

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

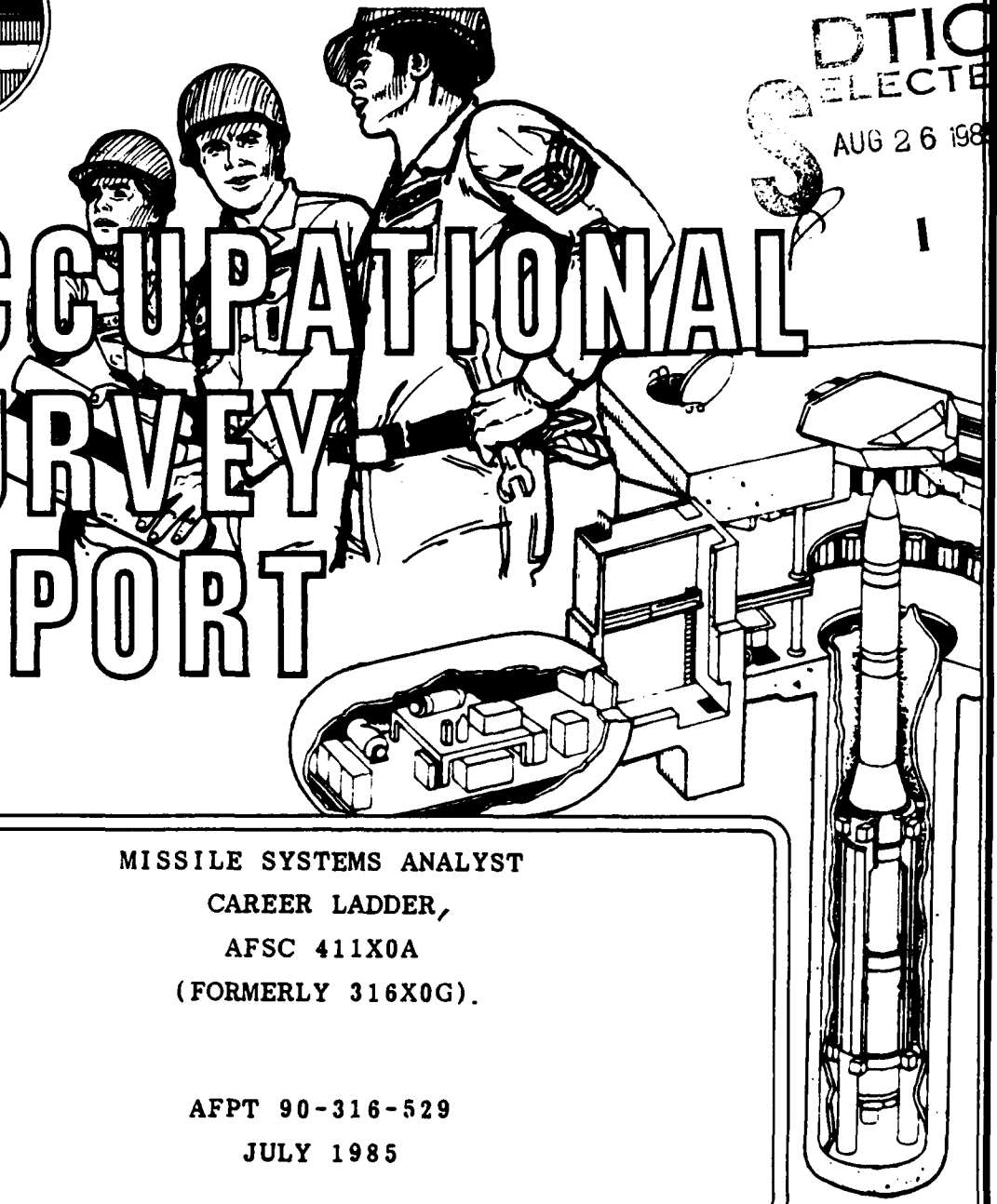
AD-A158 429



UNITED STATES AIR FORCE

DTIC ELECTE
AUG 26 1985

OCCUPATIONAL SURVEY REPORT



MISSILE SYSTEMS ANALYST
CAREER LADDER,
AFSC 411X0A
(FORMERLY 316X0G).

AFPT 90-316-529
JULY 1985

UTR FILE COPY

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

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

85 8 22 043

DISTRIBUTION FOR
AFSC 316X0G OSR AND SUPPORTING DOCUMENTS

	<u>OSR</u>	<u>ANL EXT</u>	<u>TNG EXT</u>	<u>JOB INV</u>
AFHRL/MODS	2	1m	1m	
AFHRL/ID	1	1m	1m/1h	
AFMEA/MEMD	1	1h	1	
AFMPC/MPCMC	2			
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
DEFENSE TECHNICAL INFORMATION CENTER	2			
HQ AFISC/DAP	1			
HQ ATC/TTQL	2		1	
HQ ATC/TTY	2		2	
HQ SAC/DPAT	3		3	
HQ SAC/TTGT	1		1	
HQ USAF/LGYM	1		1	
HQ USAF/MPPT	1		1	
HQ USMC (CODE TPI)	1			
LMDC/AN	1			
NODAC	1			
3330 TCHTW/TTGX (CHANUTE AFB IL)	7	2	10	2
3507 ACS/DPKI	1			
3785 FLDTG/TTFO	2		2	

m = microfiche only
h = hard copy only

Accession For	
NTIS GNA&I	✓
DTIC TAB	
Unannounced	
Justification	
By	
Distribution/	
Availability Codes	
Dist	Special
A-1	



TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE	iii
SUMMARY OF RESULTS	iv
Survey Coverage	iv
Specialty Jobs	iv
Career Ladder Progression	iv
Training Analysis	iv
Implications	iv
INTRODUCTION	1
SURVEY METHODOLOGY	2
Survey Administration	2
Survey Sample	3
Task Factor Administration	5
SPECIALTY JOBS	6
Specialty Overview	6
GROUP DESCRIPTIONS	10
Comparison of Specialty Jobs	22
ANALYSIS OF DAFSC GROUPS	28
COMPARISON OF SURVEY DATA TO AFR 39-1 SPECIALTY DESCRIPTIONS	35
ANALYSIS OF TAFMS GROUPS	36
First-Enlistment Personnel	36
Job Satisfaction	36
TRAINING ANALYSIS	42
Training Emphasis and Task Difficulty Data	42
Specialty Training Standard	43
Plan of Instruction (POI)	44
POI C3ABR31630G-002	44
POI C3ABR31630G-004	45
ELECTRONICS PRINCIPLES INVENTORY	53
COMPARISON TO PREVIOUS SURVEYS	60
SURVEY COMMENTS	63
General Comments	63
Strength and Stamina	63
IMPLICATIONS	64
APPENDIX A - SUMMARY DESCRIPTIONS OF JOB GROUPS	65

PREFACE

This report presents the results of a detailed Air Force occupational survey for the Missile Systems Analyst career ladder (AFSCs 31630G, 31650G, and 31670G). Authority for conducting occupational surveys is contained in AFR 35-2. Computer products used in analysis for this report are available for use by operating and training officials.

The survey instrument was developed by Chief Master Sergeant Donald J. Cochran, Inventory Development Specialist, and computer programming support was furnished by Sergeant Ray Tackett. Second Lieutenant Jarean L. Carson, Occupational Analyst, analyzed the data and wrote the final report. This report has been reviewed and approved by Major Charles D. Gorman, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78150-5000.

Copies of this report are distributed to Air Staff sections, MAJCOMS, and other interested training and management personnel (see DISTRIBUTION on page 1). Additional copies are available upon request to the Chief of the Occupational Analysis Branch (OMY) at the above address.

PAUL T. RINGENBACH, Colonel, USAF
Commander
USAF Occupational Measurement
Center

CHARLES D. GORMAN, Major, USAF
Acting Chief
Occupational Analysis Branch
USAF Occupational Measurement
Center

SUMMARY OF RESULTS

1. Survey Coverage: A total of 805 airmen (91 percent of eligible personnel) in the 316X0G career ladder was surveyed.
2. Specialty Jobs: The Missile Systems Analyst career ladder seems to divide into two major functions, one related to the actual maintenance of missile systems and one related to the supervisory and administrative responsibilities. Maintenance-related jobs are associated with one of the three weapon systems: WS-133A-M, WS-133A-M/CDB, and WS-133B/CDB. Supervisory-administrative functions are associated with such responsibilities as briefing, scheduling, training, and supervising.
3. Career Ladder Progression: Most 5-skill level personnel performed jobs involving maintenance of one of the three weapon systems, while most 7-skill level personnel performed supervisory or administrative jobs.
4. Training Analysis: Several tasks were not included in the Specialty Training Standards (STS) or technical course Plans of Instruction (POI). Task factor ratings and percentages of members performing these tasks should be used to consider which of these tasks, especially general missile maintenance tasks, should be included in the STS and POI.
5. Implications: The number of general missile maintenance tasks not included in the POI suggests a common core of training may be effective. In light of the merger with 316X2G, subject-matter specialists should examine career ladder documents and survey data carefully.

OCCUPATIONAL SURVEY REPORT
MISSILE SYSTEMS ANALYST CAREER LADDER
(AFSC 316XOG)

INTRODUCTION

This occupational survey examines the G shred of the Missile Systems Analyst career ladder, including AFSCs 31630G, 31650G, and 31670G. Because the last occupational survey (published in June 1978) combined 316XOG and 316X2G/H tasks, the current survey was requested by the Training Manager at Chanute Technical Training Center to identify tasks actually being performed by 316XOG personnel. This information will be used to assist in future technical course revisions. In addition, this report will provide information concerning personnel utilization, job structure, and impact on classification.

The Missile Systems Analyst specialty had its beginnings as the Missile Instrumentation specialty (AFSC 314X0) in 1951. The AFSC went through a few changes in title before becoming AFSC 312X4, Ballistic Missile Analyst, in 1961. Finally, in 1966, AFSC 316XOG emerged. In 1976, 326X0H responsibilities (which included responsibility for the WS-133B system) were absorbed into AFSC 316XOG. Currently, AFSC 316XOG applies to 1-, 3-, 5-, and 7-skill level members in grades E-1 through E-7 who work on Minuteman II and Minuteman III missile systems. The major responsibilities of this AFSC, according to AFR 39-1, include monitoring and operating consoles, fault display panels, and checkout equipment; performing malfunction analyses; repairing and servicing missile, missile subsystems, and electronic systems; and operating checkout and test equipment. In addition, 7-skill level responsibilities include coordinating launch site maintenance activities between integrated missile systems and supervising missile systems analyst activities.

Airmen in AFSC 316XOG perform tasks associated with three separate missile weapon systems: WS-133A-M, WS-133A-M/CDB, and WS-133B/CDB. These are control and monitoring systems which are associated with the control of all launch facilities in the squadron. Technical training for the award of AFSC 316XOG is given in two separate basic residence courses, corresponding to specific missile weapon systems, at Chanute Technical Training Center, IL. Course C3ABR31630G-002, which lasts 22 weeks and 4 days, pertains to the WS-133A-M and WS-133A-M/CDB missile weapons systems. It covers operation, inspection, checkout, and periodic maintenance of the WS-133A-M/CDB system, including launch facility, launch control facility, support base and aerospace ground equipment. Course C3ABR31630G-004, which lasts 22 weeks, covers the same principles as they relate to the WS-133B/CDB system.

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

SURVEY METHODOLOGY

USAF Job Inventory AFPT 90-316-529, dated December 1983, was used to collect the data for this survey. A preliminary task list was prepared using the previous inventory and occupational survey report, together with career ladder documents such as AFR 39-1 and the three Specialty Training Standards (one corresponding to each weapon system). The preparation of the current task list also included a complete reworking of the last inventory during a workshop at the Chanute Technical Training Center. Since the last inventory covered tasks for both the 316XOG and 316X2G/H career ladders, those tasks related only to 316XOG airmen had to be extracted and updated. This preliminary task list was refined and validated through personal interviews selected to cover a wide variety of 316XOG functions at the following locations:

- Ellsworth AFB SD - only base maintaining the WS-133A-M weapon system
- Grand Forks AFB ND - one of two bases maintaining the WS-133B/CDB weapon system
- Malmstrom AFB MT - only base that maintains both the WS-133A-M/CDB and WS-133B/CDB weapon systems
- Vandenberg AFB CA - only test facility base for all three weapon systems
- F. E. Warren AFB WY - one of four bases maintaining the WS-133A-M/CDB weapon system

The development process resulted in a final job inventory with 1,028 tasks, which are divided into 13 functional or duty areas. The inventory also contains a background section which addresses such items as grade, TAFMS, missile wing assigned to, and job satisfaction indicators.

Survey Administration

The inventory was distributed to Consolidated Base Personnel Offices in operational units worldwide for distribution to eligible job incumbents selected from a computer-generated mailing list obtained from the Air Force Human Resources Laboratory (AFHRL).

To complete the survey, each respondent first answered background questions, then checked each task he or she performed. Finally, he or she rated each task according to relative time spent performing that task. Ratings ranged from 1 (a very small amount of time spent) to 9 (a very large amount of time spent). As part of the computer analysis, all of an

incumbent's ratings are combined and the total is assumed to represent 100 percent of the time spent on the job; each task rating is then divided by this total and multiplied by 100 to give the relative percent time spent for each task. Using these figures, tasks can be compared in terms of relative percent time spent performing them.

Survey Sample

To ensure an accurate representation across such groups as paygrade and TAFMS groups, survey booklets were mailed to all eligible DAFSC 316XOG personnel (those in training, hospital, or PCS status were excluded). Table 1 reflects the percentage of distribution, by MAJCOM, of personnel assigned to the career ladder as of December 1983 and of respondents in the survey sample. As expected for a missile-related AFSC, nearly all personnel are assigned to SAC. Tables 2 and 3 show sample distribution for paygrade and TAFMS groups. The 805 respondents in the final sample represent 76 percent of the total assigned DAFSC 316XOG personnel, and 91 percent of those eligible. As Tables 1 through 3 reflect, the survey sample provides a very good representation of the career ladder population.

TABLE 1

COMMAND DISTRIBUTION OF SURVEY SAMPLE

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED (N=1,060)</u>	<u>PERCENT OF SAMPLE (N=805)</u>
SAC	94	96
ATC	5	3
OTHER	1	1

Total Assigned: 1,060
 Total Eligible*: 964
 Total in Sample: 805
 Percent of Assigned in Sample: 76%
 Percent of Eligible in Sample: 91%

* Excludes those in training, hospital, or PCS status

TABLE 2
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE**

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
E-1 thru E-3	38	37
E-4	24	23
E-5	22	22
E-6	10	11
E-7	6	6

TABLE 3
TAFMS DISTRIBUTION OF SURVEY SAMPLE**

<u>TAFMS (Months)</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
1-48	64	53
49-96	13	19
97-144	12	12
145-192	7	10
193-240	4	6
241+	*	*

* Less than 1 percent

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

Task Factor Administration

In addition to the job inventory, selected senior personnel in AFSC 316XOG completed a second booklet which provided separately processed information concerning either task difficulty (TD) or training emphasis (TE) ratings. TD refers to the length of time required for the average job incumbent to learn to do the task. TE refers to the importance of structured training for first-enlistment personnel. Structured training is training provided through any organized training method, such as resident technical school, field training detachments, mobile training teams, or formal OJT.

Task Difficulty (TD). Each individual completing a TD booklet rated each task with which they were familiar on a 9-point scale, ranging from 1 (extremely low relative difficulty) to 9 (extremely high relative difficulty). The interrater reliability (as assessed through components of variance of standardized group means) of the TD data provided by 43 senior NCOs was .91, indicating good agreement among raters. TD ratings were adjusted to give a rating of 5.00 for a task of average difficulty, with a standard deviation of 1.00. Data are then used to rank order the inventory tasks in terms of relative difficulty.

Job Difficulty Index (JDI). Task difficulty is also used to compute a JDI for job groups identified in the analysis of the survey, to provide a relative measure of the difficulty of jobs in comparison to each other. The JDI is computed using the number of tasks performed and the average difficulty per unit time spent. Thus a group will have a higher JDI as a result of spending more time on difficult tasks and performing more tasks. After measurements are standardized, the index ranges from 1.0 for a very simple job to 25.0 for a very complex job, with an average of 13.0.

Training Emphasis (TE). TE booklets were completed in a way similar to TD booklets, except tasks were rated according to importance for training for first-enlistment personnel on a 10-point scale, ranging from 0 (no training emphasis) to 9 (extremely heavy training required). This information was collected from 45 senior NCOs in the 316XOG career field. The interrater reliability of these ratings (as assessed through components of variance of standardized group means) was .94, indicating good agreement between raters overall. Raters, however, did not express good agreement on ratings of one group of tasks in particular: those tasks pertaining to maintenance of the WS-133A-M/CDB weapon system. Caution should be used in interpreting TE ratings for these tasks.

SPECIALTY JOBS
(Career Ladder Structure)

An important function of the USAF occupational analysis program is to examine the career ladder structure within a career field. Based on incumbent responses to survey questions, the analysis identifies groups of incumbents spending similar amounts of time performing similar tasks. Similar groups are then clustered together. In this way, analysis of the distinct jobs performed within the career field and of their relationship to each other results in a display of the career ladder structure. This information can be used to understand current utilization of personnel, to identify job satisfaction trends that may impact management decisions, or to examine such career ladder documents as AFR 39-1 Specialty Descriptions, Specialty Training Standards, or basic course Plans of Instruction.

Specialty Overview

The Missile Systems Analyst career ladder seems to divide into two major functions, one related more to actual maintenance of missile systems (representing a little under two-thirds of the sample) and one related more to supervisory and administrative responsibilities (representing about one-third of the sample). Those job groups related to missile systems maintenance perform tasks specifically associated with one of the three weapon systems: WS-133A-M, WS-133A-M/CDB, or WS-133B/CDB. Those job groups within the supervisory-administrative functions do not perform maintenance tasks on any of the three systems (although one group performs training operation and maintenance) but, instead, have such responsibilities as briefing, scheduling, and training. Analysis identified three clusters (groups of related jobs) and three independent job types (groups performing essentially the same job, but too dissimilar from other job types to be included in a cluster) within the missile system maintenance functions. Within the supervisory-administrative functions, analysis identified four clusters and four independent job types. Figure 1 illustrates this division of jobs. As listed below, the group (GRP) number refers to computer-printed information, and the number of personnel in the group is represented by the letter "N":

- I. WS-133A-M CLUSTER (GRP116, N=42)
 - A. Combat Targeting Team (CTT) Personnel (GRP388, N=13)
 - B. Electromechanical Team (EMT) Personnel (GRP236, N=21)

- II. WS-133A-M/CDB CLUSTER (GRP151, N=255)
 - A. Electromechanical Team (EMT) Personnel (GRP246, N=241)
 - B. Technical Engineering Branch (TEB) Personnel (GRP258, N=7)

- III. QUALITY EVALUATION CLUSTER (GRP171, N=30)
 - A. Vandenberg Evaluators (GRP303, N=5)
 - B. Quality Control Evaluators (GRP269, N=18)
- IV. APPRENTICE PERSONNEL (GRP301, N=6)
- V. WS-133B/CDB PERSONNEL (GRP211, N=81)
- VI. OPERATIONAL TEST LAUNCH PERSONNEL (GRP319, N=19)
- VII. TRAINER MAINTENANCE PERSONNEL (GRP244, N=6)
- VIII. SUPERVISORY PERSONNEL CLUSTER (GRP158, N=44)
 - A. Section NCOICs (GRP252, N=12)
 - B. Equipment Monitors (GRP272, N=7)
 - C. Maintenance Data Monitors (GRP232, N=5)
 - D. Maintenance Operations Supervisors (GRP310, N=7)
- IX. FLIGHT CHIEFS (GRP278, N=5)
- X. MAINTENANCE ADMINISTRATORS CLUSTER (GRP047, N=81)
 - A. Weapon Systems Controllers (GRP288, N=8)
 - B. Maintenance Planners (GRP249, N=5)
 - C. Job Controllers and Schedulers Subcluster (GRP144, N=27)
 - D. Briefing Subcluster (GRP183, N=7)
- XI. PARTS RESEARCHERS (GRP256, N=5)
- XII. SUPPLY CLUSTER (GRP068, N=26)
 - A. Supply Monitors (GRP280, N=5)
 - B. Tool Room Assistants (GRP393, N=6)
 - C. Equipment Controllers (GRP176, N=5)
- XIII. RESIDENT COURSE INSTRUCTORS (GRP214, N=9)
- XIV. INSTRUCTOR SUPERVISION CLUSTER (GRP133, N=19)
 - A. Resident Course Instructor Supervisors (GRP263, N=7)
 - B. NCOICs of Training (GRP289, N=6)

Seventy-eight percent of the survey respondents clustered into the above job groups. Of the remaining 22%, most formed groups too small to be identified as a distinct job type in the analysis, and the functions they performed were too dissimilar to be grouped with other job types. Examples of these small jobs are NCOIC of Technical Engineering Team, Career Advisor, and Launch Flight Analyst. Most of these personnel performed a set of tasks

XIII. RESIDENT COURSE INSTRUCTORS (GRP214, N=9). All nine members of this group (1 percent of the sample) are stationed at Chanute TTC, Illinois. They have an average grade of E-5, and 56 percent are in their third or subsequent enlistment. Eighty-nine percent are qualified at the 7-skill level.

Personnel in this group spend about 58 percent of their time performing tasks directly related to training, averaging 47 tasks. The following are representative tasks:

- conduct resident course classroom training
- prepare lesson plans
- write test questions
- demonstrate how to locate technical information
- counsel trainees on training progress

Their job involves training airmen in the 3ABR31630G resident technical training courses.

XIV. INSTRUCTOR SUPERVISION CLUSTER (GRP133, N=19). The 19 members of this cluster (2 percent of the sample) are involved in some type of supervision of training. One job type within this cluster supervises Resident Course Instructors, and one job type supervises other training personnel. (These groups are described in the following paragraphs.) The average grade of personnel in this cluster is E-6, and 68 percent are in their third or subsequent enlistment. Seventy-four percent are qualified at the 7-skill level.

