UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT

AIRCRAFT ELECTRICAL AND ENVIRONMENTAL SYSTEMS

AFSC 2A6X6

AFPT 90-2A6-095

SEPTEMBER 1997

OCCUPATIONAL MEASUREMENT SQUADRON
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
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PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Aircraft Electrical and Environmental Systems career ladder, Air Force Specialty Code (AFSC) 2A6X6. Authority for conducting occupational surveys is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Functional Manager, the operations training location, all major using commands, and other interested operations and training officials.

The survey instrument was developed by Lieutenant(N) Brian R. Thompson, Inventory Development Specialist, with computer programming support furnished by Mr. Tyrone Hill. Mr. Richard G. Ramos provided administrative support. Second Lieutenant Charlie L. Law, Occupational Analyst, analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Roger W. Barnes, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

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

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SUMMARY OF RESULTS

1. **Survey Coverage**: The Aircraft Electrical and Environmental Systems career ladder was surveyed to obtain current job and task data for use in examining training programs. Survey results are based on responses from 1,823 AFSC 2A6X6 personnel, which represents 30 percent of the assigned population. The Air National Guard (ANG), Air Force Reserve (AFRES) and all major commands are satisfactorily represented in the survey sample.

2. **Specialty Jobs**: Four clusters and four jobs were identified in the career ladder structure analysis. The four clusters were: Flightline, Backshop, Training, and Supervisors. Four independent jobs were also identified: Power, Oxygen, Quality Assurance Inspector, and Safety Inspector. Specialty descriptions in AFMAN 36-2108 are complete and generally are accurate portrayals of the nature of the job.

3. **Career Ladder Progression**: Nearly all 3-skill level personnel perform only technical duties. Although 5-skill level jobs are technically oriented, they also have a minimal supervisory aspect. The 7-skill level members devote most of their time to supervisory/management duties. The AFMAN 36-2108 *Specialty Description* provides a broad and accurate overview of tasks and duties performed within the career ladder, as well as the primary responsibilities of members in the eight jobs identified by the job structure analysis process.

4. **Training Analysis**: A match of survey data to the AFSC 2A6X6 Specialty Training Standard (STS) identified numerous tasks not referenced to the STS. This included all of the tasks listed under the Performing General Aircraft and Cross Utilization Training (CUT) Activities. Career ladder functional managers and training personnel should carefully review the unsupported STS items to justify their continued inclusion in the training documents.

5. **Job Satisfaction Analysis**: The majority of job satisfaction measures for the AFSC 2A6X6 were high. Group incumbents are about as satisfied as the previous samples and very similar to other career ladders in a comparative sample. As might be expected, those jobs and clusters with more experienced personnel tended to have the highest expressed levels of job satisfaction.

6. **Implications**: The career ladder structure is quite similar to that found in the previous OSR. Career ladder progression is normal, showing a movement away from the technical tasks common at the lower skill levels as the incumbents move toward the 7-skill level. For this survey, the ANG and the AFRES AFSC 2A6X6 personnel were included in the survey process and the analysis of the career field.

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OCCUPATIONAL SURVEY REPORT (OSR)
SERVICES CAREER LADDER
(AFSC 2A6X6)

INTRODUCTION

This is a report of an occupational survey of the Aircraft Electrical and Environmental Systems career ladder, completed by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron. This survey was completed as part of a 5-year cycle. The current Specialty Training Standard (STS) is dated September 1994. The last occupational survey for this career ladder was published in January 1993.

Background

As described in the AFMAN 36-2108 *Specialty Description*, dated 30 April 1994, members of the Aircraft Electrical and Environmental Systems career ladder inspect, troubleshoot, and maintain aircraft electrical and environmental systems, subsystems, components, and test equipment. In addition, members also install, test, modify, repair and overhaul aircraft electrical and environmental systems, components and test equipment.

All members are required to attend the J3ABR2A636-001 Aircraft Electrical and Environmental Systems apprentice course. The course, offered at Sheppard AFB, is 87 days long. The Aircraft Electrical and Environmental Systems Craftsman course, J3AAR2A676-000, is 10 days long. Entry into the career ladder currently requires Armed Forces Vocational Aptitude Battery minimum scores of 45 Mechanical and 60 Electronic, and the strength factor of "K" (weight lift of 70 lbs) must be met or exceeded.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Air Force Personnel Test 90-2A6-095, dated August 1996. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, tasks from the

previous survey instrument, and data from the last OSR. The preliminary task list was refined and validated through personal interviews with 41 Subject-Matter Experts (SMEs) (selected to cover a variety of major commands (MAJCOMs)) at the following locations:

BASE	REASON FOR VISIT
Sheppard AFB TX	364 TRS/TTMAS
Hurlburt Field FL	16 SOW/LGM
Dyess AFB TX	7 LG/LGMCV
Phoenix AZ	161 ARG
Nellis AFB NV	57 LG/OG
Barksdale AFB LA	2 LG/OG
Travis AFB CA	LGLT

Others contacted included Air Force Personnel Center (AFPC) classification personnel, functional and resource managers, and the Air Force Career Field Manager.

The resulting JI contained a comprehensive listing of 654 tasks grouped under 25 duty headings, and a background section requesting such information as grade, duty title, functional area, types of equipment operated, job satisfaction, and forms used.

Survey Administration

In October 1996 there were 3,920 active duty members assigned to the career ladder. Additionally, there were 1,050 Air Force Reserve (AFRES) personnel, and 1,233 Air National Guard (ANG) personnel assigned to the career ladder. Fifty percent of the eligible population were selected by a stratified random selection process for participation in the survey. Base Training Offices at operational bases worldwide administered the inventory to 2,831 eligible AFSC 2A6X6 members. Members eligible for this survey consisted of the total assigned 3-, 5-, and 7-skill levels, excluding the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring during the time the JIs were administered to the field; and (4) personnel in their job less than 6 weeks. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by AFPC, Randolph AFB TX.

Respondents were asked to complete an identification and biographical information section first and go through the booklet and check each task performed in their current job. After checking all tasks performed, respondents then rated each of these tasks on a 9-point scale showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount time spent).

To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of their time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

The final AFSC 2A6X6 survey sample includes responses from 1,823 job incumbents. Table 1 reflects the MAJCOM distribution of assigned AFSC 2A6X6 personnel. The 1,823 respondents represent 30 percent of the assigned population and 64 percent of those surveyed. Table 2 reflects the distribution by paygrade and component status. These figures show that the sample is representative of the total population.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. While most participants in the survey process completed a USAF JI, selected senior AFSC 2A6X6 personnel were also asked to complete booklets providing judgments on task training emphasis (TE) or task difficulty (TD). The information gained from task factor data is used in various analyses and is a valuable part of the training decision process.

Training Emphasis (TE). TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 47 senior NCOs from the career ladder who completed a TE booklet were asked to select tasks they felt required some structured training for entry-level personnel and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 10 (extremely high emphasis). Structured training is defined as training provided at resident technical schools, field training detachments (FTDs), mobile training teams, formal on-the-job training (OJT), or any other organized training method. There was very good agreement among the 47 raters as to which tasks required some form of structured training and which do not. The average TE rating was 2.65, with a standard deviation of 1.66. Any task with a TE rating of 4.31 or above is considered to have high training emphasis.

TABLE 1

MAJCOM REPRESENTATION OF AFSC 2A6X6 SAMPLE

MAJCOM	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
USAFE	4	4
AETC	7	7
PACAF	6	6
ACC	25	26
AMC	15	14
AFMC	3	4
AFSOC	4	3
AG	17	20
AFR	20	16

	AFSC 2A6X6 ACTIVE DUTY	AFSC 2A6X6 GUARD	AFSC 2A6X6 RESERVE
TOTAL ASSIGNED	3,920	1,233	1,050
TOTAL ELIGIBLE	3,522	1,181	986
TOTAL IN SAMPLE	1,161	362	300
PERCENT OF ASSIGNED IN SAMPLE	30%	29%	29%
PERCENT OF ELIGIBLE IN SAMPLE	33%	31%	30%

* Assigned strength as of October 1996

** Excludes personnel in PCS, student, or hospital status, or less than 6 weeks on the job

TABLE 2

PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

	PERCENT OF ACTIVE DUTY		PERCENT OF AIR RESERVE		PERCENT OF AIR GUARD	
PAYGRADE	ASSIGNED	SAMPLE	ASSIGNED	SAMPLE	ASSIGNED	SAMPLE
E-1 to E-3	26	25	1	-	4	2
E-4	25	26	16	10	20	15
E-5	26	26	45	45	39	41
E-6	13	14	27	31	26	27
E-7	10	9	11	14	11	14
E-8	<1	-	<1	-	<1	-
E-9	-	-	-	-	-	-

* Assigned strength as of October 1996

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

Task Difficulty (TD). TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 46 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 10-point scale (i.e., extremely low to extremely high). Ratings were standardized so tasks have an average difficulty of 5.00, with a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TD and TE ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting Air Force Specialty entry-level jobs.

SPECIALTY JOBS
(Career Ladder Structure)

The occupational analysis process begins with an examination of the career ladder structure. The structure of jobs within the Aircraft Electrical and Environmental Systems career ladder was examined on the basis of similarity of tasks performed and the relative percent of time spent ratings provided by job incumbents, independent of other specialty background factors.

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by respondents. The Comprehensive Occupational Data Analysis Program (CODAP) assists by creating an individual job description for each respondent based on the tasks performed and the relative amount of time spent on tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, new members are added to this initial group, or new groups are formed based on the similarity of tasks and time spent ratings.

The basic group used in this hierarchical clustering process is the *Job*. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a *Cluster*. The structure of the career ladder is then defined in terms of jobs and clusters of jobs. The resulting job structure information can be used to evaluate the accuracy of career ladder documents (i.e., AFMAN 36-2108 *Specialty Descriptions*, the Career Field Education and Training Plan, and STSs), as well as to gain a better understanding of current utilization patterns. The above terminology will be used in the discussion of the AFSC 2A6X6 career ladder structure.

Overview of Specialty Jobs

A listing of these jobs and job clusters is provided below. The stage (STG) number shown beside each title references computer printed information, the letter "N" represents the number of personnel in each group. Figure 1 illustrates the division of jobs performed by AFSC 2A6X6 personnel.

I. POWER JOB (STG134, N=18)

II. FLIGHTLINE CLUSTER (STG083, N=1,274)

III. BACKSHOP CLUSTER (STG107, N=172)

IV. OXYGEN JOB (STG125, N=12)

V. TRAINING CLUSTER (STG084, N=30)

VI. QUALITY ASSURANCE INSPECTOR JOB (STG127, N=11)

VII. SUPERVISOR CLUSTER (STG099, N=86)

VIII. SAFETY INSPECTOR JOB (STG122, N=12)

The respondents forming these jobs account for 89 percent of the survey sample. The remaining 11 percent were performing tasks or series of tasks which did not group with any of the defined jobs. Some job titles for these individuals include: Rotary Wing Program Manager. Dayshift Lead Technician, Resource Advisor, Squadron Mobility NCO, and Aviation Maintenance Manager.

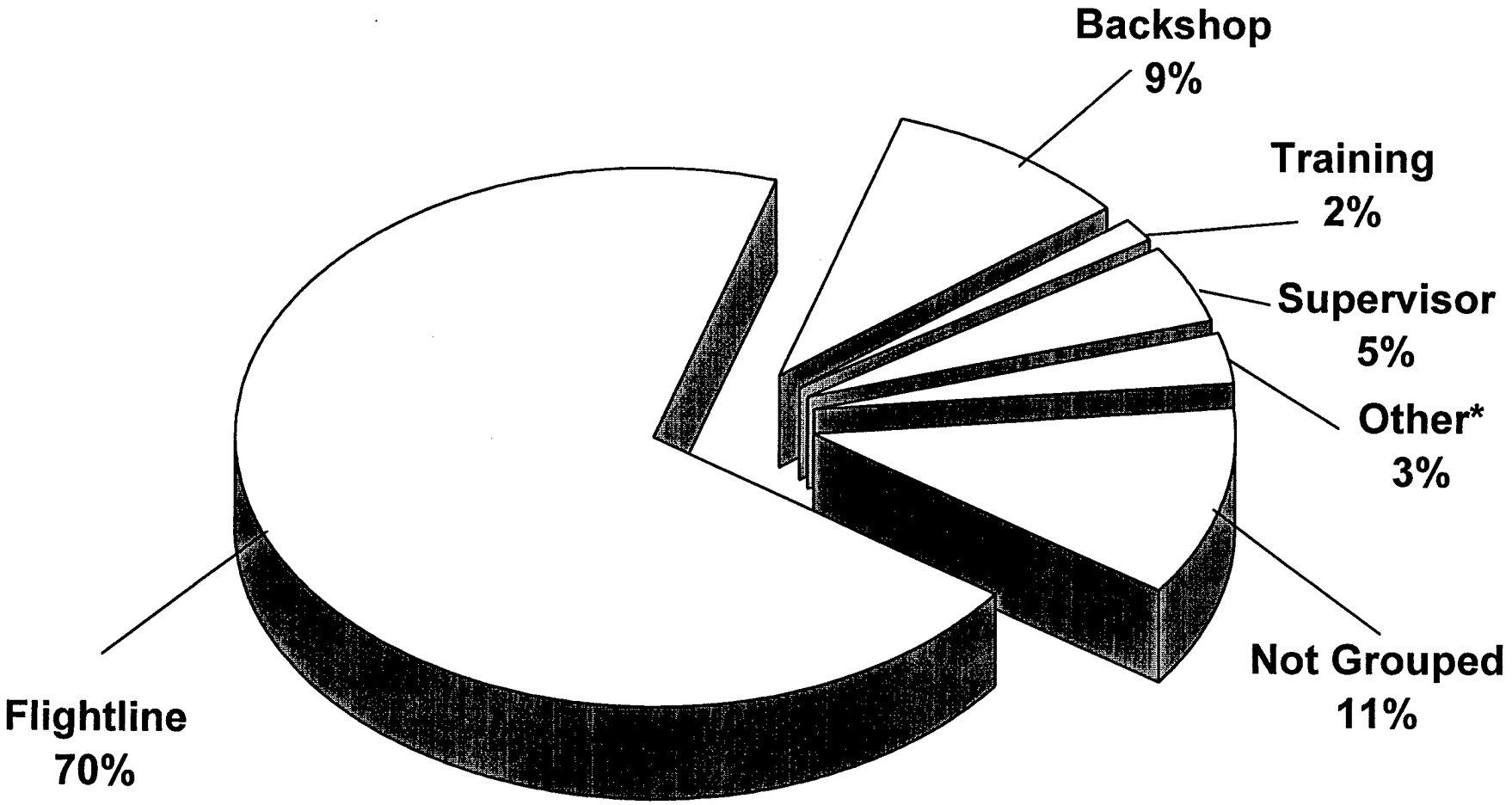
Group Descriptions

The following paragraphs contain brief descriptions of the jobs and clusters identified through the career ladder structure analysis. Table 3 presents the relative time spent on duties by members of these specialty jobs, while Table 4 provides demographic information for each job discussed within this report. Representative tasks for all the groups are contained in Appendix A1.

