS	91
C107 PREPARE APRs	88
B71 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	84
A24 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	84
I312 ESCORT VISITORS THROUGH FACILITIES	83
A13 DETERMINE WORK PRIORITIES	81
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	81
A38 SCHEDULE LEAVES OR PASSES	79
A23 ESTABLISH ORGANIZATIONAL POLICIES OR COMMUNICATIONS OPERATING INSTRUCTIONS	77
C109 REVIEW OPERATIONAL LOGS OR REPORTS	76
A19 DEVELOP WORK METHODS OR PROCEDURES	74
A21 ESTABLISH COMMUNICATIONS CENTER POLICIES	73
B85 WRITE CORRESPONDENCE	72
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	71
A35 PLAN WORK ASSIGNMENTS	71
C89 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	69
E197 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	69
C103 INDORSE AIRMEN PERFORMANCE REPORTS (APR)	69
C108 REVIEW DISCREPANCY REPORTS	68
C102 EVALUATE WORK SCHEDULES	68
B82 SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	67
C91 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	66
D131 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	65
I311 DESTROY CLASSIFIED WASTE	65
D115 CONDUCT OJT	65
B60 DIRECT TELECOMMUNICATIONS CENTER FUNCTIONS	64
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	63
C92 EVALUATE INSPECTION REPORTS OR PROCEDURES	62
C104 INSPECT FACILITIES	59

TABLE A36

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE COMMUNICATIONS OPERATIONS SUPERINTENDENTS JOB TYPE
(GRP620, N=20)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
C	INSPECTING AND EVALUATING	28
B	DIRECTING AND IMPLEMENTING	24
A	ORGANIZING AND PLANNING	24
I	MAINTAINING SECURITY	12
CHARACTERISTIC TASKS		PERCENT PERFORMING
C107	PREPARE APRs	100
B71	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	95
C103	INDORSE AIRMEN PERFORMANCE REPORTS (APR)	95
B74	ORIENT NEWLY ASSIGNED PERSONNEL	95
B85	WRITE CORRESPONDENCE	90
A24	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	90
A13	DETERMINE WORK PRIORITIES	90
C104	INSPECT FACILITIES	90
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	85
C92	EVALUATE INSPECTION REPORTS OR PROCEDURES	85
B84	SUPERVISE TELECOMMUNICATIONS OPERATIONS SUPERVISORS (AFSC 29170)	80
E197	WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	80
B69	INITIATE PERSONNEL ACTION REQUESTS	80
A38	SCHEDULE LEAVES OR PASSES	80
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	80
A2	ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	80
I312	ESCORT VISITORS THROUGH FACILITIES	75
A12	DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	75
C91	EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	70
C108	REVIEW DISCREPANCY REPORTS	70
C89	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	70
I336	SIGN RECEIPTS FOR CLASSIFIED MATERIALS	70
C93	EVALUATE JOB DESCRIPTIONS	70
B51	DIRECT MAINTENANCE OF ADMINISTRATIVE FILES	70
A36	PREPARE JOB DESCRIPTIONS	65
I328	PERFORM EMERGENCY PROCEDURES DRILLS	65
C106	PERFORM STAFF STUDIES, SURVEYS, OR SPECIAL REVIEWS	60
A25	ESTABLISH PROCEDURES FOR DOCUMENT SECURITY AND CONTROL	60
C86	ANALYZE WORKLOAD REQUIREMENTS	60
A21	ESTABLISH COMMUNICATIONS CENTER POLICIES	60
A35	PLAN WORK ASSIGNMENTS	60
C98	EVALUATE SECURITY PROGRAMS	60
A23	ESTABLISH ORGANIZATIONAL POLICIES OR COMMUNICATIONS	60
A40	CONDUCT STAFF MEETINGS	60

TABLE A37

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE BASE TELECOMMUNICATIONS OPERATIONS NCOICs JOB TYPE
(GRP733, N=17)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
A	ORGANIZING AND PLANNING	31
B	DIRECTING AND IMPLEMENTING	22
C	INSPECTING AND EVALUATING	15
D	TRAINING	10
CHARACTERISTIC TASKS		PERCENT PERFORMING
A21	ESTABLISH COMMUNICATIONS CENTER POLICIES	100
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	100
C107	PREPARE APRs	100
C103	INDORSE AIRMEN PERFORMANCE REPORTS (APR)	94
A23	ESTABLISH ORGANIZATIONAL POLICIES OR COMMUNICATIONS OPERATING INSTRUCTIONS	94
A24	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	94
A18	DEVELOP QUALITY CONTROL PROGRAMS	94
A13	DETERMINE WORK PRIORITIES	88
A22	ESTABLISH MESSAGE DISTRIBUTION POLICIES	88
A38	SCHEDULE LEAVES OR PASSES	88
I312	ESCORT VISITORS THROUGH FACILITIES	88
A8	COORDINATE SPECIAL MESSAGE HANDLING PROCEDURES WITH CUSTOMER AGENCIES	88
B71	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	82
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	82
A19	DEVELOP WORK METHODS OR PROCEDURES	82
A2	ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	82
A17	DEVELOP PROCEDURES FOR REPORTING EQUIPMENT MALFUNCTIONS	82
B60	DIRECT TELECOMMUNICATIONS CENTER FUNCTIONS	76
B84	SUPERVISE TELECOMMUNICATIONS OPERATIONS SUPERVISORS (AFSC 29170)	76
B82	SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	76
B74	ORIENT NEWLY ASSIGNED PERSONNEL	76
D118	COUNSEL TRAINEES ON TRAINING PROGRESS	71
C109	REVIEW OPERATIONAL LOGS OR REPORTS	71
E197	WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	71
D120	DETERMINE OJT TRAINING REQUIREMENTS	71
A20	ESTABLISH ALTERNATE ROUTE PROCEDURES	71
A12	DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	65
D127	EVALUATE OJT TRAINEES	65
I337	VERIFY ENTRY AUTHORIZATION OF VISITORS	65
B85	WRITE CORRESPONDENCE	59
C102	EVALUATE WORK SCHEDULES	59
D131	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	59
D112	ADMINISTER TESTS	59

TABLE A38

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE TRAINING NCOs JOB TYPE
(GRP581, N=10)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
D	TRAINING	23
C	INSPECTING AND EVALUATING	20
A	ORGANIZING AND PLANNING	19
B	DIRECTING AND IMPLEMENTING	17
CHARACTERISTIC TASKS		PERCENT PERFORMING
A24	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	100
C107	PREPARE APRs	100
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	100
D118	COUNSEL TRAINEES ON TRAINING PROGRESS	100
D131	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	100
B74	ORIENT NEWLY ASSIGNED PERSONNEL	100
E197	WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	90
D120	DETERMINE OJT TRAINING REQUIREMENTS	90
B71	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	90
A35	PLAN WORK ASSIGNMENTS	90
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	90
D124	DIRECT OF IMPLEMENT OJT PROGRAMS	80
D132	PLAN OJT	80
C89	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	80
C102	EVALUATE WORK SCHEDULES	80
D127	EVALUATE OJT TRAINEES	80
D112	ADMINISTER TESTS	80
C86	ANALYZE WORKLOAD REQUIREMENTS	80
A38	SCHEDULE LEAVES OR PASSES	80
C93	EVALUATE JOB DESCRIPTIONS	80
C91	EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	80
D115	CONDUCT OJT	80
B69	INITIATE PERSONNEL ACTION REQUESTS	80
C108	REVIEW DISCREPANCY REPORTS	70
C109	REVIEW OPERATIONAL LOGS OR REPORTS	70
B85	WRITE CORRESPONDENCE	70
C103	INDORSE AIRMEN PERFORMANCE REPORTS (APR)	70
D135	SCORE TESTS	70
A29	PLAN BRIEFINGS	70
E195	TYPE ADMINISTRATIVE MATERIAL SUCH AS CORRESPONDENCE, FORMS, OR REPORTS	60
A13	DETERMINE WORK PRIORITIES	60
B82	SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	60
D130	EVALUATE TRAINING METHODS OR TECHNIQUES	60
I312	ESCORT VISITORS THROUGH FACILITIES	60