A. Resident Course Instructor Supervisors (GRP263, N=7). All personnel in this group are assigned to Chanute TTC, Illinois. Their job involves supervision of the instructors in the resident courses at Chanute. On the average, they perform about 88 tasks in their job. Representative tasks include the following:

- supervise civilian personnel
- assign resident course instructors
- evaluate instructor performance
- counsel trainers or instructors
- determine resident course training requirements

B. NCOICs of Training (GRP289, N=6). Personnel in this group perform a similar type of job, supervising training in their own sections. They refer to themselves with such titles as Instructor Supervisor and NCOIC of Instructor Training. They average 77 tasks in their job, including the following representative tasks:

XII. SUPPLY CLUSTER (GRP068, N=26). There are 26 members in this group, accounting for 3 percent of the total sample. Most (62 percent) are in their first enlistment, and they have an average grade of E-4. Eighty-nine percent are qualified at the 5-skill level.

On the average, this cluster spends about 62 percent of its total job time performing supply and equipment functions. They perform a fairly limited job, averaging only 23 tasks. Tasks representative of this cluster include:

- issue supplies and equipment
- make entries on AF Forms 1297 (Temporary Issue Receipt)
- inventory equipment, tools, or supplies

The three tasks are common to all three job types within this cluster (Supply Monitors, Tool Room Assistants, and Equipment Controllers). These job types are described in the following paragraphs.

A. Supply Monitors (GRP280, N=5). Personnel in this job type refer to themselves with such titles as Tool Crib Monitor and Consolidated Bench Stock Monitor. An average of 80 percent of their job time is devoted to such supply tasks as maintaining bench stock levels, coordinating with Base Supply or obtaining parts, and completing AF Forms 2005 (Issue/Turn in Request).

B. Tool Room Assistants (GRP393, N=6). This group performs a job even more limited than the average for the cluster. On the average, they perform 11 tasks, with about half their total job time spent on only 4 tasks. In addition to the three tasks listed as common to the entire cluster, they perform only a few others, such as maintain consolidated tool kits and inventory bench stock items. Personnel in this job type tend to have a little less experience than the average for the cluster. Their average grade is between E-3 and E-4, and they average less than 3 years in service.

C. Equipment Controllers (GRP176, N=5). This job type is a little different than the other two in the cluster. Personnel in this group spend less time (42 percent) performing tasks more directly related to supply and equipment functions and more time (31 percent) performing tasks more directly related to general missile maintenance. Examples of tasks which differentiate this group include the following:

- assemble or configure maintenance team vehicles, equipment, or materials
- inspect or operate emergency breathing apparatus
- maintain organizational equipment or supply records
- evaluate serviceability of supplies or equipment

Personnel in this group average about 6½ years TAFMS.

Another group in the overall cluster performs a variation of the Maintenance Planners job. They concentrate more on maintenance scheduling, spending the greatest single portion of their job time developing equipment utilization or maintenance schedules. Personnel performing this variation have more experience than the Maintenance Planners just described, averaging nearly 13 years TAFMS. All members of both groups report they are assigned to a maintenance plans-scheduling work area.

C. Job Controllers and Schedulers Subcluster (GRP144, N=27). This subcluster consists of two job types whose members perform very similar jobs involving job control and scheduling. Although they perform tasks other job groups in the cluster also perform (such as coordinate work with other sections and determine work priorities), they perform tasks related to implementation of scheduled maintenance activities, including the following tasks:

- schedule work assignments and priorities
- assign maintenance functions
- determine personnel requirements
- prepare work orders
- direct utilization of facilities or work areas

Personnel in this job group average over 8 years TAFMS, and most are qualified at the 7-skill level.

D. Briefing Subcluster (GRP183, N=7). Most personnel in this group report they are assigned to a briefing/debriefing section. They perform many administrative tasks similar to those performed by other personnel in the overall cluster, but also spend much of their job time conducting predispatch maintenance briefings and other briefings. Except for these briefing tasks, this subcluster is very similar to the rest of the cluster.

XI. PARTS RESEARCHERS (GRP256, N=5). There are five members in this group (less than 1 percent of the sample), and all refer to themselves as Parts Researchers. Their job is very limited in scope, with an average of only 15 tasks. Nearly half their total job time is spent on only four tasks:

- complete AF Forms 2005 (Issue/Turn in Request)
- locate information in technical, standard, or supply publications
- locate information in SAC Civil Engineering Manuals (CEM)
- research microfiche files for supply requisition data

Personnel in this job group have an average grade of E-4 and they average 6 years in service. All are qualified at the 5-skill level.

X. MAINTENANCE ADMINISTRATORS CLUSTER (GRP047, N=81). There are 81 members in this group, representing about 10 percent of the sample. Group members, on the average, spend most of their total job time performing tasks related to coordination and scheduling of maintenance. As a group, they average only 28 tasks. Their average grade is E-5 and 58 percent are qualified at the 5-skill level. Twenty percent are in their first enlistment; 32 percent are in their second enlistment, and 48 percent are in their third or subsequent enlistment. Different job types and variations within this cluster are described in the following paragraphs.

A. Weapon Systems Controllers (GRP288, N=8). Members of this small job type refer to themselves as Weapon Systems Controllers. They perform a job much more limited in scope than the jobs of other job groups in this cluster. They perform an average of only 14 tasks, and spend nearly 50 percent of their time performing only 5 tasks:

- dispatch maintenance technicians to work areas
- adjust daily maintenance plans to meet operational commitments
- determine work priorities
- coordinate work with other sections
- maintain or make entries in maintenance logs

The difference in the tasks performed by this job type is not the tasks themselves. In fact, all groups in the cluster perform the third and fourth tasks listed above. Rather, the difference in these tasks is the amount of time members of this job type spend on them--they spend nearly 11 percent of their total job time dispatching maintenance technicians to work areas, and 10 percent adjusting daily maintenance plans to meet operational commitments, etc.

Most personnel in this group are in their second enlistment, averaging 6½ years TAFMS (slightly lower than other job groups in the cluster). Most (63 percent) are qualified at the 5-skill level.

B. Maintenance Planners (GRP249, N=5). Members of this job type refer to themselves as maintenance planners and schedulers, and they perform tasks related to coordinating the maintenance activities. They perform an average of 22 tasks, indicating their job is also limited in scope. Only 10 tasks take up nearly 50 percent of their total job time. Some tasks which best differentiate this job type include:

- operate maintenance management information and control systems (MMICS)
- participate in meetings, such as staff meetings, council meetings, briefings, conferences, or workshops
- load paper or ink on printer equipment
- schedule missile maintenance inspections

review maintenance data collection (MDC) forms
supervise Missile Systems Analyst Specialists
(AFSC 31650G)
update or annotate missile historical records
compile data for reports or staff studies
prepare lesson plans
evaluate progress of trainees

Three of the five members of this group report working on the new Expanded Minuteman Data Analysis System (EMDAS).

D. Maintenance Operations Supervisors (GRP310, N=7). Personnel in this job type perform an average of 172 tasks, nearly double the average of other job types in this cluster. Thus, their job is larger in scope, but still involves supervisory and administrative functions, primarily related to supervising maintenance operations in addition to maintenance data. Some tasks which differentiate this group from other job types in the cluster include:

supervise Missile Systems Analyst Technicians
(AFSC 31670G)
review technical orders (TO)
perform failure data analysis for maintenance problems
maintain or make entries in maintenance logs
prepare staff meeting agendas

Personnel in this group are more senior than the average for this cluster, averaging 16 years TAFMS.

IX. FLIGHT CHIEFS (GRP278, N=5). All personnel in this group identified themselves as Flight Chiefs. The five members in this group (less than 1 percent of the sample) perform a supervisory job, averaging only 47 tasks. Examples of tasks include:

conduct predispatch maintenance briefings
supervise Missile Systems Analyst Specialists
(AFSC 31650G)
evaluate compliance with performance standards
perform operator care on maintenance vehicles
dispatch maintenance technicians to work areas

Much of their time is spent on tasks related to supervision and dispatch of teams. Four of the five personnel in this group are qualified at the 7-skill level. Their average grade is E-5, and all but one are in the third or subsequent enlistment.

This group has the highest average time in service (over 13 years). There were several job types within this cluster relating to supervision of maintenance in some way. These job types are described in the following paragraphs.

A. Section NCOICs (GRP252, N=12). This group performs tasks related to supervision of a section. Most identified themselves as Section NCOICs of the Electromechanical Team (EMT) Section, although some identified themselves as NCOICs of some other branch or section. They perform an average of 81 tasks. Some examples of these tasks include:

- supervise Missile Systems Analyst Specialists (AFSC 31650G)
- inspect personnel for compliance with military standards
- coordinate work with other sections
- interpret policies, directives, or procedures for subordinates

A variation of this group was also identified in analysis. This group performed similar tasks, but spent more time performing scheduling tasks, such as establish work schedules. They also performed tasks dealing with Emergency War Order (EWO) procedures.

B. Equipment Monitors (GRP272, N=7). Personnel in this group are also supervisors, but they spend more time performing tasks related to overseeing use of equipment. They spend 25 percent of their time performing supply and equipment functions, and average 89 tasks overall. Examples of tasks they perform include:

- supervise Missile Systems Analyst Specialists (AFSC 32650G)
- establish equipment or tool requirements
- inventory equipment, tools, or supplies
- issue supplies and equipment
- review status of awaiting maintenance (AWM) or parts

Personnel in this job type are among the more experienced of the career ladder, but have slightly less experience than the average for the cluster. Their average grade is between E-5 and E-6, and 29 percent are qualified at the 5-skill level, with 71 percent qualified at the 7-skill level. Their average time in service is a little less than 10 years.

C. Maintenance Data Monitors (GRP232, N=5). All personnel in this group are assigned to a maintenance data branch, and 60 percent carry the W prefix (Automated Functional Applications Analyst) to their AFSC. In addition to their other supervisory functions, they perform a number of tasks related to monitoring maintenance information and to training. They perform an average of 96 tasks. Examples of tasks they perform include the following:

spend 28 percent of their total job time maintaining the WS-133A-M/CDB weapon system, 20 percent maintaining the WS-133A-M, and 17 percent maintaining the WS-133B/CDB. In addition, they perform Minuteman operational test launch functions. Vandenberg AFB is the only test facility base for all three weapon systems; their primary mission is to test and evaluate the Minuteman missile. Personnel in this group average 337 tasks, nearly double that of the next highest group (see Table 4). Some tasks representative of this job are:

- perform launch facility post-launch safing procedures
- perform launch capability tests (LCF)
- perform launch facilities (LF) final enablings
- unload or shutdown Wings 1, 3, 4, or 5 launch control center motor generators
- perform checkouts of Wing 2 LF storage batteries
- perform Wing 1X or 6 aerospace vehicle (AVE) or operational ground equipment (OGE) shutdown procedures

Most personnel in this group (74 percent) are qualified at the 5-skill level; 21 percent are qualified at the 7-skill level. Seventy-four percent are in their second enlistment, 21 percent are in their third or subsequent enlistment, and only 5 percent are in their first enlistment. The average grade is E-5.

VII. TRAINER MAINTENANCE PERSONNEL (GRP244, N=6). This group of six members (less than 1 percent of the sample) specializes in trainer maintenance and operations functions, though they also perform some supply and equipment functions. They perform an average of 107 tasks, including the following representative tasks:

- perform startups or shutdowns of AN/GSQ-T34 CMPT
- troubleshoot AN/GSQ-T34 CMPT
- maintain property custodian authorization/custody receipt listings (CA/CRL)
- issue supplies and equipment
- remove or install components of AN/GSQ-T34 CMPT

Personnel in this group tend to be more experienced; half are in their second enlistment, and half are in their third enlistment. Their average grade is E-5; half are qualified at the 5-skill level and half at the 7-skill level.

VIII. SUPERVISORY PERSONNEL CLUSTER (GRP158, N=44). There are 44 members in this group, representing 6 percent of the sample. This group is supervisory in nature, performing little to no maintenance. Overall, the cluster has an average grade of E-6 and 84 percent are qualified at the 7-skill level.

WS-133A-M/CDB weapon system. These tasks are task performed by other groups as well; however, apprentice personnel perform a much more limited job, concentrating on just a few of the common tasks. Some tasks which are most common to this group's job include:

- enter or exit Wings 1, 3, 4, or 5 launch facilities (LF)
- clean launch facilities
- raise or lower equipment into or from LF
- inspect or install safety devices, such as safety barriers, lanyards, or personnel harnesses
- inspect wings 1, 3, 4 or 5 telescope ladders

Personnel in this group have an average grade of E-4; two are in their first enlistment, one is in his or her second enlistment, and three are in their third enlistment. Although they average over 6 years TAFMS, they are new to the career field, averaging less than 10 months in the career field. Thus, they are more junior in the field and all but two are qualified at the 3-skill level. (As shown in Table 4, this is the highest percentage of 3-skill level personnel among the different job groups.)

V. WS-133B/CDB CLUSTER (GRP211, N=81). There are 81 members in this group, representing about 10 percent of the sample. Nearly all are located at Grand Forks AFB ND or Malmstrom AFB MT. They are highly maintenance-oriented, spending 64 percent of their total job time performing tasks specific to maintenance of the WS-133B/CDB weapon system and another 21 percent of their job time performing general missile maintenance functions. Most of their job is related to on-site maintenance of launch facilities (LF) or launch control facilities (LCF). They average 162 tasks, with 70 tasks taking about half their total job time. Representative tasks include:

- enter or exit Wing 1X or 6 launch facilities (LF)
- remove or install electronic equipment drawers
- perform Wing 1X or 6 aerospace vehicle equipment (AVE) or operational ground equipment (OGE) startup or shutdown procedures
- load Wing 1X or 6 missile computer memories

Ninety-one percent of the personnel in this group are qualified at the 5-skill level, 4 percent are qualified at the 3-skill level, and 5 percent are qualified at the 7-skill level. Their average grade is between E-3 and E-4 and most (90 percent) are in their first enlistment.

VI. OPERATIONAL TEST LAUNCH PERSONNEL (GRP319, N=19). All members of this group (2 percent of the sample) are located at Vandenberg AFB CA. This group is unique in that personnel work on all three weapons systems. They

A. Vandenberg Evaluators (GRP303, N=5). Personnel in this group spend 79 percent of their total job time performing supervisory and administrative tasks; most of these involve inspection and evaluation. Only about 12 percent of their total job time is spent on tasks more specifically related to maintenance of the WS-133A-M, WS-133A-M/CDB, or WS-133B/CDB weapon systems. They average 103 tasks, with 45 accounting for half their job time. Tasks which differentiate this group include:

- perform system design reviews
- perform technical reviews
- participate in technical order verification conferences
- evaluate engineering change proposals
- evaluate inspection reports or procedures

Personnel in this job type are more senior than the Quality Control Evaluators. All personnel in this group are qualified at the 7-skill level. They have an average grade of E-6 and all are in their third or subsequent enlistment, averaging 12 years TAFMS.

B. Quality Control Evaluators (GRP269, N=18). Compared to Vandenberg Evaluators, personnel in this group spend more of their total job time (28 percent) performing tasks more directly related to maintenance of the WS-133A-M/CDB weapon system. About 50 percent of their total job time is spent performing supervisory and administrative tasks, primarily related to quality control evaluation. Thus, their role of quality evaluation is more directly related to maintenance quality control. They perform an average of 207 tasks (over 100 more than Vandenberg Evaluators), with about 77 tasks accounting for half their total job time. Representative tasks include:

- perform quality control inspections
- implement quality control programs
- raise or lower equipment into or from launch facility (LF)
- remove or install minor hardware
- remove or install lights

In this job type, most personnel (61 percent) are qualified at the 5-skill level, with the remaining 39 percent qualified at the 7-skill level. Their average grade is between E-4 and E-5. Most (61 percent) are in their second enlistment; 22 percent are in their first enlistment, and 17 percent are in their third or subsequent enlistment.

IV. APPRENTICE PERSONNEL (GRP301, N=6). The 6 members in this group (less than 1 percent of the sample) average only 41 tasks, with 14 tasks accounting for half their total job time. On the average, 45 percent of their time is spent performing some kind of general missile maintenance functions and 41 percent is spent performing tasks more directly related to the

B. Technical Engineering Branch (TEB) Personnel (GRP258, N=7). Personnel in this group are more senior than personnel in the EMT job type. All are qualified at the 7-skill level, and all but one are in their third or subsequent enlistment, with an average grade of E-6. As more technically experienced personnel, they spend less time on maintenance tasks and perform more supervisory and administrative tasks; however, their job is still maintenance-oriented and they spend 40 percent of their job time performing tasks specific to maintenance of the WS-133A-M/CDB weapon system and 16 percent of their job time performing general missile maintenance functions. Most tasks relate to troubleshooting and resolving system malfunctions. Representative tasks include the following:

- read or interpret writing or schematic diagrams
- perform checkouts of Wings 1, 3, 4, or 5 launch facility (LF) motor generators
- coordinate work with other sections
- perform minuteman entry control system (MECS) procedures for FL/LCF dispatch and entry
- perform technical engineering branch (TEB) test equipment evaluation of maintenance problems

TEB personnel perform an average of 176 tasks, and 73 tasks account for half their total job time.

As mentioned above, TEB personnel are more senior and spend a little more time than others in the WS-133A-M/CDB cluster performing administrative and supervisory tasks. A small group of TEB supervisors who perform tasks which are nearly all supervisory or administrative in nature was also identified in the sample. This group was formed by three TEB personnel who identified themselves as NCOICs of the Technical Engineering Branch. This group was too small to be identified as a separate job group in the analysis.

III. QUALITY EVALUATION CLUSTER (GRP171, N=30). This cluster contains 30 people, accounting for 4 percent of the sample. As a group, they spend the largest portion of their job time inspecting and evaluating. One job type within this cluster is comprised of members from Vandenberg AFB CA; the other job type is comprised of Quality Control Evaluators from F. E. Warren, Minot, Whiteman, and Malmstrom Air Force Bases. Also included in this cluster is a small group from Ellsworth AFB SD who are quality evaluators for maintenance and combat targeting teams. This group was too small to be identified as a separate job type in the analysis.

Personnel in this cluster have an average grade of E-5, with 57 percent qualified at the 5-skill level and 43 percent who are qualified at the 7-skill level. Only 30 percent of the personnel in this cluster are in their first enlistment; 43 percent are in their second enlistment, and 27 percent are in their third or subsequent enlistment.

- isolate Wing 2 launch facility (LF) faults
- troubleshoot Wing 2 LF power supply groups
- perform checkouts of Wing 2 LF power supply groups
- perform checkouts of Wing 2 LF motor generators
- perform checkouts of Wing 2 LF storage batteries

Over 90 percent of the personnel in this group are qualified at the 5-skill level, and those remaining are qualified at the 7-skill level. Seventy-six percent are in their first enlistment.

II. WS-133A-M/CDB CLUSTER (GRP151, N=255). This cluster is the largest, containing 255 members, nearly a third (32 percent) of the entire sample. Personnel in this group maintain the WS-133A-M/CDB weapon system, and are located at Minot AFB ND, Whiteman AFB MO, F. E. Warren AFB WY, or Malmstrom AFB MT. Similar to the WS-133A-M Cluster, the average grade of personnel in this cluster is between E-3 and E-4, and 89 percent are qualified at the 5-skill level; 84 percent are in their first enlistment, with another 10 percent in their second enlistment. This cluster is also maintenance-oriented. Personnel spend about 65 percent of their total job time performing tasks specific to maintaining WS-133A-M/CDB weapon systems. They spend 20 percent of their total job time performing general missile maintenance functions. Two job types identified in this cluster are Electromechanical Team (EMT) Personnel and Technical Engineering Branch Personnel.

A. Electromechanical Team (EMT) Personnel (GRP246, N=241). As with EMT Personnel in the WS-133A-M Cluster, EMT Personnel maintaining the WS-133A-M/CDB weapon system spend 66 percent of their job time performing tasks specific to maintenance of this system and 21 percent performing general missile maintenance. The tasks are related to on-site maintenance. They perform an average of 168 tasks, spending half their total job time on 73 tasks. The following tasks are representative of this job:

- enter or exit Wings 1, 3, 4, or 5 launch facilities
- remove or install electronic equipment drawers
- isolate Wings 1, 3, 4, or 5 launch facility (LF) faults
- perform Wings 1, 3, 4, or 5 missile startups using control monitor (C166B)
- replace Wings 1, 3, 4, or 5 LF motor generators

Most personnel in this job group (92 percent) are qualified at the 5-skill level; 6 percent are qualified at the 3-skill level, and the remaining 2 percent are qualified at the 7-skill level. Eighty-six percent are in their first enlistment, and another 10 percent are in their second enlistment.

Group Descriptions

The following paragraphs briefly describe the clusters and independent job types identified in the analysis. Tables 4 and 5 provide selected background and job satisfaction data for these groups. Selected background and job satisfaction data, together with representative tasks, are listed in Appendix A.

I. WS-133A-M CLUSTER (GRP116, N=42). This cluster contains 42 members, representing about 5 percent of the sample. Personnel in this group maintain the WS-133A-M weapon system, and are located at Ellsworth AFB ND. The average grade of personnel in this cluster is between E-3 and E-4 and 86 percent are qualified at the 5-skill level. About 81 percent are in their first enlistment, with another 10 percent in their second enlistment. This group is maintenance-oriented; personnel in this cluster spend about three-quarters of their total job time performing tasks related to missile maintenance (50 percent of their job time is spent maintaining the WS-133A-M missile system, and 26 percent is spent performing general missile maintenance functions). Within this cluster, analysis identified two job types: Combat Targeting Team Personnel and Electromechanical Team Personnel.