I. POWER JOB (STG018). The 18 members of this job compromise less than 1 percent of the survey sample. Personnel in the Power Job work primarily with aircraft power systems. This includes working with AC and DC power systems, isolating malfunctions, removing and installing power components and inspecting power components. Over 36 percent

FIGURE 1

2A6X6 CAREER LADDER JOBS



Others includes: Power, Oxygen, Quality Inspector, and Safety Inspector

TABLE 3

RELATIVE PERCENT TIME SPENT PERFORMING DUTIES BY SPECIALTY JOBS

DUTIES	POWER (STG134) (N=18)	FLIGHTLINE (STG083) (N=1274)	BACKSHOP (STG107) (N=172)	OXYGEN (STG125) (N=12)
A PERFORMING AIRCRAFT ELECTRICAL AND ENVIRONMENTAL FUNDAMENTAL MAINTENANCE	28	8	14	8
B MAINTAINING AIRCRAFT POWER AND DISTRIBUTION SYSTEMS	36	11	8	2
C MAINTAINING ENGINE START AND IGNITION CONTROL SYSTEMS	2	1	*	-
D MAINTAINING LANDING GEAR SYSTEMS	5	6	2	1
E MAINTAINING CARGO DOOR AND RAMP SYSTEMS	2	1	*	-
F MAINTAINING FUEL AND WATER INJECTION SYSTEMS	1	1	*	*
G MAINTAINING FLIGHT CONTROL SYSTEMS	2	3	1	-
H MAINTAINING BATTERIES	4	2	8	16
I MAINTAINING MASTER CAUTION AND WARNING SYSTEMS	1	3	1	1
J MAINTAINING FIRE AND OVERHEAT WARNING SYSTEMS	2	3	1	*
K MAINTAINING LIGHTING SYSTEMS	4	6	7	*
L MAINTAINING ANTI-ICING SYSTEMS	*	2	*	1
M MAINTAINING AIRCRAFT FIRE EXTINGUISHING SYSTEMS	1	3	1	*
N MAINTAINING AIRCRAFT OXYGEN SYSTEMS AND ASSOCIATED EQUIPMENT	4	8	19	30
O MAINTAINING AIRCRAFT PRESSURIZATION SYSTEMS	1	4	1	-
P MAINTAINING AUXILIARY AIR AND BLEED AIR DISTRIBUTION SYSTEMS	2	7	1	-
Q MAINTAINING AIRCRAFT LIQUID COOLANT AND LIQUID CYCLE REFRIGERATION SYSTEMS	-	1	*	-
R MAINTAINING AIRCRAFT AIR-CONDITIONING SYSTEMS	4	7	2	-
S MAINTAINING MISCELLANEOUS ELECTRICAL ENVIRONMENTAL CONTROL SYSTEMS	1	2	11	15
T PERFORMING GENERAL AIRCRAFT AND CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	1	8	1	1
U PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	*	4	8	1
V PERFORMING TRAINING ACTIVITIES	*	2	3	1
W PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	-	1	1	4
X PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	*	1	3	11
Y PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1	5	7	9

* Denotes less than 1 percent

TABLE 3 (CONTINUED)

RELATIVE PERCENT TIME SPENT PERFORMING DUTIES BY SPECIALTY JOBS

DUTIES	TRAINING (STG 084) (N=30)	QA INSPECTOR (STG127) (N=11)	SUPERVISOR (STG099) (N=86)	SAFETY (STG012) (N=12)
A PERFORMING AIRCRAFT ELECTRICAL AND ENVIRONMENTAL FUNDAMENTAL MAINTENANCE	4	4	1	1
B MAINTAINING AIRCRAFT POWER AND DISTRIBUTION SYSTEMS	4	4	1	*
C MAINTAINING ENGINE START AND IGNITION CONTROL SYSTEMS	*	1	*	-
D MAINTAINING LANDING GEAR SYSTEMS	1	3	*	-
E MAINTAINING CARGO DOOR AND RAMP SYSTEMS	*	*	*	-
F MAINTAINING FUEL AND WATER INJECTION SYSTEMS	*	*	*	-
G MAINTAINING FLIGHT CONTROL SYSTEMS	2	3	*	-
H MAINTAINING BATTERIES	1	1	*	*
I MAINTAINING MASTER CAUTION AND WARNING SYSTEMS	1	1	*	-
J MAINTAINING FIRE AND OVERHEAT WARNING SYSTEMS	1	1	*	-
K MAINTAINING LIGHTING SYSTEMS	2	2	*	-
L MAINTAINING ANTI-ICING SYSTEMS	*	1	*	-
M MAINTAINING AIRCRAFT FIRE EXTINGUISHING SYSTEMS	*	1	*	*
N MAINTAINING AIRCRAFT OXYGEN SYSTEMS AND ASSOCIATED EQUIPMENT	1	3	*	-
O MAINTAINING AIRCRAFT PRESSURIZATION SYSTEMS	1	2	*	-
P MAINTAINING AUXILIARY AIR AND BLEED AIR DISTRIBUTION SYSTEMS	1	3	*	-
Q MAINTAINING AIRCRAFT LIQUID COOLANT AND LIQUID CYCLE REFRIGERATION SYSTEMS	*	*	*	-
R MAINTAINING AIRCRAFT AIR-CONDITIONING SYSTEMS	1	2	*	-
S MAINTAINING MISCELLANEOUS ELECTRICAL ENVIRONMENTAL CONTROL SYSTEMS	*	2	*	*
T PERFORMING GENERAL AIRCRAFT AND CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	1	4	1	-
U PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	21	27	57	78
V PERFORMING TRAINING ACTIVITIES	47	4	9	3
W PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	4	7	6	12
X PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3	2	5	2
Y PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	2	23	20	4

* Denotes less than 1 percent

TABLE 4

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	POWER (STG134)	FLIGHTLINE (STG083)	BACKSHOP (STG107)	OXYGEN (STG125)
NUMBER IN GROUP	18	1274	172	12
PERCENT OF SAMPLE	1%	69%	9%	<1%
PERCENT IN CONUS	94	85	72	75
DAFSC DISTRIBUTION:				
2A636	22%	18%	38%	50%
2A656	67%	57%	47%	50%
2A676	11%	24%	15%	0%
COMPONENT STATUS				
ACTIVE DUTY	50%	57%	95%	92%
AIR FORCE RESERVES (AFRES)	6%	20%	4%	8%
AIR NATIONAL GUARD (ANG)	45%	23%	1%	0%
PAYGRADE DISTRIBUTION				
E-1 to E-3	11%	14%	34%	50%
E-4	39%	23%	23%	25%
E-5	33%	35%	28%	17%
E-6	17%	21%	12%	8%
E-7	0%	7%	3%	0%
E-8	0%	0%	0%	0%
E-9	0%	0%	0%	0%
PERCENT SUPERVISING	17%	39%	44%	8%
AVERAGE NUMBER OF TASKS PERFORMED	64	193	119	49

* Denotes less than 1 percent

TABLE 4 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	TRAINING (STG084)	QA INSPECTOR (STG127)	SUPERVISOR (STG099)	SAFETY (STG012)
NUMBER IN GROUP	30	11	86	12
PERCENT OF SAMPLE	1%	<1%	5%	<1%
PERCENT IN CONUS	93	73	83	67
DAFSC DISTRIBUTION:				
2A636	0%	55%	0%	0%
2A656	73%	45%	8%	25%
2A676	27%	0%	92%	75%
COMPONENT STATUS				
ACTIVE DUTY	100%	91%	86%	100%
AIR FORCE RESERVES (AFRES)	0%	0%	7%	0%
AIR NATIONAL GUARD (ANG)	0%	9%	7%	0%
PAYGRADE DISTRIBUTION				
E-1 to E-3	0%	0%	0%	0%
E-4	0%	0%	1%	0%
E-5	60%	36%	2%	25%
E-6	27%	27%	21%	17%
E-7	13%	36%	74%	58%
E-8	0%	0%	1%	0%
E-9	0%	0%	0%	0%
PERCENT SUPERVISING	77%	36%	87%	33%
AVERAGE NUMBER OF TASKS PERFORMED	66	93	74	32

* Denotes less than 1 percent

of their job time is spent performing these activities, more time than members of any other job. The members of this job perform an average of 64 tasks, which is fairly low when compared to most of the other jobs. The low number of tasks suggests that this job is fairly specialized with members performing a small number of tasks concerning power systems. Members of this job are distinguished by the time they spend on the following tasks:

perform operational checks of AC power systems
remove or install AC power components
perform operational checks of DC power systems
isolate AC power malfunctions
remove or install DC power components
isolate DC power malfunctions
inspect AC power components
perform operational checks of external power systems

Most of the personnel in this job hold the 5-skill level and are in paygrades E-4 and E-5. Only 17 percent report having supervisory responsibilities.

II. FLIGHTLINE CLUSTER (STG083). Comprising 69 percent of the survey sample, this core job includes 1,274 members who are responsible for flightline related duties. Much of their time is spent performing operational checks, inspecting, isolating problems, and removing and installing a wide variety of components. Eleven percent of their time is spent maintaining aircraft power and distribution systems. One reason for the wide variety of duties performed in this cluster is the nature of the job itself. The cluster did not break down by aircraft, so the Flightline Cluster includes all types of aircraft. This includes fighter, cargo, and transport aircraft. The core tasks performed on each of these aircraft were similar; however, small differences in the tasks performed may have caused the wide range of duties performed. Two jobs were also identified in this cluster. Personnel within the Battery Job performed mostly battery related duties, such as cleaning and replacing batteries. Personnel in the General Maintenance Job performed a variety of general maintenance activities, such as aircraft towing tasks. Personnel in the Flightline Cluster perform an average of 193 tasks. This number is high when compared to other clusters and jobs. Some of the tasks which distinguish this cluster are:

crimp splices or terminals to wires
perform operational checks of AC power systems
perform operational checks of air-conditioning systems
perform operational checks of exterior lighting
perform operational checks of interior lighting
assemble or disassemble connector plugs
remove or install bleed air system components
inspect wire bundles or harnesses
perform operational checks of anti-skid systems

The predominant skill level for this cluster was the 5-skill level with the 7-skill level following. The majority of the personnel in the Flightline Cluster are paygrade E-4 and E-5. Thirty-nine percent of the personnel in this cluster report supervising others, which is about average compared to other clusters and jobs.

III. BACKSHOP CLUSTER (STG107). The 172 members in this cluster are tasked with the duties that typically are not accomplished on the flightline. In fact, the duty location is the primary factor that separated this cluster from the Flightline Cluster. Members in this cluster are responsible for a variety of tasks, including battery and oxygen related tasks. Ninety-five percent of the members of this cluster are active duty, with only 4 percent AFRES and 1 percent ANG. The members of this cluster comprise 9 percent of the sample, which makes it the second largest job identified. Nineteen percent of their time is spent maintaining aircraft oxygen systems, while 14 percent is spent performing aircraft electrical and environmental maintenance. Three separate jobs were identified in this cluster. The backshop supervisors did almost exclusively supervisory-related tasks. Backshop managers did a combination of supervisory and technical tasks. Finally, the backshop technicians did almost all technical tasks with very few supervisory tasks. Overall, an average of 119 tasks are performed by personnel in this cluster, which is the second highest, and fairly high when compared to the other clusters and jobs. Tasks that distinguish this cluster include:

clean batteries
assemble or disassemble batteries
perform capacitance tests and service batteries
inspect LOX servicing carts
crimp splices or terminals to wires
isolate LOX servicing cart malfunctions
bench check exterior lighting components
clean connector plugs
inspect liquid nitrogen servicing carts

The majority of the personnel in this cluster are 5-skill level. A high percentage of personnel also are 3-skill level, with only 15 percent of the cluster at the 7-skill level. The E-1 to E-3 paygrade had the highest percentage of personnel, which is second only to the Oxygen Job at this paygrade level.

IV. OXYGEN JOB (STG125). Eleven of the 12 members in this job are active duty, with the remaining member AFRES. This job comprises less than 1 percent of the survey sample. Members of this job primarily maintain liquid oxygen (LOX) and gaseous oxygen (GOX) systems. This includes inspecting, isolating malfunctions, and removing and installing

components. Thirty percent of their time is spent on oxygen systems, which is higher than any other job group. An average of 49 tasks are performed, which is the second lowest when compared to other jobs. Most of those tasks are very specialized to oxygen duties. Working with batteries and maintaining miscellaneous electrical environmental control systems are also important skills for members of this job. Some tasks which are representative of the job are:

purge LOX servicing carts
remove or install LOX servicing cart components
perform leakage checks of LOX servicing carts
inspect LOX servicing carts
perform operational checks of LOX servicing carts
perform operational checks of GOX servicing carts
isolate LOX servicing cart malfunctions
perform leakage checks of GOX servicing carts

The personnel in the Oxygen Job are split between the 3- and 5-skill level, with 50 percent in each. The predominant paygrades are E-1 to E-3, which account for 50 percent of the members of this job. There are not any members above E-6. The percent supervising is only 8 percent for this job, which is the lowest of any job group.

V. TRAINING CLUSTER (STG084). The 30 members of this cluster represent 1 percent of the survey sample. The Training Cluster is the third largest cluster or job identified. Members of this cluster are responsible for the formal training of job incumbents. Two distinct jobs were identified within this cluster. The first job identified those members who worked only as instructors. Typically, this was the classroom, formal instruction. Members in the second job also were instructors but were also performing a large amount of technical duties. Members of this second job were "On-the-Job Training" instructors rather than classroom instructors. Members of this cluster performed an average of 66 tasks. This is about average when compared to the other job groups. Members in the Training Cluster spend 47 percent of their time performing training activities. That is much higher than any other cluster or job. In addition, 21 percent of their time is spent performing management and supervisory activities. Representative tasks performed by members of this cluster include:

conduct formal course classroom training
administer or score tests
demonstrate operation of equipment
evaluate progress of trainees
develop training materials or aids
personalize lesson plans
demonstrate how to locate technical information
develop performance tests

Seventy-three percent of the members in the Training Cluster are at the 5-skill level, while the other 27 percent are at the 7-skill level. All of the members in this cluster are active duty. Most of the personnel are E-5 and E-6 paygrades. Seventy-seven percent of the personnel report supervising other personnel.

VI. QUALITY ASSURANCE INSPECTOR JOB (STG127). The 11 members forming this group are primarily responsible for quality assurance functions. Members of this job perform duties such as inspecting records, observing work procedures, and evaluating procedures, all of which are directly related to quality assurance. Twenty-seven percent of their time is spent performing management and supervisory activities and 23 percent is spent performing maintenance management activities. Most of the members of this job report working in a Quality Assurance office. The average number of tasks performed was 93 for members in the Quality Assurance Inspector Job. This job is distinguished by the following tasks:

evaluate maintenance procedures
complete accident or incident reports
analyze Core Automated Maintenance System (CAMS) data
initiate technical order improvement reports
observe in-process maintenance or initiate on-the-spot corrections
review publishing bulletins or technical order changes
write inspection reports
perform maintenance activity inspections or self-inspections

Fifty-five percent of the quality assurance inspectors are at the 3-skill level with the other 45 percent at the 7-skill level. Thirty-six percent of the personnel in this job have the E-5 paygrade and 36 percent also are at the E-7 paygrade. Ninety-one percent are active duty and 9 percent are ANG. Thirty-six percent report supervising, which is about average when compared to the other jobs.

VII. SUPERVISOR CLUSTER (STG099). The 86 members comprising this cluster represent 5 percent of the sample. There are two separate jobs within the Supervisor Cluster. The first job is purely a supervisory one. Members of this job are responsible for such tasks as determining work assignments, writing performance reports, and counseling subordinates. Maintenance supervisors comprise the second job within the Supervisor Cluster. Members of this job are responsible for tasks such as coordinating aircraft maintenance activities and reviewing aircraft maintenance records. Both of these jobs are similar with members in each respective job performing primarily supervisory tasks. The maintenance supervisors, however, perform unique tasks specific to maintenance. The majority of the personnel report working in a maintenance shop. Members of the Supervisor Cluster report spending 57 percent of their time

performing management and supervisory activities and 20 percent of their time is spent performing maintenance management activities. Personnel in this cluster perform an average of 74 tasks, which is about average compared to other jobs. Representative tasks performed by members of this cluster include:

supervise military personnel
determine or establish work assignments or priorities
develop or establish work schedules
evaluate personnel for compliance with performance standards
write performance reports or supervisory appraisals
coordinate aircraft maintenance activities with maintenance control
evaluate maintenance procedures
conduct self-inspections or self-assessments

Ninety-two percent of the members in the Supervisor Cluster are at the 7-skill level and 8 percent are at the 5-skill level. Seventy-four percent are paygrade E-7. Eighty-seven percent report supervisory responsibilities, which is much higher than any other job or cluster.

