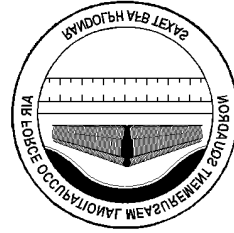




**UNITED STATES
AIR FORCE**



OCCUPATIONAL SURVEY REPORT



AIRCRAFT FUEL SYSTEMS

AFSC 2A6X4

OSSN: 2442

MARCH 2001

**OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION AND TRAINING COMMAND
1550 5th STREET EAST
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TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE	vii
SUMMARY OF RESULTS	ix
INTRODUCTION	1
Background	1
SURVEY METHODOLOGY	2
Inventory Development	2
Survey Administration.....	2
Survey Sample	3
Task Factor Administration.....	6
SPECIALTY JOBS	7
Overview of Specialty Jobs.....	7
Group Descriptions	9
Comparison to Previous Study.....	12
Summary.....	12
ANALYSIS OF DAFSC GROUPS	16
Skill-Level Descriptions	16
Summary.....	17
TRAINING ANALYSIS	18
First-Enlistment Personnel.....	18
Training Emphasis (TE) and Task Difficulty (TD) Data.....	20
Specialty Training Standard (STS).....	21
Plan of Instruction (POI).....	21
JOB SATISFACTION ANALYSIS	22
IMPLICATIONS	23

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TABLE OF CONTENTS
(Tables, Figures, Appendices)

	<u>PAGE NUMBER</u>
TABLE 1 DAFSC DISTRIBUTION OF SURVEYED PERSONNEL.....	4
TABLE 2 PAYGRADE/COMMAND DISTRIBUTION OF SURVEY SAMPLE.....	5
TABLE 3 RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS.....	13
TABLE 4 SELECTED BACKGROUND DATA FOR SPECIALTY JOBS.....	14
TABLE 5 SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1998 SURVEYS.....	15
FIGURE 1 AFSC 2A6X4 CAREER LADDER SPECIALTY JOBS (N=1,638).....	8
FIGURE 2 DISTRIBUTION OF AFSC 2A6X4 FIRST-ENLISTMENT PERSONNEL ACROSS SPECIALTY JOBS (N=366).....	19
APPENDIX A SELECTED REPRESENTATIVE TASKS PERFORMED BY SPECIALTY JOB GROUPS	25
APPENDIX B TABLES 6-40.....	27

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PREFACE

This report presents the results of an Air Force Occupational Survey of the Aircraft Fuel Systems career ladder, Air Force Specialty Code (AFSC) 2A6X4. Authority for conducting occupational surveys is contained in AFI 36-2623. Computer products used in this report are available for use by operations and training officials.

Mr. Scott Vap developed the survey instrument. Mrs. Jeanie Guesman provided computer-programming support and Ms. Dolores Navarro provided administrative support. Second Lieutenant Troy Guthrie 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).

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to AFOMS/OMYXI, 1550 5th Street East, Randolph Air Force Base, 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 <https://www.omsq.af.mil>.

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SUMMARY OF RESULTS

1. **Survey Coverage:** The Aircraft Fuel Systems career ladder was surveyed to provide current job and task data for use in updating career ladder documents and training programs. Survey results are based on responses from 1,638 Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command (AFRC) respondents.
2. **Specialty Jobs:** Structure analysis identified one cluster and two jobs. The Fuel Systems Maintenance Job is the predominant job or cluster, accounting for 90 percent of the survey population. The remaining jobs are the Quality Assurance Job and Supervisor Job.
3. **Career Ladder Progression:** Skill-level progression for members of the Aircraft Fuel Systems career ladder is typical, with a move from technical work at the 3- and 5-skill levels to supervisory and management work beginning at the 7-skill level. Members spend less time on technical tasks as they progress through the skill levels.
4. **Training Analysis:** The current Specialty Training Standard (STS) provides comprehensive coverage of the work performed by career ladder personnel. Some STS elements warrant review of proficiency coding based on survey data. Tasks that were not matched to areas within the STS should be considered for inclusion based on high training emphasis and percentages of members performing. The 3-skill level course Plan of Instruction (POI) was well supported. There were very few POI elements that were unsupported.
5. **Job Satisfaction:** Job satisfaction among AFSC 2A6X4 personnel rates slightly lower in the areas of expressed job interest and sense of accomplishment gained from work for all Total Active Federal Military Service (TAFMS) groups (first-enlistment, second-enlistment, and career groups) when compared to responses from like AFSCs surveyed within the last twelve months. Job satisfaction has decreased slightly since the previous OSR was conducted in 1998. This was evident in a marked drop in the expressed job interest, perceived utilization of talents, and accomplishment gained from work by first and second-term airmen.
6. **Implications:** Survey results indicate that the present classification structure, as described in the latest specialty description, accurately portray the jobs performed in this career ladder. The career ladder progression is normal, showing a movement away from the technical tasks common at the lower skill levels, as incumbents move toward the 7-skill level. Career ladder training documents appear, on the whole, to be well supported by survey data, but require review to ensure appropriate proficiency coding.