A. Combat Targeting Team Personnel (GRP388, N=13). Personnel in this group spend an average of 41 percent of their total job time performing tasks related to maintenance of WS-133A-M weapon systems. They are responsible for targeting and aligning missiles and for providing support to the Defense Mapping Agency Geodetic Survey Unit's task of laying sets verification facilities. They average 75 tasks, with half their job time spent on 29 tasks. Some tasks which best differentiate this group include the following:

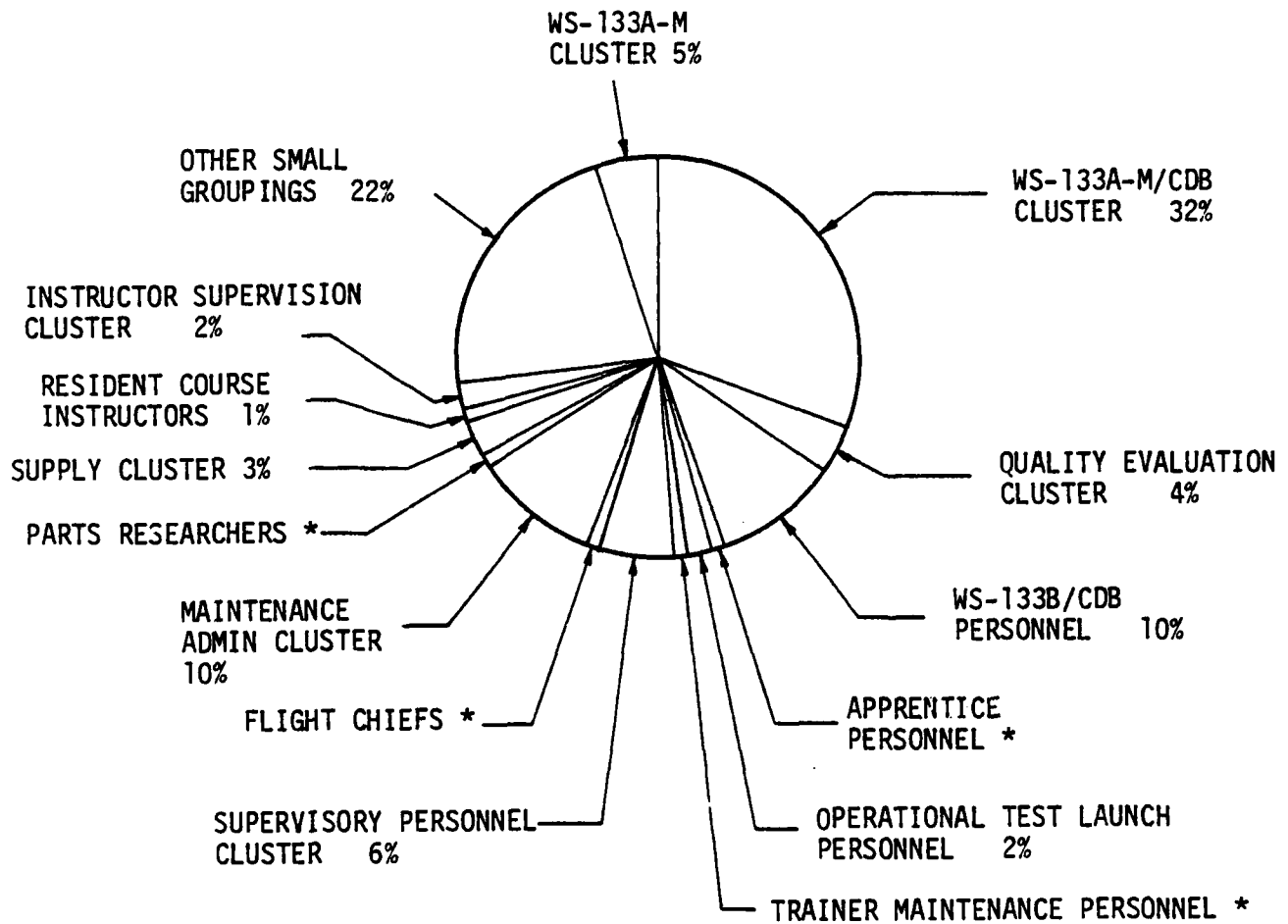
- align Wing 2 collimators
- load Wing 2 missile computer memories
- downgrade Wing 2 missile computer memory information
- check Wing 2 collimator azimuths
- determine Wing 2 missile centerline offsets

About 23 percent of the personnel in this job group are qualified at the 3-skill level, and 77 percent are qualified at the 5-skill level. Nearly all (92 percent) are in their first enlistment; the remaining 8 percent are in their second enlistment.

B. Electromechanical Team (EMT) Personnel (GRP236, N=21). Personnel in this group spend a greater percentage of their total job time (65 percent) performing tasks specific to maintenance of WS-133A-M weapon systems. They average 142 tasks, spending half their total job time on 67 tasks. These tasks are related to "on-site" maintenance of launch facilities and launch control facilities, as shown by the following representative tasks:

FIGURE 1

316X0G CAREER LADDER DISTRIBUTION
(PERCENT MEMBERS PERFORMING)



* Less than 1 percent

related in some way to supervision or administration. The many different small groups and the fact that nearly two-thirds of the various job groups are comprised of supervisory-administrative personnel, who represent one-third of the sample, indicate that this career field has a wide variety of supervisory functions and responsibilities.

evaluate effectiveness of training programs
direct or implement training programs, other than OJT
develop training aids
advise unit staff personnel on training matters
participate in training conferences

All personnel in this job type are qualified at the 7-skill level.

Comparison of Specialty Jobs

In addition to individual descriptions of each job, a comparison of some differences and similarities in the groups helps promote a better understanding of the career ladder structure. Two primary areas of comparison are background characteristics--particularly job difficulty--and job satisfaction indicators.

Job Difficulty. As mentioned before, there seemed to be two types of jobs in this career field: those related more to actual maintenance of missile systems and those related more to supervisory and administrative functions. The Job Difficulty Index (JDI), which is based on the number of tasks performed and the relative difficulty per unit time spent (see Task Factor Administration Section), can be used to compare the difficulty of the different job groups. In general, jobs with maintenance-related functions tended to have a higher JDI, probably due to a greater average number of tasks performed in these jobs than in most of the supervisory-administrative-related job groups (see Table 4 for a complete comparison). Operational Test Launch Personnel have the highest JDI at 22.1, very near the standardized limit of 25.0. This high JDI is probably related to the high number of tasks these members perform; they average 337 tasks, nearly double that of the next highest group. The job with the lowest JDI is the Supply Cluster, with a JDI of only 3.8. This low JDI is due to both the low number of tasks performed (an average of 23), as well as the nature of the job--the tasks they perform tend to be less difficult.

The difficulty of the job did not necessarily seem related to the level of experience. For example, the three clusters relating to maintenance of specific weapon systems (WS-133A-M, WS-133A-M/CDB, or WS-133B/CDB) had JDIs close to average or above average (12.6, 16.8, and 16.8, respectively), and 85 percent or more of their personnel were qualified at the 5-skill level. On the other hand, the Supervisory Personnel Cluster, the Flight Chiefs, and the Resident Course Instructors had JDIs close to average or below average (13.2, 8.8, and 10.9, respectively), but 80 percent or more of their personnel were qualified at the 7-skill level. In general, the supervisory-administrative-related jobs tended to have personnel with more experience, but they tended to perform fewer tasks in their total job. Thus, their jobs were not as difficult as some of the more complex maintenance jobs which involved more tasks.

Job Satisfaction. As part of the Background Section of the survey, job incumbents are asked to respond to several questions, indicating how interesting they find their job, how well their job utilizes their talents and training, how satisfied they are with the sense of accomplishment gained from their work, and if they will reenlist. Answers from these questions may help managers identify problem areas.

In general, as Table 5 shows, most job satisfaction indicators look good, with at least 60 percent of most groups responding positively. There were some exceptions, though, as shown by the circled numbers in Table 5. The most notable area of concern seems to be with personnel in the Supply Cluster. In every category, 50 percent or less responded positively; the consequence can be seen in the low percentage reporting they intend to reenlist. One reason for the low satisfaction may be the limited and simple job they perform (as mentioned previously, the Supply Cluster had the lowest JDI at 3.8).

Other limited jobs also showed fewer responding positively. For example, only 17 percent of the Apprentice Personnel report they are satisfied with the sense of accomplishment they gain from their job. Another area of concern may be the low positive response from Trainer Maintenance Personnel regarding their perceived use of training; only 33 percent report their training is used well.

In summary, analysis of this career ladder structure suggests a great deal of diversity among supervisory-administrative type jobs, with a wide range of difficulty and job satisfaction indicators. The maintenance-type jobs seem to have a much clearer division, relating to one of the three weapon systems. These three clusters are very distinct in terms of tasks performed, but more similar in terms of background characteristics and job satisfaction indicators.

TABLE 4

SELECTED BACKGROUND INFORMATION FOR SPECIALTY JOB GROUPS

	WS-133A-M		WS-133A-M/ CDB		QUALITY EVAL		APPRENT		WS-133B/ CDB		OPERATIONAL TEST		TRAINER MAINT	
	CLUSTER		CLUSTER		CLUSTER		PERS		PERS	PERS		PERS		PERS
NUMBER IN GROUP	42		249		30		6		81		19		6	
PERCENT OF SAMPLE	5%		31%		4%		*		10%		2%		*	
AVERAGE NUMBER OF TASKS	107		166		170		41		162		337		107	
JOB DIFFICULTY INDEX	12.1		16.8		17.1		5.8		16.8		22.1		9.6	

MAJCOM (Percent):

SAC	100%	99%	100%	100%	100%	99%	100%	100%	99%	100%	100%	100%	100%
ATC	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	*	*	0	0	0	0	0	1%	0	0	0	0

DAFSC (Percent):

40002 31630G	9%	6%	0	0	67%	4%	5%	0
40052 31650G	86%	89%	57%	91%	33%	91%	74%	50%
40072 31670G	5%	5%	43%	5%	0	5%	21%	50%

AVERAGE GRADE

	E-4	E-4	E-5	E-4	E-3	E-5
AVERAGE TICF (Months)	32	32	70	10	35	73
AVERAGE TAFMS (Months)	45	40	78	77	41	81
PERCENT FIRST ENLISTMENT	81%	84%	30%	33%	90%	5%

TABLE 4 (Continued)

SELECTED BACKGROUND INFORMATION FOR SPECIALTY JOB GROUPS

	SUPERVISORY PERSONNEL CLUSTER	FLIGHT CHIEFS	MAINT ADMIN		PARTS RESEARCHERS	SUPPLY CLUSTER	RESIDENT COURSE INSTRUCTORS	INSTRUCTOR SUPERVISION CLUSTER
			CLUSTER	CLUSTER				
NUMBER IN GROUP	44	5	81	5	26	9	19	
PERCENT OF SAMPLE	6%	*	10%	*	3%	1%	2%	
AVERAGE NUMBER OF TASKS	98	47	28	15	23	47	87	
JOB DIFFICULTY INDEX	13.2	8.8	7.9	6.3	3.8	10.9	13.5	

MAJCOM (Percent):

SAC	100%	100%	100%	100%	100%	0	53%
ATC	0	0	0	0	0	100%	47%
OTHER	0	0	0	0	0	0	0

DAFSC (Percent):

42002 31630G	2%	0	3%	0	0	0	0
42052 31650G	14%	20%	58%	100%	89%	11%	26%
42072 31670G	84%	80%	38%	0	11%	89%	74%

AVERAGE GRADE

	E-6	E-5	E-4	E-5	E-4	E-5	E-6
AVERAGE TICF (Months)	127	112	87	71	44	101	112
AVERAGE TAFMS (Months)	160	116	98	72	60	116	134
PERCENT FIRST ENLISTMENT	0	0	20%	20%	62%	11%	11%

TABLE 5

JOB SATISFACTION INDICATORS BY SPECIALTY JOB GROUP
(Percent Members Responding)

	WS-133A-M		WS-133A-M/ CDB		QUALITY EVAL CLUSTER	APPRENT		WS-133B/ CDB		OPERATIONAL		TRAINER	
	CLUSTER	CLUSTER	CLUSTER	CLUSTER		PERS	PERS	PERS	PERS	TEST LAUNCH	PERS	MAINT PERS	
<u>EXPRESSED JOB INTEREST</u>													
DULL	14	8	0	17	15	11	33						
SO-SO	36	19	10	33	27	26	0						
INTERESTING	50	73	90	50	57	63	67						
<u>PERCEIVED USE OF TALENTS</u>													
LITTLE OR NOT AT ALL	31	25	7	17	28	21	33						
FAIRLY WELL TO PERFECTLY	69	75	93	83	72	79	67						
<u>PERCEIVED USE OF TRAINING</u>													
LITTLE OR NOT AT ALL	24	9	7	0	15	10	67						
FAIRLY WELL TO PERFECTLY	76	90	93	100	85	90	33						
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>													
DISSATISFIED	19	14	3	66	19	10	33						
NEUTRAL	24	13	13	17	19	32	17						
SATISFIED	57	73	83	17	62	58	50						
<u>REENLISTMENT INTENTIONS</u>													
WILL RETIRE	5	1	3	0	3	0	0						
WILL NOT/PROBABLY WILL NOT REENLIST	38	41	27	33	27	47	17						
WILL/PROBABLY WILL REENLIST	57	57	70	67	70	53	83						

TABLE 5 (Continued)

JOB SATISFACTION INDICATORS BY SPECIALTY JOB GROUP
(Percent Members Responding)

	SUPERVISORY PERSONNEL CLUSTER	FLIGHT CHIEFS	MAINT ADMIN CLUSTER	PARTS RESEARCHERS	SUPPLY CLUSTER	RESIDENT COURSE INSTRUCTORS	INSTRUCTOR SUPERVISION CLUSTER
<u>EXPRESSED JOB INTEREST</u>							
DULL	7	20	9	0	19	11	11
SO-SO	11	0	18	20	31	0	0
INTERESTING	82	80	73	80	50	89	89
<u>PERCEIVED USE OF TALENTS</u>							
LITTLE OR NOT AT ALL	16	20	17	20	54	11	16
FAIRLY WELL TO PERFECTLY	82	80	83	80	46	89	84
<u>PERCEIVED USE OF TRAINING</u>							
LITTLE OR NOT AT ALL	34	40	38	20	50	11	47
FAIRLY WELL TO PERFECTLY	66	60	62	80	50	89	53
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>							
DISSATISFIED	14	20	20	40	35	11	16
NEUTRAL	7	0	2	0	27	0	5
SATISFIED	79	60	78	60	38	89	79
<u>REENLISTMENT INTENTIONS</u>							
WILL RETIRE	18	0	4	0	0	0	5
WILL NOT/PROBABLY WILL NOT REENLIST	11	0	22	60	58	22	16
WILL/PROBABLY WILL REENLIST	68	100	74	40	42	78	74

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, together with the analysis of the career ladder structure, is also helpful in understanding the Missile Systems Analyst Specialist. The DAFSC analysis compares the skill levels, highlighting differences in the tasks performed at the various skill levels. This information is also useful in evaluating how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the Specialty Training Standards (STS), reflect what career ladder personnel are actually doing in the field.

Because a comparison of duties and tasks performed between 3- and 5-skill level (31630G and 31650G) personnel indicates the jobs they perform are essentially the same, they are discussed as one group in this report. (Three-skill levels are assigned on OJT to the 5-skill level and, thus, must perform the same tasks as part of their upgrade training.) For the distribution of skill-level groups across the career ladder jobs, see Table 6. The relative percent time spent on each duty across the skill level groups is presented in Table 7.

DAFSC 31630G/50G: There are 585 airmen in the sample (73 percent) qualified at a 3- or 5-skill level. As Table 6 shows, most perform maintenance on one of the three weapons systems, with the largest portion in the WS-133A-M/CDB cluster. The division of the career ladder structure into diverse job groups is reflected in Table 8, which lists all tasks performed by 50 percent or more 3- and 5-skill level personnel. Most of these tasks are general ones, such as raising or lowering equipment into or from the launch facility or removing or installing electronic equipment drawers. Note that, as Table 7 shows, most jobs for 3- and 5-skill level personnel involve spending the greatest portion of their total job time performing maintenance tasks.

Examining 3- and 5-skill level personnel by weapon systems showed no substantial differences in the tasks performed, except in those tasks which relate to a specific weapon system. As would be expected, 3- and 5-skill level personnel working on WS-133A-M perform tasks in Duty J, Maintaining WS-133A-M (Wing 2) Weapon Systems; 3- and 5-skill level personnel working on the WS-133A-M/CDB perform tasks in Duty K, Maintaining WS-133A-M/CDB (Wings 1, 3, 4, 5,) Weapon Systems; and 3-/5-skill level personnel working on the WS-133B/CDB perform tasks in Duty L, Maintaining WS-133B/CDB (Wings 1X, 6) Weapon Systems.

DAFSC 31670G: The transition from the 5-skill level to the 7-skill level is clearly marked by an increase in administrative, supervisory, and training responsibilities. As Table 7 shows, 7-skill level personnel spend an increased amount of time performing tasks within supervisory and administrative duties, and a decreased amount of time on tasks within maintenance duties. There is a great deal of variety in the types of jobs performed by 7-skill level personnel, as previously mentioned in the discussion of several of these supervisory job groups in the SPECIALTY JOBS section. Table 9, which lists all tasks performed by more than 40 percent of 7-skill level personnel, again reveals the variety in job groups. These tasks are general supervisory-type tasks which anyone in a supervisory level job might be expected to perform. There are no substantial differences between weapon systems at the 7-skill level, in terms of tasks performed.

Comparison of 31630G/50G to 31670G Personnel. As Tables 6-9 show, the jobs performed by 3- and 5-skill level personnel are much different than those performed by 7-skill level personnel, in terms of both the type of tasks performed and the relative amount of time spent on those tasks. The nature of the jobs performed by 3- and 5-skill level personnel tends to be more directly maintenance-related, although (as Table 6 shows) a small number of 5-skill level personnel work in supervisory-related jobs. On the other hand, most 7-skill level personnel work mainly in supervisory, administrative, and training jobs. To show more clearly some of the differences, Table 10 lists representative task differences between 31630G/50G and 31670G personnel.

TABLE 6

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS
CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES

JOB GROUP	DAFSC 31630G/50G		DAFSC 31670G	
	(NUMBER)	(PERCENT)	(NUMBER)	(PERCENT)
I. WS-133A-M CLUSTER (N=42)	40	8%	2	1%
II. WS-133A-M/CDB CLUSTER (N=255)	242	49%	13	10%
III. QUALITY EVALUATION CLUSTER (N=30)	17	3%	13	10%
IV. APPRENTICE PERSONNEL (N=6)	6	1%	0	0
V. WS-133B/CDB PERSONNEL (N=81)	77	16%	4	3%
VI. OPERATIONAL TEST LAUNCH PERSONNEL (N=19)	15	3%	4	3%
VII. TRAINER MAINTENANCE PERSONNEL (N=6)	3	*	3	2%
VIII. SUPERVISORY PERSONNEL CLUSTER (N=44)	7	1%	37	27%
IX. FLIGHT CHIEFS (N=5)	1	*	4	3%
X. MAINTENANCE ADMINISTRATOR CLUSTER (N=81)	49	10%	31	23%
XI. PARTS RESEARCHERS (N=5)	5	1%	0	0
XII. SUPPLY CLUSTER (N=26)	23	5%	3	2%
XIII. RESIDENT COURSE INSTRUCTORS (N=9)	1	*	8	6%
XIV. INSTRUCTOR SUPERVISION CLUSTER (N=19)	5	1%	14	10%
	491	100%	136	100%

* Less than 1 percent

TABLE 7

RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS

DUTIES	DAFSC 31630G/50G (N=585)	DAFSC 31670G (N=219)
A. ORGANIZING AND PLANNING	6	16
B. DIRECTING AND IMPLEMENTING	5	15
C. EVALUATING AND INSPECTING	4	14
D. TRAINING	4	14
E. PERFORMING ADMINISTRATIVE FUNCTIONS	10	15
F. PERFORMING SUPPLY AND EQUIPMENT FUNCTIONS	7	8
G. PERFORMING GENERAL MISSILE MAINTENANCE FUNCTIONS	17	6
H. PERFORMING TRAINER OPERATIONS FUNCTIONS	1	*
I. PERFORMING TRAINER MAINTENANCE	1	1
J. MAINTENANCE WS-133A-M (WING 2) WEAPON SYSTEMS	5	2
K. MAINTAINING WS-133A-M/CDB (WING 1, 3, 4, 5) WEAPON SYSTEMS	30	5
L. MAINTAINING WS-133B/CDB (WING 1X, 6) WEAPON SYSTEMS	10	2
M. PERFORMING MINUTEMAN OPERATIONAL TEST LAUNCH FUNCTIONS	*	1

* Less than 1 percent

TABLE 8

ALL TASKS PERFORMED BY 50 PERCENT OR MORE OF 31630G/50G PERSONNEL

TASKS	PERCENT PERFORMING
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	68
G364 REMOVE OR INSTALL LIGHTS	67
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	66
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	66
G341 INSPECT OR INSTALL SAFETY DEVICES, SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL HARNESES	66
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LF	66
G365 REMOVE OR INSTALL MINOR HARDWARE	65
G362 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS, SUCH AS BULBS, FUSES, OR CIRCUIT BREAKERS	64
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	63
G360 REMOVE OR INSTALL ACCESS COVERS OR PLATES	61
G338 CLEAN LAUNCH FACILITIES (LF)	61
G339 IDENTIFY CORROSION	61
G371 REPORT SECURITY STATUS TO TRANSPORTATION CONTROL CENTERS (TCC) WHILE ENROUTE TO LCF OR LF	60
G354 PERFORM OPERATOR CARE ON MAINTENANCE VEHICLES	59
G340 IDENTIFY OR REPORT SHOP OF WEAPON SYSTEMS SAFETY HAZARDS	56
G361 REMOVE OR INSTALL BONDING MATERIALS, SUCH AS ADHESIVES AND TAPES	56
G344 INSPECT OR OPERATE MAINTENANCE VEHICLE HOISTS	55
G355 PERFORM OPERATOR MAINTENANCE ON SYSTEM (CATEGORY II) TEST EQUIPMENT, SUCH AS LAMP REPLACEMENT	53
G347 LUBRICATE MECHANICAL COMPONENTS	53
G367 REMOVE OR INSTALL PERSONNEL ACCESS HATCH ENVIRONMENTAL COVERS	53
G349 OPERATE PORTABLE HEATERS	52
E239 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	52
G353 PERFORM MINUTEMAN ENTRY CONTROL SYSTEM (MECS) PROCEDURES FOR LF/LCF DISPATCH AND ENTRY	52
G370 REMOVE OR INSTALL WIRES	51
G369 REMOVE OR INSTALL SWITCHES	51