TABLE A39

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE COMMUNICATIONS CENTER NCOICs JOB TYPE
(GRP685, N=101)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
A	ORGANIZING AND PLANNING	23
B	DIRECTING AND IMPLEMENTING	21
C	INSPECTING AND EVALUATING	18
D	TRAINING	11
I	MAINTAINING SECURITY	11
CHARACTERISTIC TASKS		PERCENT PERFORMING
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED MATTERS	98
C107	PREPARE APRs	96
B74	ORIENT NEWLY ASSIGNED PERSONNEL	96
B71	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	93
A21	ESTABLISH COMMUNICATIONS CENTER POLICIES	93
A24	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	93
C109	REVIEW OPERATIONAL LOGS OR REPORTS	92
I312	ESCORT VISITORS THROUGH FACILITIES	92
A12	DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	89
A23	ESTABLISH ORGANIZATIONAL POLICIES OR COMMUNICATIONS OPERATING INSTRUCTIONS	88
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	87
C108	REVIEW DISCREPANCY REPORTS	86
A38	SCHEDULE LEAVES OR PASSES	86
A2	ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	86
C102	EVALUATE WORK SCHEDULES	85
B85	WRITE CORRESPONDENCE	84
C103	INDORSE AIRMEN PERFORMANCE REPORTS (APR)	84
A13	DETERMINE WORK PRIORITIES	84
C91	EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	84
B60	DIRECT TELECOMMUNICATIONS CENTER FUNCTIONS	83
A8	COORDINATE SPECIAL MESSAGE HANDLING PROCEDURES WITH CUSTOMER AGENCIES	83
A22	ESTABLISH MESSAGE DISTRIBUTION POLICIES	82
C89	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	81
A19	DEVELOP WORK METHODS OR PROCEDURES	81
A30	PLAN COMMUNICATIONS CUSTOMER EDUCATION PROGRAMS	81
E192	WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	81
C104	INSPECT FACILITIES	80
A17	DEVELOP PROCEDURES FOR REPORTING EQUIPMENT MALFUNCTIONS	80
C92	EVALUATE INSPECTION REPORTS OR PROCEDURES	79
D118	COUNSEL TRAINEES ON TRAINING PROGRESS	78
A18	DEVELOP QUALITY CONTROL PROGRAMS	77
A10	COORDINATE WITH USERS OR MAINTENANCE AGENCIES ON PLANNED CIRCUIT OUTAGES OR EQUIPMENT MALFUNCTIONS	77
A35	PLAN WORK ASSIGNMENTS	75

TABLE A40

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE COMSEC SUPERVISORS JOB TYPE
(GRP742, N=32)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
I	MAINTAINING SECURITY	33
A	ORGANIZING AND PLANNING	15
B	DIRECTING AND IMPLEMENTING	13
C	INSPECTING AND EVALUATING	11
CHARACTERISTIC TASKS		PERCENT PERFORMING
I313	INVENTORY ACCOUNTABLE COMSEC MATERIALS	100
I318	WITNESS DESTRUCTION OF CLASSIFIED WASTE	100
I316	MAINTAIN AUTHORIZED ENTRANCE LISTS	100
I310	CHANGE LOCK COMBINATIONS	100
I314	ISSUE COMSEC MATERIALS	97
I312	ESCORT VISITORS THROUGH FACILITIES	97
I333	PREPARE DESTRUCTION REPORTS FOR CLASSIFIED MATERIALS	94
I319	MAINTAIN OPERATIONAL COMSEC ACCOUNT RECORDS	94
I311	DESTROY CLASSIFIED WASTE	94
I326	MAKE TRACE CHECKS	94
I337	VERIFY ENTRY AUTHORIZATION OF VISITORS	94
I336	SIGN RECEIPTS FOR CLASSIFIED MATERIALS	91
I324	MAINTAIN VISITOR REGISTERS	91
I331	PREPARE CLASSIFIED DOCUMENTS FOR MAILING	91
I328	PERFORM EMERGENCY PROCEDURES DRILLS	91
C107	PREPARE APRs	91
I315	MAINTAIN ADMINISTRATIVE COMSEC ACCOUNT RECORDS	88
I332	PREPARE COMSEC REPORTS, SUCH AS ADMINISTRATIVE, TACTICAL, OR SPECIAL	88
I327	PERFORM COURIER FUNCTIONS	88
B44	DIRECT COMMUNICATIONS SECURITY PROCEDURES	88
A25	ESTABLISH PROCEDURES FOR DOCUMENT SECURITY AND CONTROL	88
B74	ORIENT NEWLY ASSIGNED PERSONNEL	88
I330	PERFORM PHYSICAL SECURITY INSPECTIONS OF FACILITIES	84
I317	MAINTAIN COMSEC ACCOUNT READINESS ACTIONS (CARAS)	84
A37	PREPARE UNIT EMERGENCY PLANS	84
C98	EVALUATE SECURITY PROGRAMS	78
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	78
A38	SCHEDULE LEAVES OR PASSES	78
B82	SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	75
A13	DETERMINE WORK PRIORITIES	75
A23	ESTABLISH ORGANIZATIONAL POLICIES OR COMMUNICATIONS OPERATING INSTRUCTIONS	75
I335	REVIEW MESSAGES FOR SECURITY VIOLATIONS	75
A19	DEVELOP WORK METHODS OR PROCEDURES	75
B85	WRITE CORRESPONDENCE	72
C101	EVALUATE UNIT EMERGENCY PLANS	72
A24	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	72

TABLE A41

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE FIRST-LINE TELECOMMUNICATIONS SUPERVISORS JOB TYPE
(GRP764, N=72)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
H	PROCESSING MESSAGES	17
B	DIRECTING AND IMPLEMENTING	15
C	INSPECTING AND EVALUATING	14
I	MAINTAINING SECURITY	13
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	11
CHARACTERISTIC TASKS		PERCENT PERFORMING
B82	SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	97
B74	ORIENT NEWLY ASSIGNED PERSONNEL	96
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	96
I311	DESTROY CLASSIFIED WASTE	94
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	94
H281	PREPARE SERVICE MESSAGES	94
I313	INVENTORY ACCOUNTABLE COMSEC MATERIALS	93
I312	ESCORT VISITORS THROUGH FACILITIES	92
I324	MAINTAIN VISITOR REGISTERS	93
I328	PERFORM EMERGENCY PROCEDURES DRILLS	93
H264	MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	93
A22	ESTABLISH MESSAGE DISTRIBUTION POLICIES	92
A13	DETERMINE WORK PRIORITIES	92
I326	MAKE PAGE CHECKS	92
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	92
H268	MAKE ENTRIES ON AF FORM 1022, COMMCEN MESSAGE REGISTER	92
B60	DIRECT TELECOMMUNICATIONS CENTER FUNCTIONS	90
D115	CONDUCT OJT	90
I337	VERIFY ENTRY AUTHORIZATION OF VISITORS	90
B53	DIRECT MESSAGE DISTRIBUTION FUNCTIONS	90
H293	REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	90
A21	ESTABLISH COMMUNICATIONS CENTER POLICIES	89
C109	REVIEW OPERATIONAL LOGS OR REPORTS	89
A19	DEVELOP WORK METHODS OR PROCEDURES	89
E163	MAKE ENTRIES ON DD FORM 1753, MASTER STATION LOG	89
I335	REVIEW MESSAGES FOR SECURITY VIOLATIONS	89
H273	NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	89
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED MATTERS	88
C107	PREPARE APRs	88
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE	88
E191	PICK UP AND STORE SUPPLIES	88
H303	STAMP FILING TIMES ON OUTGOING MESSAGES	88
A24	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	86
A23	ESTABLISH ORGANIZATIONAL POLICIES OR COMMUNICATIONS OPERATING INSTRUCTIONS	86
B72	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	86