VIII. SAFETY INSPECTOR JOB (STG122). The 12 members of this job account for less than 1 percent of the survey population. Personnel in this job primarily inspect for work hazards and safety in the work areas. Much of the job time is spent in performing management and supervisory activities (78 percent) while 12 percent of their time is spent performing general administrative and technical order system activities. Members of this job perform an average of only 32 tasks. This is the lowest number of tasks performed, and indicates a very highly specialized job. There are no ANG or AFRES members performing this job. Tasks which best differentiate this job from others are:

conduct self-inspections or self-assessments
conduct safety inspections of equipment or facilities
evaluate accident or incident reports
evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) Program
write inspection reports
plan safety or security programs
complete accident or incident reports
investigate accidents or incidents

Three-quarters of the personnel in this job are 7-skill level, with 25 percent at the 5-skill level. The predominant paygrade is E-7. Only 33 percent of the personnel report supervising, which is slightly lower than average.

Comparison of Current Jobs to Previous Survey Findings

Results of the specialty job analysis were compared to those of the last Aircraft Electrical and Environmental Systems OSR published in 1993. With some variance in the job titles between the two studies, the tasks that personnel performed in the previous OSR are generally found in the current study. As shown in Table 5, the majority of jobs identified previously were also identified in this study. The current OSR groups several of the jobs from the previous OSR into clusters. For example, the Technical Training Instructor and the Field Training Detachment (FTD) Instructor jobs from the previous OSR are now in the Training Cluster. Conversely, the previous OSR had battery and oxygen cart maintenance clustered together, while the current study identifies them as independent jobs. The Airborne Warning and Control System (AWACS) Job, the Maintenance Scheduling Job, the Wiring Job, and the Helicopter Cluster from the previous OSR were not similar to any of the jobs or clusters identified in the current study.

Summary

Utilizing the special job-identifying techniques described at the beginning of this section, eight jobs were identified in the career ladder structure analysis. The eight jobs were directly involved in performing the full range of duties and responsibilities of the Aircraft Electrical and Environmental systems career field.

The majority of the personnel are involved in jobs that center around the flightline with almost three quarters of the personnel grouped as flightline personnel. Most job groups have similar tasks that involve inspecting, troubleshooting, removing, repairing and installing components. Current results largely follow the historical career structure with the major changes involving the deletion of the AWACS, Maintenance Scheduling, Wiring, and Helicopter jobs.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may then be used to evaluate how well career ladder documents, such as the AFMAN 36-2108 *Specialty Description* and the STS, reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the career ladder jobs is displayed in Table 6, while Table 7 offers another perspective by displaying the average percent time spent on each duty across the skill-level groups. Both 3- and 5-skill level groups perform mostly technical

TABLE 5

COMPARISON OF JOB GROUPS IN CURRENT STUDY
TO PREVIOUS STUDY

	1997 STUDY (N=1,823)	PERCENT OF SAMPLE		1993 STUDY (N=2,931)	PERCENT OF SAMPLE
I.	POWER	1	I.	NOT IDENTIFIED	-
II.	FLIGHTLINE	69	II.	FLIGHTLINE MAINTENANCE	53
III.	BACKSHOP	9	III.	IN-SHOP MAINTENANCE	17
IV.	OXYGEN	<1	IV.	BATTERY, OXYGEN CART MAINTENANCE	1
V.	TRAINING	1	V.	TECHNICAL TRAINING INSTRUCTOR AND FTD INSTRUCTOR	2
VI.	QUALITY ASSURANCE INSPECTOR	<1	VI.	QUALITY ASSURANCE	1
VII.	SUPERVISORS	5	VII.	SUPERVISOR	7
VIII.	SAFETY INSPECTOR	<1	VIII.	NOT IDENTIFIED	-
IX.	NOT IDENTIFIED	-	IX.	HELICOPTER	1
X.	NOT IDENTIFIED	-	X.	CROSS-UTILIZATION TRAINING	<1
XI.	NOT IDENTIFIED	-	XI.	WIRING	<1
XII.	NOT IDENTIFIED	-	XII.	MAINTENANCE SCHEDULING	<1
XIII.	NOT IDENTIFIED	-	XIII.	AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)	<1

TABLE 6

DISTRIBUTION OF AFSC 2A6X6 MEMBERS ACROSS SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

SPECIALTY JOBS	DAFSC 2A636			DAFSC 2A656				DAFSC 2A676			
	TOTAL (N=356)	ACTIVE (N=341)	AFRES (N=15)	TOTAL (N=978)	ACTIVE (N=578)	ANG (N=225)	AFRES (N=175)	TOTAL (N=489)	ACTIVE (N=242)	ANG (N=137)	AFRES (N=110)
I. POWER	1	1	7	1	1	3	-	-	-	2	-
II. FLIGHTLINE	65	65	73	75	70	81	82	64	39	88	88
III. BACKSHOP	19	19	13	8	14	-	2	5	9	1	2
IV. OXYGEN	2	2	-	1	1	-	1	-	-	-	-
V. TRAINING	-	-	-	2	4	-	-	2	3	-	-
VI. QUALITY ASSURANCE INSPECTOR	-	-	-	1	1	-	-	1	2	-	-
VII. SUPERVISOR	-	-	-	1	1	-	-	16	28	4	6
VIII. SAFETY INSPECTOR	-	-	-	-	1	-	-	2	4	-	-
NOT GROUPED	13	13	7	11	7	16	15	10	15	5	4

TABLE 7

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY TOTAL DAFSC 2A6X6 GROUPS
(RELATIVE PERCENT OF JOB TIME)

	DUTIES	DAFSC 2A636 (N=356)	DAFSC 2A656 (N=978)	DAFSC 2A676 (N=489)
A	PERFORMING AIRCRAFT ELECTRICAL AND ENVIRONMENTAL FUNDAMENTAL MAINTENANCE	11	10	7
B	MAINTAINING AIRCRAFT POWER AND DISTRIBUTION SYSTEMS	12	10	7
C	MAINTAINING ENGINE START AND IGNITION CONTROL SYSTEMS	1	1	1
D	MAINTAINING LANDING GEAR SYSTEMS	6	6	4
E	MAINTAINING CARGO DOOR AND RAMP SYSTEMS	1	1	1
F	MAINTAINING FUEL AND WATER INJECTION SYSTEMS	1	1	*
G	MAINTAINING FLIGHT CONTROL SYSTEMS	2	3	2
H	MAINTAINING BATTERIES	4	3	2
I	MAINTAINING MASTER CAUTION AND WARNING SYSTEMS	2	2	2
J	MAINTAINING FIRE AND OVERHEAT WARNING SYSTEMS	2	2	2
K	MAINTAINING LIGHTING SYSTEMS	7	6	4
L	MAINTAINING ANTI-ICING SYSTEMS	1	2	1
M	MAINTAINING AIRCRAFT FIRE EXTINGUISHING SYSTEMS	2	2	2
N	MAINTAINING AIRCRAFT OXYGEN SYSTEMS AND ASSOCIATED EQUIPMENT	11	8	6
O	MAINTAINING AIRCRAFT PRESSURIZATION SYSTEMS	4	3	2
P	MAINTAINING AUXILIARY AIR AND BLEED AIR DISTRIBUTION SYSTEMS	6	6	4
Q	MAINTAINING AIRCRAFT LIQUID COOLANT AND LIQUID CYCLE REFRIGERATION SYSTEMS	1	1	*
R	MAINTAINING AIRCRAFT AIR-CONDITIONING SYSTEMS	7	6	5
S	MAINTAINING MISCELLANEOUS ELECTRICAL ENVIRONMENTAL CONTROL SYSTEMS	4	3	2
T	PERFORMING GENERAL AIRCRAFT AND CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	7	7	4
U	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	5	21
V	PERFORMING TRAINING ACTIVITIES	1	4	6
W	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	*	1	3
X	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	2	3
Y	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	5	5	9

* Denotes less than 1 percent

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

duties, with 5-skill level personnel also performing some supervisory and training duties. Seven-skill level members report a large amount of their job time is spent on supervisory, training, and administrative duties (see Table 7, Duty U). This indicates a career ladder with a high level of technical task performance for all personnel up to and including 7-skill level personnel.

Skill-Level Descriptions

DAFSC 2A636. The 356 airmen at the 3-skill level (representing 20 percent of the survey sample), perform an average of 123 tasks. This low number is expected because the personnel are primarily in their first enlistment and doing a small number of technical tasks. Sixty-five percent of the 3-skill level are grouped into the Flightline Cluster (Table 6). Tables 7-10 show average percent time spent performing duties by skill level. Table 7 includes the entire sample. Table 8 is broken down into active duty personnel only, while Tables 9 and 10 are broken down into ANG and AFRES respectively. As shown in Table 7, 34 percent of the respondents' time is spent performing fundamental maintenance, maintaining aircraft power and distribution systems, and maintaining oxygen systems. Their job focus is shown in Tables 11-13, which lists representative tasks performed by the 3-skill level incumbents for the total sample, active duty, and AFRES respondents. Very few differences were exhibited between the two separate components. Most tasks listed relate to Duty A, Performing Aircraft Electrical and Environmental Fundamental Maintenance. Very few respondents reported performing supervisory duties. The ANG did not have any respondents at the 3-skill level.

DAFSC 2A656. The 978 airmen in the 5-skill level (54 percent of the survey sample) perform an average of 162 tasks. Personnel are doing more tasks as they get more proficient in the tasks they learn at the 3-skill level. As with 3-skill level personnel, the largest percentages of 5-skill level incumbents work in either the Flightline or Backshop clusters. As shown in Table 7, 20 percent of the respondents' time is spent performing electrical and environmental fundamental maintenance, and maintaining aircraft power and distribution systems. Again, Tables 8-10 show similar information broken down by components. Tables 14-17 indicate that the time spent on tasks is very similar across Active Duty, ANG and AFRES members. These tables indicate that the 5-skill level members are performing a wide variety of tasks, which is expected at this level. Personnel at this level are performing mostly technical tasks such as removing and installing components and inspecting and troubleshooting components. Time spent on tasks is very similar across Active Duty, ANG and AFRES members. Tables 18-20 show those tasks which best differentiate the 3- and 5-skill levels.

DAFSC 2A676. The 489 NCOs in the 7-skill level (27 percent of the survey sample) perform an average of 174 tasks. Table 7 outlines the duties performed by the total sample 7-skill level, while Tables 8-10 show this same information broken down by component status. As Table 6 demonstrates, unlike their junior counterparts at the 3- and 5-skill levels, 16 percent of the total sample were grouped into the Supervisor Cluster. Active duty reported 28 percent of their personnel at the 7-skill level were in the Supervisor Cluster, with only 4 percent of the ANG and

TABLE 8

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY ACTIVE DUTY DAFSC 2A6X6 GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES		DAFSC 2A636 (N=341)	DAFSC 2A656 (N=578)	DAFSC 2A676 (N=242)
A	PERFORMING AIRCRAFT ELECTRICAL AND ENVIRONMENTAL FUNDAMENTAL MAINTENANCE	11	8	4
B	MAINTAINING AIRCRAFT POWER AND DISTRIBUTION SYSTEMS	12	10	5
C	MAINTAINING ENGINE START AND IGNITION CONTROL SYSTEMS	1	1	1
D	MAINTAINING LANDING GEAR SYSTEMS	6	5	3
E	MAINTAINING CARGO DOOR AND RAMP SYSTEMS	1	1	*
F	MAINTAINING FUEL AND WATER INJECTION SYSTEMS	1	1	*
G	MAINTAINING FLIGHT CONTROL SYSTEMS	2	2	1
H	MAINTAINING BATTERIES	4	2	1
I	MAINTAINING MASTER CAUTION AND WARNING SYSTEMS	2	2	1
J	MAINTAINING FIRE AND OVERHEAT WARNING SYSTEMS	2	2	1
K	MAINTAINING LIGHTING SYSTEMS	7	5	2
L	MAINTAINING ANTI-ICING SYSTEMS	1	1	1
M	MAINTAINING AIRCRAFT FIRE EXTINGUISHING SYSTEMS	2	2	1
N	MAINTAINING AIRCRAFT OXYGEN SYSTEMS AND ASSOCIATED EQUIPMENT	11	8	4
O	MAINTAINING AIRCRAFT PRESSURIZATION SYSTEMS	4	3	2
P	MAINTAINING AUXILIARY AIR AND BLEED AIR DISTRIBUTION SYSTEMS	6	5	2
Q	MAINTAINING AIRCRAFT LIQUID COOLANT AND LIQUID CYCLE REFRIGERATION SYSTEMS	1	1	1
R	MAINTAINING AIRCRAFT AIR-CONDITIONING SYSTEMS	7	5	3
S	MAINTAINING MISCELLANEOUS ELECTRICAL ENVIRONMENTAL CONTROL SYSTEMS	4	3	1
T	PERFORMING GENERAL AIRCRAFT AND CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	7	8	4
U	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	8	34
V	PERFORMING TRAINING ACTIVITIES	1	5	9
W	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	*	1	4
X	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	3	4
Y	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	5	6	9

* Denotes less than 1 percent

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

TABLE 9

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY ANG DAFSC 2A6X6 GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES	DAFSC 2A656 (N=225)	DAFSC 2A676 (N=137)
A PERFORMING AIRCRAFT ELECTRICAL AND ENVIRONMENTAL FUNDAMENTAL MAINTENANCE	12	9
B MAINTAINING AIRCRAFT POWER AND DISTRIBUTION SYSTEMS	12	10
C MAINTAINING ENGINE START AND IGNITION CONTROL SYSTEMS	1	1
D MAINTAINING LANDING GEAR SYSTEMS	6	6
E MAINTAINING CARGO DOOR AND RAMP SYSTEMS	1	1
F MAINTAINING FUEL AND WATER INJECTION SYSTEMS	1	1
G MAINTAINING FLIGHT CONTROL SYSTEMS	2	2
H MAINTAINING BATTERIES	6	4
I MAINTAINING MASTER CAUTION AND WARNING SYSTEMS	2	2
J MAINTAINING FIRE AND OVERHEAT WARNING SYSTEMS	3	2
K MAINTAINING LIGHTING SYSTEMS	8	6
L MAINTAINING ANTI-ICING SYSTEMS	2	2
M MAINTAINING AIRCRAFT FIRE EXTINGUISHING SYSTEMS	2	2
N MAINTAINING AIRCRAFT OXYGEN SYSTEMS AND ASSOCIATED EQUIPMENT	9	8
O MAINTAINING AIRCRAFT PRESSURIZATION SYSTEMS	4	4
P MAINTAINING AUXILIARY AIR AND BLEED AIR DISTRIBUTION SYSTEMS	6	6
Q MAINTAINING AIRCRAFT LIQUID COOLANT AND LIQUID CYCLE REFRIGERATION SYSTEMS	1	*
R MAINTAINING AIRCRAFT AIR-CONDITIONING SYSTEMS	7	6
S MAINTAINING MISCELLANEOUS ELECTRICAL ENVIRONMENTAL CONTROL SYSTEMS	2	2
T PERFORMING GENERAL AIRCRAFT AND CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	5	4
U PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	7
V PERFORMING TRAINING ACTIVITIES	1	4
W PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	*	2
X PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	3
Y PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	4	8

* Denotes less than 1 percent

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

TABLE 10

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY AFRES DAFSC 2A6X6 GROUPS
(RELATIVE PERCENT OF JOB TIME)