TABLE 9

ALL TASKS PERFORMED BY 40 PERCENT OR MORE OF 31670G PERSONNEL

<u>TASKS</u>	<u>PERCENT PERFORMING</u>
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	78
A3 COORDINATE WITH OTHER SECTIONS	74
C121 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	59
B53 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	57
C139 WRITE APR	55
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	53
D183 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	52
B52 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	50
B80 ORIENT NEWLY ASSIGNED PERSONNEL	48
B86 SUPERVISE MISSILE SYSTEMS ANALYST SPECIALISTS (AFSC 31650G)	47
C120 INSPECT CONDITION OR APPEARANCE OF FACILITIES OR WORK AREAS	46
B49 CONDUCT BRIEFINGS	45
A32 PLAN OR PREPARE BRIEFINGS	45
C135 PROVIDE TECHNICAL ASSISTANCE FOR JOB-RELATED PROBLEMS ENCOUNTERED BY SUBORDINATES	45
E237 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	45
F305 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	44
A7 DETERMINE WORK PRIORITIES	43
A25 ESTABLISH WORK SCHEDULES	43
D184 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	43
E262 REVIEW CORRESPONDENCE	42
A6 DETERMINE SPACE, EQUIPMENT, OR SUPPLY REQUIREMENTS	42
B78 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	41
A5 DETERMINE PERSONNEL REQUIREMENTS	40
B48 COMPILE DATA FOR REPORTS OR STAFF STUDIES	38
G354 PERFORM OPERATOR CARE ON MAINTENANCE VEHICLES	38
E249 MAKE ENTRIES ON SAC FORMS 799 (PRE-DISPATCH NOTIFICATION)	37
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	36
A15 DEVELOP WORK METHODS OR PROCEDURES	36
F276 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	36

TABLE 10

REPRESENTATIVE TASK DIFFERENCES BETWEEN 31630G/31650G
AND 31670G PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 31630G/ 31650G	DAFSC 31670G	DIFFERENCE
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LAUNCH FACILITY (LF)	66	17	+49
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	68	19	+49
G338 CLEAN LAUNCH FACILITIES (LF)	61	13	+48
G371 REPORT SECURITY STATUS TO TRANSPORTATION CONTROL CENTERS (TCC) WHILE ENROUTE TO LCF OR LF	60	15	+44
G364 REMOVE OR INSTALL LIGHTS	66	23	+43
G365 REMOVE OR INSTALL MINOR HARDWARE	65	22	+43
G362 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS, SUCH AS BULBS, FUSES, OR CIRCUIT BREAKERS	64	22	+42
G360 REMOVE OR INSTALL ACCESS COVERS OR PLATES	61	19	+42
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	66	24	+42
G341 INSPECT OR INSTALL SAFETY DEVICES, SUCH AS SAFETY BARRIERS LANYARDS, OR PERSONNEL HARNESSES	66	26	+40
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	63	28	+35
G339 IDENTIFY CORROSION	60	28	+32
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	67	36	+31
.	.	.	.
.	.	.	.
.	.	.	.
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	31	78	-47
A3 COORDINATE WORK WITH OTHER SECTIONS	29	74	-45
C139 WRITE APR	11	55	-44
B53 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	13	57	-44
B52 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	11	50	-39
C121 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	23	59	-36
D183 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	19	52	-33

COMPARISON OF SURVEY DATA TO AFR 39-1 SPECIALTY DESCRIPTIONS

To verify the completeness and accuracy of the 316X0G specialty descriptions, survey data were compared to the April 1983 AFR 39-1 Specialty Descriptions for AFSC 316X0. In general, the descriptions are well supported by survey data and accurately portray the duties and responsibilities of 316X0G Missile Systems Analyst Personnel. The descriptions seem to be complete, except that duties related to performing trainer operations functions and maintenance are not mentioned. These duties, however, are performed by less than 1 percent of the sample.

TABLE 17

TASKS NOT REFERENCED TO POI C3ABR31630G-002 WITH HIGH TE
AND OVER 50 PERCENT PERFORMING

TASKS	TNG EMPH*	PERCENT PERFORMING		TASK DIFF**
		WS-133A-M FIRST ENL	WS-133A-M/CDB FIRST ENL	
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	6.38	72	90	6.24
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	6.24	60	88	4.26
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	6.24	82	89	3.97
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	6.11	85	92	3.50
G344 INSPECT OR OPERATE MAINTENANCE VEHICLE HOISTS	6.02	63	73	4.05
G353 PERFORM MINUTEMAN ENTRY CONTROL SYSTEM (MECS) PROCEDURES FOR LF/LCF DISPATCH AND ENTRY	6.00	52	79	3.92
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LF	5.56	85	90	2.97
G354 PERFORM OPERATOR CARE ON MAINTENANCE VEHICLES	5.47	75	80	3.39
G372 SOLDER ELECTRICAL CONNECTIONS	5.42	50	70	4.26
F276 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	5.07	52	42	4.14
G370 REMOVE OR INSTALL WIRES	4.89	48	71	4.04
G349 OPERATE PORTABLE HEATERS	4.78	53	73	4.10
G369 REMOVE OR INSTALL SWITCHES	4.78	55	71	3.85
G345 INSTALL SOLDERLESS CONNECTIONS	4.69	55	67	3.27
G355 PERFORM OPERATOR MAINTENANCE ON SYSTEM (CATEGORY II) TEST EQUIPMENT, SUCH AS LAMP REPLACEMENT	4.69	58	71	3.35
G368 REMOVE OR INSTALL RADIO FREQUENCY INTERFERENCE SHIELD	4.62	60	58	4.71
G362 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS, SUCH AS BULBS, FUSES, OR CIRCUIT BREAKERS	4.56	83	88	3.33
G371 REPORT SECURITY STATUS TO TRANSPORTATION CONTROL CENTERS (TCC) WHILE ENROUTE TO LCF OR LF	4.44	78	85	2.52
G367 REMOVE OR INSTALL PERSONNEL ACCESS HATCH ENVIRONMENTAL COVERS	4.42	62	74	3.84
E261 REPORT MAINTENANCE VEHICLE DISCREPANCIES	4.33	53	54	3.38
G365 REMOVE OR INSTALL MINOR HARDWARE	4.33	85	88	2.87
G360 REMOVE OR INSTALL ACCESS COVERS OR PLATES	4.16	75	86	2.94

* Average training emphasis is 1.12

** Average task difficulty is 5.00

TABLE 16

EXAMPLES OF TASKS NOT REFERENCED TO ANY 316XOG STS

TASKS	TNG EMP*	PERCENT PERFORMING			TASK DIF**
		1ST ENL	5-LVL	7-LVL	
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	6.38	74	67	36	6.24
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	6.11	76	68	19	3.50
G370 REMOVE OR INSTALL WIRES	4.89	59	52	16	4.04
G369 REMOVE OR INSTALL SWITCHES	4.78	60	52	15	3.85
G345 INSTALL SOLDERLESS CONNECTIONS	4.69	54	48	19	3.27
G368 REMOVE OR INSTALL RADIO FREQUENCY INTERFERENCE SHIELD	4.62	46	40	9	4.71
G335 ASSEMBLE OR CONFIGURE MAINTENANCE TEAM VEHICLES, EQUIPMENT, OR MATERIALS	4.60	40	37	15	4.20
E222 MAKE ENTRIES IN AF FORMS 1492 (DANGER)	4.44	38	38	20	3.25
G371 REPORT SECURITY STATUS TO TRANSPORTATION CONTROL CENTERS (TCC) WHILE ENROUTE TO LCF OR LF	4.44	72	59	16	2.52
G360 REMOVE OR INSTALL ACCESS COVERS OR PLATES	4.16	70	62	19	2.94
G364 REMOVE OR INSTALL LIGHTS	4.16	74	67	23	2.48
G374 WRAP OR UNWRAP SOLDERLESS WIRE CONNECTIONS	3.87	40	36	11	3.28
G347 LUBRICATE MECHANICAL COMPONENTS	3.80	63	54	12	3.27
G366 REMOVE OR INSTALL MOTOR GENERATOR BRUSHES	3.71	33	29	7	5.89
G361 REMOVE OR INSTALL BONDING MATERIALS, SUCH AS ADHESIVES AND TAPES	3.58	64	56	13	3.18
G357 PERFORM SIMULATED ELECTRONIC LAUNCH MINUTEMAN (SELM) TEST FUNCTIONS OR CONFIGURATIONS	3.47	44	40	15	5.49
K758 PERFORM WINGS 1, 3, 4, OR 5 LF ELECTRICAL ISOLATION PROCEDURES	2.80	47	43	10	3.74
K756 PERFORM WINGS 1, 3, 4, OR 5 LAUNCHER EQUIPMENT ROOM (LER) RACK POWER REMOVAL PROCEDURES	2.64	47	43	11	4.22
K710 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 CMPG COMMAND LINE TONES	2.44	45	40	10	5.08
K732 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 PROGRAMMER GROUP COMMAND LINE TONES	2.42	43	39	10	4.82

* Average training emphasis is 1.12

** Average task difficulty is 5.00

TABLE 15

STS-2 ITEMS NOT SUPPORTED BY SURVEY DATA

	TNG EMPH	TASK DIFF	WS-133A-M/CDB PERSONNEL (PERCENT PERFORMING)		
			1ST ENL	5-LVL	7-LVL
25M(1). CHECK OUT VOICE REPORTING SIGNAL SYSTEM ----- 2B/- 3C 4C K709 PERFORM CHECKOUTS OF WING 4 VOICE REPORTING SIGNAL SYSTEMS (VRSS)	.11	4.14	7%	6%	3%
25M(2). REPAIR VOICE REPORTING SIGNAL SYSTEM ----- 2B/- 3C 4C K787 REPAIR WING 4 VRSS	.20	5.25	4%	4%	3%
25M(3). TROUBLESHOOT VOICE REPORTING SIGNAL SYSTEM ----- 2B/- 3C 4C K858 TROUBLESHOOT WING 4 VRSS	.09	4.84	3%	3%	4%
27B. FOLLOW PROCEDURES FOR EMERGENCY INTERROGATION ----- 2B/- 3C 4C OF VRSA K753 PERFORM WING 4 VOICE REPORTING SIGNAL ASSEMBLY (VRSA) EMER- GENY INTERROGATION PROCEDURES	.24	4.73	5%	5%	4%

TABLE 14

STS ITEMS TO BE CONSIDERED FOR 3-LEVEL CODE

		<u>TNG EMPH</u>	<u>1ST ENL (PERCENT PERFORMING)</u>
----- 2C(1)(A). LF/LCF DISPATCH = 3C 4C -----			
2C(1)(B). LF/LCF ENTRY - 3C 4C -----			
G353	PERFORM MINUTEMAN ENTRY CONTROL SYSTEM (MECS) PROCEDURES FOR LF/LCF DISPATCH AND ENTRY	6.00	60%
----- 4D. USE SUPPLY PUBLICATIONS = 2B 3C -----			
F276	COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	5.07	43%

Many of the unreferenced tasks which are high in TE and percent performing are directly related to maintenance of the WS-133A-M/CDB weapon system; these probably should be addressed in resident course training.

One area that may be a concern is training WS-133A-M personnel on the WS-133A-M/CDB weapon system. For example, although the current POI blocks are supported by percentages of WS-133A-M/CDB first-termers, fewer WS-133A-M first-termers are performing tasks matched to these blocks. On the other hand, there are several tasks not referenced to the POI which are performed by high percentages of WS-133A-M first-termers; these relate directly to maintenance of the WS-133A-M system. Training personnel may want to consider if better integration of training on this system would be appropriate for the current course.

POI C3ABR31630G-004. Analysis of POI C3ABR31630G-004 shows that it is well supported by percentages of WS-133B/CDB first-termers performing matched tasks; although TE ratings of those tasks are very low, TD ratings are, in most cases, above average. As with POI -002, there are several unreferenced tasks. Many unreferenced tasks have over 50 percent WS-133B/CDB first-termers performing them (see Table 18). Many of these are general missile maintenance tasks. Again, these may be inherent in other tasks which are matched to POI blocks, but they should be carefully examined to make sure this is the case. The great number of general missile maintenance tasks which are not matched to either POI -002 or POI -004, but which are high in TE and percentage of total first-termers performing them, may be an indication that some common core of training--beyond the common EPI course--may be effective. Other unreferenced relate directly to maintenance of the WS-133B/CDB system. These tasks in particular should be considered for inclusion in the basic course, especially if the TD ratings indicate they are difficult enough to warrant centralized training.

In general, both Plans of Instruction seem to be well written and well supported by survey data. There are, however, a great number of tasks not included in either POI which may be appropriate for resident course training. Subject-matter specialists should carefully examine the computer-generated listings of these tasks to determine if they should, in fact, be included.

they are inherent in other tasks that are matched to specific items in one of the three STS supplements. Others may relate to an area not covered by the STS; these should be considered for possible inclusion. Other unreferenced tasks performed by first-enlistment personnel relate to maintenance of the WS-133A-M/CDB weapon system; these should also be reviewed for possible inclusion.

Tasks within three inventory duties (performing minuteman operational test launch functions, performing trainer operation functions, and performing trainer maintenance) were not matched to any of the three supplements. Most of these have low percentages of personnel performing them, and low task factor ratings, but some have high TD ratings; since the jobs related to these duties are small, but specialized, the high TD ratings may justify their inclusion in the STS. These task should also be reviewed by specialists to determine if they should be included in the STS.

Plan of Instruction (POI)

A similar match of survey data to the two POIs for Courses 3ABR31630G-002 and 3ABR31630G-004 shows these documents are also well supported, but several tasks are not matched to blocks in the POI. Based on previously mentioned assistance from subject-matter specialists in matching inventory tasks to the POI, computer products displaying the results of the matching process were generated. Information contained in these products includes TE and TD ratings, as well as percent members performing tasks for first-enlistment personnel of four groups (total sample, WS-133A-M, WS-133A-M/CDB, and WS-133B/CDB).

Personnel entering this career field attend either the 3ABR31630G-002 course or the 3ABR31630G-004 course. Training in course -002 covers operation, inspection, checkout and periodic maintenance of WS-133A-M/CDB; personnel entering the field in assignments related to either WS-133A-M or WS-133B/CDB weapon systems attend this course. Training in course -004 covers operation, inspection, checkout, and periodic maintenance of WS-133B/CDB; personnel entering the field in assignments related to the WS-133B/CDB weapon system attend this course.

POI C3ABR31630G-002. Analysis shows that POI C3ABR31630G-002 generally is well supported by percentages of WS-133A-M/CDB first-enlistment personnel performing tasks matched to current items and by TE ratings; however, percentages of WS-133A-M first-enlistment personnel are much smaller. Although the current document is well supported, at least for WS-133A-M/CDB personnel, several tasks not matched to any POI blocks may indicate areas that should be added to the course. Several unreferenced tasks are performed by over 30 percent of the WS-133A-M/CDB first-termers, and many are performed by over 50 percent (see Table 17). Many also had high TE ratings, indicating senior NCOs believe they are important for first-enlistment training. These tasks especially should be considered for inclusion in the course. As with the STS, many of the tasks related to general missile maintenance functions may be inherent in some tasks that are included in the POI, but these tasks should be carefully examined by training specialists to make sure this is the case.

Specialty Training Standard (STS)

A review of 316XOG Specialty Training Standard with Supplements 1, 2, and 4 (corresponding to the three different weapon systems), dated August 1983, compared STS sections to survey data. Sections containing general information or knowledge areas were not evaluated. In addition to looking at how well survey data supported STS items, analysis also examined what other areas might need to be included in the STS based on survey findings.

The general portion of the STS (paragraphs 1 through 14), which is common to all three weapon systems, is well supported by survey data; however, three items (subparagraphs 2c(1)(a), 2c(1)(b), and 4d) may need to be reviewed to determine if the 3-level proficiency code is appropriate. Presently, the proficiency code is a dash for the 3-skill level, indicating no training is given in the basic course. Tasks matched to these three items, which deal with launch facility (LF) and launch control facility (LCF) dispatch and entry and with use of supply publications, are performed by over 40 percent of the first-enlistment personnel (see Table 14). Also, these tasks have very high TE ratings, another indication they are important for first-enlistment training. Subject-matter specialists should review these items to determine the appropriate 3-level proficiency code.

The three supplemental Specialty Training Standards were also reviewed. Supplements 1 and 4 (corresponding to the WS-133A-M and the WS-133B/CDB systems) were well supported. Supplement 2 (corresponding to the WS-133A-M/CDB systems) had one area relating to voice reporting signal systems (VRSS) that was not supported by survey data. Tasks matched to subparagraphs 25m(1), 25m(2), 25m(3), and 27b had low percentages of personnel performing them (see Table 15) and low TE ratings. These items should be reviewed to determine if criticality, safety, or some other consideration requires that they remain in the STS.

A second area of analysis involves examining tasks not matched to any items in the STS. Unreferenced tasks with at least 20 percent of a group, such as first-enlistment personnel, performing them are performed to an extent great enough that they should be included in the STS. Those with high TE ratings have been rated by senior NCOs as important for first-enlistment training and, thus, also should be included in the STS. High TD may be an indication that those tasks could be critical or especially important to the career field and therefore, should be considered for inclusion in the STS. In reviewing the computer-generated listing, which has been forwarded to the technical school, specialists should pay special attention to unreferenced tasks with any of the factors just mentioned.

There were 510 tasks not matched to any items in any of the three Specialty Training Standards. Several of these had high percentages of first-enlistment, 5-skill level, and 7-skill level personnel performing them. For example, 41 unmatched tasks were performed by 20 percent or more of the first-enlistment personnel, and 11 of these were performed by over 50 percent of the first-termers. Table 16 gives examples of unreferenced tasks performed by a substantial percentage of personnel. Many of these tasks are related to general missile maintenance functions. Some may not have been matched because

TRAINING ANALYSIS

Information gathered with the occupational survey is also used to assist the development or evaluation of training programs that are relevant for personnel working in their first assignments. Some factors which may be used include percent of first-enlistment personnel performing tasks, and training emphasis and task difficulty ratings (as explained in the Task Factor Administration section). These factors were used in evaluating 316XOG Specialty Training Standards and Plans of Instruction for the basic courses, based on the matching of inventory tasks to appropriate sections of the STS and POI by technical school personnel from the Chanute Technical Training Center. A complete computer listing displaying the percent members performing and TE and TD ratings for each task, along with STS and POI matchings, has been forwarded to the technical school for use in further detailed reviews of training documents. A summary of that information is contained in this section.

Although current plans for the 316XOG career ladder involve combining it with 316X2G to form AFSC 411XOA, this training analysis should assist training personnel in evaluating documents for the new career ladder as well. Similar information for the 316X2G occupational survey may be found in a concurrently published occupational survey report for AFSC 316X2G. Copies of that OSR may be obtained upon request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150-5000.

Training Emphasis and Task Difficulty Data

The objective of collecting TE and TD ratings is to develop rank-ordered listings of tasks in terms of importance for first-term training and in terms of difficulty. These lists of inventory tasks are included in the Analysis Extract, and TE and TD ratings accompany each inventory task displayed in the Training Extract. (For a more detailed explanation of both types of ratings, see Task Factor Administration in the SURVEY METHODOLOGY section.) Tasks performed by moderate to high percentages of personnel may warrant resident technical training. TE and TD ratings (composed of the opinions of experienced career ladder personnel) are secondary factors that may assist training developers in deciding what tasks should be emphasized in entry-level training. Those tasks receiving high task factor ratings but low personnel percentages may be more appropriately planned for OJT programs within the career field. Low task factor ratings may highlight tasks best left out of training for new 316XOG personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the task.