TABLE A42

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE NCOICs OF TELEPHONE SWITCHBOARD OPERATIONS JOB TYPE
(GRP727, N=24)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
J	OPERATING NON-MOBILE TELEPHONE SWITCHBOARDS	24
A	ORGANIZING AND PLANNING	18
B	DIRECTING AND IMPLEMENTING	18
D	TRAINING	13
C	INSPECTING AND EVALUATING	13
CHARACTERISTIC TASKS		PERCENT PERFORMING
J352	MAINTAIN SWITCHBOARD INSTRUCTIONS FOR EMERGENCIES, SUCH AS FIRE, CRASH, OR ATTACK	100
J358	PLACE CALLS FROM DISTANT STATIONS TO SUBSCRIBERS	100
B74	ORIENT NEWLY ASSIGNED PERSONNEL	100
J339	ACCEPT AND CONNECT CALLS ACCORDING TO THEIR PRECEDENCE	100
J364	SUPERVISE MINIMIZE CONDITION ACTIONS	100
J344	COORDINATE SWITCHBOARD CIRCUIT OR EQUIPMENT PROBLEMS WITH MAINTENANCE, TECHNICAL CONTROL, OR SUPPORT AGENCIES	96
J340	ANSWER SUPERVISORY LIGHTS	96
B59	DIRECT SWITCHBOARD OPERATIONS	92
J343	COMPILE, MAINTAIN, OR DISTRIBUTE TELEPHONE DIRECTORIES	92
J357	PLACE CALLS BETWEEN SUBSCRIBERS	92
J361	PLACE OUTGOING CALLS TO DISTANT STATIONS USING TRUNKS	92
D115	CONDUCT OJT	88
B71	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	88
A24	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	88
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	88
D118	COUNSEL TRAINEES ON TRAINING PROGRESS	88
J354	MONITOR HIGH PRECEDENCE OR EMERGENCY CALLS	88
A38	SCHEDULE LEAVES OR PASSES	88
J363	REROUTE CALLS IN EVENT OF CIRCUIT FAILURES	88
A30	PLAN COMMUNICATIONS CUSTOMER EDUCATION PROGRAMS	83
D127	EVALUATE OJT TRAINEES	83
J350	MAINTAIN MASTER TELEPHONE INFORMATION FILES FOR INFORMATION SYSTEMS	83
C107	PREPARE APRs	83
J366	TEST SWITCHBOARD CIRCUITS	83
J351	MAINTAIN STATUS BOARDS ON LOCATION OF COMMANDERS	83
J362	PROCESS TELEPHONE CONFERENCE CALLS	79
D131	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	75
A35	PLAN WORK ASSIGNMENTS	75
C89	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	75
C109	REVIEW OPERATIONAL LOGS OR REPORTS	75
A13	DETERMINE WORK PRIORITIES	75
J353	MAINTAIN DD FORM 1194, TOLL TICKET	75
B82	SUPERVISE TELECOMMUNICATIONS OPERATIONS SPECIALISTS (AFSC 29150)	71

TABLE A43

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE TRAFFIC SERVICE SUPERINTENDENTS JOB TYPE
(GRP428, N=11)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
A	ORGANIZING AND PLANNING	28
B	DIRECTING AND IMPLEMENTING	26
C	INSPECTING AND EVALUATING	16
F	MANAGING SOFTWARE AND PERFORMING PROCEDURES AND ANALYSIS	7
K	PROGRAMMING COMPUTERS	5
CHARACTERISTIC TASKS		PERCENT PERFORMING
A16	DEVELOP POLICIES FOR MANAGEMENT OF COMMUNICATIONS SYSTEMS	100
B71	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	91
B41	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	91
A6	COORDINATE EQUIPMENT INSTALLATION OR RELOCATION WITH ENGINEERING AND INSTALLATION	91
A29	PLAN BRIEFINGS	91
B74	ORIENT NEWLY ASSIGNED PERSONNEL	91
C87	DRAFT STAFF STUDIES, SURVES, OR SPECIAL REPORTS	82
A23	ESTABLISH ORGANIZATIONAL POLICIES OR COMMUNICATIONS OPERATING INSTRUCTIONS	82
C107	PREPARE APRs	82
C89	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	82
A12	DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	82
E197	WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	82
B76	PROVIDE TECHNICAL COMMUNICATIONS GUIDANCE TO HOST UNITS OR COMMANDS	73
A13	DETERMINE WORK PRIORITIES	73
A32	PLAN LAYOUT OF FACILITIES	73
A3	COORDINATE CIRCUIT ACTIVATIONS, DEACTIVATIONS, OR CHANGES WITH TECHNICAL CONTROL FACILITIES AND MAINTENANCE	73
C108	REVIEW DISCREPANCY REPORTS	73
B75	PERFORM STAFF TECHNICAL ASSISTANCE VISITS	73
A10	COORDINATE WITH USERS OR MAINTENANCE AGENCIES ON PLANNED CIRCUIT OUTAGES OR EQUIPMENT MALFUNCTIONS	73
A4	COORDINATE COMMUNICATIONS COMPUTER SYSTEMS DEVELOPMENT WITH OTHER DOD AGENCIES AND CIVILIAN CONTRACTORS	73
A2	ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	73
I312	ESCORT VISITORS THROUGH FACILITIES	73
B85	WRITE CORRESPONDENCE	64
B80	SUPERVISE AUTOMATIC DIGITAL SWITCHING TECHNICIANS (AFSC 29570)	64
C104	INSPECT FACILITIES	64
A38	SCHEDULE LEAVES OR PASSES	64
B57	DIRECT PROCEDURES AND ANALYSIS FUNCTIONS	64
B63	DRAFT RECOMMENDED CHANGES TO OPERATING PUBLICATIONS	64
C106	PERFORM STAFF STUDIES, SURVEYS, OR SPECIAL REVIEWS	64
A35	PLAN WORK ASSIGNMENTS	64

TABLE A44

CHARACTERISTIC TASKS PERFORMED BY
THE TRAFFIC ANALYSIS CLUSTER
(GRP249)

TASKS	PERCENT MEMBERS PERFORMING (N=111)
F232 PERFORM DAILY REVIEWS OF PREVIOUS DAY'S TRAFFIC	92
F236 REVIEW DAILY TRAFFIC LOGS OR FILES	90
F220 MAINTAIN GENERAL MESSAGE FILES	86
F223 MAINTAIN MESSAGE OR TRACER ACTION CASE FILES	84
I312 ESCORT VISITORS THROUGH FACILITIES	73
F217 MAINTAIN ADDRESS INDICATOR GROUP (AIG) FILES	71
F200 ANALYZE AND EVALUATE STATISTICAL DATA TO DETERMINE MESSAGE HANDLING EFFECTIVENESS	71
F211 COORDINATE WITH SUBSCRIBERS ON OPERATIONAL AND PROCEDURAL PROBLEMS	70
F214 IMPLEMENT ROUTING INDICATOR DELETIONS, ADDITIONS, OR CHANGES	68
E195 TYPE ADMINISTRATIVE MATERIAL SUCH AS CORRESPONDENCE, FORMS, OR REPORTS	68
F209 COMPILE STATISTICS OF MESSAGES THAT CONTAIN ERRORS	68
C109 REVIEW OPERATIONAL LOGS OR REPORTS	66
H281 PREPARE SERVICE MESSAGES	66
H292 REVIEW MESSAGES FOR MISHANDLING	63
F205 COMPILE DATA FOR COMMUNICATIONS OPERATIONS REPORTS	63
I311 DESTROY CLASSIFIED WASTE	62
F213 EVALUATE QUALITY OF SERVICE PROVIDED TO CUSTOMERS	60
F210 CONDUCT FACILITY QUALITY CONTROL PROGRAMS	59
I335 REVIEW MESSAGES FOR SECURITY VIOLATIONS	58
H293 REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	57
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	57
A28 ESTIMATE COMMUNICATIONS TRAFFIC LOADS	56
C95 EVALUATE PROCEDURES AND ANALYSIS FUNCTIONS	55
A18 DEVELOP QUALITY CONTROL PROGRAMS	55
F231 PERFORM DAILY REVIEWS OF GENERAL MESSAGE DISTRIBUTION	53
B57 DIRECT PROCEDURES AND ANALYSIS FUNCTIONS	52
H260 INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	52
F208 COMPILE DATA FOR SPECIAL SURVEYS	51
A8 COORDINATE SPECIAL MESSAGE HANDLING PROCEDURES WITH CUSTOMER AGENCIES	50