	DUTIES	DAFSC 2A636 (N=15)	DAFSC 2A656 (N=175)	DAFSC 2A676 (N=110)
A	PERFORMING AIRCRAFT ELECTRICAL AND ENVIRONMENTAL FUNDAMENTAL MAINTENANCE	13	11	8
B	MAINTAINING AIRCRAFT POWER AND DISTRIBUTION SYSTEMS	11	10	9
C	MAINTAINING ENGINE START AND IGNITION CONTROL SYSTEMS	1	1	1
D	MAINTAINING LANDING GEAR SYSTEMS	5	6	6
E	MAINTAINING CARGO DOOR AND RAMP SYSTEMS	2	2	2
F	MAINTAINING FUEL AND WATER INJECTION SYSTEMS	1	1	1
G	MAINTAINING FLIGHT CONTROL SYSTEMS	2	4	3
H	MAINTAINING BATTERIES	4	4	2
I	MAINTAINING MASTER CAUTION AND WARNING SYSTEMS	3	3	3
J	MAINTAINING FIRE AND OVERHEAT WARNING SYSTEMS	3	3	3
K	MAINTAINING LIGHTING SYSTEMS	8	7	6
L	MAINTAINING ANTI-ICING SYSTEMS	2	2	2
M	MAINTAINING AIRCRAFT FIRE EXTINGUISHING SYSTEMS	3	3	3
N	MAINTAINING AIRCRAFT OXYGEN SYSTEMS AND ASSOCIATED EQUIPMENT	12	7	7
O	MAINTAINING AIRCRAFT PRESSURIZATION SYSTEMS	3	3	3
P	MAINTAINING AUXILIARY AIR AND BLEED AIR DISTRIBUTION SYSTEMS	5	5	5
Q	MAINTAINING AIRCRAFT LIQUID COOLANT AND LIQUID CYCLE REFRIGERATION SYSTEMS	1	*	*
R	MAINTAINING AIRCRAFT AIR-CONDITIONING SYSTEMS	7	7	7
S	MAINTAINING MISCELLANEOUS ELECTRICAL ENVIRONMENTAL CONTROL SYSTEMS	3	2	2
T	PERFORMING GENERAL AIRCRAFT AND CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	5	6	6
U	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	*	3	9
V	PERFORMING TRAINING ACTIVITIES	1	2	5
W	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1	*	1
X	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	2
Y	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	4	3	5

* Denotes less than 1 percent

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

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY ALL DAFSC 2A636 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=356)
A17	Crimp splices or terminals to wires	92
A4	Assemble or disassemble connector plugs	85
A26	Inspect wire bundles or harnesses	79
K193	Perform operational checks of exterior lighting	79
A11	Clean connector plugs	77
K194	Perform operational checks of interior lighting	76
B54	Perform operational checks of AC power systems	74
B59	Remove or install AC power components	73
B56	Perform operational checks of DC power systems	71
K196	Remove or install interior lighting components	71
K195	Remove or install exterior lighting components	71
K189	Isolate exterior lighting malfunctions	71
R362	Perform operational checks of air-conditioning systems	70
A32	Perform time compliance technical orders (TCTOs) modifications	70
B61	Remove or install DC power components	70
A24	Inspect electrical bonds or grounds	69
D96	Perform operational checks of anti-skid systems	68
B49	Isolate AC power malfunctions	68
K190	Isolate interior lighting malfunctions	68
R366	Remove or install air-conditioning system components	67
J178	Perform operational checks of fire and overheat warning systems	67
B43	Inspect AC power components	67
D102	Remove or install anti-skid components	66
K187	Inspect exterior lighting components	66
B51	Isolate DC power malfunctions	66
K188	Inspect interior lighting components	65
R359	Perform leakage checks of air-conditioning systems	64
K183	Assemble or disassemble exterior lighting assemblies	64
B45	Inspect DC power components	64
P323	Remove or install bleed air system components	63
P316	Perform operational checks of bleed air systems	63
D84	Inspect anti-skid components	63
R352	Inspect air-conditioning systems	62
R355	Isolate air-conditioning system malfunctions	62
P312	Perform leakage checks of bleed air systems	62
B58	Perform operational checks of external power systems	62
D90	Isolate anti-skid malfunctions	62
O276	Perform leakage checks of cabin or cargo pressurization systems	60
P297	Inspect bleed air systems	60

* Average Number of Tasks Performed -123

TABLE 12

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A636 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=341)
A17	Crimp splices or terminals to wires	92
A4	Assemble or disassemble connector plugs	85
K193	Perform operational checks of exterior lighting	79
A26	Inspect wire bundles or harnesses	78
A11	Clean connector plugs	76
K194	Perform operational checks of interior lighting	76
B59	Remove or install AC power components	73
B54	Perform operational checks of AC power systems	73
B56	Perform operational checks of DC power systems	71
K196	Remove or install interior lighting components	71
K195	Remove or install exterior lighting components	71
A32	Perform time compliance technical orders (TCTOs) modifications	70
B61	Remove or install DC power components	70
K189	Isolate exterior lighting malfunctions	70
R362	Perform operational checks of air-conditioning systems	69
A24	Inspect electrical bonds or grounds	69
D96	Perform operational checks of anti-skid systems	68
K190	Isolate interior lighting malfunctions	68
R366	Remove or install air-conditioning system components	67
B49	Isolate AC power malfunctions	67
J178	Perform operational checks of fire and overheat warning systems	67
D102	Remove or install anti-skid components	66
B43	Inspect AC power components	66
K187	Inspect exterior lighting components	65
K188	Inspect interior lighting components	65
B51	Isolate DC power malfunctions	65
R359	Perform leakage checks of air-conditioning systems	64
P316	Perform operational checks of bleed air systems	63
B45	Inspect DC power components	63
K183	Assemble or disassemble exterior lighting assemblies	63
P323	Remove or install bleed air system components	62
R355	Isolate air-conditioning system malfunctions	62
P312	Perform leakage checks of bleed air systems	62
D84	Inspect anti-skid components	62
B58	Perform operational checks of external power systems	62
D90	Isolate anti-skid malfunctions	62
R352	Inspect air-conditioning systems	61
O276	Perform leakage checks of cabin or cargo pressurization systems	60
O279	Perform operational checks of cabin or cargo pressurization systems	60

* Average Number of Tasks Performed - 122

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY RESERVE DAFSC 2A636 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=15)
A17	Crimp splices or terminals to wires	93
B54	Perform operational checks of AC power systems	87
B49	Isolate AC power malfunctions	87
K183	Assemble or disassemble exterior lighting assemblies	87
A16	Clean test equipment	87
A26	Inspect wire bundles or harnesses	87
R362	Perform operational checks of air-conditioning systems	87
K193	Perform operational checks of exterior lighting	87
P323	Remove or install bleed air system components	87
K189	Isolate exterior lighting malfunctions	87
A11	Clean connector plugs	87
B56	Perform operational checks of DC power systems	80
B59	Remove or install AC power components	80
H156	Clean batteries	80
A4	Assemble or disassemble connector plugs	80
B61	Remove or install DC power components	80
B51	Isolate DC power malfunctions	80
K184	Assemble or disassemble interior lighting assemblies	80
K196	Remove or install interior lighting components	80
R352	Inspect air-conditioning systems	80
K194	Perform operational checks of interior lighting	80
K195	Remove or install exterior lighting components	80
A29	Perform corrosion control	80
P297	Inspect bleed air systems	80
N257	Purge aircraft LOX converters	80
P304	Isolate bleed air system malfunctions	80
B43	Inspect AC power components	80
K187	Inspect exterior lighting components	80
B45	Inspect DC power components	80
J176	Inspect fire and overheat detection circuit components	80
B41	Bench check DC power components	73
H163	Perform capacitance tests and service batteries	73
R366	Remove or install air-conditioning system components	73
A24	Inspect electrical bonds or grounds	73
K185	Bench check exterior lighting components	73
R359	Perform leakage checks of air-conditioning systems	73
R355	Isolate air-conditioning system malfunctions	73
I171	Remove or install fire or overheat system components	73
O279	Perform operational checks of cabin or cargo pressurization systems	73

* Average Number of Tasks Performed - 162

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY ALL DAFSC 2A656 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=978)
A17	Crimp splices or terminals to wires	90
A4	Assemble or disassemble connector plugs	86
A11	Clean connector plugs	83
K193	Perform operational checks of exterior lighting	82
A26	Inspect wire bundles or harnesses	81
K194	Perform operational checks of interior lighting	80
B54	Perform operational checks of AC power systems	78
B56	Perform operational checks of DC power systems	77
K195	Remove or install exterior lighting components	76
B59	Remove or install AC power components	76
K196	Remove or install interior lighting components	76
K187	Inspect exterior lighting components	76
K189	Isolate exterior lighting malfunctions	76
B43	Inspect AC power components	75
J178	Perform operational checks of fire and overheat warning systems	75
D84	Inspect anti-skid components	75
R362	Perform operational checks of air-conditioning systems	74
D96	Perform operational checks of anti-skid systems	74
K188	Inspect interior lighting components	74
K190	Isolate interior lighting malfunctions	74
B61	Remove or install DC power components	74
A24	Inspect electrical bonds or grounds	73
R366	Remove or install air-conditioning system components	72
A32	Perform time compliance technical orders (TCTOs) modifications	72
R352	Inspect air-conditioning systems	72
B49	Isolate AC power malfunctions	72
B45	Inspect DC power components	72
R359	Perform leakage checks of air-conditioning systems	71
D102	Remove or install anti-skid components	70
D90	Isolate anti-skid malfunctions	70
J176	Inspect fire and overheat detection circuit components	70
B51	Isolate DC power malfunctions	70
J177	Isolate fire and overheat detection circuit malfunctions	70
R355	Isolate air-conditioning system malfunctions	69
K183	Assemble or disassemble exterior lighting assemblies	68
B58	Perform operational checks of external power systems	68
I171	Remove or install fire or overheat system components	68
P323	Remove or install bleed air system components	67
P297	Inspect bleed air systems	67

*Average Number of Tasks Performed - 162

TABLE 15

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A656 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=578)
A17	Crimp splices or terminals to wires	87
A4	Assemble or disassemble connector plugs	82
A11	Clean connector plugs	81
A26	Inspect wire bundles or harnesses	77
K193	Perform operational checks of exterior lighting	77
K194	Perform operational checks of interior lighting	75
B54	Perform operational checks of AC power systems	73
B56	Perform operational checks of DC power systems	73
B43	Inspect AC power components	71
K189	Isolate exterior lighting malfunctions	71
K187	Inspect exterior lighting components	71
A32	Perform time compliance technical orders (TCTOs) modifications	70
B59	Remove or install AC power components	70
B49	Isolate AC power malfunctions	70
K195	Remove or install exterior lighting components	70
J178	Perform operational checks of fire and overheat warning systems	70
K196	Remove or install interior lighting components	70
K190	Isolate interior lighting malfunctions	70
K188	Inspect interior lighting components	69
B61	Remove or install DC power components	69
B45	Inspect DC power components	68
B51	Isolate DC power malfunctions	68
R362	Perform operational checks of air-conditioning systems	67
A24	Inspect electrical bonds or grounds	67
B58	Perform operational checks of external power systems	67
D84	Inspect anti-skid components	67
J177	Isolate fire and overheat detection circuit malfunctions	67
R366	Remove or install air-conditioning system components	66
R352	Inspect air-conditioning systems	66
D96	Perform operational checks of anti-skid systems	66
B53	Isolate external power system malfunctions	66
P323	Remove or install bleed air system components	65
R355	Isolate air-conditioning system malfunctions	65
R359	Perform leakage checks of air-conditioning systems	65
P304	Isolate bleed air system malfunctions	64
D102	Remove or install anti-skid components	64
D90	Isolate anti-skid malfunctions	64
J176	Inspect fire and overheat detection circuit components	64
D99	Perform operational checks of landing gear control or warning systems	64

* Average Number of Tasks Performed - 151

TABLE 16

REPRESENTATIVE TASKS PERFORMED BY GUARD DAFSC 2A656 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=225)
A17	Crimp splices or terminals to wires	92
A4	Assemble or disassemble connector plugs	89
A11	Clean connector plugs	89
A26	Inspect wire bundles or harnesses	88
D96	Perform operational checks of anti-skid systems	88
K193	Perform operational checks of exterior lighting	88
K195	Remove or install exterior lighting components	88
B54	Perform operational checks of AC power systems	87
K194	Perform operational checks of interior lighting	87
K183	Assemble or disassemble exterior lighting assemblies	87
B56	Perform operational checks of DC power systems	86
H157	Inspect batteries	85
D84	Inspect anti-skid components	85
K196	Remove or install interior lighting components	85
B59	Remove or install AC power components	84
R352	Inspect air-conditioning systems	83
K189	Isolate exterior lighting malfunctions	83
K184	Assemble or disassemble interior lighting assemblies	83
A24	Inspect electrical bonds or grounds	82
R362	Perform operational checks of air-conditioning systems	82
K187	Inspect exterior lighting components	82
K188	Inspect interior lighting components	81
B61	Remove or install DC power components	81
K190	Isolate interior lighting malfunctions	81
H156	Clean batteries	80
R366	Remove or install air-conditioning system components	80
J178	Perform operational checks of fire and overheat warning systems	80
D90	Isolate anti-skid malfunctions	80
B43	Inspect AC power components	79
R359	Perform leakage checks of air-conditioning systems	78
A32	Perform time compliance technical orders (TCTOs) modifications	78
D102	Remove or install anti-skid components	78
J176	Inspect fire and overheat detection circuit components	78
O276	Perform leakage checks of cabin or cargo pressurization systems	76
B49	Isolate AC power malfunctions	76
B45	Inspect DC power components	76
P297	Inspect bleed air systems	75
B51	Isolate DC power malfunctions	75
H163	Perform capacitance tests and service batteries	74

* Average Number of Tasks Performed - 173

TABLE 17

REPRESENTATIVE TASKS PERFORMED BY RESERVE DAFSC 2A656 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=175)
A17	Crimp splices or terminals to wires	95
A4	Assemble or disassemble connector plugs	93
K193	Perform operational checks of exterior lighting	89
K194	Perform operational checks of interior lighting	87
A26	Inspect wire bundles or harnesses	85
D84	Inspect anti-skid components	85
K196	Remove or install interior lighting components	84
K187	Inspect exterior lighting components	84
K195	Remove or install exterior lighting components	84
B54	Perform operational checks of AC power systems	83
K189	Isolate exterior lighting malfunctions	83
D96	Perform operational checks of anti-skid systems	83
J178	Perform operational checks of fire and overheat warning systems	83
A11	Clean connector plugs	82
R362	Perform operational checks of air-conditioning systems	82
B59	Remove or install AC power components	82
R366	Remove or install air-conditioning system components	82
D102	Remove or install anti-skid components	82
B43	Inspect AC power components	81
K188	Inspect interior lighting components	81
B61	Remove or install DC power components	81
B56	Perform operational checks of DC power systems	80
A24	Inspect electrical bonds or grounds	79
K190	Isolate interior lighting malfunctions	79
R359	Perform leakage checks of air-conditioning systems	79
J176	Inspect fire and overheat detection circuit components	79
K183	Assemble or disassemble exterior lighting assemblies	78
R352	Inspect air-conditioning systems	78
D90	Isolate anti-skid malfunctions	78
K184	Assemble or disassemble interior lighting assemblies	77
B45	Inspect DC power components	77
R355	Isolate air-conditioning system malfunctions	77
I170	Perform operational checks of master caution warning systems	77
I171	Remove or install fire or overheat system components	77
B49	Isolate AC power malfunctions	76
J177	Isolate fire and overheat detection circuit malfunctions	76
B58	Perform operational checks of external power systems	74
I167	Inspect master caution warning system components	74
B51	Isolate DC power malfunctions	74

* Average Number of Tasks Performed - 184

TABLE 18

TASKS WHICH BEST DIFFERENTIATE BETWEEN ALL DAFSC 2A636 AND DAFSC 2A656 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 2A636 (N=356)	DAFSC 3A656 (N=978)	DIFF
V555	Conduct OJT	15	49	-35
U543	Supervise military personnel	3	37	-34
Y621	Clear Red-X conditions	2	34	-32
U485	Counsel subordinates concerning personal matters	1	31	-30
U488	Determine or establish work assignments or priorities	5	34	-29
V558	Demonstrate how to locate technical information	13	42	-29
V559	Demonstrate operation of equipment	17	43	-26
U483	Conduct supervisory performance feedback sessions	1	27	-26
V568	Evaluate progress of trainees	3	28	-25
U475	Assign personnel to work areas or duty positions	3	28	-25
V573	Maintain training records or files	10	34	-24
Y622	Coordinate aircraft maintenance activities with maintenance control	6	29	-23
U518	Evaluate personnel for compliance with performance standards	1	23	-22
V567	Evaluate personnel to determine training needs	2	24	-22
U528	Inspect personnel for compliance with military standards	3	24	-21
U480	Conduct self-inspections or self-assessments	7	28	-21
U479	Conduct safety inspections of equipment or facilities	9	29	-20
U546	Write performance reports or supervisory appraisals	.56	20	-20
U482	Conduct supervisory orientations for newly assigned personnel	.56	20	-20
U506	Establish performance standards for subordinates	.12	20	-19