TABLE 13
 JOB SATISFACTION INDICATORS BY TAFMS GROUPS
 (PERCENT MEMBERS RESPONDING)*

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	316XOG (N=424)	COMPARATIVE SAMPLE** (N=7,891)	316XOG (N=150)	COMPARATIVE SAMPLE** (N=3,015)	316XOG (N=227)	COMPARATIVE SAMPLE** (N=3,790)
<u>EXPRESSED JOB INTEREST</u>						
DULL	14	11	9	11	11	9
SO-SO	23	17	20	18	11	15
INTERESTING	62	72	70	70	79	74
<u>PERCEIVED USE OF TALENT</u>						
LITTLE OR NOT AT ALL	28	23	23	23	18	19
FAIRLY WELL TO PERFECTLY	72	77	75	76	82	80
<u>PERCEIVED USE OF TRAINING</u>						
LITTLE OR NOT AT ALL	19	21	31	22	32	21
FAIRLY WELL TO PERFECTLY	81	79	68	77	68	78
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
DISSATISFIED	19	16	17	20	18	20
NEUTRAL	17	13	17	14	7	11
SATISFIED	64	70	66	65	75	68
<u>REENLISTMENT INTENTIONS</u>						
WILL RETIRE	***	***	***	***	14	15
WILL NOT/PROBABLY						
WILL NOT REENLIST	46	40	32	23	8	8
WILL/PROBABLY WILL						
REENLIST	51	59	67	74	74	76

* Columns may not add up to 100 percent due to nonresponse and rounding
 ** Comparative sample of mission equipment maintenance career ladders surveyed in 1984, including AFSs 30XXX, 31XXX, 32XXX, 34XXX, 36XXX, 40XXX, 42XXX, 43XXX, 44XXX, and 46XXX
 *** Less than 1 percent

TABLE 12

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT PERSONNEL
(1-48 MONTHS TAFMS)

TASKS	PERCENT PERFORMING
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	76
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LF	76
G341 INSPECT OR INSTALL SAFETY DEVICES, SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL HARNESSSES	75
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	75
G364 REMOVE OR INSTALL LIGHTS	74
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	74
G365 REMOVE OR INSTALL MINOR HARDWARE	74
G362 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS, SUCH AS BULBS, FUSES, OR CIRCUIT BREAKERS	73
G371 REPORT SECURITY STATUS TO TRANSPORTATION CONTROL CENTERS (TCC) WHILE ENROUTE TO LCF OR LF	71
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	71
G360 REMOVE OR INSTALL ACCESS COVERS OR PLATES	70
G338 CLEAN LAUNCH FACILITIES (LF)	69
G339 IDENTIFY CORROSION	68
G354 PERFORM OPERATOR CARE ON MAINTENANCE VEHICLES	65
G361 REMOVE OR INSTALL BONDING MATERIALS, SUCH AS ADHESIVES AND TAPES	64
G344 INSPECT OR OPERATE MAINTENANCE VEHICLE HOISTS	63
G347 LUBRICATE MECHANICAL COMPONENTS	63
G340 IDENTIFY OR REPORT SHOP OR WEAPON SYSTEMS SAFETY HAZARDS	62
G349 OPERATE PORTABLE HEATERS	62
G367 REMOVE OR INSTALL PERSONNEL ACCESS HATCH ENVIRONMENTAL COVERS	60
G353 PERFORM MINUTEMAN ENTRY CONTROL SYSTEM (MECS) PROCEDURES FOR LF/LCF DISPATCH AND ENTRY	60
G369 REMOVE OR INSTALL SWITCHES	60
G355 PERFORM OPERATOR MAINTENANCE ON SYSTEM (CATEGORY II) TEST EQUIPMENT, SUCH AS LAMP REPLACEMENT	59
G370 REMOVE OR INSTALL WIRES	59
G345 INSTALL SOLDERLESS CONNECTIONS	54
K689 ENTER WINGS 1, 3, 4, OR 5 LAUNCH FACILITIES	53
K690 EXIT WINGS 1, 3, 4, OR 5 LAUNCH FACILITIES	53
K726 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 LF STORAGE BATTERIES	52
K730 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 LF MOTOR GENERATORS	51
K766 PERFORM WINGS 1, 3, 4, OR 5 MISSILE STARTUPS USING CONTROL MONITOR (C166B)	51
G372 SOLDER ELECTRICAL CONNECTIONS	51
K700 ISOLATE WINGS 1, 3, 4, OR 5 LAUNCH FACILITY (LF) FAULTS	51
K836 REPLACE WINGS 1, 3, 4, OR 5 LF MOTOR GENERATORS	51
E239 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	51
K764 PERFORM WINGS 1, 3, 4, OR 5 MISSILE COMPUTER MEMORY LOADINGS	51

TABLE 11

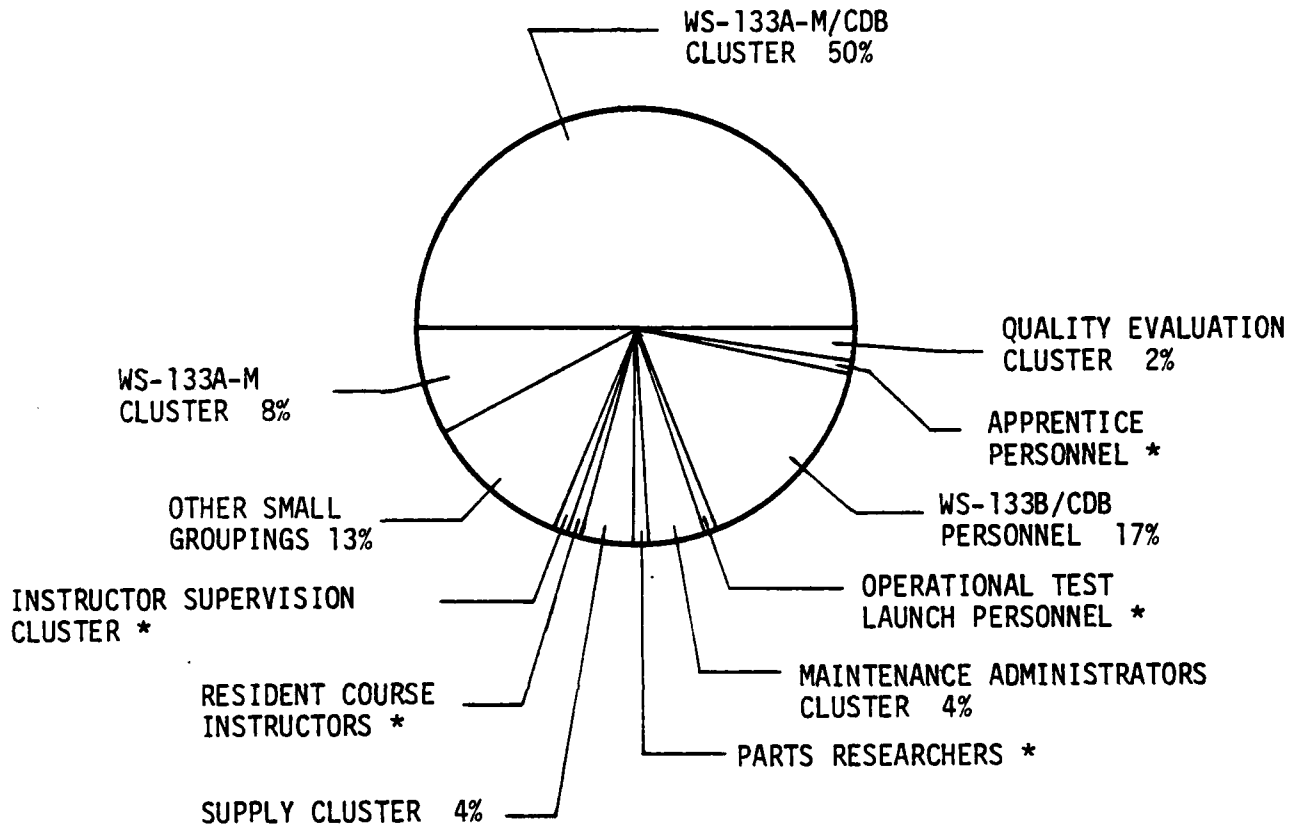
RELATIVE PERCENT TIME SPENT ON DUTIES BY TAFMS GROUPS

<u>DUTY</u>	<u>1-48 MOS (N=424)</u>	<u>49-96 MOS (N=150)</u>	<u>97+ MOS (N=227)</u>
A ORGANIZING AND PLANNING	3	11	17
B DIRECTING AND IMPLEMENTING	3	10	14
C EVALUATING AND INSPECTING	3	8	14
D TRAINING	4	10	11
E PERFORMING ADMINISTRATIVE FUNCTIONS	8	16	15
F PERFORMING SUPPLY AND EQUIPMENT FUNCTIONS	6	10	9
G PERFORMING GENERAL MISSILE MAINTENANCE FUNCTIONS	19	10	7
H PERFORMING TRAINER OPERATIONS FUNCTIONS	*	1	*
I PERFORMING TRAINER MAINTENANCE	1	1	1
J MAINTAINING WS-133A-M (WING 2) WEAPON SYSTEMS	5	5	2
K MAINTAINING WS-133A-M/CDB (WING 1, 3, 4, 5) WEAPON SYSTEMS	35	15	6
L MAINTAINING WS-133B/CDB (WINGS 1X, 6) WEAPONS SYSTEMS	13	3	3
M PERFORMING MINUTEMAN OPERATIONAL TEST LAUNCH FUNCTIONS	*	*	1

* Less than 1 percent

FIGURE 2

DISTRIBUTION OF FIRST-ENLISTMENT PERSONNEL
ACROSS SPECIALTY JOB GROUPS
(PERCENT MEMBERS PERFORMING)



* Less than 1 percent

training sense of accomplishment from the work, and reenlistment intentions provided this information. Table 13 presents this data for 316XOG TAFMS groups and for a comparative sample of mission equipment maintenance AFSs surveyed in 1984.

A comparison of the two samples shows that for all categories except perceived use of training, 316XOG first-enlistment personnel responded less positively than first-enlistment personnel in the comparative sample. On the other hand, second-term (49-96 months TAFMS) and career (97 months TAFMS or more) personnel generally responded more positively than the comparative sample in all categories but perceived use of training. This difference between the TAFMS groups may be due to the different types of jobs performed by these groups; first-enlistment personnel spend more time performing maintenance tasks (which more directly utilize basic course training), while second or subsequent enlistment personnel spend more time performing supervisory and managerial tasks (which generally provide more variety and job satisfaction). For all TAFMS groups, though, job satisfaction indicators are still fairly high, with two-thirds or more responding positively. Reenlistment intentions are also fairly high for all groups except first-enlistment personnel.

ANALYSIS OF TAFMS GROUPS

An analysis of total active federal military service (TAFMS) groups provides a description of how jobs within a career ladder change with time and experience. As is typical in most career ladders, performance of duties involving supervisory, managerial, training, and administrative tasks increases as time in service and experience increase (see Table 11). As personnel spend more time on these duties, the relative time they spend performing maintenance-related duties decreases. Note that for junior personnel, the greatest percentage of time is spent maintaining WS-133A-M/CDB weapons systems--this greater percentage is a reflection of the greater numbers of personnel working on this system than on the other two systems, as well as the large amount of time first-termers spend performing maintenance. The small number of personnel in independent job types performing trainer maintenance and operations functions and operational test launch functions is reflected by the low percentage of relative time spent by experience groups on these duties.

First-Enlistment Personnel

In this study, there are 424 members in their first enlistment (1-48 months TAFMS), representing 53 percent of the survey sample. Figure 2 shows the distribution of first-enlistment personnel across the job groups discussed in the SPECIALTY JOBS section of this report. Fifty percent were working on the WS-133A-M/CDB weapons system, which is also the largest cluster in the specialty overall. A comparison of Figure 1 to Figure 2 shows that the percentage in the WS-133A-M/CDB cluster is slightly greater for first-term personnel than for the career ladder as a whole, probably because personnel who are more senior work in a variety of jobs which are supervisory in nature. Remaining first enlistment personnel are dispersed over many other jobs, with 17 percent in the WS-133B/CDB independent job type and 8 percent in the WS-133A-M cluster.

Table 12 displays the top 35 tasks in terms of percent performing for first-enlistment personnel. This group is the target for ABR training programs and is highlighted to provide a foundation for examining specialty entry-level training. The top 20 tasks displayed relate to general missile maintenance functions. Most of the others relate to maintenance of the weapons system on which the largest portion of first-termers work (WS-133A-M/CDB). Examining first-term personnel across weapon systems shows no substantial differences in tasks performed, except in those tasks specifically related to the weapon system (Duties J, K, L).

Job Satisfaction

TAFMS group perceptions of jobs, together with similar data for comparative groups, may give managers a better understanding of some of the factors which may affect the job performance of airmen in the career ladder. Five attitude questions covering job interest, perceived utilization of talents and

TABLE 17 (Continued)

TASKS NOT REFERENCED TO POI C3ABR31630G-002 WITH HIGH TE
AND OVER 50 PERCENT PERFORMING

TASKS	TNG EMPH*	PERCENT PERFORMING		TASK DIFF**
		WS-133A-M FIRST ENL	WS-133A-M/CDB FIRST ENL	
G364 REMOVE OR INSTALL LIGHTS	4.16	85	87	2.48
G338 CLEAN LAUNCH FACILITIES (LF)	4.07	73	82	2.94
G374 WRAP OR UNWRAP SOLDERLESS WIRE CONNECTIONS	3.87	42	50	3.28
G347 LUBRICATE MECHANICAL COMPONENTS	3.80	68	75	3.27
G361 REMOVE OR INSTALL BONDING MATERIALS, SUCH AS ADHESIVES AND TAPES	3.58	73	79	3.18
G357 PERFORM SIMULATED ELECTRONIC LAUNCH MINUTEMAN (SELM) TEST FUNCTIONS OR CONFIGURATIONS	3.47	55	50	5.49
E225 MAKE ENTRIES ON AF FORMS 1800 (OPERATOR'S INSPECTION GUIDE AND TROUBLE REPORT (GENERAL PURPOSE VEHICLE))	3.02	50	50	2.98
F305 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	2.98	33	50	2.93
K874 UNLOAD OR SHUTDOWN WINGS 1, 3, 4, OR 5 LAUNCH CONTROL CENTER MOTOR GENERATORS	2.98	27	82	5.00
K758 PERFORM WINGS 1, 3, 4, OR 5 LF ELECTRICAL ISOLATION PROCEDURES	2.80	28	81	3.74
K854 STARTUP OR LOAD WINGS 1, 3, 4, OR 5 LAUNCH CONTROL CENTER MOTOR GENERATORS	2.73	25	75	4.79
K756 PERFORM WINGS 1, 3, 4, OR 5 LAUNCHER EQUIPMENT ROOM (LER) RACK POWER REMOVAL PROCEDURES	2.64	25	83	4.22
K761 PERFORM WINGS 1, 3, 4, OR 5 LF TO LCC REESTABLISHMENT OF COMMUNICATIONS	2.44	25	77	4.08
K687 ALIGN WINGS 1, 3, 4, OR 5 TELESCOPING LADDERS	2.36	28	72	4.93

* Average training emphasis is 1.12

** Average task difficulty is 5.00

TABLE 18

TASKS NOT REFERENCED TO POI C3ABR31630G-004
WITH OVER 50 PERCENT PERFORMING

TASKS	TNG EMPH*	PERCENT PERFORMING		TASK DIFF**
		WS-133B/CDB 1ST ENL		
G341 INSPECT OR INSTALL DEVICES, SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL HARNESES	6.84	79		3.49
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	6.38	80		6.24
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	6.24	79		4.26
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	6.24	78		3.97
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	6.11	83		3.50
G344 INSPECT OR OPERATE MAINTENANCE VEHICLE HOISTS	6.02	73		4.05
G353 PERFORM MINUTEMAN ENTRY CONTROL SYSTEM (MECS) PROCEDURES FOR LF/LCF DISPATCH AND ENTRY	6.00	59		3.92
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LF	5.56	83		2.97
G354 PERFORM OPERATOR CARE ON MAINTENANCE VEHICLES	5.47	58		3.39
F276 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	5.07	53		4.14
G370 REMOVE OR INSTALL WIRES	4.89	68		4.04
G349 OPERATE PORTABLE HEATERS	4.78	71		4.10
G369 REMOVE OR INSTALL SWITCHES	4.78	70		3.85
G345 INSTALL SOLDERLESS CONNECTIONS	4.69	53		3.27
G355 PERFORM OPERATOR MAINTENANCE ON SYSTEM (CATEGORY II) TEST EQUIPMENT, SUCH AS LAMP REPLACEMENT	4.69	66		3.35
G362 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPO- NENTS, SUCH AS BULBS, FUSES, OR CIRCUIT BREAKERS	4.56	77		3.33
E222 MAKE ENTRIES IN AF FORMS 1492 (DANGER)	4.44	52		3.25
G371 REPORT SECURITY STATUS TO TRANSPORTATION CONTROL CENTERS (TCC) WHILE ENROUTE TO LCF OR LF	4.44	76		2.52
G367 REMOVE OR INSTALL PERSONNEL ACCESS HATCH ENVIRON- MENTAL COVERS	4.42	65		3.84
G365 REMOVE OR INSTALL MINOR HARDWARE	4.33	78		2.87
G360 REMOVE OR INSTALL ACCESS COVERS OR PLATES	4.16	74		2.94
G364 REMOVE OR INSTALL LIGHTS	4.16	81		2.48
G338 CLEAN LAUNCH FACILITIES (LF)	4.07	79		2.94
G347 LUBRICATE MECHANICAL COMPONENTS	3.80	66		3.27
G361 REMOVE OR INSTALL BONDING MATERIALS, SUCH AS ADHESIVES AND TAPES	3.58	68		3.18
G350 PERFORM COLOR METRIC TESTS	3.44	58		3.83

L910 PERFORM CHECKOUTS OF WING 1X OR 6 OUTER ZONE SECURITY SYSTEMS	.27	64		6.44
L894 PERFORM CHECKOUTS OF WING 1X OR 6 INNER ZONE SECURITY SYSTEMS	.22	66		5.58

TABLE 18 (CONTINUED)

TASKS NOT REFERENCED TO POI C3ABR31630G-004
WITH OVER 50 PERCENT PERFORMING

TASKS	TNG EMPH*	PERCENT PERFORMING		TASK DIFF**
		WS-133B/CDB 1ST ENL		
L933 REPAIR WING 1X OR 6 FOLDING LADDERS	.22	59		4.10
L876 ALIGN WING 1X OR 6 TELESCOPING LADDERS	.20	63		4.66
L962 REPLACE WING 1X OR 6 HAND DRIVEN LINEAR ACTUATORS	.20	64		3.45
L963 REPLACE WING 1X OR 6 IPD PROCESSOR KEYING VARIABLES	.07	53		4.19

* Average training emphasis is 1.12

** Average task difficulty is 5.00

ELECTRONICS PRINCIPLES INVENTORY

An additional source of information for 316X0G training developers is the electronics principles inventory (EPI). The EPI is a 1,366 item, knowledge-based inventory which identifies the range of electronics principles personnel must understand to perform any electronics-oriented job. The difference between OSR data and EPI data relates to the type of inventory items used and the type of data collected for those items. Occupational survey reports use a performance-based job inventory with specific task statements developed to provide a precise picture of the kinds of functions personnel in a specific AFS actually perform at a specific point in time. The data collected for these task statements include percent members performing, relative time spent, task difficulty, and training emphasis. The Electronics Principles Inventory, on the other hand, uses a knowledge-based inventory with questions developed to provide an objective measurement of electronics knowledge required to perform an electronics-oriented job. Training managers can use EPI data in conjunction with OSR data to determine precisely what specialists do and what electronics principles they employ on the job.

The EPI was administered to 5- and 7-skill level personnel in those specialties for which electronics training is provided at Chanutte AFB. A report summarizing the results of this survey was published in April 1984. Copies are available upon request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Branch (OMY), Randolph AFB Texas 78150-5000.

In this EPI survey, 31650G personnel used the electronics principles included in the inventory far less than other AFSCs. The report stated that this may indicate the need for a different type of training for personnel in these specialties. Table 19 shows those items to which 50 percent or more answered "yes". Table 20 shows those items to which 30 to 49 percent answered "yes". Note that, of the 1,366 items in the EPI, only 23 items were used by at least 50 percent of 31650G personnel.

Although 31650G personnel use electronics principles very little, 316X2G personnel use electronics principles a great deal (see the Chanutte EPI Report mentioned previously for more information). Since AFSCs 316X0G and 316X2G will be combined into AFSC 411X0A, training personnel will want to consider which electronics principles should be taught to airmen entering the specialty. Since entering airmen will be assigned to jobs involving 316X0G tasks, very little electronics principles training would be appropriate. This would mean additional electronics principles training, however, for those who later attend the course which will qualify them for jobs involving 316X2G tasks.