TABLE A45

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE TRAFFIC HANDLING AND TRAFFIC ANALYSIS PERSONNEL
JOB TYPE
(GRP654, N=11)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
F	MANAGING SOFTWARE AND PERFORMING PROCEDUR'S AND ANALYSIS	31
H	PROCESSING MESSAGES	29
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	11
I	MAINTAINING SECURITY	10
CHARACTERISTIC TASKS		PERCENT PERFORMING
F232	PERFORM DAILY REVIEWS OF PREVIOUS DAY'S TRAFFIC	100
F220	MAINTAIN GENERAL MESSAGE FILES	100
F217	MAINTAIN ADDRESS INDICATOR GROUP (AIG) FILES	100
F236	REVIEW DAILY TRAFFIC LOGS OR FILES	91
E195	TYPE ADMINISTRATIVE MATERIAL SUCH AS CORRESPONDENCE, FORMS, OR REPORTS	91
H293	REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	82
H254	ASSIGN ROUTING INDICATORS	82
H281	PREPARE SERVICE MESSAGES	82
H273	NOTIFY ADDRESSEES OR DISTRIBUTION CENTERS OF HIGH PRECEDENCE MESSAGE RECEIPT	82
H292	REVIEW MESSAGES FOR MISHANDLING	73
I335	REVIEW MESSAGES FOR SECURITY VIOLATIONS	73
H288	REPRODUCE MESSAGES FOR DISTRIBUTION	73
F223	MAINTAIN MESSAGE OR TRACER ACTION CASE FILES	73
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE	73
E144	MAINTAIN FILES OF LETTERS OF AUTHORIZATION FOR RECEIVING MESSAGES	73
H284	PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	73
H274	PERFORATE MESSAGE TAPES	73
H268	MAKE ENTRIES ON AF FORM 1022, COMMEN MESSAGE REGISTER	73
I312	ESCORT VISITORS THROUGH FACILITIES	73
H301	STAMP FILING TIMES ON OUTGOING MESSAGES	73
H306	STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	73
H305	STAMP TIME OF RECEIPT ON INCOMING MESSAGES	73
A28	ESTIMATE COMMUNICATIONS TRAFFIC LOADS	64
H270	MAKE ENTRIES ON DD FORM 1503, MESSAGE CORRECTION NOTICE	64
F214	IMPLEMENT ROUTING INDICATOR DELETIONS, ADDITIONS, OR CHANGES	64
H264	MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	64
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	64
H260	INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	64
H304	STAMP MESSAGES WITH SPECIAL HANDLING, PRECEDENCE, OR CLASSIFICATION	64
F231	PERFORM DAILY REVIEWS OF GENERAL MESSAGE DISTRIBUTION	55
H291	REVIEW DD FORM 1392, DATA MESSAGE FORM, FOR ACCURACY	55
F205	COMPILE DATA FOR COMMUNICATIONS OPERATIONS REPORTS	55
I311	DESTROY CLASSIFIED WASTE	55

TABLE A46

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE JUNIOR TELECOM TRAFFIC ANALYSIS CLERKS JOB TYPE
(GRP712, N=11)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
F	MANAGING SOFTWARE AND PERFORMING PROCEDURES AND ANALYSIS	59
H	PROCESSING MESSAGES	17
CHARACTERISTIC TASKS		PERCENT PERFORMING
F232	PERFORM DAILY REVIEWS OF PREVIOUS DAY'S TRAFFIC	100
F205	COMPILE DATA FOR COMMUNICATIONS OPERATIONS REPORTS	100
F236	REVIEW DAILY TRAFFIC LOGS OR FILES	91
F209	COMPILE STATISTICS OF MESSAGES THAT CONTAIN ERRORS	91
F220	MAINTAIN GENERAL MESSAGE FILES	91
F223	MAINTAIN MESSAGE OR TRACER ACTION CASE FILES	91
F217	MAINTAIN ADDRESS INDICATOR GROUP (AIG) FILES	82
F200	ANALYZE AND EVALUATE STATISTICAL DATA TO DETERMINE MESSAGE HANDLING EFFECTIVENESS	82
H292	REVIEW MESSAGES FOR MISHANDLING	82
E195	TYPE ADMINISTRATIVE MATERIAL SUCH AS CORRESPONDENCE, FORMS, OR REPORTS	82
F210	CONDUCT FACILITY QUALITY CONTROL PROGRAMS	73
F211	COORDINATE WITH SUBSCRIBERS ON OPERATIONAL AND PROCEDURAL PROBLEMS	73
F214	IMPLEMENT ROUTING INDICATOR DELETIONS, ADDITIONS, OR CHANGES	64
F231	PERFORM DAILY REVIEW OF GENERAL MESSAGE DISTRIBUTION	64
F207	COMPILE DATA FOR MONTHLY COMMUNICATIONS OPERATING SUMMARIES (COMOPS) OR AFTER-ACTION REPORTS	64
H281	PREPARE SERVICE MESSAGES	64
F208	COMPILE DATA FOR SPECIAL SURVEYS	64
F213	EVALUATE QUALITY OF SERVICE PROVIDED TO CUSTOMERS	55
F202	ANALYZE SYSTEM PRINTOUTS	55
I311	DESTROY CLASSIFIED WASTE	55
H293	REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	45
C109	REVIEW OPERATIONAL LOGS OR REPORTS	45
F230	PERFORM DAILY REVIEWS OF FACILITY OPERATIONAL RECORDS	45
I335	REVIEW MESSAGES FOR SECURITY VIOLATIONS	45
H291	REVIEW DD FORM 1392, DATA MESSAGE FORM, FOR ACCURACY	45
I312	ESCORT VISITORS THROUGH FACILITIES	45
H270	MAKE ENTRIES ON DD FORM 1503, MESSAGE CORRECTION NOTICE	36
F201	ANALYZE CIRCUIT AND EQUIPMENT OUTAGE REPORTS	36
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE	36
F215	IMPLEMENT TELECOMMUNICATIONS SERVICE REQUESTS (TSR)	36
H260	INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	36
C95	EVALUATE PROCEDURES AND ANALYSIS FUNCTIONS	27
F229	ORIGINATE DAILY COMMUNICATIONS IMPROVEMENT MEMORANDUM (CIM) REPORTS	27