TABLE 19

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSC 2A636 AND DAFSC 2A656 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 2A636 (N=341)	DAFSC 2A656 (N=578)	DIFF
U485	Counsel subordinates concerning personal matters	1	45	-44
U543	Supervise military personnel	3	46	-43
U483	Conduct supervisory performance feedback sessions	1	41	-40
V555	Conduct OJT	14	54	-40
U488	Determine or establish work assignments or priorities	5	43	-38
Y621	Clear Red-X conditions	2	39	-37
U546	Write performance reports or supervisory appraisals	1	33	-32
V558	Demonstrate how to locate technical information	13	45	-32
V559	Demonstrate operation of equipment	16	48	-32
U475	Assign personnel to work areas or duty positions	3	34	-31
U518	Evaluate personnel for compliance with military standards	2	33	-31
V568	Evaluate progress of trainees	3	34	-31
U528	Inspect personnel for compliance with military standards	3	33	-30
V573	Maintain training records or files	10	40	-30
U506	Establish performance standards for subordinates	1	30	-29
U482	Conduct supervisory orientations for newly assigned personnel	1	28	-27
V567	Evaluate personnel to determine training needs	1	28	-27
U479	Conduct safety inspections of equipment or facilities	9	32	-23
U480	Conduct self-inspection or self-assessments	7	30	-23
U519	Evaluate personnel for promotion, demotion, reclassification, or special awards	1	22	-21
U491	Develop or establish work methods or procedures	5	26	-21

TABLE 20

TASKS WHICH BEST DIFFERENTIATE BETWEEN RESERVE 2A636 AND RESERVE 2A656 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		RESERVE 2A636 (N=15)	RESERVE 2A656 (N=175)	DIFF
A16	Clean test equipment	87	44	43
B41	Bench check DC power components	73	35	38
N259	Purge LOX servicing carts	67	32	35
A9	Bench check motors	73	39	34
A35	Service test equipment	66	33	33
N238	Isolate LOX servicing cart malfunctions	66	33	33
A31	Perform soldering on circuit boards	73	41	32
N235	Inspect oxygen walkaround bottles or regulators	66	34	32
N262	Remove or install LOX servicing cart components	67	35	32
H156	Clean batteries	80	49	31
B40	Bench check AC power components	66	36	30
N267	Remove or install oxygen walkaround bottles or regulators	60	30	30
P301	Inspect ram air systems	7	44	-37
G149	Perform operational checks of spoiler control systems	7	43	-36
T441	Position or remove aircraft chocks	20	55	-35
Y621	Clear Red-X conditions	0	34	-34
T472	Walk wings or tails during aircraft towing operations	27	59	-32
C75	Perform operational checks of electrical or air-operated starter system components	13	43	-30
R354	Inspect equipment cooling systems,	27	57	-30
R368	Remove or install equipment cooling system components	27	57	-30
G153	Remove or install spoiler control components	7	37	-30
R357	Isolate equipment cooling system malfunctions	27	57	-30
G141	Inspect spoiler control components	7	37	-30

6 percent of the AFRES reporting grouped into the Supervisor Cluster. Since the ANG and AFRES members spend very little time performing Supervisory duties, this is the most significant area of difference between components. Tables 21-24 list the most common tasks performed by 7-skill level personnel. While active duty tasks involve supervisory functions, ANG and AFRES members still perform many of the technical tasks. Tables 25-28 show those tasks which best differentiate the 5-and 7-skill levels. As expected, key differences at the 7-skill level are greater emphasis on supervision and administration, with less emphasis on technical tasks.

Summary

Active duty Aircraft Electrical and Environmental Systems career ladder progression follows a normal pattern of technical job focus at the 3-skill level. Personnel slowly progress into supervisory duties in the 5-skill level, but are still performing mostly technical tasks, while at the 7-skill level they are primarily concerned with supervising personnel. On the other hand, ANG and AFRES personnel tend to perform a larger number of technical tasks at the upper skill levels, possibly due to the limited number of personnel in these components. Across all three components, emphasis at the 3-skill level is on fundamental maintenance and power systems. At the 5-skill level, members are still primarily concerned with fundamental maintenance and power systems, with a small increase in the supervisory duties within the active duty members. At the 7-skill level, active duty members spend most of their time performing supervisory activities, while ANG and AFRES work is still largely focused on technical tasks.

TRAINING ANALYSIS

Occupational survey data represent one of many sources of information which are used to assist in the development of training programs for career ladder personnel. OSR data useful to training personnel include job descriptions for the various jobs performed within a career ladder, distribution of personnel across career ladder jobs, percentages of personnel performing specific tasks, and percentages of personnel maintaining specific equipment or systems, as well as the difficulty of tasks and TE ratings gathered from senior members of the career ladder.

First Enlistment Analysis

In this study, there are 362 Aircraft Electrical and Environmental Systems members in their first enlistment (1-48 months TAFMS), representing 20 percent of the survey sample. Jobs they perform are displayed in Figure 2. As displayed in Table 29, 12 percent of their time is spent maintaining aircraft power and distribution systems, 11 percent of their time is spent performing fundamental maintenance, and 11 percent of their time is spent maintaining aircraft oxygen systems. Figure 2 shows that 75 percent of first-enlistment personnel are working on the

TABLE 21

REPRESENTATIVE TASKS PERFORMED BY ALL DAFSC 2A676 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=489)
A17	Crimp splices or terminals to wires	70
A26	Inspect wire bundles or harnesses	70
A4	Assemble or disassemble connector plugs	68
U543	Supervise military personnel	67
Y621	Clear Red-X conditions	67
B43	Inspect AC power components	67
D84	Inspect anti-skid components	67
K193	Perform operational checks of exterior lighting	67
Y618	Access core automated maintenance system (CAMS) menus and data screens	66
B54	Perform operational checks of AC power systems	66
B45	Inspect DC power components	66
K194	Perform operational checks of interior lighting	66
J178	Perform operational checks of fire and overheat warning systems	66
B56	Perform operational checks of DC power systems	65
D96	Perform operational checks of anti-skid systems	65
A11	Clean connector plugs	65
B59	Remove or install AC power components	65
K188	Inspect interior lighting components	65
A32	Perform time compliance technical orders (TCTOs) modifications	64
K195	Remove or install exterior lighting components	64
B49	Isolate AC power malfunctions	63
A24	Inspect electrical bonds or grounds	63
D90	Isolate anti-skid malfunctions	63
U488	Determine or establish work assignments or priorities	62
V555	Conduct OJT	62
R366	Remove or install air-conditioning system components	62
R352	Inspect air-conditioning systems	62
R355	Isolate air-conditioning system malfunctions	62
R362	Perform operational checks of air-conditioning systems	62
P297	Inspect bleed air systems	62
U475	Assign personnel to work areas or duty positions	58
U480	Conduct self-inspections or self-assessments	57
Y637	Initiate or annotate aircraft flight or maintenance records, such as AFTO Forms 781 series	57
V573	Maintain training records or files	56
V558	Demonstrate how to locate technical information	56
U518	Evaluate personnel for compliance with performance standards	55
U485	Counsel subordinates concerning personal matters	55
A25	Inspect test equipment	54

* Average Number of Tasks Performed - 174

TABLE 22

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A676 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=242)
U543	Supervise military personnel	77
U485	Counsel subordinates concerning personal matters	71
U488	Determine or establish work assignments or priorities	70
U546	Write performance reports or supervisory appraisals	70
U483	Conduct supervisory performance feedback sessions	70
Y621	Clear Red-X conditions	68
U518	Evaluate personnel for compliance with performance standards	68
U475	Assign personnel to work areas or duty positions	64
U528	Inspect personnel for compliance with military standards	62
Y618	Access core automated maintenance system (CAMS) menus and data screens	61
U532	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	60
U480	Conduct self-inspections or self-assessments	60
U491	Develop or establish work methods or procedures	60
V573	Maintain training records or files	59
U492	Develop or establish work schedules	58
U482	Conduct supervisory orientations for newly assigned personnel	57
U478	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	55
U537	Plan or schedule work assignments or priorities	55
U479	Conduct safety inspections of equipment or facilities	55
U506	Establish performance standards for subordinates	55
V568	Evaluate progress of trainees	54
V555	Conduct OJT	53
U486	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	52
U540	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	52
U522	Evaluate work schedules	51
U519	Evaluate personnel for promotion, demotion, reclassification, or special awards	51
V567	Evaluate personnel to determine training needs	51
Y645	Review aircraft flight or maintenance records, such as AFTO Forms 781 series	50
Y637	Initiate or annotate aircraft flight or maintenance records, such as AFTO Forms 781 series	50
U529	Interpret policies, directives, or procedures for subordinates	48
U523	Evaluate workload requirements	47
V560	Determine training requirements	46
Y641	Observe in-process maintenance or initiate on-the-spot corrections	45
V575	Plan or schedule training	44
Y644	Retrieve CAMS listings or reports	43

* Average Number of Tasks Performed - 129

TABLE 23

REPRESENTATIVE TASKS PERFORMED BY GUARD DAFSC 2A676 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=137)
A17	Crimp splices or terminals to wires	94
D96	Perform operational checks of anti-skid systems	92
A4	Assemble or disassemble connector plugs	91
K194	Perform operational checks of interior lighting	91
K193	Perform operational checks of exterior lighting	91
K195	Remove or install exterior lighting components	91
K196	Remove or install interior lighting components	91
J178	Perform operational checks of fire and overheat warning systems	90
K184	Assemble or disassemble interior lighting assemblies	90
K183	Assemble or disassemble exterior lighting assemblies	89
A26	Inspect wire bundles or harnesses	88
A11	Clean connector plugs	88
B59	Remove or install AC power components	88
D84	Inspect anti-skid components	88
K189	Isolate exterior lighting malfunctions	88
D102	Remove or install anti-skid components	88
J176	Inspect fire and overheat detection circuit components	88
K190	Isolate interior lighting malfunctions	88
B54	Perform operational checks of AC power systems	87
A32	Perform time compliance technical orders (TCTOs) modifications	87
A24	Inspect electrical bonds or grounds	87
R352	Inspect air-conditioning systems	87
R362	Perform operational checks of air-conditioning systems	87
O279	Perform operational checks of cabin or cargo pressurization systems	87
B61	Remove or install DC power components	87
O276	Perform leakage checks of cabin or cargo pressurization systems	86
B56	Perform operational checks of DC power systems	85
R366	Remove or install air-conditioning system components	85
R355	Isolate air-conditioning system malfunctions	85
P297	Inspect bleed air systems	85
D90	Isolate anti-skid malfunctions	85
B43	Inspect AC power components	85
K188	Inspect interior lighting components	85
B45	Inspect DC power components	84
O282	Remove or install cabin or cargo pressurization system components	84
Y618	Access core automated maintenance system (CAMS) menus and data screens	82
H157	Inspect batteries	82
P323	Remove or install bleed air system components	82
O273	Isolate cabin or cargo pressurization system malfunctions	82
B49	Isolate AC power malfunctions	81
R359	Perform leakage checks of air-conditioning systems	81

* Average Number of Tasks Performed - 225

TABLE 24

REPRESENTATIVE TASKS PERFORMED BY RESERVE DAFSC 2A676 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=110)
B54	Perform operational checks of AC power systems	90
D84	Inspect anti-skid components	89
B56	Perform operational checks of DC power systems	88
K193	Perform operational checks of exterior lighting	88
A26	Inspect wire bundles or harnesses	87
B59	Remove or install AC power components	87
B43	Inspect AC power components	86
J178	Perform operational checks of fire and overheat warning systems	86
B61	Remove or install DC power components	86
A17	Crimp splices or terminals to wires	85
D96	Perform operational checks of anti-skid systems	85
A11	Clean connector plugs	85
B49	Isolate AC power malfunctions	85
K196	Remove or install interior lighting components	85
K194	Perform operational checks of interior lighting	85
K188	Inspect interior lighting components	85
B45	Inspect DC power components	85
K187	Inspect exterior lighting components	85
B51	Isolate DC power malfunctions	85
K195	Remove or install exterior lighting components	84
D102	Remove or install anti-skid components	84
I171	Remove or install fire or overheat system components	84
K189	Isolate exterior lighting malfunctions	84
K183	Assemble or disassemble exterior lighting assemblies	84
K184	Assemble or disassemble interior lighting assemblies	84
A4	Assemble or disassemble connector plugs	83
B58	Perform operational checks of external power systems	83
D90	Isolate anti-skid malfunctions	82
R355	Isolate air-conditioning system malfunctions	81
R362	Perform operational checks of air-conditioning systems	81
K190	Isolate interior lighting malfunctions	81
A24	Inspect electrical bonds or grounds	80
R352	Inspect air-conditioning systems	80
J176	Inspect fire and overheat detection circuit components	80
J177	Isolate fire and overheat detection circuit malfunctions	80
R366	Remove or install air-conditioning system components	79
R359	Perform leakage checks of air-conditioning systems	79
O282	Remove or install cabin or cargo pressurization system components	79
I173	Remove or install warning system components	78

* Average Number of Tasks Performed - 208

TABLE 25

TASKS WHICH BEST DIFFERENTIATE BETWEEN ALL DAFSC 2A656 AND DAFSC 2A676 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 2A656 (N=978)	DAFSC 2A676 (N=489)	DIFF
A17	Crimp splices or terminals to wires	90	70	20
A4	Assemble or disassemble connector plugs	86	68	18
A11	Clean connector plugs	83	65	18
---	---	---	---	---
U492	Develop or establish work schedules	15	49	-34
Y621	Clear Red-X conditions	34	67	-33
U518	Evaluate personnel for compliance with performance standards	23	55	-32
U540	Schedule personnel for temporary duty (TDY) assignment, leaves, or passes	6	37	-31
U537	Plan or schedule work assignments or priorities	16	47	-31
U543	Supervise military personnel	37	67	-30
U475	Assign personnel to work areas or duty positions	28	58	-30
U491	Develop or establish work methods or procedures	22	52	-30
U575	Plan or schedule training	17	46	-29
U522	Evaluate work schedules	10	39	-29
U488	Determine or establish work assignments or priorities	33	62	-29
U480	Conduct self-inspections or self-assessments	28	57	-29
V579	Schedule personnel for training	13	42	-29
U486	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	17	45	-28
U532	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	22	50	-28
U523	Evaluate workload requirements	9	37	-28
V560	Determine training requirements	16	43	-27
U476	Assign sponsors for newly assigned personnel	6	33	-27
U478	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	13	40	-27
U519	Evaluate personnel for promotion, demotion, reclassification, or special awards	16	42	-26

TABLE 26

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSC 2A656 AND DAFSC 2A676 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 2A656 (N=578)	DAFSC 2A676 (N=242)	DIFF
A17	Crimp splices or terminals to wires	87	49	38
A11	Clean connector plugs	81	44	37
A4	Assemble or disassemble connector plugs	82	48	34
K193	Perform operational checks of exterior lighting	77	43	34
T441	Position or remove aircraft chocks	59	27	32
K194	Perform operational checks of interior lighting	75	44	31
B56	Perform operational checks of DC power systems	73	43	30
K195	Remove or install exterior lighting components	70	40	30
K196	Remove or install interior lighting components	70	40	30
K190	Isolate interior lighting malfunctions	70	40	30
R362	Perform operational checks of air-conditioning systems	67	38	29
B54	Perform operational checks of AC power systems	73	44	29
U540	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	9	52	-43
U492	Develop or establish work schedules	19	58	-39
U478	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	16	55	-39
U522	Evaluate work schedules	13	50	-37
U546	Write performance reports or supervisory appraisals	33	70	-37
U518	Evaluate personnel for compliance with performance standards	32	68	-36
U523	Evaluate workload requirements	11	46	-35
U532	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	25	60	-35
U476	Assign sponsors for newly assigned personnel	8	42	-34
U537	Plan or schedule work assignments or priorities	20	54	-34