TABLE 19

EPI PRINCIPLES USED BY 50 PERCENT OR MORE
31650G PERSONNEL

TITLE		PERCENT USING (N=105)

MATHEMATICS (A1)		

A 1	A1-1 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10.	57

DIRECT CURRENT (A2)		

A 12	A2-1 DO YOU USE (PERHAPS IN TECHNICAL ORDERS) THE TERM VOLTAGE OR VOLT (V)?	88
A 14	A2-3 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM OHM?	84
A 17	A2-6 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM AMPERE?	79
A 22	A2-11 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM CURRENT?	78

METERS/MULTIMETERS (B1)		

B 60	B1-1 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE RESISTANCE?	70
B 61	B1-2 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE VOLTAGE?	70
B 62	B1-3 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE CURRENT?	62
B 64	B1-5 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE FREQUENCY?	59
B 65	B1-6 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE TEMPERATURE?	52

ALTERNATING CURRENT (AC) (B2)		

B 72	B2-5 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM FREQUENCY IN YOUR PRESENT JOB?	62

TABLE 19 (CONTINUED)

EPI PRINCIPLES USED BY 50 PERCENT OR MORE
31650G PERSONNEL

TITLE	PERCENT USING (N=105)

SOLDERING OR SOLDERLESS CONNECTIONS (E2)	

E 263 E2-1 IN YOUR PRESENT JOB, DO YOU CONNECT ELECTRONIC CIRCUITS USING SOLDERLESS CONNECTIONS OR SOLDERING TECHNIQUES? IF NO, GO TO ITEM E3-1; IF YES, CON- TINUE.	53
E 264 E2-2 DO YOU SOLDER CONNECTIONS?	52
E 265 E2-3 DO YOU DESOLDER CONNECTIONS?	51

RELAYS (E3)	

E 277 E3-1 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB? IF NO, GO TO ITEM F1-1; IF YES, CONTINUE.	56
E 281 E3-5 DO YOU TROUBLESHOOT RELAYS?	54
E 283 E3-7 DO YOU REMOVE OR REPLACE RELAYS?	51

POWER SUPPLIES (H2)	

H 467 H2-1 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES? IF NO, GO TO ITEM H3-1; IF YES CONTINUE.	51

MOTORS AND GENERATORS (M3)	

M 778 M3-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS, GENERATORS (SERVO), OR ALTERNATORS? IF NO, GO TO ITEM N1-1; IF YES CONTINUE.	51
M 782 M3-5 DO YOU REMOVE OR REPLACE COMPLETE MOTORS?	51

METER MOVEMENTS (N1)	

N 809 N1-1 DO YOU WORK WITH METERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM N2-1; IF YES, CONTINUE.	68
N 813 N1-5 DO YOU READ METER SCALES?	66
N 816 N1-8 DO YOU ZERO OHMMETERS?	69

TABLE 20

EPI PRINCIPLES USED BY 30-49 PERCENT
31650G PERSONNEL

TITLE	PERCENT USING (N=105)

MATHEMATICS (A1)	

A 2 A1-2 DO YOU USE PUBLICATIONS, SUCH AS TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB?	36

DIRECT CURRENT (A2)	

A 23 A2-12 DO YOU USE (PERHAPS IN TECHNICAL ORDERS OR ELSEWHERE) THE TERM WATTAGE?	48
A 24 A2-13 DO YOU DETERMINE IF TWO OR MORE BATTERIES MUST BE CONNECTED IN SERIES OR PARALLEL TO ACHIEVE A SPECIFIC VOLTAGE AND/OR CURRENT?	47

RESISTANCE AND RESISTIVE CIRCUITS (A3)	

A 25 A3-1 DO YOU WORK WITH RESISTORS OR RESISTIVE CIRCUITS IN YOUR PRESENT JOB? IF NO, GO TO ITEM B1-1; IF YES CONTINUE.	41
A 29 A3-5 DO YOU MEASURE RESISTORS?	43
A 40 A3-16 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES?	47

METERS/MULTIMETERS (B1)	

B 63 B1-4 DO YOU USE METERS OR MULTIMETERS IN YOUR PRESENT JOB TO MEASURE POWER?	36

ALTERNATING CURRENT (AC) (B2)	

B 70 B2-3 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM AVERAGE VOLTAGE (DC) IN YOUR PRESENT JOB?	32
B 74 B2-7 DO YOU USE OR REFER TO THE ALTERNATING CURRENT (AC) TERM PHASE RELATIONSHIPS IN YOUR PRESENT JOB?	36

TABLE 20 (CONTINUED)

EPI PRINCIPLES USED BY 30-49 PERCENT
31650G PERSONNEL

TITLE	PERCENT USING (N=105)

CAPACITORS AND CAPACITATIVE REACTANCE (C1)	

C 97 C1-1 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB? IF NO, GO TO ITEM C2-1; IF YES, CONTINUE.	42
C 101 C1-5 DO YOU TEST CAPACITORS?	31
C 102 C1-6 DO YOU DISCHARGE CAPACITORS?	44
C 112 C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS?	34
C 113 C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS?	38
C 114 C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC?	31

MAGNETISM (C3)	

C 168 C3-1 DO YOU USE OR REFER TO PERMANENT MAGNETS?	39

FILTERS (D3)	

D 233 D3-1 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB? IF NO, GO TO ITEM E1-1; IF YES, CONTINUE.	36
D 237 D3-5 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL?	31

SOLDERING OR SOLDERLESS CONNECTIONS (E2)	

E 267 E2-5 DO YOU INSPECT SOLDERED CONNECTIONS?	44
E 268 E2-6 DO YOU CLEAN OR TIN CONNECTIONS?	38
E 269 E2-7 DO YOU MAKE HARDWIRE CONNECTIONS?	45
E 275 E2-13 DO YOU PERFORM CRIMPING IN LIEU OF SOLDERING?	35

TABLE 20 (CONTINUED)

EPI PRINCIPLES USED BY 30-49 PERCENT OR MORE
31650G PERSONNEL

TITLE	PERCENT USING (N=105)

RELAYS (E3)	

E 280 E3-4 DO YOU INSPECT RELAYS?	38
E 289 E3-13 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS?	38
E 290 E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS?	36
E 293 E3-17 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS?	31
E 294 E3-18 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE?	45

MICROPHONES AND SENSING DEVICES (F1)	

F 295 F1-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES OR OTHER SENSING DEVICES SUCH AS TRANSDUCERS? IF NO, GO TO ITEM F2-1; IF YES, CONTINUE.	31

POWER SUPPLIES (H2)	

H 468 H2-2 DO YOU INSPECT POWER SUPPLIES?	33
H 473 H2-7 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES?	46
H 475 H2-9 DO YOU INSPECT OR SERVICE COOLANT LEVELS?	31

MOTORS AND GENERATORS (M3)	

M 779 M3-2 DO YOU INSPECT MOTORS?	42
M 780 M3-3 DO YOU CLEAN OR LUBRICATE MOTORS?	36
M 781 M3-4 DO YOU OPERATE MOTORS?	43
M 783 M3-6 DO YOU REMOVE OR REPLACE MOTOR PARTS?	37
M 785 M3-8 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS?	34
M 789 M3-12 DO YOU PERFORM ANY TASKS ON MOTOR BRUSHES?	40
M 802 M3-25 DO YOU INSPECT GENERATORS OR ALTERNATORS?	36

TABLE 20 (CONTINUED)

EPI PRINCIPLES USED BY 30-49 PERCENT OR MORE
31650G PERSONNEL

TITLE	PERCENT USING (N=105)
M 803 M3-26 DO YOU CLEAN OR LUBRICATE GENERATORS OR ALTERNATORS?	31
M 804 M3-27 DO YOU OPERATE GENERATORS OR ALTERNATORS?	36
M 805 M3-28 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS OR ALTERNATORS?	43
M 806 M3-29 DO YOU REMOVE OR REPLACE GENERATOR, ALTERNATOR, OR PARTS?	34
M 807 M3-30 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS OR ALTERNATORS?	38
M 808 M3-31 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS OR ALTERNATORS?	33

METER MOVEMENT (N1)	

N 817 N1-9 DO YOU ZERO AMMETERS?	37
N 818 N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)?	35

ANTENNAS (03)	

O 924 03-1 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB? IF NO, GO TO ITEM P1-1; IF YES, CONTINUE.	36
O 925 03-2 DO YOU INSPECT ANTENNAS?	36
O 926 03-3 DO YOU CLEAN ANTENNAS?	33
O 929 03-6 DO YOU TROUBLESHOOT TO ANTENNAS	32
O 930 03-7 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS?	31
O 931 03-8 DO YOU REMOVE OR INSTALL ANTENNAS?	32

INPUT/OUTPUT (PERIPHERAL) DEVICES (S1)	

S1188 S1-1 DO YOU WORK WITH INPUT OR OUTPUT DEVICES ON YOUR PRESENT JOB? IF NO, GO TO ITEM S2-1; IF YES, CONTINUE.	45
S1189 S1-2 DO YOU USE OR REFER TO KEYBOARDS OR TELETYPE-WRITERS?	36
S1190 S1-3 DO YOU USE OR REFER TO PRINTERS?	37

COMPUTERS, MICROPROCESSORS, AND PROGRAMMING (U1)	

U1304 U1-1 IN YOUR PRESENT JOB, DO YOU PERFORM MAINTENANCE ROUTINES OR PROGRAMMING TASKS? IF NO, GO TO ITEM U2-1; IF YES, CONTINUE.	35

COMPARISON TO PREVIOUS SURVEYS

Results of this survey were compared to those of the last survey of this career ladder, published in June 1978 (Report Number: AFPT 90-316-261). The 1985 survey included only 316X0G personnel, while the 1978 survey also included 316X2G/H personnel.

Findings from the earlier study are consistent with the 1985 data. The job groups identified in the analyses of the career ladder structures were similar, though the job groups were identified in much greater detail in the 1985 survey. A comparison of related job groups is shown in Figure 3. Many of the general groups of the 1978 survey include combinations of the more specific groups of the 1985 survey. Two groups were identified in the 1985 survey for which no corresponding groups were found in the 1978 survey (although similar jobs may be included in some of the more general descriptions of the 1978 survey). These groups related to parts and supply (Parts Researchers and Supply cluster). One group identified in the 1978 survey (Site Security Maintenance Team (SSMT) Members) was not identified as a separate group in the 1985 survey; many tasks performed by members of this group are performed by EMT members in the 1985 clusters. A comparison of DAFSC groups from the 1978 and 1985 surveys also showed similar groupings. In both surveys, most 5-skill level personnel grouped into technical maintenance job groups, while most 7-skill level personnel grouped into supervisory and administrative job groups.

A comparison of job satisfaction indicators shows changes over time. As Table 20 shows, more personnel responded positively in 1985 than in 1978 in every category for all three TAFMS groups. This is a trend that can be seen in many other AFSCs, as well. Particularly noteworthy is the increase in the percentage of first-enlistment (1-48 months TAFMS) personnel who intend to reenlist, from only a third in 1978 to over half in 1985. This trend in first-enlistment personnel reenlistment intentions is one that has also been identified in several other current surveys.

Overall, the 316X0G career ladder seems relatively stable in terms of basic job structure, although specific job responsibilities may change with technology. The combination of the 316X0G career ladder with the 316X2G career ladder, though, should result in some changes as new jobs are added. Some of those changes may be inferred from descriptions of 316X2G job groups, which will be published in a separate occupational survey report.

FIGURE 3

CAREER LADDER COMPARISON

1978

1985

ELECTROMECHANICAL TEAM (EMT) MEMBERS

WS-133A-M CLUSTER, Electromechanical Team (EMT) Personnel
WS-133A-M/CDB CLUSTER, Electromechanical Team (EMT) Personnel
WS-133B/CDB PERSONNEL
APPRENTICE PERSONNEL

COMBAT TRAGETING TEAM (CTT) MEMBERS

WS-133A-M CLUSTER, Combat Targeting Team (CTT) Personnel

TECHNICAL ENGINEERING AND ANALYSIS TECHNICIANS (TEAT)

WS-133A-M/CDB CLUSTER, Technical Engineering Branch (TEB) Personnel

SUPERVISION AND SUPPORT PERSONNEL

- Training Instructors
RESIDENT COURSE INSTRUCTORS
INSTRUCTOR SUPERVISOR CLUSTER

- Supervisors (Field/Staff)
SUPERVISORY PERSONNEL CLUSTER
FLIGHT CHIEFS

- Inspectors/Evaluators
QUALITY EVALUATION CLUSTER

- Trainer Maintainers
TRAINER MAINTENANCE PERSONNEL

MAINTENANCE CONTROL PERSONNEL

MAINTENANCE ADMINISTRATORS

PARTS RESEARCHERS

SUPPLY CLUSTER

SITE SECURITY MAINTENANCE TEAM (SSMT) MEMBERS

TABLE 21

COMPARISON OF 316YOG JOB SATISFACTION INDICATIONS BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)*

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	1985	1978	1985	1978	1985	1978
<u>EXPRESSED JOB INTEREST</u>						
DULL	14	22	9	14	11	10
SO-SO	23	21	20	23	11	16
INTERESTING	62	54	70	51	79	67
<u>PERCEIVED USE OF TALENTS</u>						
LITTLE OR NOT AT ALL	28	47	23	30	18	22
FAIRLY WELL TO PERFECTLY	72	52	75	68	82	77
<u>PERCEIVED USE OF TRAINING</u>						
LITTLE OR NOT AT ALL	19	34	31	38	32	35
FAIRLY WELL TO PERFECTLY	81	64	68	61	68	64
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
DISSATISFACTION	19	34	17	33	18	23
NEUTRAL	17	16	17	15	7	12
SATISFIED	64	49	66	50	75	63
<u>REENLISTMENT INTENTIONS</u>						
WILL NOT/PROBABLY WILL NOT REENLIST	46	63	32	45	22	20
WILL/PROBABLY WILL REENLIST	51	33	67	51	77	77

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

SURVEY COMMENTS

In addition to answering background questions and rating tasks performed, survey respondents may also write in comments or add information at the end of the survey booklet. These survey comments address many different issues; it is helpful to consider multiple comments on an issue to identify those of importance.

General Comments

Few personal opinion comments were received for this occupational survey, though there were some comments giving additional information on tasks performed. Most of these comments fell into two areas: work with the Peacekeeper missile, and work with the Expanded Minuteman Data Analysis System (EMDAS). Those who reported working with the Peacekeeper Missile Program performed tasks in support of operational test and evaluation. Those who reported working with EMDAS performed maintenance, operation and monitoring tasks. Because this system came into operation at about the same time this inventory was developed, the only survey information is that provided by write-in comments to the inventory and task factor rating booklets.

Strength and Stamina

In the task factor rating booklets, raters were asked to identify those tasks which first-enlistment personnel they supervise have difficulty performing due to excessive physical strength or stamina requirements inherent in the tasks. Few raters identified any such tasks, and no more than four raters identified any one task. In short, strength and stamina does not appear to be a major issue of concern.

TABLE VI

OPERATIONAL TEST LAUNCH PERSONNEL
(GRP319)

GROUP SIZE:	19	PERCENT OF SAMPLE:	2%
AVERAGE GRADE:	E-5	AVERAGE TAFMS:	81 MONTHS
AVERAGE TICF:	73 MONTHS		
DAFSC:	31630G	5%	
	31650C	74%	
	31670G	21%	

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
M1022 PERFORM LAUNCH FACILITY POST-LAUNCH SAFING PROCEDURES	100.00
M1020 PERFORM LAUNCH CAPABILITY TESTS (LCT)	100.00
M1021 PERFORM LAUNCH FACILITY (LF) FINAL ENABLINGS	100.00
M1024 PERFORM SAFING OF ENABLED LAUNCH FACILITY	100.00
M1023 PERFORM LAUNCH ENVIRONMENT PROTECTION SYSTEM (LEPS) CHECKOUTS	100.00
G341 INSPECT OR INSTALL SAFETY DEVICES, SUCH AS SAFETY BAR- RIERS, LANYARDS, OR PERSONNEL HARNESSSES	100.00
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	100.00
G354 PERFORM OPERATOR CARE ON MAINTENANCE VEHICLES	100.00
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	100.00
K874 UNLOAD OR SHUTDOWN WINGS 1, 3, 4, OR 5 LAUNCH CONTROL CENTER MOTOR GENERATORS	100.00
K726 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 LF STORAGE BATTERIES	100.00
K832 REPLACE WINGS 1, 3, 4, OR 5 LCF STORAGE BATTERIES	100.00
K829 REPLACE WINGS 1, 3, 4, OR 5 KEYBOARD PRINTERS	100.00
K720 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 LCF STORAGE BATTERIES	100.00
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	94.74
M1026 REPLACE LEPS	94.74
M1025 PERFORM SYSTEMS FUNCTIONAL TESTS (SFT)	94.74
J547 EXIT WING 2 LAUNCH FACILITIES	94.74
M1028 TROUBLESHOOT LEPS	94.74
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LF	94.74
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	94.74
G344 INSPECT OR OPERATE MAINTENANCE VEHICLE HOISTS	94.74
G339 IDENTIFY CORROSION	94.74
K854 STARTUP OR LOAD WINGS 1, 3, 4, OR 5 LAUNCH CONTROL CENTER MOTOR GENERATORS	94.74
G364 REMOVE OR INSTALL LIGHTS	94.74

TABLE IIIB

QUALITY CONTROL EVALUATORS
(GRP269, JOB TYPE IN QUALITY EVALUATION CLUSTER)

GROUP SIZE: 18

AVERAGE GRADE: E-5

AVERAGE TAFMS: 20 MONTHS

AVERAGE TICF: 65 MONTHS

DAFSC: 31630G 0
31650G 61%
31670G 39%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
C109 EVALUATE PERSONNEL PERFORMING MAINTENANCE TASKS	100.00
E245 MAKE ENTRIES ON SAC FORMS 1500 (EVALUATION SUMMARY REPORT)	100.00
C141 WRITE INSPECTION REPORTS	100.00
E229 MAKE ENTRIES ON AF FORMS 2420 (QUALITY CONTROL INSPECTION SUMMARY)	100.00
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	100.00
G341 INSPECT OR INSTALL SAFETY DEVICES, SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL HARNESSSES	100.00
E237 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	100.00
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	100.00
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LF	100.00
G365 REMOVE OR INSTALL MINOR HARDWARE	100.00
G360 REMOVE OR INSTALL ACCESS COVERS OR PLATES	100.00
G364 REMOVE OR INSTALL LIGHTS	100.00
C130 PERFORM QUALITY CONTROL INSPECTIONS	94.44
C98 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	94.44
E249 MAKE ENTRIES ON SAC FORMS 799 (PRE-DISPATCH NOTIFICATION)	94.44
C123 INSPECT UTILIZATION OF PROTECTIVE EQUIPMENT	94.44
E267 REVIEW TECHNICAL ORDERS (TO)	94.44
K689 ENTER WINGS 1, 3, 4, OR 5 LAUNCH FACILITIES	94.44
G339 IDENTIFY CORROSION	94.44
G344 INSPECT OR OPERATE MAINTENANCE VEHICLE HOISTS	94.44
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	94.44
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	94.44
K730 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 LF MOTOR GENERATORS	94.44
K700 ISOLATE WINGS 1, 3, 4, OR 5 LAUNCH FACILITIES (LF) FAULTS	94.44
G371 REPORT SECURITY STATUS TO TRANSPORTATION CONTROL CENTERS (TCC) WHILE ENROUTE TO LCF OR LF	94.44

TABLE IIIA

VANDENBURG EVALUATORS
(GRP303, JOB TYPE IN QUALITY EVALUATION CLUSTER)

GROUP SIZE: 5
 AVERAGE GRADE: E-6 AVERAGE TAFMS: 144 MONTHS
 AVERAGE TICF: 120 MONTHS
 DAFSC: 31630G 0
 31650G 0
 31670G 100%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
G110 EVALUATE PROPOSED PUBLICATIONS	100.00
A29 PERFORM TECHNICAL REVIEWS	100.00
C98 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	100.00
A28 PERFORM SYSTEM DESIGN REVIEWS	100.00
C125 PARTICIPATE IN TECHNICAL ORDER VERIFICATION CONFERENCES	100.00
E267 REVIEW TECHNICAL ORDERS (TO)	100.00
C109 EVALUATE PERSONNEL PERFORMING MAINTENANCE TASKS	100.00
B88 VERIFY NEW MAINTENANCE PROCEDURES OR EQUIPMENT	100.00
B63 DIRECT PERSONNEL EVALUATIONS	100.00
B48 COMPILE DATA FOR REPORTS OR STAFF STUDIES	100.00
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	100.00
C115 EVALUATE TECHNICAL ORDER IMPROVEMENT REPORTS	100.00
E268 REVIEW TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	100.00
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	100.00
C91 EDIT OFFICIAL CORRESPONDENCE OR MESSAGES	100.00
E237 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	100.00
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100.00
E262 REVIEW CORRESPONDENCE	100.00
C138 REVIEW OR COORDINATE ON OFFICIAL CORRESPONDENCE OR MESSAGES	100.00
C141 WRITE INSPECTION REPORTS	100.00
E257 PREPARE MINUTES OF BRIEFINGS OR CONFERENCES	100.00
C90 CONDUCT STAFF ASSISTANCE VISITS	100.00
B67 DRAFT RECOMMENDATIONS FOR CHANGES IN EQUIPMENT OR PROCEDURES	100.00
G341 INSPECT OR INSTALL SAFETY DEVICES, SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL HARNESSSES	100.00
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	100.00
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	100.00
D186 PARTICIPATE IN TRAINING CONFERENCES	100.00
E266 REVIEW MAINTENANCE OR INSPECTION REPORTS	100.00

TABLE III

QUALITY EVALUATION CLUSTER
(GRP171)

GROUP SIZE: 30 PERCENT OF SAMPLE: 4
 AVERAGE GRADE: E-5 AVERAGE TAFMS: 78 MONTHS
 AVERAGE TICF: 70 MONTHS
 DAFSC: 31630G 0
 31650G 57%
 31670G 43%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
C109 EVALUATE PERSONNEL PERFORMING MAINTENANCE TASKS	100.00
C141 WRITE INSPECTION REPORTS	100.00
E237 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	100.00
E245 MAKE ENTRIES ON SAC FORMS 1500 (EVALUATION SUMMARY REPORT)	96.67
G341 INSPECT OR INSTALL SAFETY DEVICES, SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL HARNESSSES	96.67
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	96.67
C98 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	93.33
E229 MAKE ENTRIES ON AF FORMS 2420 (QUALITY CONTROL INSPECTION SUMMARY)	93.33
C115 EVALUATE TECHNICAL ORDER IMPROVEMENT REPORTS	93.33
G339 IDENTIFY CORROSION	93.33
C134 PERFORM TECHNICAL INSPECTIONS	90.00
C123 INSPECT UTILIZATION OF PROTECTIVE EQUIPMENT	90.00
E267 REVIEW TECHNICAL ORDERS (TO)	90.00
C122 INSPECT PROTECTIVE EQUIPMENT	86.67
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	86.67
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	86.67
C114 EVALUATE SUGGESTIONS	86.67
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	83.33
G344 INSPECT OR OPERATE MAINTENANCE VEHICLE HOISTS	83.33
C130 PERFORM QUALITY CONTROL INSPECTIONS	80.00
C95 EVALUATE ALERT OR EMERGENCY PROCEDURES	80.00
E261 REPORT MAINTENANCE VEHICLE DISCREPANCIES	80.00
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LF	80.00
C135 PROVIDE TECHNICAL ASSISTANCE FOR JOB-RELATED PROBLEMS ENCOUNTERED BY SUBORDINATES	76.67
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	76.67

TABLE IIB

TECHNICAL ENGINEERING BRANCH (TEB) PERSONNEL
(GRP258, JOB TYPE IN WS-133A-M/CDB CLUSTER)

GROUP SIZE: 7

AVERAGE GRADE: E-6

AVERAGE TAFMS: 153 MONTHS

AVERAGE TICF: 123 MONTHS

DAFSC: 31630G 0
31650G 0
31670G 100%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	100.00
K730 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 LF MOTOR GENERATORS	100.00
G353 PERFORM MINUTEMAN ENTRY CONTROL SYSTEM (MECS) PROCEDURES FOR LF/LCF DISPATCH AND ENTRY	100.00
E249 MAKE ENTRIES ON SAC FORMS 799 (PRE-DISPATCH NOTIFICATION)	100.00
K743 PERFORM TROUBLE ANALYSIS OF WINGS 1, 3, 4, OR 5 LF MOTOR GENERATORS	100.00
E237 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	100.00
G372 SOLDER ELECTRICAL CONNECTIONS	100.00
K689 ENTER WINGS 1, 3, 4, OR 5 LAUNCH FACILITIES	100.00
K690 EXIT WINGS 1, 3, 4, OR 5 LAUNCH FACILITIES	100.00
K803 REPAIR WINGS 1, 3, 4, OR 5 LF MOTOR GENERATORS	100.00
G362 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS, SUCH AS BULBS, FUSES, OR CIRCUIT BREAKERS	100.00
G354 PERFORM OPERATOR CARE ON MAINTENANCE VEHICLES	100.00
G345 INSTALL SOLDERLESS CONNECTIONS	100.00
G370 REMOVE OR INSTALL WIRES	100.00
K736 PERFORM CHECKOUTS OF WINGS 3, 4, OR 5 MISSILE GUIDANCE SET COOLING SYSTEMS	100.00
K862 TROUBLESHOOT WINGS 1, 3, 4, OR 5 LAUNCH CONTROL CONSOLES	100.00
K801 REPAIR WINGS 1, 3, 4, OR 5 LF DISTRIBUTION BOXES	100.00
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100.00
A3 COORDINATE WORK WITH OTHER SECTIONS	100.00
D159 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100.00
K731 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 POWER SIGNALS DISTRIBUTION UNITS (PSDU)	100.00
G365 REMOVE OR INSTALL MINOR HARDWARE	100.00
G369 REMOVE OR INSTALL SWITCHES	100.00
G364 REMOVE OR INSTALL LIGHTS	100.00