TABLE A47

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE TRAFFIC ANALYSIS SUPERVISORS JOB TYPE
(GRP765, N=23)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
F	MANAGING SOFTWARE AND PERFORMING PROCEDURES AND ANALYSIS	25
A	ORGANIZING AND PLANNING	14
B	DIRECTING AND IMPLEMENTING	14
C	INSPECTING AND EVALUATING	11
H	PROCESSING MESSAGES	11
CHARACTERISTIC TASKS		PERCENT PERFORMING
F200	ANALYZE AND EVALUATE STATISTICAL DATA TO DETERMINE MESSAGE HANDLING EFFECTIVENESS	100
A30	PLAN COMMUNICATIONS CUSTOMER EDUCATION PROGRAMS	100
F232	PERFORM DAILY REVIEWS OF PREVIOUS DAY'S TRAFFIC	96
F209	COMPILE STATISTICS OF MESSAGES THAT CONTAIN ERRORS	96
D113	CONDUCT COMMUNICATIONS CUSTOMER EDUCATION PROGRAMS	96
A19	DEVELOP WORK METHODS OR PROCEDURES	96
F220	MAINTAIN GENERAL MESSAGE FILES	96
D122	DEVELOP COMMUNICATIONS CUSTOMER EDUCATION PROGRAMS	96
F223	MAINTAIN MESSAGE OR TRACER ACTION CASE FILES	96
C95	EVALUATE PROCEDURES AND ANALYSIS FUNCTIONS	91
F236	REVIEW DAILY TRAFFIC LOGS OR FILES	91
C109	REVIEW OPERATIONAL LOGS OR REPORTS	91
B57	DIRECT PROCEDURES AND ANALYSIS FUNCTIONS	87
F211	COORDINATE WITH SUBSCRIBERS ON OPERATIONAL AND PROCEDURAL PROBLEMS	87
F208	COMPILE DATA FOR SPECIAL SURVEYS	87
B52	DIRECT MAINTENANCE OF MESSAGE ROUTING INFORMATION	87
I312	ESCORT VISITORS THROUGH FACILITIES	87
F217	MAINTAIN ADDRESS INDICATOR GROUP (AIG) FILES	83
B71	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	83
A28	ESTIMATE COMMUNICATIONS TRAFFIC LOADS	83
E195	TYPE ADMINISTRATIVE MATERIAL SUCH AS CORRESPONDENCE, FORMS, OR REPORTS	83
A18	DEVELOP QUALITY CONTROL PROGRAMS	83
H259	INITIATE ELECTRICAL TRACER ACTIONS	83
A8	COORDINATE SPECIAL MESSAGE HANDLING PROCEDURES WITH CUSTOMER AGENCIES	83
F205	COMPILE DATA FOR COMMUNICATIONS OPERATIONS REPORTS	78
F210	CONDUCT FACILITY QUALITY CONTROL PROGRAMS	78
C87	DRAFT STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	78
I214	IMPLEMENT ROUTING INDICATOR DELETIONS, ADDITIONS, OR CHANGES	78
B85	WRITE CORRESPONDENCE	74
H260	INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	74
C86	ANALYZE WORKLOAD REQUIREMENTS	70

TABLE A48

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE TELECOM TRAFFIC ANALYSIS CLERKS JOB TYPE
(GRP756, N=16)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
H	PROCESSING MESSAGES	27
F	MANAGING SOFTWARE AND PERFORMING PROCEDURES AND ANALYSIS	22
I	MAINTAINING SECURITY	11
E	PERFORMING GENERAL COMMUNICATIONS FUNCTIONS	11
CHARACTERISTIC TASKS		PERCENT PERFORMING
F236	REVIEW DAILY TRAFFIC LOGS OR FILES	100
F220	MAINTAIN GENERAL MESSAGE FILES	100
H293	REVIEW ORIGINAL DD FORM 173/1/2/3, JOINT MESSAGEFORM, FOR ACCURACY	100
H270	MAKE ENTRIES ON DD FORM 1503, MESSAGE CORRECTION NOTICE	100
I311	DESTROY CLASSIFIED WASTE	100
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE	100
H281	PREAPRE SERVICE MESSAGES	100
F232	PERFORM DAILY REVIEWS OF PREVIOUS DAY'S TRAFFIC	94
H303	STAMP FILING TIMES ON OUTGOING MESSAGES	94
F214	IMPLEMENT ROUTING INDICATOR DELETIONS, ADDITIONS, OR CHANGES	88
F217	MAINTAIN ADDRESS INDICATOR GROUP (AIG) FILES	88
H292	REVIEW MESSAGES FOR MISHANDLING	88
H306	STAMP TIME OF TRANSMISSION ON OUTGOING MESSAGES	88
F223	MAINTAIN MESSAGE OR TRACER ACTION CASE FILES	88
H268	MAKE ENTRIES ON AF FORM 1022, COMMCEN MESSAGE REGISTER	88
H264	MAINTAIN DD FORM 1765, INCOMING SERVICE MESSAGE LOG OR FILES	88
H266	MAINTAIN DD FORM 1766, OUTGOING SERVICE MESSAGE LOG OR FILES	88
A8	COORDINATE SPECIAL MESSAGE HANDLING PROCEDURES WITH CUSTOMER AGENCIES	88
H260	INITIATE FOLLOW-UP ACTIONS ON SERVICE MESSAGES	88
H254	ASSIGN ROUTING INDICATORS	88
H288	REPRODUCE MESSAGES FOR DISTRIBUTION	88
F213	EVALUATE QUALITY OF SERVICE PROVIDED TO CUSTOMERS	81
F209	COMPILE STATISTICS OF MESSAGES THAT CONTAIN ERRORS	81
E195	TYPE ADMINISTRATIVE MATERIAL SUCH AS CORRESPONDENCE, FORMS, OR REPORTS	81
H284	PROOFREAD OR CORRECT TELETYPE TAPES, PAGE COPIES, OR HEADER AND EOT CARDS	81
I312	ESCORT VISITORS THROUGH FACILITIES	81
I313	INVENTORY ACCOUNTABLE COMSEC MATERIALS	81
H278	PREPARE HEADERS AND END OF TRANSMISSION (EOT) CARDS FOR DATA MESSAGES	81
H287	REPORT CIRCUIT OR EQUIPMENT OUTAGES	81
E186	PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS	81
F200	ANALYZE AND EVALUATE STATISTICAL DATA TO DETERMINE MESSAGE HANDLING EFFECTIVENESS	75
A30	PLAN COMMUNICATIONS CUSTOMER EDUCATION PROGRAMS	75

TABLE A49

PRIMARY DUTIES AND CHARACTERISTIC TASKS PERFORMED BY
MEMBERS OF THE AUTOMATIC DIGITAL TRAFFIC ANALYSIS NCOICs JOB TYPE
(GRP805, N=12)

PRIMARY DUTIES		RELATIVE PERCENT OF JOB TIME
F	MANAGING SOFTWARE AND PERFORMING PROCEDURES AND ANALYSIS	47
B	DIRECTING AND IMPLEMENTING	9
CHARACTERISTIC TASKS		PERCENT PERFORMING
F236	REVIEW DAILY TRAFFIC LOGS OR FILES	100
F202	ANALYZE SYSTEM PRINTOUTS	100
F207	COMPILE DATA FOR MONTHLY COMMUNICATIONS OPERATING SUMMARIES (COMOPS) OR AFTER-ACTION REPORTS	100
F211	COORDINATE WITH SUBSCRIBERS ON OPERATIONAL AND PROCEDURAL PROBLEMS	100
F232	PERFORM DAILY REVIEWS OF PREVIOUS DAY'S TRAFFIC	100
F223	MAINTAIN MESSAGE OR TRACER ACTION CASE FILES	100
F212	DISTRIBUTE COMOPS	92
B57	DIRECT PROCEDURES AND ANALYSIS FUNCTIONS	92
F201	ANALYZE CIRCUIT AND EQUIPMENT OUTAGES REPORTS	92
F205	COMPILE DATA FOR COMMUNICATIONS OPERATIONS REPORTS	83
F230	PERFORM DAILY REVIEWS OF FACILITY OPERATIONAL RECORDS	83
I311	DESTROY CLASSIFIED WASTE	83
I312	ESCORT VISITORS THROUGH FACILITIES	83
F200	ANALYZE AND EVALUATE STATISTICAL DATA TO DETERMINE MESSAGE HANDLING EFFECTIVENESS	75
F220	MAINTAIN GENERAL MESSAGE FILES	75
F206	COMPILE DATA FOR HEADER EXTRACT REPORTS	75
B75	PERFORM STAFF TECHNICAL ASSISTANCE VISITS	75
F213	EVALUATE QUALITY OF SERVICE PROVIDED TO CUSTOMERS	75
I335	REVIEW MESSAGES FOR SECURITY VIOLATIONS	75
F233	PREPARE WORK REQUESTS	75
F208	COMPILE DATA FOR SPECIAL SURVEYS	75
C109	REVIEW OPERATIONAL LOGS OR REPORTS	67
F221	MAINTAIN INFORMATION ON SUBSCRIBERS SUCH AS KEY PERSONNEL, TELEPHONE NUMBERS, OR ROUTING INDICATORS	67
I331	PREPARE CLASSIFIED DOCUMENTS FOR MAILING	67
F229	ORIGINATE DAILY COMMUNICATIONS IMPROVEMENT MEMORANDUM (CIM) REPORTS	67
F218	MAINTAIN CASE FILES ON SUBSCRIBERS	67
U640	EVALUATE OFF-LINE PRINTOUTS IN AUTODIN I	58
F209	COMPILE STATISTICS OF MESSAGES THAT CONTAIN ERRORS	58
F210	CONDUCT FACILITY QUALITY CONTROL PROGRAMS	58
F231	PERFORM DAILY REVIEWS OF GENERAL MESSAGE DISTRIBUTION	58
I338	WITNESS DESTRUCTION OF CLASSIFIED WASTE	58
F234	REPORT INTERLACED MESSAGES TO DEFENSE COMMUNICATIONS AREA (DCA)	58
U649	OPERATE HIGH SPEED PRINTERS IN AUTODIN I	58