TABLE 27

TASKS WHICH BEST DIFFERENTIATE BETWEEN GUARD DAFSC 2A656 AND DAFSC 2A676 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 2A656 (N=225)	DAFSC 2A676 (N=137)	DIFF
Y621	Clear Red-X conditions	23	75	-52
U543	Supervise military personnel	17	59	-42
V555	Conduct OJT	33	75	-42
U488	Determine or establish work assignments or priorities	16	58	-42
X609	Initiate requisitions for equipment, tools, parts, or supplies	22	63	-41
X607	Evaluate serviceability of equipment, tools, parts, or supplies	25	63	-38
Y622	Coordinate aircraft maintenance activities with maintenance control	40	78	-38
X615	Maintain precision measurement equipment (PME) calibration schedules	15	53	-38
X608	Initiate documentation to turn in excess surplus property	10	47	-37
V575	Plan or schedule training	10	46	-36
U518	Evaluate personnel for compliance with performance standards	6	42	-36
U475	Assign personnel to work areas or duty positions	13	49	-36
V567	Evaluate personnel to determine training needs	13	48	-35
V559	Demonstrate operation of equipment	33	68	-35
X617	Review supply computer runs, such as D04, D18, or M30	7	42	-35
X613	Maintain documentation on items requiring periodic inspections	17	51	-34
V568	Evaluate progress of trainees	16	50	-34
Y641	Observe in-process maintenance or initiate on-the-spot corrections	16	50	-34
X611	Issue or log turn-ins of equipment, tools, parts, or supplies	28	62	-34
V573	Maintain training records or files	16	49	-33
Y651	Update maintenance data collection (MDC) data using CAMS	26	59	-33
X614	Maintain organizational equipment or supply records, such as custodian authorization/custody receipt listings (CA/CRLs)	7	40	-33
Y639	Inspect parts received for serviceability	39	72	-33

TABLE 28

TASKS WHICH BEST DIFFERENTIATE BETWEEN RESERVE DAFSC 2A656 AND DAFSC 2A676 PERSONNEL
(PERCENT MEMBERS PERFORMING)

	TASKS	DAFSC 2A656 (N=175)	DAFSC 2A676 (N=110)	DIFF
U485	Counsel subordinates concerning personal matters	14	48	-34
U492	Develop or establish work schedules	11	41	-30
U475	Assign personnel to work areas or duty positions	27	57	-30
U483	Conduct supervisory performance feedback sessions	11	41	-30
U518	Evaluate personnel for compliance with performance standards	15	42	-27
U528	Inspect personnel for compliance with military standards	15	42	-27
U537	Plan or schedule work assignments or priorities	13	40	-27
U575	Plan or schedule training	22	49	-27
U579	Schedule personnel for training	20	47	-27
U480	Conduct self-inspections or self-assessments	29	55	-26
U488	Determine or establish work assignments or priorities	26	52	-26
U491	Develop or establish work methods or procedures	18	43	-25
U482	Conduct supervisory orientations for newly assigned personnel	14	39	-25
V571	Initiate requests for training	12	37	-25
V560	Determine training requirements	17	42	-25
U543	Supervise military personnel	33	57	-24
U546	Write performance reports or supervisory appraisals	3	27	-24
U497	Direct training functions	20	44	-24
U519	Evaluate personnel for promotion, demotion, reclassification, or special awards	9	32	-23
V568	Evaluate progress of trainees	26	49	-23
U525	Initiate actions required due to substandard performance of personnel	5	28	-23
V567	Evaluate personnel to determine training needs	22	45	-23
V573	Maintain training records or files	36	58	-22
Y621	Clear Red-X conditions	34	56	-22

FIGURE 2

FIRST-ENLISTMENT PERSONNEL JOBS

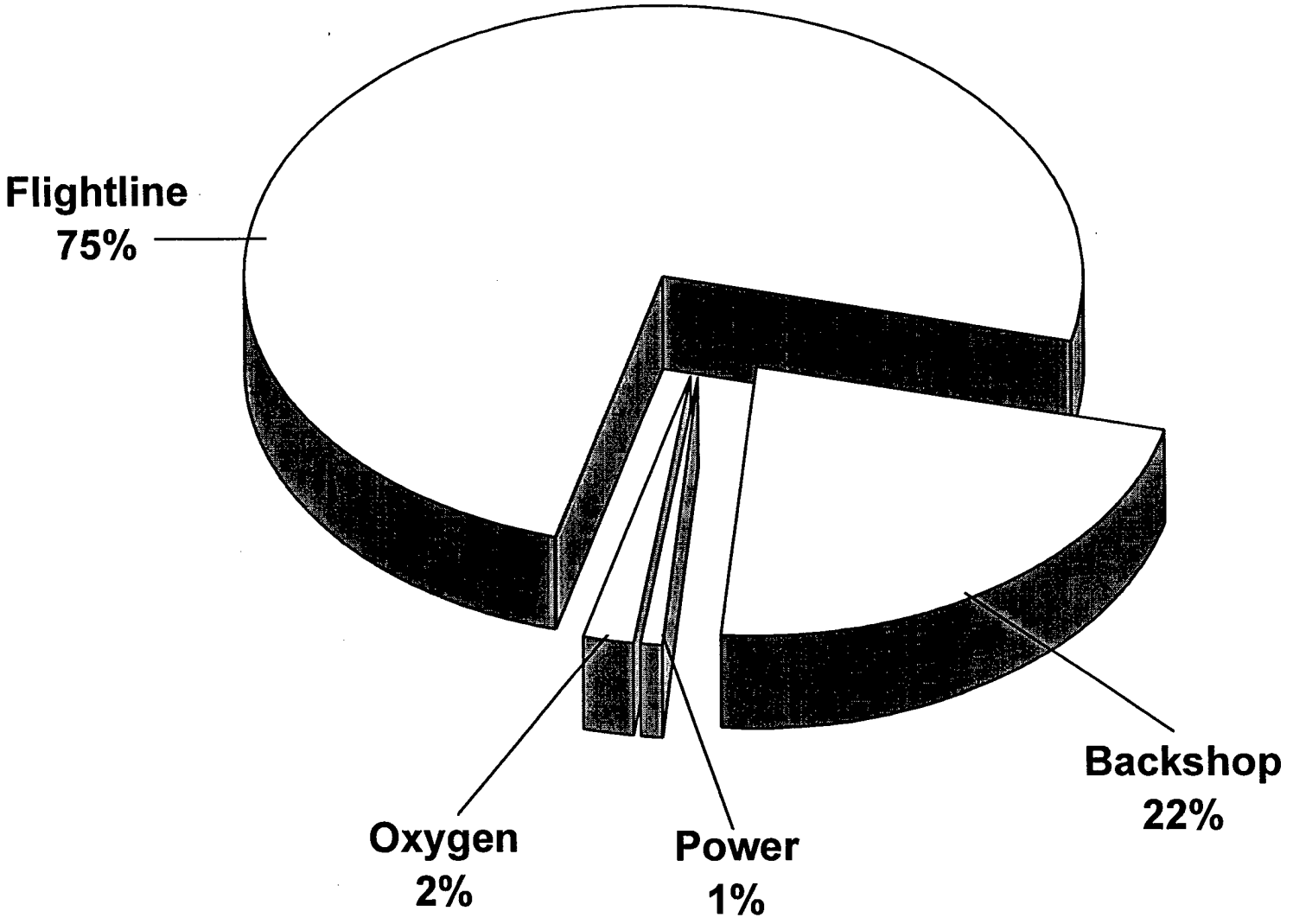


TABLE 29

RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES
BY ACTIVE DUTY FIRST-ENLISTMENT AFSC 2A6X6 PERSONNEL

	TASKS	AVERAGE PERCENT TIME SPENT (N=362)
B	Maintaining aircraft power and distribution systems	12
A	Performing aircraft electrical and environmental fundamental maintenance	11
N	Maintaining aircraft oxygen systems and associated equipment	11
T	Performing general aircraft and cross utilization training (CUT) activities	7
K	Maintaining lighting systems	7
R	Maintaining aircraft air-conditioning systems	7
P	Maintaining auxiliary air and bleed air distribution systems	6
D	Maintaining landing gear systems	6
Y	Performing maintenance management activities	5
H	Maintaining batteries	4
S	Maintaining miscellaneous electrical environmental control systems	4
O	Maintaining aircraft pressurization systems	4
I	Maintaining master caution and warning systems	2
J	Maintaining fire and overheat warning systems	2
M	Maintaining aircraft fire extinguishing systems	2
G	Maintaining flight control systems	2
X	Performing general supply and equipment activities	2
L	Maintaining anti-icing systems	1
Q	Maintaining aircraft liquid coolant and liquid cycle refrigeration systems	1
C	Maintaining engine start and ignition control systems	1
E	Maintaining cargo door and ramp systems	1
F	Maintaining fuel and water injection systems	1
V	Performing training activities	1
U	Performing management and supervisory activities	1
M	Performing general administrative and technical order system activities	-

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

in a backshop. There were no first-enlistment personnel in the Training Cluster, the Supervisor Cluster, the Quality Assurance Inspector Job, or the Safety Inspector Job. This is not surprising, since personnel at the higher skill levels traditionally perform these jobs.

Table 30 displays commonly performed tasks for active duty first-enlistment personnel. The majority of tasks displayed involve performing operational checks of components, and inspecting, removing and installing components.

Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD data are secondary factors that can help technical school personnel decide which entry-level training tasks to emphasize. These ratings, based on the judgments of senior career ladder NCOs at operational units, provide training personnel with a rank ordering of those tasks considered important for first-enlistment airman training (TE), and a measure of the difficulty of those tasks (TD). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors (TE and TD), accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel. This decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

Table 31 lists the tasks having the highest TE ratings, as well as the percentages of first-job, first-enlistment, and TD ratings for each task. The majority of high TE tasks are performed by high percentages of both groups. Most tasks involve performing operational checks on various equipment pieces.

Table 32 lists the tasks having the highest TD rating, with the percentages of first-job, first-enlistment, 3-, 5-, and 7-skill level personnel performing, and TE ratings included for each task. The majority of tasks with high difficulty involve isolating malfunctions. Most of the tasks with high difficulty were performed fairly evenly across all levels, with a slight increase as members move up through the skill levels. Various lists of tasks, accompanied by TD ratings, are contained in the Training Extract package and should be reviewed in detail by technical school personnel. For a more detailed explanation of TD and TE ratings, see the Task Factor Administration in the **SURVEY METHODOLOGY** section of this report.

TABLE 30

MOST COMMONLY PERFORMED TASKS
FOR ACTIVE DUTY FIRST-ENLISTMENT 2A6X6 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=362)
A17	Crimp splices or terminals to wires	92
A4	Assemble or disassemble connector plugs	86
K193	Perform operational checks of exterior lighting	79
A26	Inspect wire bundles or harnesses	78
A11	Clean connector plugs	76
K194	Perform operational checks of interior lighting	76
B59	Remove or install AC power components	72
B54	Perform operational checks of AC power systems	72
B56	Perform operational checks of DC power systems	70
K195	Remove or install exterior lighting components	70
K196	Remove or install interior lighting components	70
K189	Isolate exterior lighting malfunctions	70
R362	Perform operational checks of air-conditioning systems	69
A24	Inspect electrical bonds or grounds	69
A32	Perform time compliance technical orders (TCTOs) modifications	69
D96	Perform operational checks of anti-skid systems	69
B61	Remove or install DC power components	69
R366	Remove or install air-conditioning system components	67
B49	Isolate AC power malfunctions	67
J178	Perform operational checks of fire and overheat warning systems	67
K190	Isolate interior lighting malfunctions	67
D102	Remove or install anti-skid components	66
K187	Inspect exterior lighting components	65
B51	Isolate DC power malfunctions	65
R359	Perform leakage checks of air-conditioning systems	64
K183	Assemble or disassemble exterior lighting assemblies	64
K188	Inspect interior lighting components	64
B43	Inspect AC power components	64
P316	Perform operational checks of bleed air systems	63
D84	Inspect anti-skid components	63
P323	Remove or install bleed air system components	62
B45	Inspect DC power components	62
D90	Isolate anti-skid malfunctions	62
R352	Inspect air-conditioning systems	61
R355	Isolate air-conditioning system malfunctions	61
P312	Perform leakage checks of bleed air systems	61
B58	Perform operational checks of external power systems	61
P297	Inspect bleed air systems	60
O279	Perform operational checks of cabin or cargo pressurization systems	60

* Average Number of Tasks Performed - 120

TABLE 31

TECHNICAL TASKS RATED HIGHEST IN TRAINING EMPHASIS (TE)
BY AFSC 2A6X6 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING			
		TNG EMP*	1ST JOB	1ST ENL	TASK DIFF**
A17	Crimp spices or terminals to wires	7.69	89	92	2.55
B49	Isolate AC power malfunctions	7.13	59	67	7.37
R355	Isolate air-conditioning system malfunctions	7.11	54	31	6.88
B54	Perform operational checks of AC power systems	7.00	67	72	4.75
O279	Perform operational checks of cabin or cargo pressurization systems	7.00	57	60	6.08
D93	Isolate landing gear control or warning malfunctions	6.91	45	54	7.25
J177	Isolate fire and overheat detection circuit malfunctions	6.91	50	57	6.32
A26	Inspect wire bundles or harnesses	6.87	77	78	3.66
B51	Isolate DC power malfunctions	6.87	58	65	6.71
D96	Perform operational checks of anti-skid systems	6.84	65	69	5.31
B56	Perform operational checks of DC power systems	6.78	64	70	4.55
P304	Isolate bleed air system malfunctions	6.76	53	59	6.20
B53	Isolate external power system malfunctions	6.67	46	56	6.49
J178	Perform operational checks of fire and overheat warning systems	6.62	60	67	3.89
R362	Perform operational checks of air-conditioning systems	6.62	65	69	4.92
A4	Assemble or disassemble connector plugs	6.62	83	86	4.11
P316	Perform operational checks of bleed air systems	6.60	60	63	4.93
B58	Perform operational checks of external power systems	6.58	56	61	4.29

* Mean TE Rating is 2.65, and Standard Deviation is 1.66 (High TE = 4.31)
** Average TD Rating is 5.00

TABLE 32

TASKS RATED HIGHEST IN TASK DIFFICULTY (TD) BY AFSC 2A6X6 PERSONNEL

TASKS		TASK DIFF*	PERCENT MEMBERS PERFORMING 1ST JOB	1ST ENL	2A636	2A656	2A676	TNG EMP*
G143	Isolate flight control asymmetry system malfunctions	7.87	10	13	14	24	24	3.24
B49	Isolate AC power malfunctions	7.37	59	67	67	70	70	7.13
B52	Isolate emergency power malfunctions, other than batteries	7.27	30	41	42	52	52	6.18
D93	Isolate landing gear control or warning malfunctions	7.25	45	54	54	61	61	6.91
G142	Isolate flap or slat control and warning malfunctions	7.22	19	25	23	35	35	4.04
D92	Isolate kneeling system malfunctions	7.19	3	5	5	9	9	1.82
U499	Draft budget requirements	7.12	0	1	1	1	1	.58
G145	Isolate spoiler control malfunctions	7.01	7	10	10	18	18	3.04
C74	Isolate propeller control circuit malfunctions	6.97	2	7	8	10	10	1.64
E117	Isolate cargo ramp malfunctions	6.95	14	17	16	24	24	2.96
T437	Perform ground engine runs	6.94	18	20	20	22	22	1.29
A33	Remove or install components on circuit boards	6.92	20	20	21	16	16	1.84
A27	Isolate test equipment malfunctions	6.89	16	21	21	21	21	3.04
R355	Isolate air-conditioning system malfunctions	6.88	54	61	62	65	65	7.11
B50	Isolate battery charger system malfunctions	6.86	33	41	41	51	51	5.91
U534	Plan deployments of equipment or personnel	6.82	0	0	0	4	4	1.18
D94	Isolate nose-wheel or nose-gear steering malfunctions	6.81	28	32	31	38	38	5.29
U500	Draft inputs for status of resources, training, and supplies (SORTS) program	6.76	0	0	0	3	3	.89
V564	Develop training programs, plans, or procedures	6.72	0	1	1	11	11	1.04
B51	Isolate DC power malfunctions	6.71	58	65	65	68	68	6.87

* Average TD Rating is 5.00

** Mean TE Rating is 2.65, and Standard Deviation is 1.66 (High TE = 4.31)

Specialty Training Standard (STS)

A comprehensive review of the STS was made by comparing survey data to STS elements. SMEs matched JI tasks to appropriate STS sections and subsections. A complete computer listing displaying the percent members performing tasks, TE and TD ratings for each task, along with the STS matching, has been forwarded to the school for further review of training documents.