TABLE IIA

ELECTROMECHANICAL TEAM (EMT) PERSONNEL
(GRP246, JOB TYPE IN WS-133A-M/CDB CLUSTER)

GROUP SIZE: 241

AVERAGE GRADE: E-3

AVERAGE TAFMS: 37 MONTHS

AVERAGE TICF: 30 MONTHS

DAFSC: 31630G 6%
31650G 92%
31670G 3%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
K690 EXIT WINGS 1, 3, 4, OR 5 LAUNCH FACILITIES	99.59
K689 ENTER WINGS 1, 3, 4, OR 5 LAUNCH FACILITIES	99.17
K730 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 LF MOTOR GENERATORS	98.34
K726 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 LF STORAGE BATTERIES	97.93
K766 PERFORM WINGS 1, 3, 4, OR 5 MISSILE STARTUPS USING CONTROL MONITOR (C166B)	97.51
K836 REPLACE WINGS 1, 3, 4, OR 5 LF MOTOR GENERATORS	97.51
K700 ISOLATE WINGS 1, 3, 4, OR 5 LAUNCH FACILITIES (LF) FAULTS	96.68
K727 PERFORM CHECKOUTS OF WINGS 1, 3, 4, OR 5 LF BATTERY CHARGER SETS	96.68
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	96.27
K765 PERFORM WINGS 1, 3, 4, OR 5 MISSILE NORMAL SHUTDOWN PROCEDURES	96.27
K829 REPLACE WINGS 1, 3, 4, OR 5 KEYBOARD PRINTERS	95.85
K764 PERFORM WINGS 1, 3, 4, OR 5 MISSILE COMPUTER MEMORY LOADINGS	95.44
K743 PERFORM TROUBLE ANALYSIS OF WINGS 1, 3, 4, OR 5 LF MOTOR GENERATORS	95.02
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LF	94.61
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	94.61
K688 CHANGE WINGS 1, 3, 4, OR 5 SECONDARY DOOR LOCK COMBINATIONS	93.78
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	93.78
K762 PERFORM WINGS 1, 3, 4, OR 5 MISSILE COMMAND SIGNALS DECODER (CSD(M)) CODE CHANGES	93.78
K866 TROUBLESHOOT WINGS 1, 3, 4, OR 5 MISSILE MISSILE GUIDANCE SET COOLING SYSTEMS	93.36
G365 REMOVE OR INSTALL MINOR HARDWARE	92.53
K694 INSPECT WINGS 1, 3, 4, OR 5 TELESCOPING LADDERS	92.53
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	92.12

TABLE IB

ELECTROMECHANICAL TEAM (EMT) PERSONNEL
(GRP236, JOB TYPE IN WS-133A-M CLUSTER)

GROUP SIZE: 21

AVERAGE GRADE: E-4

AVERAGE TAFMS: 46 MONTHS

AVERAGE TICF: 39 MONTHS

DAFSC: 31630G 0
31650G 91%
31670G 9%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
J551 ISOLATE WING 2 LAUNCH FACILITY (LF) FAULTS	100.00
J673 TROUBLESHOOT WING 2 LF POWER SUPPLY GROUPS	100.00
J574 PERFORM CHECKOUTS OF WING 2 LF POWER SUPPLY GROUPS	100.00
J573 PERFORM CHECKOUTS OF WING 2 LF MOTOR GENERATORS	100.00
J588 PERFORM WING 2 LAUNCH FACILITY EMERGENCY PROCEDURES FOR ELECTRICAL ISOLATION OF LAUNCHER SUPPORT BUILDINGS (LSB)	100.00
J589 PERFORM WING 2 LAUNCH FACILITIES EMERGENCY SHUTDOWN PROCEDURES	100.00
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	95.24
J575 PERFORM CHECKOUTS OF WING 2 LF STORAGE BATTERIES	95.24
J674 TROUBLESHOOT WING 2 LF STORAGE BATTERIES	95.24
J672 TROUBLESHOOT WING 2 LF MOTOR GENERATORS	95.24
J639 REPLACE WING 2 LF STORAGE BATTERIES	95.24
J659 TROUBLESHOOT WING 2 G&C COUPLERS	95.24
J638 REPLACE WING 2 LF MOTOR GENERATORS	95.24
J590 PERFORM WING 2 MISSILE SHUTDOWN PROCEDURES	95.24
J547 EXIT WING 2 LAUNCH FACILITIES	90.48
J548 INSPECT WING 2 TELESCOPING LADDERS	90.48
J576 PERFORM CHECKOUTS OF WING 2 MISSILE GUIDANCE SET COOLING SYSTEMS	90.48
J577 PERFORM CHECKOUTS OF WING 2 OUTER ZONE SECURITY SYSTEMS	90.48
J540 CHANGE WING 2 SECONDARY DOOR LOCK COMBINATIONS	90.48
J656 STARTUP WING 2 MISSILES	90.48
G371 REPORT SECURITY STATUS TO TRANSPORTATION CONTROL CENTERS (TCC) WHILE ENROUTE TO LCF OR LF	90.48
J675 TROUBLESHOOT WING 2 MISSILE GUIDANCE SET COOLING SYSTEMS	90.48
J559 PERFORM CHECKOUTS OF WING 2 INNER ZONE SECURITY SYSTEMS	90.48
J619 REPAIR WING 2 SECURITY PIT VAULT DOORS	90.48
J536 ADJUST WING 2 OUTER ZONE SECURITY SYSTEMS	90.48
J661 TROUBLESHOOT WING 2 INNER ZONE SECURITY SYSTEMS	90.48
J618 REPAIR WING 2 SECONDARY DOORS	90.48
J600 REPAIR WING 2 G&C COUPLERS	90.48
J569 PERFORM CHECKOUTS OF WING 2 LF BATTERY CHARGER SETS	90.48

TABLE IA

COMBAT TARGETING TEAM PERSONNEL
(GRP388, JOB TYPE IN WS-133A-M CLUSTER)

GROUP SIZE: 13

AVERAGE GRADE: E-3

AVERAGE TAFMS: 34 MONTHS

AVERAGE TICF: 26 MONTHS

DAFSC: 31630G 23%
31650G 77%
31670G 0

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
J545 ENTER WING 2 LAUNCH FACILITIES	100.00
J537 ALIGN WING 2 COLLIMATORS	100.00
J547 EXIT WING 2 LAUNCH FACILITIES	100.00
J552 LOAD WING 2 MISSILE COMPUTER MEMORIES	100.00
J544 DOWNGRADE WING 2 MISSILE COMPUTER MEMORY INFORMATION	100.00
J541 CHECK WING 2 COLLIMATOR AZIMUTHS	100.00
J554 PERFORM CHECKOUTS OF WINGS 2 COLLIMATORS	100.00
J542 DETERMINE WING 2 MISSILE CENTERLINE OFFSETS	100.00
J656 STARTUP WING 2 MISSILE	100.00
J590 PERFORM WING 2 MISSILE SHUTDOWN PROCEDURES	100.00
G341 INSPECT OR INSTALL SAFETY DEVICES, SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL HARNESSSES	100.00
G354 PERFORM OPERATOR CARE ON MAINTENANCE VEHICLES	100.00
G339 IDENTIFY CORROSION	100.00
G362 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS, SUCH AS BULBS, FUSES, OR CIRCUIT BREAKERS	100.00
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	100.00
G364 REMOVE OR INSTALL LIGHTS	100.00
G340 IDENTIFY OR REPORT SHOP OR WEAPONS SYSTEMS SAFETY HAZARDS	100.00
J557 PERFORM CHECKOUTS OF WING 2 GUIDANCE AND CONTROL (G&C) COUPLERS	100.00
G371 REPORT SECURITY STATUS TO TRANSPORTATION CONTROL CENTERS (TCC) WHILE ENROUTE TO LCF OR LF	92.31
G358 RAISE OR LOWER EQUIPMENT INTO OR FROM LF	92.31
J583 PERFORM WING 2 AZIMUTH CORRECTION RESPONSES (ACR)	92.31
G338 CLEAN LAUNCH FACILITIES (LF)	92.31
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	92.31
J595 REPAIR WING 2 COLLIMATORS	92.31
J546 EVACUATE WING 2 LAUNCH FACILITIES FOR EMERGENCY WAR ORDER (EWO) LAUNCH CONDITIONS	92.31

APPENDIX A
SUMMARY DESCRIPTIONS OF JOB GROUPS

IMPLICATIONS

As mentioned in the INTRODUCTION, the purpose of the survey was to identify tasks actually performed by 316X0G personnel to assist training personnel in future technical course revisions. The current inventory has allowed a much more detailed analysis of the types of jobs in the career ladder structure. The impact on training, however, can be seen in the number of general missile maintenance tasks performed in common by first-enlistment personnel. One possible implication is that it may be effective to train all personnel entering the field on some of these tasks before dividing them into one of two more specific courses. Training personnel should examine the tasks not included in the STS or POI to determine which would be appropriate to add and how they would be most effectively incorporated into training.

Analysis of the specialty jobs showed that the primary jobs in this career ladder related to maintenance of one of three weapon systems (WS-133A-M, WS-133A-M/CDB, and WS-133B/CDB), and these groups were very distinct. Adding the 316X2G jobs to this structure will result in even more of these separate and distinct jobs. Considering this diversity, subject-matter specialists should carefully examine such career ladder documents as the Specialty Training Standard and technical course Plans of Instruction in light of survey information from both the 316X0G and 316X2G occupational surveys.

TABLE VII

TRAINER MAINTENANCE PERSONNEL
(GRP244)

GROUP SIZE: 6 PERCENT OF SAMPLE: LESS THAN 1%

AVERAGE GRADE: E-5 AVERAGE TAFMS: 93 MONTHS

AVERAGE TICF: 75 MONTHS

DAFSC: 31630G 0
31650G 50%
31670G 50%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
H406 PERFORM STARTUPS OR SHUTDOWNS OF AN/GSQ-T34 CMPT	100.00
I444 PERFORM CHECKOUTS OF AN/GSQ-T34 CMPT	100.00
I528 TROUBLESHOOT AN/GSQ-T34 CMPT	100.00
F305 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	100.00
F276 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	100.00
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	100.00
F302 MAINTAIN PROPERTY CUSTODIAN AUTHORIZATION/CUSTODY RECEIPT LISTINGS (CA/CRL)	100.00
G365 REMOVE OR INSTALL MINOR HARDWARE	100.00
A3 COORDINATE WORK WITH OTHER SECTIONS	100.00
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	100.00
F312 MAKE ENTRIES ON AF FORMS 601 (EQUIPMENT ACTION REQUEST)	100.00
I500 REMOVE OR INSTALL COMPONENTS OF AN/GSQ-T34 CMPT	100.00
F277 COMPLETE DD FORMS 1348-6 (NON-NSN REQUISITION (MANUAL))	100.00
G355 PERFORM OPERATOR MAINTENANCE ON SYSTEM (CATEGORY II) TEST EQUIPMENT, SUCH AS LAMP REPLACEMENT	100.00
G362 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS, SUCH AS BULBS, FUSES, OR CIRCUIT BREAKERS	100.00
F329 REVIEW SUPPLY DAILY DOCUMENT REGISTERS (DO4/804-11)	100.00
E240 MAKE ENTRIES ON AF FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100.00
F294 ISSUE SUPPLIES AND EQUIPMENT	100.00
I453 PERFORM INSPECTIONS OF AN/GSQ-T34 CMPT	100.00
E239 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100.00
G363 REMOVE OR INSTALL ELECTRONIC EQUIPMENT DRAWERS	100.00
G372 SOLDER ELECTRICAL CONNECTIONS	100.00
H407 PERFORM STARTUPS OR SHUTDOWNS OF AN/GSQ-T38 ADAPTER SET PROCEDURE TRAINERS	83.33
F323 REQUISITION TOOLS AND EQUIPMENT	83.33
H396 PERFORM OPERATION OF AN/GSQ-T34 CMPT	83.33

TABLE VIIIA

SECTION NCOICS
(GRP252, JOB TYPE IN SUPERVISORY PERSONNEL CLUSTER)

GROUP SIZE: 12

AVERAGE GRADE: E-6

AVERAGE TAFMS: 145 MONTHS

AVERAGE TICF: 107 MONTHS

DAFSC: 31630G 8%
31650G 8%
31670G 84%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B86 SUPERVISE MISSILE SYSTEMS ANALYST SPECIALISTS (AFSC 31650G)	100.00
B53 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	100.00
C121 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100.00
B78 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100.00
B52 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	100.00
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100.00
A3 COORDINATE WORK WITH OTHER SECTIONS	100.00
D183 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	100.00
B50 CONDUCT PREDISPATCH MAINTENANCE BRIEFINGS	100.00
B80 ORIENT NEWLY ASSIGNED PERSONNEL	100.00
C142 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	100.00
C139 WRITE APR	91.67
A25 ESTABLISH WORK SCHEDULES	91.67
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	91.67
A42 SCHEDULE LEAVES OR PASSES	91.67
E262 REVIEW CORRESPONDENCE	83.33
B46 ADJUST DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS	83.33
C135 PROVIDE TECHNICAL ASSISTANCE FOR JOB-RELATED PROBLEMS ENCOUNTERED BY SUBORDINATES	83.33
C120 INSPECT CONDITION OR APPEARANCE OF FACILITIES OR WORK AREAS	83.33
C101 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	83.33
A5 DETERMINE PERSONNEL REQUIREMENTS	83.33
D184 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	83.33

TABLE VIIIB

EQUIPMENT MONITORS
(GRP272, JOB TYPE IN SUPERVISORY PERSONNEL CLUSTER)

GROUP SIZE: 7

AVERAGE GRADE: E-6

AVERAGE TAFMS: 131 MONTHS

AVERAGE TICF: 123 MONTHS

DAFSC: 31630G 0
31650G 29%
31670G 71%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
C137 REVIEW MAINTENANCE DATA COLLECTION (MDC) FORMS	100.00
E205 EDIT AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100.00
C104 EVALUATE MAINTENANCE DATA COLLECTION (MDC) REPORTS	100.00
F294 ISSUE SUPPLIES AND EQUIPMENT	100.00
F293 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	100.00
F305 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	100.00
B86 SUPERVISE MISSILE SYSTEMS ANALYST SPECIALISTS (AFSC 31650G)	100.00
E249 MAKE ENTRIES ON SAC FORMS 799 (PRE-DISPATCH NOTIFICATION)	100.00
C121 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100.00
F280 ESTABLISH EQUIPMENT OR TOOL REQUIREMENTS	100.00
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	100.00
B52 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	100.00
B53 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	100.00
C135 PROVIDE TECHNICAL ASSISTANCE FOR JOB-RELATED PROBLEMS ENCOUNTERED BY SUBORDINATES	85.71
A4 DETERMINE EQUIPMENT MAINTENANCE REQUIREMENTS	85.71
C139 WRITE APR	85.71
C122 INSPECT PROTECTIVE EQUIPMENT	85.71
A6 DETERMINE SPACE, EQUIPMENT, OR SUPPLY REQUIREMENTS	85.71
F292 INVENTORY BENCH STOCK ITEMS	85.71
F323 REQUISITION TOOLS AND EQUIPMENT	85.71
A3 COORDINATE WORK WITH OTHER SECTIONS	85.71
E239 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	85.71
C120 INSPECT CONDITION OR APPEARANCE OF FACILITIES OR WORK AREAS	85.71

TABLE VIIIC

MAINTENANCE DATA MONITORS
(GRP232, JOB TYPE IN SUPERVISORY PERSONNEL CLUSTER)

GROUP SIZE: 5

AVERAGE GRADE: E-6

AVERAGE TAFMS: 179 MONTHS

AVERAGE TICF: 136 MONTHS

DAFSC: 31630G 0
31650G 20%
31670G 80%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B48 COMPILE DATA FOR REPORTS OR STAFF STUDIES	100.00
C121 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100.00
D174 EVALUATE PROGRESS OF TRAINEES	100.00
A32 PLAN OR PREPARE BRIEFINGS	100.00
A21 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	100.00
A15 DEVELOP WORK METHODS OR PROCEDURES	100.00
E273 UPDATE OR ANNOTATE MISSILE HISTORICAL RECORDS	100.00
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100.00
E262 REVIEW CORRESPONDENCE	100.00
D190 PREPARE LESSON PLANS	100.00
A22 ESTABLISH PROCEDURAL GUIDELINES, SUCH AS OPERATING INSTRUCTIONS (OI) OR SPECIAL OPERATING INSTRUCTIONS (SOI)	100.00
C137 REVIEW MAINTENANCE DATA COLLECTION (MDC) FORMS	100.00
A3 COORDINATE WORK WITH OTHER SECTIONS	100.00
A6 DETERMINE SPACE, EQUIPMENT, OR SUPPLY REQUIREMENTS	100.00
D168 DIRECT OR IMPLEMENT OJT TRAINING PROGRAMS	80.00
E265 REVIEW MAINTENANCE MANAGEMENT INFORMATION CONTROL SYSTEMS (MMICS) OUTPUT DATA	80.00
B85 SUPERVISE MILITARY PERSONNEL IN AFSC OTHER THAN 316X0G	80.00
D177 INSPECT TRAINING AIDS FOR OPERATION OR SUITABILITY	80.00
A25 ESTABLISH WORK SCHEDULES	80.00
B86 SUPERVISE MISSILE SYSTEMS ANALYST SPECIALISTS (AFSC 31650G)	80.00
E205 EDIT AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	80.00
C139 WRITE APR	80.00
B52 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	80.00
C120 INSPECT CONDITION OR APPEARANCE OF FACILITIES OR WORK AREAS	80.00
A7 DETERMINE WORK PRIORITIES	80.00

TABLE VIIID

MAINTENANCE OPERATIONS SUPERVISORS
(GRP310, JOB TYPE IN SUPERVISORY PERSONNEL CLUSTER)

GROUP SIZE: 7

AVERAGE GRADE: E-6

AVERAGE TAFMS: 193 MONTHS

AVERAGE TICF: 152 MONTHS

DAFSC: 31630G 0
31650G 14%
31670G 86%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	100.00
C135 PROVIDE TECHNICAL ASSISTANCE FOR JOB-RELATED PROBLEMS ENCOUNTERED BY SUBORDINATES	100.00
B86 SUPERVISE MISSILE SYSTEMS ANALYST SPECIALISTS (AFSC 31650G)	100.00
D159 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100.00
A7 DETERMINE WORK PRIORITIES	100.00
A34 PLAN WORK ASSIGNMENTS OR SEQUENCE OF WORK OPERATIONS	100.00
B87 SUPERVISE MISSILE SYSTEMS ANALYST TECHNICIANS (AFSC 31670G)	100.00
C121 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100.00
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100.00
A6 DETERMINE SPACE, EQUIPMENT, OR SUPPLY REQUIREMENTS	100.00
A45 SCHEDULE WORK WITH OTHER SECTIONS	100.00
A3 COORDINATE WORK WITH OTHER SECTIONS	100.00
B78 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100.00
A25 ESTABLISH WORK SCHEDULES	100.00
E265 REVIEW MAINTENANCE MANAGEMENT INFORMATION CONTROL SYSTEMS (MMICS) OUTPUT DATA	100.00
E267 REVIEW TECHNICAL ORDERS (TO)	100.00
D183 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	100.00
C120 INSPECT CONDITION OR APPEARANCE OF FACILITIES OR WORK AREAS	100.00
C139 WRITE APR	100.00
C138 REVIEW OR COORDINATE ON OFFICIAL CORRESPONDENCE OR MESSAGES	100.00
B59 DIRECT MAINTENANCE OF EQUIPMENT, SUPPLIES, OR WORKSPACE	100.00
B81 PERFORM FAILURE DATA ANALYSIS FOR MAINTENANCE PROBLEMS	100.00
B48 COMPILE DATA FOR REPORTS OR STAFF STUDIES	100.00

TABLE XA

WEAPON SYSTEMS CONTROLLERS
(GRP288, JOB TYPE IN MAINTENANCE ADMINISTRATORS CLUSTER)