TABLE A50

CHARACTERISTIC TASKS PERFORMED BY
THE COMSEC ACCOUNTANT INDEPENDENT JOB TYPE
(GRP321)

TASKS	PERCENT MEMBERS PERFORMING (N=197)
I313 INVENTORY ACCOUNTABLE COMSEC MATERIALS	98
I326 MAKE PAGE CHECKS	98
I311 DESTROY CLASSIFIED WASTE	97
I338 WITNESS DESTRUCTION OF CLASSIFIED WASTE	96
I333 PREPARE DESTRUCTION REPORTS FOR CLASSIFIED MATERIALS	93
I336 SIGN RECEIPTS FOR CLASSIFIED MATERIALS	92
I314 ISSUE COMSEC MATERIALS	90
I310 CHANGE LOCK COMBINATIONS	88
I315 MAINTAIN ADMINISTRATIVE COMSEC ACCOUNT RECORDS	86
I312 ESCORT VISITORS THROUGH FACILITIES	85
I328 PERFORM EMERGENCY PROCEDURES DRILLS	84
I332 PREPARE COMSEC REPORTS, SUCH AS ADMINISTRATIVE, TACTICAL, OR SPECIAL	80
I331 PREPARE CLASSIFIED DOCUMENTS FOR MAILING	80
I327 PERFORM COURIER FUNCTIONS	77
I337 VERIFY ENTRY AUTHORIZATION OF VISITORS	77
I319 MAINTAIN OPERATIONAL COMSEC ACCOUNT RECORDS	74
I317 MAINTAIN COMSEC ACCOUNT READINESS ACTIONS (CARAS)	74
I324 MAINTAIN VISITOR REGISTERS	72
I316 MAINTAIN AUTHORIZED ENTRANCE LISTS	72
I330 PERFORM PHYSICAL SECURITY INSPECTIONS OF FACILITIES	71
I329 PERFORM INVENTORIES OF CLASSIFIED ACCOUNTABLE ITEMS OTHER THAN CRYPTOGRAPHIC MATERIALS	63
I321 MAINTAIN SECURITY OF FACILITIES OR CLASSIFIED MATERIALS DURING EMERGENCIES	61
I334 REVIEW DOCUMENTS OR OTHER MATERIALS TO DETERMINE SECURITY DISPOSITION	54
E195 TYPE ADMINISTRATIVE MATERIAL SUCH AS CORRESPONDENCE, FORMS, OR REPORTS	52

APPENDIX B

**BACKGROUND AND JOB SATISFACTION INFORMATION ON
INDEPENDENT JOB TYPES, CLUSTERS, AND JOB TYPES WITHIN CLUSTERS**

TABLE B1

BACKGROUND INFORMATION ON JOB TYPES WITHIN THE COMMCENTER OPERATIONS CLUSTER
AND THE DIGITAL GRAPHICS INDEPENDENT JOB TYPE

JOB GROUPS WITHIN COMMCENTER OPERATIONS CLUSTER

	COMM- CENTER OPERATIONS CLUSTER (GRP242)	TELECOM OPERATIONS AND OPERATOR MAINTENANCE PERSONNEL (GRP626)				TELECOM OPERATIONS OJT PERSONNEL (GRP760)		STREAMLINER OPERATORS (GRP699)		MESSAGE PREPARATION PERSONNEL (GRP510)		DIGITAL GRAPHICS INDEPENDENT JOB TYPE (GRP458)
		TELECOM OPERATORS (GRP637)	TELECOM OPERATORS (GRP637)	TELECOM OPERATORS (GRP637)	TELECOM OPERATORS (GRP637)	TELECOM OPERATIONS OJT PERSONNEL (GRP760)	TELECOM OPERATIONS OJT PERSONNEL (GRP760)	STREAMLINER OPERATORS (GRP699)	STREAMLINER OPERATORS (GRP699)	MESSAGE PREPARATION PERSONNEL (GRP510)	MESSAGE PREPARATION PERSONNEL (GRP510)	
NUMBER MEMBERS IN GROUP	1,207	869	10	16	43	12	16	43	12	16	16	
EXPERIENCE												
AVERAGE GRADE DUTY AFSC (PERCENT)												
29130	E-4	E-4	E-3, E-4	E-5, E-6	E-4	E-4	E-4	E-4	E-4	E-4	E-4	
29150	22	10	10	0	23	8	0	23	8	37	37	
29170	69	72	70	75	73	75	75	73	75	25	25	
29190	8	16	20	19	5	9	19	5	9	0	0	
29530	0	0	0	0	0	0	0	0	0	0	0	
29570	1	0	0	0	0	0	0	0	0	0	0	
29590	0	0	0	0	0	0	0	0	0	0	0	
MONTHS IN PRESENT JOB	20	20	14	21	16	21	21	16	21	18	18	
MONTHS IN CAREER FIELD	50	50	73	98	43	98	98	43	53	30	30	
MONTHS TAFTS	58	58	80	116	47	116	116	47	59	63	63	
PERCENT IN FIRST ENLISTMENT	63	62	40	13	74	13	13	74	75	63	63	
PERCENT ASSIGNED OVERSEAS	41	38	60	44			44		80	19	19	

JOB CHARACTERISTICS:

AVERAGE NUMBER TASKS PERFORMED:
AVERAGE TASK DIFF PER UNIT TIME SPENT:
JOB DIFFICULTY INDEX:
PERCENT SUPERVISING:
AVERAGE NUMBER SUBORDINATES:
PERCENT WHOSE JOBS REQUIRE ACCESS TO
SPECIALTY COMPARTMENTED INFORMATION:

JOB SATISFACTION (PERCENT RESPONDING)

FIND JOB INTERESTING:
FEEL TAFTS ARE WELL USED:
FEEL TRAINING IS WELL USED:
SATISFIED WITH SENSE OF ACCOMPLISHMENT
GAINED FROM JOB
PLAN TO REENLIST:
PLAN TO RETIRE:

60	66	41	69	75	47	67
4.01	4.02	3.89	4.53	4.17	4.02	4.37
12.3	13.2	9.5	15.2	14.9	10.7	14.0
31	33	20	94	33	25	37
2.7	2.7	2.5	4.9	2.3	2.0	3.7
46	41	50	31	95	58	19
43	44	60	63	47	42	44
60	62	80	87	70	75	44
80	83	70	81	86	83	31
42	42	40	69	47	33	19
51	51	60	75	44	50	50
2	2	10	6	0	8	6