Typically, tasks which have sufficiently high TE and TD ratings, and are performed by at least 20 percent of personnel in appropriate experience or skill-level groups (such as first-enlistment or 1-48 months TAFMS, and 5- and 7-skill level groups), should be considered for inclusion in the STS. Likewise, tasks with less than 20 percent performing in all of these groups should be considered for deletion from the STS. Twenty-eight line items from the STS were not supported by 20 percent of personnel. Examples of these items are in Table 33, along with the accompanying JI task and survey data. Bench checking and inspecting various components were areas not performed by 20 percent of personnel. Training personnel and SMEs should review these areas to determine if inclusion in future revisions to the STS is warranted.

Tasks not matched to any element of the STS are listed at the end of the STS computer listing. These were reviewed to determine if there were any tasks concentrated around any particular functions or jobs. All of the tasks not matched were from the Performing General Aircraft and Cross Utilization Training Activities duty section. Examples of tasks not matched are in Table 34.

Examples of technical tasks performed by at least 20 percent of STS target group respondents, but which are not referenced to any STS element, are displayed in Table 34. Training personnel and SMEs should review these and other unreferenced tasks to determine STS inclusion.

JOB SATISFACTION ANALYSIS

An examination of the job satisfaction indicators of various groups can give career ladder managers a better understanding of some of the factors which may affect the job performance of airmen in the career ladder. Questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions were included in the survey booklet to provide indications of job satisfaction

The Aircraft Electrical and Environmental Systems survey booklet included questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions. The responses of the current survey sample were then analyzed by making the following comparisons: (1) among TAFMS groups of the Aircraft Electrical and Environmental Systems career ladder and a comparative sample of personnel from other Mission Equipment Management career ladders surveyed in 1996; (2) between current and

TABLE 33

EXAMPLES OF STS ITEMS NOT SUPPORTED BY OSR DATA
(PERCENT MEMBERS PERFORMING)

STS REFERENCE/TASKS	3-LVL PROF CODE	TNG EMP	PERCENT MEMBERS PERFORMING 1ST ENL (N=362)	5-LVL (N=578)	7-LVL (N=242)	TSK DIF
1a Communication Security (COMSEC)	-					
U504 Establish communications security (COMSEC) subaccounts		.69	0	0	0	6.52
W588 Initiate classified reports, messages, or documents		.49	1	1	1	6.00
22h	-					
D83 Bench check nose-wheel or nose-gear steering components		2.13	9	8	5	5.37
25h. Bench check components	-					
M204 Bench check aircraft fire extinguishing system components		1.84	5	8	4	5.21
M205 Bench check aircraft fire suppression system components		1.69	4	7	3	5.39
M206 Calibrate aircraft fire suppression systems		1.04	4	6	3	6.05
28h Bench check components	-					
E107 Bench check cargo door control components		1.31	2	3	2	5.17
E108 Bench check cargo hoist or winch components		.87	2	3	2	4.98
30b(1) Jet engine						
S390 Isolate IBIS circuit component malfunctions	-	.84	1	2	1	6.24
31h Bench check components	-					
L197 Bench check anti-ice or deice electrical control and warning components		1.98	7	8	4	4.77
33b Bsubsystem fundamentals						
P290 Bench check bleed air system components		1.87	5	6	4	5.41
P289 Bench check ATMs or control devices		.96	2	1	1	5.87

TD MEAN = 5.00; SD = 1.00
TE MEAN = 2.65; SD = 1.66

TABLE 34

TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE
GROUP MEMBERS BUT NOT REFERENCED BY STS

TASKS		TNG EMP	PERCENT MEMBERS PERFORMING 1ST JOB	1ST ENL	2A636 (N=341)	2A656 (N=578)	2A676 (N=242)	TSK DIF
T466	Static ground aircraft	4.07	24	34	34	49	26	1.58
T439	Perform pre-use inspections of aircraft support equipment, such as hydraulic servicing carts or maintenance stands	4.02	14	18	19	35	21	4.04
T452	Remove or install aircraft safety pins or locks	3.82	34	42	41	49	25	3.22
T472	Walk wings or tails during aircraft towing operations	3.47	51	56	55	62	39	1.54
T427	Inspect egress system safety pins	3.31	12	16	16	19	9	3.61
T448	Remove or install aircraft doors or panels	3.20	40	44	44	53	27	3.28
T432	Operate aircraft brakes during towing operations	3.16	26	35	36	48	24	2.80
T450	Remove or install aircraft landing gear components	2.91	21	30	31	42	19	5.39
T429	Launch or recover aircraft	2.87	40	45	45	52	27	4.01
T428	Jack or level aircraft	2.64	36	43	43	54	27	4.82
T441	Position or remove aircraft chocks	2.64	49	53	53	59	27	1.71
T430	Marshall aircraft	2.56	23	29	28	36	24	3.51
T462	Service engine constant speed drives (CSDs)	2.53	12	17	18	28	15	3.84
T425	Inspect aircraft pneumatic systems	2.40	11	12	14	24	13	4.52
T473	Wash aircraft	2.27	38	42	42	30	13	1.96
T440	Perform supplemental inspections, such as acceptance, calendar, or time replacement item	2.24	10	15	14	28	19	4.42
T422	Connect or disconnect portable hydraulic test stands to or from aircraft	2.13	12	16	17	20	11	4.09
T468	Tow aircraft	2.07	16	20	22	30	22	4.38
T469	Tow nonpowered Aerospace Ground Equipment (AGE)	2.07	20	24	24	40	26	2.47
T471	Transport test equipment or units to or from flightline	1.96	13	17	17	28	17	1.85

TD MEAN = 5.00; SD = 1.00

previous survey experience groups; and (3) across specialty groups identified in the **SPECIALTY JOBS** section of the report. In addition, the current study also lists job satisfaction across jobs by both ANG and AFRES.

Table 35 compares first-enlistment (1-48 months TAFMS), second-enlistment (49-96 months TAFMS), and career (97+ months TAFMS) group data to corresponding enlistment groups from other Mission Equipment Management AFSCs surveyed during the previous calendar year. These data give a relative measure of how the job satisfaction of AFSC 2A6X6 personnel compares with similar Air Force specialties. All three groups report comparable job satisfaction for all indicators except reenlistment intentions. The "NO OR PROBABLY NO" reenlistment intention indicators for all three groups were somewhat higher than other Mission Equipment Management AFSCs.

Table 36 compares job satisfaction indicator responses of the TAFMS groups in the current survey to TAFMS groups for the previous survey. Generally, the 1997 responses are very similar when compared to the 1993 responses.

An examination of job satisfaction data can also reveal the influences performing certain jobs may have on overall job satisfaction. Table 37 presents job satisfaction data for the jobs identified in the career ladder structure for AFSC 2A6X6. Overall, job satisfaction was very high across specialty jobs, with a slight decrease in job satisfaction for the Safety Inspection Job. Job satisfaction was highest for the Quality Assurance Inspector Job.

When there are issues in an occupation that are not directly addressed in the JI, survey respondents frequently provide write-in comments. The majority of write-in comments dealt with explaining the type of job held, base to which assigned (particularly ANG bases), or expanded upon the specific type of equipment used. Very few comments addressed anything other than the above mentioned topics.

IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted as part of a 5-year cycle and to provide training personnel with current information on the Aircraft Electrical and Environmental Systems career ladder for use in reviewing current training programs and training documents. Overall job progression is normal and shows a distinct pattern as one moves from the 3- to the 7-skill level. The AFMAN 36-2108 *Specialty Description* broadly describes jobs and tasks being performed. Job satisfaction is high and there were not any serious problem areas noted. Analysis of career ladder documents indicate the STS contains a number of unsupported line items and learning objectives, and excludes an entire duty section. The unsupported items should be reviewed to determine if their inclusion in future revisions of the STS is warranted.

TABLE 35

JOB SATISFACTION INDICATORS FOR ACTIVE DUTY AFSC 2A6X6 TAFMS GROUPS (PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	AFSC 2A6X6 (N=362)	COMP SAMPLE (N=4,506)	AFSC 2A6X6 (N=250)	COMP SAMPLE (N=3,339)	AFSC 2A6X6 (N=549)	COMP SAMPLE (N=9,548)
EXPRESSED JOB INTEREST:						
INTERESTING	74	75	75	73	81	78
SO-SO	15	16	14	16	12	14
DULL	11	9	11	11	7	8
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	83	83	86	84	87	85
LITTLE OR NOT AT ALL	17	17	14	16	13	15
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	89	89	89	84	85	82
LITTLE OR NOT AT ALL	11	11	11	16	15	18
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	71	73	70	72	77	75
NEUTRAL	14	14	15	13	9	11
DISSATISFIED	15	13	16	15	14	14
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	54	63	68	73	73	78
NO, OR PROBABLY NO	46	36	32	26	7	7
PLAN TO RETIRE	0	1	0	1	19	15

TABLE 36

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 2A6X6
TAFMS GROUPS IN CURRENT STUDY TO PREVIOUS STUDY
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	1997 2A6X6 (N=362)	1993 2A6X6 (N=897)	1997 2A6X6 (N=250)	1993 2A6X6 (N=575)	1997 2A6X6 (N=549)	1993 2A6X6 (N=1,456)
EXPRESSED JOB INTEREST:						
INTERESTING	74	77	75	75	81	76
SO-SO	15	14	14	16	12	16
DULL	11	8	11	9	7	8
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	83	83	86	84	87	84
LITTLE OR NOT AT ALL	17	17	14	16	13	16
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	89	88	89	86	85	81
LITTLE OR NOT AT ALL	11	12	11	14	15	18
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	71	78	70	75	77	75
NEUTRAL	14	10	15	15	9	9
DISSATISFIED	15	11	16	15	14	16
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	54	57	68	70	73	78
NO, OR PROBABLY NO	46	43	32	30	7	8
PLAN TO RETIRE	0	0	0	0	19	14

TABLE 37

COMPARISONS OF JOB SATISFACTION INDICATORS FOR MEMBERS OF SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	POWER (STG134) (N=18)	FLIGHTLINE (STG083) (N=1,274)	BACKSHOP (STG107) (N=172)	OXYGEN (STG125) (N=12)
EXPRESSED JOB INTEREST:				
INTERESTING	83	84	67	67
SO-SO	0	11	19	17
DULL	17	5	15	17
PERCEIVED UTILIZATION OF TALENTS:				
FAIRLY WELL TO PERFECTLY	83	89	81	75
LITTLE OR NOT AT ALL	17	11	19	25
PERCEIVED UTILIZATION OF TRAINING:				
FAIRLY WELL TO PERFECTLY	89	93	82	83
LITTLE OR NOT AT ALL	11	7	18	17
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:				
SATISFIED	72	78	63	75
NEUTRAL	0	11	21	8
DISSATISFIED	28	12	16	17
REENLISTMENT INTENTIONS:				
YES, OR PROBABLY YES	67	75	65	92
NO, OR PROBABLY NO	22	18	28	0
PLAN TO RETIRE	6	6	6	8

TABLE 37 (CONTINUED)

COMPARISONS OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	TRAINING (STG084) (N=30)	QA INSPECTOR (STG127) (N=11)	SUPERVISOR (STG099) (N=86)	SAFETY INSPECTOR (STG122) (N=12)
EXPRESSED JOB INTEREST:				
INTERESTING	93	91	88	83
SO-SO	3	9	7	13
DULL	3	0	5	3
PERCEIVED UTILIZATION OF TALENTS:				
FAIRLY WELL TO PERFECTLY	93	100	93	83
LITTLE OR NOT AT ALL	7	0	7	17
PERCEIVED UTILIZATION OF TRAINING:				
FAIRLY WELL TO PERFECTLY	97	100	78	58
LITTLE OR NOT AT ALL	3	0	22	42
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:				
SATISFIED	97	100	84	67
NEUTRAL	0	0	2	25
DISSATISFIED	3	0	14	8
REENLISTMENT INTENTIONS:				
YES, OR PROBABLY YES	90	91	72	58
NO, OR PROBABLY NO	3	0	3	8
PLAN TO RETIRE	7	9	24	33

From the standpoint of data gathered during this OSR, the AFSC 2A6X6 career ladder structure reflects a wide diversity and variety of jobs performed by career ladder members. Almost three-quarters of career ladder members spend their time on the flightline. The Backshop Cluster is the place most of the remaining personnel are located. Despite the diversity of work found in the career ladder, job progression shows a distinct pattern as one moves from the 3- to 7-skill levels. The AFMAN 36-2108 *Specialty Description* broadly describes the jobs performed.

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APPENDIX A

REPRESENTATIVE TASKS PERFORMED BY MEMBERS OF CAREER LADDER JOBS

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TABLE A1

REPRESENTATIVE TASKS PERFORMED
POWER
(N=18)

TASKS		PERCENT MEMBERS PERFORMING
A17	CRIMP SPLICES OR TERMINALS TO WIRES	100
B54	PERFORM OPERATIONAL CHECKS OF AC POWER SYSTEMS	100
B59	REMOVE OR INSTALL AC POWER COMPONENTS	100
B56	PERFORM OPERATIONAL CHECKS OF DC POWER SYSTEMS	94
A4	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	94
B61	REMOVE OR INSTALL DC POWER COMPONENTS	94
A11	CLEAN CONNECTOR PLUGS	89
B49	ISOLATE AC POWER MALFUNCTIONS	83
B58	PERFORM OPERATIONAL CHECKS OF EXTERNAL POWER SYSTEMS	83
A24	INSPECT ELECTRICAL BONDS OR GROUNDS	78
B51	ISOLATE DC POWER MALFUNCTIONS	78
A26	INSPECT WIRE BUNDLES OR HARNESSES	72
A29	PERFORM CORROSION CONTROL	72
B45	INSPECT DC POWER COMPONENTS	72
B55	PERFORM OPERATIONAL CHECKS OF BATTERY CHARGER SYSTEMS	72
A32	PERFORM TIME COMPLIANCE TECHNICAL ORDERS (TCTOs) MODIFICATIONS	67
B60	REMOVE OR INSTALL BATTERY CHARGER SYSTEMS	67
A3	APPLY SEALANT TO CONNECTORS OR RELAYS	67
B43	INSPECT AC POWER COMPONENTS	61
B57	PERFORM OPERATIONAL CHECKS OF EMERGENCY POWER SYSTEMS	61
B53	ISOLATE EXTERNAL POWER SYSTEM MALFUNCTIONS	61
B44	INSPECT BATTERY CHARGER SYSTEMS	61
B63	REMOVE OR INSTALL EXTERNAL POWER COMPONENTS	61
A22	FABRICATE WIRE BUNDLES OR HARNESSES	56
A20	FABRICATE ELECTRICAL LEADS	56
B52	ISOLATE EMERGENCY POWER MALFUNCTIONS, OTHER THAN BATTERIES	50
B47	INSPECT EXTERNAL POWER COMPONENTS	50
A25	INSPECT TEST EQUIPMENT	50