GROUP SIZE: 8

AVERAGE GRADE: E-5

AVERAGE TAFMS: 78 MONTHS

AVERAGE TICF: 75 MONTHS

DAFSC: 31630G 0
31650G 63%
31670G 37%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B65 DISPATCH MAINTENANCE TECHNICIANS TO WORK AREAS	100.00
B46 ADJUST DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS	100.00
A7 DETERMINE WORK PRIORITIES	100.00
A3 COORDINATE WORK WITH OTHER SECTIONS	100.00
E218 MAINTAIN OR MAKE ENTRIES IN MAINTENANCE LOGS	75.00
E232 MAKE ENTRIES ON AF FORMS 790 (MISSILE STATUS WORKSHEET)	75.00
E249 MAKE ENTRIES ON SAC FORMS 799 (PRE-DISPATCH NOTIFICATION)	50.00
B69 IMPLEMENT EMERGENCY WAR ORDER (EWO) PROCEDURES	50.00
B59 DIRECT MAINTENANCE OF EQUIPMENT, SUPPLIES, OR WORKSPACE	37.50
G348 OPERATE MAINTENANCE MANAGEMENT INFORMATION AND CONTROL SYSTEMS (MMICS)	37.50
F279 COORDINATE WITH BASE SUPPLY ON OBTAINING PARTS	37.50
B47 ASSIGN MAINTENANCE FUNCTIONS	25.00
A4 DETERMINE EQUIPMENT MAINTENANCE REQUIREMENTS	25.00
F322 PREPARE WORK ORDERS	25.00
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	25.00
B57 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	25.00
A9 DEVELOP EQUIPMENT UTILIZATION OR MAINTENANCE SCHEDULES	25.00
C135 PROVIDE TECHNICAL ASSISTANCE FOR JOB-RELATED PROBLEMS ENCOUNTERED BY SUBORDINATES	25.00
B85 SUPERVISE MILITARY PERSONNEL IN AFSC OTHER THAN 316X0G	25.00
B80 ORIENT NEWLY ASSIGNED PERSONNEL	25.00
B50 CONDUCT PREDISPATCH MAINTENANCE BRIEFINGS	25.00
E237 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	25.00
C139 WRITE APR	25.00
B81 PERFORM FAILURE DATA ANALYSIS FOR MAINTENANCE PROBLEMS	12.50
A45 SCHEDULE WORK WITH OTHER SECTIONS	12.50
G359 READ OR INTERPRET WIRING OR SCHEMATIC DIAGRAMS	12.50

TABLE XB

MAINTENANCE PLANNERS
(GRP249, JOB TYPE IN MAINTENANCE ADMINISTRATORS CLUSTER)

GROUP SIZE: 5

AVERAGE GRADE: E-4

AVERAGE TAFMS: 77 MONTHS

AVERAGE TICF: 75 MONTHS

DAFSC: 31630G 0
31650G 60%
31670G 40%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
G348 OPERATE MAINTENANCE MANAGEMENT INFORMATION AND CONTROL SYSTEMS (MMICS)	100.00
E265 REVIEW MAINTENANCE MANAGEMENT INFORMATION CONTROL SYSTEMS (MMICS) OUTPUT DATA	100.00
A40 SCHEDULE EQUIPMENT OR FACILITY INSPECTIONS	100.00
A3 COORDINATE WORK WITH OTHER SECTIONS	100.00
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100.00
A7 DETERMINE WORK PRIORITIES	100.00
A9 DEVELOP EQUIPMENT UTILIZATION OR MAINTENANCE SCHEDULES	80.00
A25 ESTABLISH WORK SCHEDULES	60.00
G346 LOAD PAPER OR INK ON PRINTER EQUIPMENT	60.00
A43 SCHEDULE MISSILE MAINTENANCE INSPECTIONS	60.00
E239 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	60.00
A30 PLAN EMERGENCY WAR ORDER (EWO) PROCEDURES	40.00
F327 REVIEW STATUS OF AWAITING MAINTENANCE (AWM) PARTS	40.00
F328 REVIEW STATUS OF AWAITING PARTS (AWP) EQUIPMENT	40.00
B46 ADJUST DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS	40.00
E268 REVIEW TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	40.00
A4 DETERMINE EQUIPMENT MAINTENANCE REQUIREMENTS	40.00
A45 SCHEDULE WORK WITH OTHER SECTIONS	40.00
A6 DETERMINE SPACE, EQUIPMENT, OR SUPPLY REQUIREMENTS	40.00
F279 COORDINATE WITH BASE SUPPLY ON OBTAINING PARTS	40.00
A5 DETERMINE PERSONNEL REQUIREMENTS	40.00
A32 PLAN OR PREPARE BRIEFINGS	40.00
E262 REVIEW CORRESPONDENCE	40.00
E213 MAINTAIN EQUIPMENT AND CHANGE REQUIREMENTS	40.00
A13 DEVELOP SELF-INSPECTION PROGRAMS	40.00
E271 UPDATE FACILITY INSPECTION RECORDS	20.00
B69 IMPLEMENT EMERGENCY WAR ORDER (EWO) PROCEDURES	20.00

TABLE XC

JOB CONTROLLERS AND SCHEDULERS SUBCLUSTER
(GRP144, SUBCLUSTER IN MAINTENANCE ADMINISTRATORS CLUSTER)

GROUP SIZE: 27

AVERAGE GRADE: E-5

AVERAGE TAFMS: 108 MONTHS

AVERAGE TICF: 97 MONTHS

DAFSC: 31630G 0
31650G 52%
31670G 44%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
A3 COORDINATE WORK WITH OTHER SECTIONS-	96.30
A7 DETERMINE WORK PRIORITIES	96.30
A4 DETERMINE EQUIPMENT MAINTENANCE REQUIREMENTS	92.59
B46 ADJUST DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS	88.89
A9 DEVELOP EQUIPMENT UTILIZATION OR MAINTENANCE SCHEDULES	74.07
B65 DISPATCH MAINTENANCE TECHNICIANS TO WORK AREAS	74.07
A5 DETERMINE PERSONNEL REQUIREMENTS	74.07
A6 DETERMINE SPACE, EQUIPMENT, OR SUPPLY REQUIREMENTS	70.37
B69 IMPLEMENT EMERGENCY WAR ORDER (EWO) PROCEDURES	66.67
A41 SCHEDULE EQUIPMENT OR VEHICLE USE	62.96
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	59.26
B49 CONDUCT BRIEFINGS	59.26
A34 PLAN WORK ASSIGNMENTS OR SEQUENCE OF WORK OPERATIONS	51.85
A25 ESTABLISH WORK SCHEDULES	48.15
C89 ANALYZE WORK LOAD REQUIREMENTS	44.44
E218 MAINTAIN OR MAKE ENTRIES IN MAINTENANCE LOGS	44.44
G348 OPERATE MAINTENANCE MANAGEMENT INFORMATION AND CONTROL SYSTEMS (MMICS)	44.44
B59 DIRECT MAINTENANCE OF EQUIPMENT, SUPPLIES, OR WORKSPACE	44.44
F322 PREPARE WORK ORDERS	44.44
E249 MAKE ENTRIES ON SAC FORMS 799 (PRE-DISPATCH NOTIFICATION)	44.44
B70 IMPLEMENT MAINTENANCE CONTROL WORK METHODS	44.44
B57 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	44.44
C139 WRITE APR	44.44
A32 PLAN OR PREPARE BRIEFINGS	44.44
B47 ASSIGN MAINTENANCE FUNCTIONS	40.74
E210 MAINTAIN CLASSIFIED MATERIAL OR MESSAGE FILES	40.74
A45 SCHEDULE WORK WITH OTHER SECTIONS	37.04
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	37.04

TABLE XD

BRIEFING SUBCLUSTER
(GRP183, SUBCLUSTER IN MAINTENANCE ADMINISTRATORS CLUSTER)

GROUP SIZE: 7

AVERAGE GRADE: E-5

AVERAGE TAFMS: 94 MONTHS

AVERAGE TICF: 91 MONTHS

DAFSC: 31630G 14%
31650G 43%
31670G 43%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
E205 EDIT AF TO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100.00
E247 MAKE ENTRIES ON SAC FORMS 529 (ICBM MAINTENANCE DISPATCH RECORD)	100.00
E239 MAKE ENTRIES ON AF TO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100.00
C137 REVIEW MAINTENANCE DATA COLLECTION (MDC) FORMS	85.71
B50 CONDUCT PREDISPATCH MAINTENANCE BRIEFINGS	85.71
B49 CONDUCT BRIEFINGS	71.43
A7 DETERMINE WORK PRIORITIES	71.43
E240 MAKE ENTRIES ON AF FORMS 350 (REPARABLE ITEM PROCESSING TAG)	57.14
E265 REVIEW MAINTENANCE MANAGEMENT INFORMATION CONTROL SYSTEMS (MMICS) OUTPUT DATA	57.14
A3 COORDINATE WORK WITH OTHER SECTIONS	57.14
G346 LOAD PAPER OR INK ON PRINTER EQUIPMENT	57.14
G348 OPERATE MAINTENANCE MANAGEMENT INFORMATION AND CONTROL SYSTEMS (MMICS)	42.86
C121 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	42.86
E216 MAINTAIN MAINTENANCE MANAGEMENT INFORMATION AND CONTROL SYSTEM (MMICS) WORKCENTER LISTINGS	42.86
F276 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	42.86
E218 MAINTAIN OR MAKE ENTRIES IN MAINTENANCE LOGS	42.86
A15 DEVELOP WORK METHODS OR PROCEDURES	42.86
B80 ORIENT NEWLY ASSIGNED PERSONNEL	42.86
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	42.86
F274 ATTACH OR ANNOTATE EQUIPMENT STATUS LABELS OR TAGS, SUCH AS DD FORMS 1574 (SERVICEABLE TAG-MATERIAL)	42.86
B46 ADJUST DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS	42.86
B65 DISPATCH MAINTENANCE TECHNICIANS TO WORK AREAS	28.57
E251 PREPARE AF FORMS 332 (BCE WORK REQUEST)	28.57

AD-R158 429

MISSILE SYSTEMS ANALYST CAREER LADDER AFSC 411X0A
(FORMERLY 316X0G)(U) AIR FORCE OCCUPATIONAL MEASUREMENT
CENTER RANDOLPH AFB TX JUL 85

2/2

UNCLASSIFIED

F/G 5/9

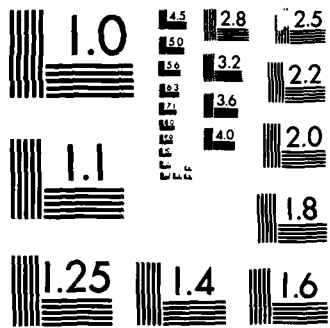
NL



END

FILMED

DTIC



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE X11A

SUPPLY MONITORS
(GRP280, JOB TYPE IN SUPPLY CLUSTER)

GROUP SIZE: 5

AVERAGE GRADE: E-4

AVERAGE TAFMS: 88 MONTHS

AVERAGE TICF: 54 MONTHS

DAFSC: 31630G 0
31650G 100 %
31670G 0

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
F294 ISSUE SUPPLIES AND EQUIPMENT	100.00
F305 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	100.00
F279 COORDINATE WITH BASE SUPPLY ON OBTAINING PARTS	100.00
F276 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	100.00
F292 INVENTORY BENCH STOCK ITEMS	80.00
F293 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	80.00
F297 MAINTAIN BENCHSTOCK LEVELS	80.00
F302 MAINTAIN PROPERTY CUSTODIAN AUTHORIZATION/CUSTODY RECEIPT LISTINGS (CA/CRL)	80.00
F284 ESTIMATE OR VALIDATE BENCH STOCK REQUIREMENTS	80.00
F304 MAKE ENTRIES ON AF FORMS 126 (CUSTODIAN REQUEST LOG)	80.00
F316 MAKE ENTRIES ON DD FORMS 1348-1 (DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT)	80.00
F280 ESTABLISH EQUIPMENT OR TOOL REQUIREMENTS	80.00
F282 ESTABLISH SUPPLY AND EQUIPMENT ACCOUNTABILITY PROCEDURES	80.00
F298 MAINTAIN CONSOLIDATED TOOL KITS	60.00
F300 MAINTAIN INSPECTION CARDS OR ITEMS REQUIRING PERIODIC INSPECTIONS	60.00
F277 COMPLETE DD FORMS 1348-6 (NON-NSN REQUISITION (MANUAL))	60.00
E204 DEVELOP EQUIPMENT CHECKLISTS	60.00
E240 MAKE ENTRIES ON AF FORMS 350 (REPARABLE ITEM PROCESS- ING TAG)	60.00
F323 REQUISITION TOOLS AND EQUIPMENT	60.00
F285 EVALUATE EQUIPMENT ALLOWANCE OR AUTHORIZATION CHANGES	60.00
F313 MAKE ENTRIES ON AF FORMS 9 (REQUEST FOR PURCHASE)	60.00
A15 DEVELOP WORK METHODS OR PROCEDURES	60.00
F303 MAINTAIN SUPPORT EQUIPMENT DAILY STATUS RECORDS	40.00
E212 MAINTAIN EQUIPMENT STATUS REPORTS	40.00
F288 EVALUATE SERVICEABILITY OF SUPPLIES OR EQUIPMENT	40.00
F286 EVALUATE EQUIPMENT STORAGE PROCEDURES	40.00
F312 MAKE ENTRIES ON AF FORMS 601 (EQUIPMENT ACTION REQUEST)	40.00

TABLE XIIB

TOOL ROOM ASSISTANTS
(GRP393, JOB TYPE IN SUPPLY CLUSTER)

GROUP SIZE: 6

AVERAGE GRADE: E-4

AVERAGE TAFMS: 36 MONTHS

AVERAGE TICF: 54 MONTHS

DAFSC: 31630G 0
31650G 83%
31670G 17%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
F305 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	100.00
F294 ISSUE SUPPLIES AND EQUIPMENT	100.00
F293 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	100.00
F298 MAINTAIN CONSOLIDATED TOOL KITS	100.00
F292 INVENTORY BENCH STOCK ITEMS	83.33
F284 ESTIMATE OR VALIDATE BENCH STOCK REQUIREMENTS	66.67
F297 MAINTAIN BENCHSTOCK LEVELS	50.00
B50 CONDUCT PREDISPATCH MAINTENANCE BRIEFINGS	33.33
G356 PERFORM PREVENTIVE MAINTENANCE ON HAND TOOLS OR SPECIAL TOOLS	33.33
F300 MAINTAIN INSPECTION CARDS OR ITEMS REQUIRING PERIODIC INSPECTIONS	33.33
F275 CERTIFY STATUS OF REPARABLE, SERVICEABLE, OR CONDEMNED PARTS	33.33
A4 DETERMINE EQUIPMENT MAINTENANCE REQUIREMENTS	16.67
F303 MAINTAIN SUPPORT EQUIPMENT DAILY STATUS RECORDS	16.67
A40 SCHEDULE EQUIPMENT OR FACILITY INSPECTIONS	16.67
E218 MAINTAIN OR MAKE ENTRIES IN MAINTENANCE LOGS	16.67
F288 EVALUATE SERVICEABILITY OF SUPPLIES OR EQUIPMENT	16.67
F296 LOG SUPPLY AND EQUIPMENT TURN-INS	16.67
E240 MAKE ENTRIES ON AF FORMS 350 (REPARABLE ITEM PROCESSING TAG)	16.67
B65 DISPATCH MAINTENANCE TECHNICIANS TO WORK AREAS	16.67
G372 SOLDER ELECTRICAL CONNECTIONS	16.67
F323 REQUISITION TOOLS AND EQUIPMENT	16.67
E205 EDIT AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	16.67
F333 TRANSPORT TECHNICAL EQUIPMENT TO USING OR SERVICING ACTIVITIES	16.67
F280 ESTABLISH EQUIPMENT OR TOOL REQUIREMENTS	16.67
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUNCIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	16.67
A3 COORDINATE WORK WITH OTHER SECTIONS	16.67

TABLE XIIC

EQUIPMENT CONTROLLERS
(GRP176, JOB TYPE IN SUPPLY CLUSTER)

GROUP SIZE: 5

AVERAGE GRADE: E-4

AVERAGE TAFMS: 58 MONTHS

AVERAGE TICF: 41 MONTHS

DAFSC: 31630G 0
31650G 100Z
31670G 0

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
G335 ASSEMBLE OR CONFIGURE MAINTENANCE TEAM VEHICLES, EQUIPMENT, OR MATERIALS	100.00
F294 ISSUE SUPPLIES AND EQUIPMENT	100.00
F305 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	80.00
F293 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	80.00
G342 INSPECT OR OPERATE EMERGENCY BREATHING APPARATUS	80.00
G341 INSPECT OR INSTALL SAFETY DEVICES, SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL HARNESSSES	80.00
G343 INSPECT OR OPERATE HOISTING UNITS, SLINGS, OR ADAPTERS	80.00
F301 MAINTAIN ORGANIZATIONAL EQUIPMENT OR SUPPLY RECORDS	80.00
F288 EVALUATE SERVICEABILITY OF SUPPLIES OR EQUIPMENT	80.00
F303 MAINTAIN SUPPORT EQUIPMENT DAILY STATUS RECORDS	80.00
A3 COORDINATE WORK WITH OTHER SECTIONS	80.00
F276 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	60.00
C122 INSPECT PROTECTIVE EQUIPMENT	60.00
G349 OPERATE PORTABLE HEATERS	60.00
G365 REMOVE OR INSTALL MINOR HARDWARE	60.00
F282 ESTABLISH SUPPLY AND EQUIPMENT ACCOUNTABILITY PROCEDURES	40.00
F295 ISSUE, SIGN FOR, OR TURN IN CLASSIFIED EQUIPMENT	40.00
C134 PERFORM TECHNICAL INSPECTIONS	40.00
C131 PERFORM SAFETY INSPECTIONS	40.00
G344 INSPECT OR OPERATE MAINTENANCE VEHICLE HOISTS	40.00
A9 DEVELOP EQUIPMENT UTILIZATION OR MAINTENANCE SCHEDULES	40.00
F286 EVALUATE EQUIPMENT STORAGE PROCEDURES	40.00
A6 DETERMINE SPACE, EQUIPMENT, OR SUPPLY REQUIREMENTS	40.00
E239 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	40.00
F296 LOG SUPPLY AND EQUIPMENT TURN-INS	40.00
G355 PERFORM OPERATOR MAINTENANCE ON SYSTEM (CATEGORY II) TEST EQUIPMENT, SUCH AS LAMP REPLACEMENT	40.00
F300 MAINTAIN INSPECTION CARDS OR ITEMS REQUIRING PERIODIC INSPECTIONS	40.00
E261 REPORT MAINTENANCE VEHICLE DISCREPANCIES	40.00
E212 MAINTAIN EQUIPMENT STATUS REPORTS	40.00

TABLE XIVA

RESIDENT COURSE INSTRUCTOR SUPERVISORS
(GRP263, JOB TYPE IN INSTRUCTOR SUPERVISION CLUSTER)

GROUP SIZE: 7

AVERAGE GRADE: E-6

AVERAGE TAFMS: 159 MONTHS

AVERAGE TICF: 136 MONTHS

DAFSC: 31630G 0
31650G 29%
31670G 71%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B84 SUPERVISE CIVILIAN PERSONNEL	100.00
D147 ASSIGN RESIDENT COURSE INSTRUCTORS	100.00
D173 EVALUATE INSTRUCTOR PERFORMANCE	100.00
D163 DEVELOP COURSE CURRICULA, PLANS OF INSTRUCTIONS (POI), OR SPECIALTY TRAINING STANDARDS (STS)	100.00
D190 PREPARE LESSON PLANS	100.00
D176 EVALUATE TRAINING METHODS OR TECHNIQUES	100.00
D152 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	100.00
D179 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	100.00
C140 WRITE CIVILIAN PERFORMANCE RATINGS OR SUPERVISORY APPRAISALS	100.00
C121 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100.00
A3 COORDINATE WORK WITH OTHER SECTIONS	100.00
E211 MAINTAIN COUNSELING FORMS	100.00
D183 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	100.00
D184 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	100.00
B80 ORIENT NEWLY ASSIGNED PERSONNEL	100.00
A25 ESTABLISH WORK SCHEDULES	85.71
D144 ADMINISTER OR SCORE TESTS	85.71
A21 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	85.71
D162 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	85.71
D158 COUNSEL TRAINERS OR INSTRUCTORS	85.71
D198 WRITE TEST QUESTIONS	85.71
D175 EVALUATE TRAINING MATERIALS OR AIDS	85.71
E208 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	85.71
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUN- CIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	85.71
D157 COUNSEL TRAINEES ON TRAINING PROGRESS	85.71
E233 MAKE ENTRIES ON AF FORMS 971 (SUPERVISOR'S RECORD OF EMPLOYEE)	85.71

TABLE XIVB

NCOICS OF TRAINING
(GRP289, JOB TYPE IN INSTRUCTOR SUPERVISION CLUSTER)

GROUP SIZE: 6

AVERAGE GRADE: E-6

AVERAGE TAFMS: 132 MONTHS

AVERAGE TICF: 93 MONTHS

DAFSC: 31630G 0
31650G 0
31670G 100%

TASK LISTING IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
D172 EVALUATE EFFECTIVENESS OF TRAINING PROGRAMS	100.00
D169 DIRECT OR IMPLEMENT TRAINING PROGRAMS, OTHER THAN OJT	100.00
D195 SCHEDULE TRAINING SESSIONS OTHER THAN OJT	100.00
D190 PREPARE LESSON PLANS	100.00
D167 DEVELOP TRAINING AIDS	100.00
D144 ADMINISTER OR SCORE TESTS	100.00
D145 ADVISE UNIT STAFF PERSONNEL ON TRAINING MATTERS	100.00
D175 EVALUATE TRAINING MATERIALS OR AIDS	100.00
D179 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	100.00
D163 DEVELOP COURSE CURRICULA, PLANS OF INSTRUCTIONS (POI), OR SPECIALTY TRAINING STANDARDS (STS)	100.00
D198 WRITE TEST QUESTIONS	100.00
D193 REVIEW TRAINING REPORTS	100.00
D186 PARTICIPATE IN TRAINING CONFERENCES	100.00
D165 DEVELOP PERFORMANCE TESTS	100.00
A26 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, COUN- CIL MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100.00
D152 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	83.33
D173 EVALUATE INSTRUCTOR PERFORMANCE	83.33
D176 EVALUATE TRAINING METHODS OR TECHNIQUES	83.33
D177 INSPECT TRAINING AIDS FOR OPERATION OR SUITABILITY	83.33
D158 COUNSEL TRAINERS OR INSTRUCTORS	83.33
D164 DEVELOP NEW EQUIPMENT TRAINING PROGRAMS	83.33
D192 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	83.33
D157 COUNSEL TRAINEES ON TRAINING PROGRESS	83.33
D174 EVALUATE PROGRESS OF TRAINEES	83.33
D178 MAINTAIN STUDY REFERENCE FILES	83.33
C135 PROVIDE TECHNICAL ASSISTANCE FOR JOB-RELATED PROBLEMS ENCOUNTERED BY SUBORDINATES	83.33
B52 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	83.33
B53 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	83.33

END

FILMED

10-85

DTIC