TABLE B2

BACKGROUND INFORMATION ON JOB TYPES WITHIN THE AUTOMATIC DIGITAL OPERATIONS CLUSTER

	JOB GROUPS WITHIN AUTOMATIC DIGITAL OPERATIONS CLUSTER							
	AUTOMATIC DIGITAL OPERATIONS CLUSTER (GRP255)	OPERATOR MAINTENANCE PERSONNEL (GRP566)	FIRST-LINE AUTOMATIC DIGITAL OPERATIONS SUPERVISORS (GRP893)			MCATS OPERATORS (GRP625)		
			AMPE OPERATORS (GRP1065)	USET-8 OPERATORS (GRP849)	ICATS OPERATORS (GRP775)			
NUMBER MEMBERS IN GROUP:	121	11	21	11	16	19	15	
EXPERIENCE:								
AVERAGE GRADE:								
DUTY AFSC: (PERCENT)								
29130	1	0	0	0	6	0	0	
29150	21	9	48	0	37	11	0	
29170	7	0	24	0	0	0	0	
29190	0	0	0	0	0	0	0	
29530	45	27	19	55	44	68	67	
29570	26	64	9	45	13	21	33	
29590	0	0	0	0	0	0	0	
MONTHS IN PRESENT JOB:								
MONTHS IN CAREER FIELD:								
MONTHS TAPPS:								
PERCENT IN FIRST ENLISTMENT:								
PERCENT ASSIGNED OVERSEAS:								
JOB CHARACTERISTICS:								
AVERAGE NUMBER TASKS PERFORMED:								
AVERAGE TASK DIFF PER UNIT TIME SPENT:								
JOB DIFFICULTY INDEX:								
PERCENT SUPERVISING:								
AVERAGE NUMBER SUBORDINATES:								
PERCENT WHOSE JOBS REQUIRE ACCESS TO SPECIALLY COMPARTMENTED INFORMATION:								
JOB SATISFACTION: (PERCENT RESPONDING)								
FIND JOB INTERESTING:								
FEEL TALENTS ARE WELL USED:								
FEEL TRAINING IS WELL USED:								
SATISFIED WITH SENSE OF ACCOMPLISHMENT								
GAINED FROM JOB:								
PLAN TO REEPLIST:								
PLAN TO RETIRE:								

TABLE B3

BACKGROUND INFORMATION ON THE COMMUNICATIONS CENTER SWITCHBOARDS OPERATORS AND MOBILE COMMUNICATIONS INDEPENDENT JOB TYPES AND ON JCS TYPES WITHIN THE AUTODIN OPERATIONS AND COMMUNICATIONS COMPUTER OPERATIONS CLUSTER

COMMCENTER SWITCHBOARD OPERATORS INDEPENDENT JOB TYPE (GRP294)	MOBILE COMMUNICATIONS INDEPENDENT JOB TYPE (GRP319)	JOB GROUPS WITHIN AUTODIN OPERATIONS CLUSTER				JOB GROUPS WITHIN COMMUNICATIONS COMPUTER OPERATIONS CLUSTER			
		AUTODIN OPERATIONS		OVERSEAS AUTODIN OPERATIONS (GRP499)		COMH COMPUTER OPERATIONS CLUSTER (GRP114)		NORAD 427M/CSS OPERATORS (GRP698)	
		CONUS AUTODIN OPERATIONS CLUSTER (GRP252)	E-5	CONUS AUTODIN OPERATIONS CLUSTER (GRP679)	E-5	CONUS AUTODIN OPERATIONS CLUSTER (GRP114)	E-5	CONUS AUTODIN OPERATIONS CLUSTER (GRP698)	E-5
NUMBER MEMBERS IN GROUP:	10	9	72	44	19	104	12	39	16
<u>EXPERIENCE:</u>									
AVERAGE GRADE:	E-4	E-4	E-5	E-5	E-5	E-5	E-4, E-5	E-5	E-5
DUTY AFSC: (PERCENT)									
29130	30	11	3	4	0	1	0	0	0
29150	60	78	0	0	0	2	0	0	0
29170	10	11	0	0	0	1	0	0	0
29190	0	0	0	0	0	0	0	0	0
29530	0	0	62	64	53	60	50	69	37
29570	0	0	35	32	47	36	50	31	63
29590	0	0	0	0	0	0	0	0	0
MONTHS IN PRESENT JOB:	16	23	19	16	28	17	12	21	17
MONTHS IN CAREER FIELD:	47	63	45	41	66	43	21	44	64
MONTHS TAFTS:	49	76	112	115	126	118	103	122	136
PERCENT IN FIRST ENLISTMENT:	90	33	24	25	5	17	33	8	13
PERCENT ASSIGNED OVERSEAS:	30	22	26	0	100	26	0	56	0
<u>JOB CHARACTERISTICS:</u>									
AVERAGE NUMBER TASKS PERFORMED:	71	60	74	79	71	72	92	63	116
AVERAGE TASK DIFF PER UNIT TIME SPENT:	4.18	4.57	4.34	4.38	4.41	4.49	4.37	4.36	4.66
JOB DIFFICULTY INDEX:	14.3	14.1	15.1	16.0	15.0	15.3	17.4	13.9	21.2
PERCENT SUPERVISING:	30	44	14	11	26	50	17	46	19
AVERAGE NUMBER SUBORDINATES:	2.3	3.0	4.7	4.0	5.4	1.9	6.0	2.2	4.7
PERCENT WHOSE JOBS REQUIRE ACCESS TO SPECIALLY COMPARTMENTED INFORMATION:	50	33	100	100	100	19	17	0	25
<u>JOB SATISFACTION: (PERCENT RESPONDING)</u>									
FIND JOB INTERESTING:	40	33	61	61	63	54	67	39	81
FEEL TALENTS ARE WELL USED:	50	35	76	75	84	64	83	51	94
FEEL TRAINING IS WELL USED:	80	67	82	82	89	61	83	54	87
SATISFIED WITH SENSE OF ACCOMPLISHMENT									
GAINED FROM JOB:	40	33	57	57	58	49	67	39	87
PLAN TO REENLIST:	40	33	68	68	79	65	58	61	63
PLAN TO RETIRE:	10	11	10	7	16	10	8	8	13

TABLE B4

JOB GROUPS WITHIN BASE SWITCHBOARD OPERATIONS CLUSTER		AFSATCOM OPERATORS INDEPENDENT JOB TYPE (GRP617)		BASE SWITCHBOARD OPERATIONS CLUSTER (GRP238)		SWITCHBOARD OPERATORS (GRP612)		VOICE COMMUNICATIONS OPERATORS (GRP745)		TECHNICAL TRAINING INDEPENDENT JOB TYPE (GRP335)	
NUMBER MEMBERS IN GROUP:		16	173	111	36	17					
<u>EXPERIENCE:</u>											
AVERAGE GRADE:											
DUTY AFSC: (PERCENT)											
29130											
29150											
29170											
29190											
29530											
29570											
29590											
MONTHS IN PRESENT JOB:											
MONTHS IN CAREER FIELD:											
MONTHS TAFTS:											
PERCENT IN FIRST ENLISTMENT:											
PERCENT ASSIGNED OVERSEAS:											
<u>JOB CHARACTERISTICS:</u>											
AVERAGE NUMBER TASKS PERFORMED:											
AVERAGE TASK DIFF PER UNIT TIME SPENT:											
JOB DIFFICULTY INDEX:											
PERCENT SUPERVISING:											
AVERAGE NUMBER SUBORDINATES:											
PERCENT WHOSE JOBS REQUIRE ACCESS TO SPECIALLY COMPARTMENTED INFORMATION:											
<u>JOB SATISFACTION: (PERCENT RESPONDING)</u>											
FIND JOB INTERESTING:											
FEEL TALENTS ARE WELL USED:											
FEEL TRAINING IS WELL USED:											
SATISFIED WITH SENSE OF ACCOMPLISHMENT											
GAINED FROM JOB:											
PLAN TO REENLIST:											
PLAN TO RETIRE:											