Average number of tasks performed = 64

TABLE A2

REPRESENTATIVE TASKS PERFORMED
FLIGHTLINE
(N=1,274)

TASKS		PERCENT MEMBERS PERFORMING
K193	PERFORM OPERATIONAL CHECKS OF EXTERIOR LIGHTING	97
K194	PERFORM OPERATIONAL CHECKS OF INTERIOR LIGHTING	96
A17	CRIMP SPLICES OR TERMINALS TO WIRES	95
B54	PERFORM OPERATIONAL CHECKS OF AC POWER SYSTEMS	95
B59	REMOVE OR INSTALL AC POWER COMPONENTS	95
K195	REMOVE OR INSTALL EXTERIOR LIGHTING COMPONENTS	94
K196	REMOVE OR INSTALL INTERIOR LIGHTING COMPONENTS	94
B56	PERFORM OPERATIONAL CHECKS OF DC POWER SYSTEMS	94
K189	ISOLATE EXTERIOR LIGHTING MALFUNCTIONS	94
J178	PERFORM OPERATIONAL CHECKS OF FIRE AND OVERHEAT WARNING SYSTEMS	93
B61	REMOVE OR INSTALL DC POWER COMPONENTS	93
R362	PERFORM OPERATIONAL CHECKS OF AIR-CONDITIONING SYSTEMS	92
K190	ISOLATE INTERIOR LIGHTING MALFUNCTIONS	92
D96	PERFORM OPERATIONAL CHECKS OF ANTI-SKID SYSTEMS	92
A4	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	91
R366	REMOVE OR INSTALL AIR-CONDITIONING SYSTEM COMPONENTS	91
A11	CLEAN CONNECTOR PLUGS	90
B49	ISOLATE AC POWER MALFUNCTIONS	90
D102	REMOVE OR INSTALL ANTI-SKID COMPONENTS	90
D84	INSPECT ANTI-SKID COMPONENTS	89
R355	ISOLATE AIR-CONDITIONING SYSTEM MALFUNCTIONS	89
A26	INSPECT WIRE BUNDLES OR HARNESSES	89
R359	PERFORM LEAKAGE CHECKS OF AIR-CONDITIONING SYSTEMS	89
D90	ISOLATE ANTI-SKID MALFUNCTIONS	89
R352	INSPECT AIR-CONDITIONING SYSTEMS	88
B51	ISOLATE DC POWER MALFUNCTIONS	88
J177	ISOLATE FIRE AND OVERHEAT DETECTION CIRCUIT MALFUNCTIONS	88
I171	REMOVE OR INSTALL FIRE OR OVERHEAT SYSTEM COMPONENTS	87

Average number of tasks performed = 193

TABLE A3

REPRESENTATIVE TASKS PERFORMED
BACKSHOP
(N=172)

TASKS		PERCENT MEMBERS PERFORMING
A17	CRIMP SPLICES OR TERMINALS TO WIRES	94
H156	CLEAN BATTERIES	94
N230	INSPECT LOX SERVICING CARTS	94
N245	PERFORM LEAKAGE CHECKS OF LOX SERVICING CARTS	93
H154	ASSEMBLE OR DISASSEMBLE BATTERIES	92
A4	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	91
H157	INSPECT BATTERIES	91
N251	PERFORM OPERATIONAL CHECKS OF LOX SERVICING CARTS	89
H163	PERFORM CAPACITANCE TESTS AND SERVICE BATTERIES	88
N238	ISOLATE LOX SERVICING CART MALFUNCTIONS	87
K185	BENCH CHECK EXTERIOR LIGHTING COMPONENTS	86
N262	REMOVE OR INSTALL LOX SERVICING CART COMPONENTS	81
N228	INSPECT GOX SERVICING CARTS	81
A26	INSPECT WIRE BUNDLES OR HARNESSES	81
A11	CLEAN CONNECTOR PLUGS	81
N259	PURGE LOX SERVICING CARTS	80
Y618	ACCESS CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) MENUS AND DATA SCREENS	80
K183	ASSEMBLE OR DISASSEMBLE EXTERIOR LIGHTING ASSEMBLIES	77
N243	PERFORM LEAKAGE CHECKS OF GOX SERVICING CARTS	77
S404	PERFORM OPERATIONAL CHECKS OF LIN SERVICING CARTS	76
N249	PERFORM OPERATIONAL CHECKS OF GOX SERVICING CARTS	76
S382	INSPECT LIQUID NITROGEN SERVICING CARTS	74
S398	PERFORM LEAKAGE CHECKS OF LIN SERVICING CARTS	74
K186	BENCH CHECK INTERIOR LIGHTING COMPONENTS	73
H158	INSPECT BATTERY CHARGER ANALYZER COMPONENTS	73
A10	BENCH CHECK RELAYS	73
S407	PURGE LIN SERVICING CARTS	72
N236	ISOLATE GOX SERVICING CART MALFUNCTIONS	70

Average number of tasks performed = 119

TABLE A4

REPRESENTATIVE TASKS PERFORMED
OXYGEN
(N=12)

TASKS		PERCENT MEMBERS PERFORMING
H163	PERFORM CAPACITANCE TESTS AND SERVICE BATTERIES	100
N245	PERFORM LEAKAGE CHECKS OF LOX SERVICING CARTS	100
H154	ASSEMBLE OR DISASSEMBLE BATTERIES	92
H156	CLEAN BATTERIES	92
H157	INSPECT BATTERIES	92
N230	INSPECT LOX SERVICING CARTS	92
N251	PERFORM OPERATIONAL CHECKS OF LOX SERVICING CARTS	92
N249	PERFORM OPERATIONAL CHECKS OF GOX SERVICING CARTS	92
Y618	ACCESS CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) MENUS AND DATA SCREENS	92
N259	PURGE LOX SERVICING CARTS	83
N262	REMOVE OR INSTALL LOX SERVICING CART COMPONENTS	83
N238	ISOLATE LOX SERVICING CART MALFUNCTIONS	83
N243	PERFORM LEAKAGE CHECKS OF GOX SERVICING CARTS	83
N260	REMOVE OR INSTALL GOX SERVICING CART COMPONENTS	75
N236	ISOLATE GOX SERVICING CART MALFUNCTIONS	75
N228	INSPECT GOX SERVICING CARTS	75
H162	ISOLATE BATTERY MALFUNCTIONS	58
X607	EVALUATE SERVICEABILITY OF EQUIPMENT, TOOLS, PARTS, OR SUPPLIES	58
A29	PERFORM CORROSION CONTROL	58
S413	REMOVE OR INSTALL LIQUID NITROGEN SERVICING COMPONENTS	50
S404	PERFORM OPERATIONAL CHECKS OF LIN SERVICING CARTS	50
W596	MAINTAIN TECHNICAL ORDER LIBRARIES	50
S407	PURGE LIN SERVICING CARTS	50
X610	INVENTORY AND STORE EQUIPMENT, TOOLS, PARTS, OR SUPPLIES	50
X612	MAINTAIN BENCHSTOCK PARTS OR EQUIPMENT LEVELS	50
S373	FILL CARBON DIOXIDE (CO2) LIFERAFT CYLINDERS	50
X604	COORDINATE SUPPLY-RELATED MATTERS WITH APPROPRIATE AGENCIES	50
S382	INSPECT LIQUID NITROGEN SERVICING CARTS	42

Average number of tasks performed = 49

TABLE A5

REPRESENTATIVE TASKS PERFORMED
TRAINING
(N=30)

TASKS		PERCENT MEMBERS PERFORMING
V554	CONDUCT FORMAL COURSE CLASSROOM TRAINING	100
V563	DEVELOP TRAINING MATERIALS OR AIDS	100
V574	PERSONALIZE LESSON PLANS	97
V549	ADMINISTER OR SCORE TESTS	93
V559	DEMONSTRATE OPERATION OF EQUIPMENT	93
V568	EVALUATE PROGRESS OF TRAINEES	87
V562	DEVELOP PERFORMANCE TESTS	87
V558	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	77
V561	DEVELOP FORMAL COURSE CURRICULA, PLANS OF INSTRUCTIONS, (POIs), OR SPECIALTY TRAINING STANDARDS (STSs)	77
U528	INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	70
V564	DEVELOP TRAINING PROGRAMS, PLANS, OR PROCEDURES	70
V573	MAINTAIN TRAINING RECORDS OR FILES	70
V566	EVALUATE EFFECTIVENESS OF TRAINING PROGRAMS, PLANS, OR PROCEDURES	67
U532	PARTICIPATE IN GENERAL MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS, OTHER THAN CONDUCTING	67
V556	CONDUCT RESIDENT COURSE CLASSROOM TRAINING	63
V572	INSPECT TRAINING MATERIALS OR AIDS FOR OPERATION OR SUITABILITY	63
U479	CONDUCT SAFETY INSPECTIONS OF EQUIPMENT OR FACILITIES	60
V565	ESTABLISH OR MAINTAIN STUDY REFERENCE FILES	60
V560	DETERMINE TRAINING REQUIREMENTS	60
U485	COUNSEL SUBORDINATES CONCERNING PERSONAL MATTERS	60
V553	COMPLETE STUDENT ENTRY OR WITHDRAWAL FORMS	53
U480	CONDUCT SELF-INSPECTIONS OR SELF-ASSESSMENTS	53
U478	CONDUCT GENERAL MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	53
W596	MAINTAIN TECHNICAL ORDER LIBRARIES	50
V567	EVALUATE PERSONNEL TO DETERMINE TRAINING NEEDS	50
V575	PLAN OR SCHEDULE TRAINING	50

Average number of tasks performed = 66

TABLE A6

REPRESENTATIVE TASKS PERFORMED
QUALITY ASSURANCE INSPECTOR
(N=11)

TASKS		PERCENT MEMBERS PERFORMING
Y618	ACCESS CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) MENUS AND DATA SCREENS	100
W583	COMPLETE ACCIDENT OR INCIDENT REPORTS	100
Y620	ANALYZE CAMS DATA	100
Y629	EVALUATE MAINTENANCE PROCEDURES	91
Y645	REVIEW AIRCRAFT FLIGHT OR MAINTENANCE RECORDS, SUCH AS AFTO FORMS 781 SERIES	91
U479	CONDUCT SAFETY INSPECTIONS OF EQUIPMENT OR FACILITIES	91
Y638	INITIATE TECHNICAL ORDER IMPROVEMENT REPORTS	91
Y637	INITIATE OR ANNOTATE AIRCRAFT FLIGHT OR MAINTENANCE RECORDS, SUCH AS AFTO FORMS 781 SERIES	91
W600	REVIEW PUBLISHING BULLETINS OR TECHNICAL ORDER CHANGES	82
U511	EVALUATE JOB HAZARDS OR COMPLIANCE WITH AIR FORCE OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM	82
Y644	RETRIEVE CAMS LISTINGS OR REPORTS	82
Y642	PERFORM MAINTENANCE ACTIVITY INSPECTIONS OR SELF-INSPECTIONS	82
A26	INSPECT WIRE BUNDLES OR HARNESSES	82
A25	INSPECT TEST EQUIPMENT	82
T426	INSPECT AIRFRAME OR AIRFRAME LINE REPLACEABLE UNITS (LRUs)	82
B43	INSPECT AC POWER COMPONENTS	82
B45	INSPECT DC POWER COMPONENTS	82
U539	REVIEW DRAFTS OF REGULATIONS, MANUALS, OR OTHER DIRECTIVES	82
K188	INSPECT INTERIOR LIGHTING COMPONENTS	82
J176	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	82
P297	INSPECT BLEED AIR SYSTEMS	82
B047	INSPECT EXTERNAL POWER COMPONENTS	82
R352	INSPECT AIR-CONDITIONING SYSTEMS	82
O270	INSPECT CABIN OR CARGO PRESSURIZATION SYSTEMS	82

Average number of tasks performed = 93

TABLE A7

REPRESENTATIVE TASKS PERFORMED
SUPERVISORS
(N=86)

TASKS		PERCENT MEMBERS PERFORMING
U543	SUPERVISE MILITARY PERSONNEL	94
U488	DETERMINE OR ESTABLISH WORK ASSIGNMENTS OR PRIORITIES	88
U483	CONDUCT SUPERVISORY PERFORMANCE FEEDBACK SESSIONS	88
U518	EVALUATE PERSONNEL FOR COMPLIANCE WITH PERFORMANCE STANDARDS	86
U492	DEVELOP OR ESTABLISH WORK SCHEDULES	85
U546	WRITE PERFORMANCE REPORTS OR SUPERVISORY APPRAISALS	84
U485	COUNSEL SUBORDINATES CONCERNING PERSONAL MATTERS	84
U486	DETERMINE OR ESTABLISH LOGISTICS REQUIREMENTS, SUCH AS PERSONNEL, EQUIPMENT, TOOLS, PARTS, SUPPLIES, OR WORKSPACE	80
U475	ASSIGN PERSONNEL TO WORK AREAS OR DUTY POSITIONS	79
U480	CONDUCT SELF-INSPECTIONS OR SELF-ASSESSMENTS	79
U532	PARTICIPATE IN GENERAL MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS, OTHER THAN CONDUCTING	78
U522	EVALUATE WORK SCHEDULES	78
U491	DEVELOP OR ESTABLISH WORK METHODS OR PROCEDURES	78
U478	CONDUCT GENERAL MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	77
U519	EVALUATE PERSONNEL FOR PROMOTION, DEMOTION, RECLASSIFICATION, OR SPECIAL AWARDS	77
U537	PLAN OR SCHEDULE WORK ASSIGNMENT OR PRIORITIES	76
U506	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	76
U540	SCHEDULE PERSONNEL FOR TEMPORARY DUTY (TDY) ASSIGNMENTS, LEAVES, OR PASSES	74
U528	INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	74
U482	CONDUCT SUPERVISORY ORIENTATIONS FOR NEWLY ASSIGNED PERSONNEL	74
Y618	ACCESS CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) MENUS AND DATA SCREENS	72

Average number of tasks performed = 74

TABLE A8

REPRESENTATIVE TASKS PERFORMED
SAFETY INSPECTORS
(N=12)

TASKS		PERCENT MEMBERS PERFORMING
U532	PARTICIPATE IN GENERAL MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS, OTHER THAN CONDUCTING	92
U478	CONDUCT GENERAL MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	92
U480	CONDUCT SELF-INSPECTIONS OR SELF-ASSESSMENTS	83
U481	CONDUCT STAFF ASSISTANCE VISITS, INSPECTIONS, OR AUDITS	83
U479	CONDUCT SAFETY INSPECTIONS OF EQUIPMENT OR FACILITIES	75
U508	EVALUATE ACCIDENT OR INCIDENT REPORTS	75
U511	EVALUATE JOB HAZARDS OR COMPLIANCE WITH AIR FORCE OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM	75
U521	EVALUATE SAFETY OR SECURITY PROGRAMS	75
U544	WRITE INSPECTION REPORTS	75
U538	PLAN SAFETY OR SECURITY PROGRAMS	75
U538	PLAN SAFETY OR SECURITY PROGRAMS	67
W583	COMPLETE ACCIDENT OR INCIDENT REPORTS	67
U530	WRITE REPLIES TO INSPECTIONS REPORTS	67
U495	DEVELOP SELF-INSPECTION OR SELF-ASSESSMENT PROGRAM CHECKLISTS	67
W594	MAINTAIN OR UPDATE STATUS INDICATORS, SUCH AS BOARDS, GRAPHS, OR CHARTS	67
W593	MAINTAIN ADMINISTRATIVE FILES	67
U510	EVALUATE INSPECTION REPORT FINDINGS OR INSPECTIONS PROCEDURES	58
U530	INVESTIGATE ACCIDENTS OR INCIDENTS	58
U498	DRAFT AGENDA FOR GENERAL MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	58
U505	ESTABLISH ORGANIZATIONAL POLICIES, SUCH AS OPERATING INSTRUCTIONS (OIs) OR STANDARD OPERATING PROCEDURES (SOPs)	58
Y633	IMPLEMENT GROUND SAFETY PROGRAMS OR PROCEDURES	50

Average number of tasks performed = 32