TABLE B5

BACKGROUND INFORMATION ON JOB TYPES WITHIN THE LIAISON AND PROGRAMMERS CLUSTERS

	JOB GROUPS WITHIN LIAISON CLUSTER				JOB GROUPS WITHIN PROGRAMMERS CLUSTER			
	STAFF		GUARD AND RESERVE		CENTRAL		ON-SITE	
	LIAISON CLUSTER (GRP165)	FUNCTIONAL MANAGERS (GRP562)	LIAISON ADVISORS (GRP374)	TECH CLUSTERS (GRP096)	PROGRAMMING PERSONNEL (GRP683)	PROGRAMMERS	PROGRAMMERS	(GRP591)
NUMBER MEMBERS IN GROUP:	52	15	11	59	32	10		
<u>EXPERIENCE:</u>								
AVERAGE GRADE:								
DUTY AFSC: (PERCENT)								
29130	E-6,E-7	E-7	E-7	E-5,E-6	E-5,E-6	E-6		
29150	0	0	0	0	0	0		
29170	4	7	0	5	3	10		
29190	64	33	91	3	3	0		
29530	11	27	9	0	0	0		
29570	2	0	0	22	28	10		
29590	13	20	0	65	63	80		
MONTHS IN PRESENT JOB:	6	13	0	5	3	0		
MONTHS IN CAREER FIELD:	20	22	24	19	21	19		
MONTHS TAFMS:	180	163	210	79	73	86		
PERCENT IN FIRST ENLISTMENT:	214	211	231	167	156	184		
PERCENT ASSIGNED OVERSEAS:	0	0	0	7	9	10		
	29	40	9	10	13	10		
<u>JOB CHARACTERISTICS:</u>								
AVERAGE NUMBER TASKS PERFORMED:	26	36	28	33	27	59		
AVERAGE TASK DIFF PER UNIT TIME SPENT:	5.75	5.88	5.61	6.27	6.41	5.91		
JOB DIFFICULTY INDEX:	13.1	15.1	13.0	15.9	15.3	18.4		
PERCENT SUPERVISING:	8	7	0	17	6	30		
AVERAGE NUMBER SUBORDINATES:	1.7	1.0						
PERCENT THOSE JOBS REQUIRE ACCESS TO SPECIALLY COMPARTMENTED INFORMATION:	29	33	0	2.3	2.5	1.0		
<u>JOB SATISFACTION: (PERCENT RESPONDING)</u>								
FIND JOB INTERESTING:	83	100	100	91	94	100		
FEEL TALENTS ARE WELL USED:	75	87	100	86	87	90		
FEEL TRAINING IS WELL USED:	73	87	100	83	81	80		
SATISFIED WITH SENSE OF ACCOMPLISHMENT GAINED FROM JOB:	73	93	91	85	87	80		
PLAN TO REENLIST:	42	33	55	63	66	50		
PLAN TO RETIRE:	39	53	36	22	18	20		

TABLE B6

BACKGROUND INFORMATION ON JOB TYPES WITHIN THE SUPERVISION AND ADMINISTRATION CLUSTER

SUPV AND ADMIN CLUSTER (GRP189)	JOB GROUPS WITHIN THE SUPERVISION AND ADMINISTRATION CLUSTER							
	COMM OPERATIONS SUPT (GRP620)	BASE TELECOM NCOICs (GRP733)	TRAINING NCOs (GRP581)	COMM CENTER NCOICs (GRP685)	COMSEC SUPT (GRP742)	FIRST-LINE TELECOM SUPT (GRP764)	TELEPHONE SWITCHBOARD OPERATIONS (GRP727)	TRAFFIC SERVICE SUPT (GRP428)
NUMBER MEMBERS IN GROUP:	20	17	10	101	32	7	24	11
EXPERIENCE:								
AVERAGE GRADE:	E-7,E-8	E-6,E-7	E-6	E-6,E-7	E-6	E-5	E-5,E-6	E-7
DUTY AFSC: (PERCENT)								
29130	0	0	0	1	0	4	0	0
29150	0	6	20	4	28	47	21	0
29170	40	82	40	69	63	47	79	18
29190	60	12	0	17	6	1	0	18
29530	0	0	0	0	0	0	0	0
29570	0	0	40	5	3	0	0	64
29590	0	0	0	4	0	0	0	0
MONTHS IN PRESENT JOB:	16	10	14	14	21	16	17	27
MONTHS IN CAREER FIELD:	236	206	163	186	163	132	135	168
MONTHS TAFTS:	236	208	196	205	174	144	154	237
PERCENT IN FIRST ENLISTMENT:	0	0	0	0	0	10	0	0
PERCENT ASSIGNED OVERSEAS:	30	35	30	43	47	49	33	27
JOB CHARACTERISTICS:								
AVERAGE NUMBER TASKS PERFORMED:	52	61	64	95	92	152	79	65
AVERAGE TASK DIFF PER YR, TIME SPENT:	5.51	5.33	5.32	5.32	5.06	4.84	5.08	5.79
JOB DIFFICULTY INDEX:	16.2	16.8	16.1	21.1	19.8	25.2	18.3	18.7
PERCENT SUPERVISING:	90	94	90	95	87	83	87	91
AVERAGE NUMBER SUBORDINATES:	4.2	13.1	8.9	8.5	3.0	5.0	7.9	6.7
PERCENT WHOSE JOBS REQUIRE ACCESS TO SPECIALLY COMPARTMENTED INFORMATION:	30	29	0	1	47	36	13	45
JOB SATISFACTION: (PERCENT RESPONDING)								
FIND JOB INTERESTING:	85	82	100	76	69	57	83	91
FEEL TALENTS ARE WELL USED:	90	82	80	88	75	75	79	91
FEEL TRAINING IS WELL USED:	80	82	80	83	75	86	63	91
SATISFIED WITH SENSE OF ACCOMPLISHMENT GAINED FROM JOB:	75	71	100	70	72	63	71	91
PLAN TO REENLIST:	35	53	70	51	69	65	63	55
PLAN TO RETIRE:	55	35	30	40	13	17	13	45

TABLE B7

BACKGROUND INFORMATION ON JOB TYPES WITHIN THE TRAFFIC ANALYSIS CLUSTER AND ON THE
CONSEC ACCOUNTANT INDEPENDENT JOB TYPE

JOB GROUPS WITHIN THE TRAFFIC ANALYSIS CLUSTER													
	TRAFFIC ANALYSIS CLUSTER (GRP249)	TRAFFIC HANDLING AND PERSONNEL CLERKS (GRP654)	JUNIOR TELECOM ANALYSIS CLERKS (GRP712)	TRAFFIC ANALYSIS SUPERVISORS (GRP765)	TELECOM ANALYSIS CLERKS (GRP756)	AUTOMATIC DIGITAL TRAFFIC ANALYSIS NCOICs (GRP805)	CONSEC ACCOUNTANT INDEPENDENT JOB TYPE (GRP321)						
NUMBER MEMBERS IN GROUP:								11	11	23	16	12	197
EXPERIENCE:													
AVERAGE GRADE:													
DUTY AFSC: (PERCENT)													
29130	E-5	E-4	E-4,E-5	E-5	E-4,E-5	E-5	E-5	E-5	E-5	E-5	E-5	E-5	E-5
29150	4	9	9	0	13	0	4	0	0	0	0	4	4
29170	55	82	82	61	75	0	64	0	0	0	0	64	64
29190	18	9	0	30	12	0	29	0	0	0	0	29	29
29530	0	0	0	0	0	0	2	0	0	0	0	2	2
29570	8	0	0	4	0	0	0	0	0	0	0	0	0
29590	15	0	9	4	0	50	1	0	50	50	1	1	1
MONTHS IN PRESENT JOB:	0	0	0	0	0	0	0	0	0	0	0	0	0
MONTHS IN CAREER FIELD:	15	14	15	15	12	16	19	16	16	16	19	19	19
MONTHS TAFTMS:	82	62	47	113	79	59	98	59	59	59	98	98	98
PERCENT IN FIRST ENLISTMENT:	108	65	63	133	81	154	105	154	154	154	105	105	105
PERCENT ASSIGNED OVERSEAS:	29	64	45	13	38	8	31	8	8	8	31	31	31
	32	55	36	30	25	0	42	0	0	0	42	42	42
JOB CHARACTERISTICS:													
AVERAGE NUMBER TASKS PERFORMED:													
AVERAGE TASK DIFF PER UNIT TIME SPENT:													
JOB DIFFICULTY INDEX:													
PERCENT SUPERVISING:													
AVERAGE NUMBER SUBORDINATES:													
PERCENT WHOSE JOBS REQUIRE ACCESS TO SPECIALLY COMPARTMENTED INFORMATION:													
JOB SATISFACTION: (PERCENT RESPONDING)													
FIND JOB INTERESTING:													
FEEL TALENTS ARE WELL USED:													
FEEL TRAINING IS WELL USED:													
SATISFIED WITH SENSE OF ACCOMPLISHMENT GAINED FROM JOB:													
PLAN TO REENLIST:													
PLAN TO RETIRE:													