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**OCCUPATIONAL SURVEY REPORT (OSR)
AIRCRAFT FUEL SYSTEMS
(AFSC 2A6X4)**

INTRODUCTION

This is an Occupational Survey Report (OSR) on the Air Force Specialty Code (AFSC) 2A6X4 career ladder conducted by the Air Force Occupational Measurement Squadron (AFOMS). Authority for conducting occupational surveys is contained in AFI 36-2623. The last occupational survey report for this career ladder was published in August 1998. Survey data will be used to identify current utilization patterns among career ladder personnel and evaluate career ladder documents and training programs.

Background

As described in the AFMAN 36-2108, *Airman Classification*, dated 30 Apr 00, specialty description, Aircraft Fuel Systems, dated 30 Apr 99, personnel remove, repair, inspect, install, and modify aircraft fuel systems including integral fuel tanks, bladder cells, and external tanks. These personnel also maintain the associated hardware and equipment.

Upon graduation from Basic Military Training (BMT), airmen are assigned to the 361 TRS at Sheppard AFB, TX to attend the J3ABR2A634, Aircraft Fuel Systems Apprentice Course. This group-paced course provides entry-level students training in:

- aircraft safety
- hazardous materials/waste management and spill containment
- aircraft familiarization
- technical publications
- fuel systems tools and equipment
- AGE
- operation of fuel subsystems
- removal, installation and inspection of components
- confined space entry
- fuel cell removal, installation, and inspection
- fuel leak detection; internal tank repairs
- application of sealants and corrosion control

Entry into this career ladder currently requires an Armed Forces Vocational Aptitude Test Battery (ASVAB) score of General-44, normal color vision, and a strength factor of "J" (Weight lift of 60 lbs).

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SURVEY METHODOLOGY

Inventory Development

This survey instrument was developed to include the tasks performed by AFSC 2A6X4, Aircraft Fuels Systems personnel. The data collection instrument for this occupational survey was USAF Job Inventory (JI) Occupational Survey Study Number (OSSN) 2442, dated July 2000. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, pertinent tasks from the previous survey instrument, and data from the last OSR. The preliminary task list was refined and validated through personal interviews with 36 subject-matter experts (SMEs) at 7 operational bases and one training unit.

<u>BASE</u>	<u>UNIT VISITED</u>
Sheppard AFB, TX	361 TRS/TRR
Kirtland AFB, NM	58 MXS/LCMCF
Travis AFB, CA	60 EMS/LGMCF
McChord AFB, WA	62 LG/MCF
Fairchild AFB, WA	92 MS/ LGMSAF
Mt Home AFB, ID	366 CRS/LGMCF
Idaho ANG, Boise, ID	124 MS/LGMCF
Barksdale AFB, LA	2 MXS/LGMCF

The resulting JI contains a comprehensive listing of 640 tasks grouped under 14 duty headings, and a background section. The background questions request such information as grade, base, major command (MAJCOM) assigned, organizational level, component status, job title, functional area, work schedule, test equipment used or operated, aircraft support equipment used or operated, aircraft maintained, and forms used.

Survey Administration

From September - December 2000, Survey Control Monitors at operational units worldwide administered the inventory to eligible AFSC 2A6X4 personnel. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Personnel Center, Randolph AFB, TX. Each individual who completed the inventory first completed an identification and biographical information section and then checked each task performed in his or her current job. After checking all tasks performed, each member 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 his or her 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

Table 1 reflects the percentage of distribution, by Duty AFSC (DAFSC), of assigned AFSC 2A6X4 Aircraft Fuel Systems personnel as of July 2000. The 1,638 respondents in the final sample represent 56 percent of the total assigned personnel and 59 percent of the total personnel surveyed. Table 2 reflects the paygrade and MAJCOM distribution for this study.

As can be seen from Tables 1 and 2, the DAFSC, Paygrade, and Command distributions of the survey sample are extremely close to the percent assigned. This indicates a high probability that the survey is an accurate representation of the respective populations for these career ladders.

TABLE 1
DAFSC DISTRIBUTION OF SURVEYED PERSONNEL

DAFSC	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE**
2A634	18	19
2A654	52	49
2A674	30	32

TOTAL ASSIGNED = 2,912

TOTAL SURVEYED = 2,764

TOTAL IN SURVEY SAMPLE = 1,638

PERCENT OF ASSIGNED IN SAMPLE = 56

PERCENT OF SURVEYED IN SAMPLE = 59

* Assigned strength as of July 2000

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

TABLE 2

PAYGRADE/COMMAND DISTRIBUTION OF SURVEY SAMPLE

* As of July 2000

PAYGRADE	2A6X4	
	Percent of Assigned*	Percent of Sample
E-1 – E-3	16	15
E-4	22	22
E-5	27	27
E-6	22	24
E-7	12	12
E-8	**	0
COMMAND	2A6X4	
	Percent of Assigned*	Percent of Sample
USAFE	5	6
ACC	23	24
AFSOC	2	3
AMC	10	8
AFRC	15	15
AETC	5	6
PACAF	8	8
AFMC	3	3
ANG	29	27

** Less than 1%

Task Factor

Job descriptions sufficient data for about career ladder programs. Task needed for a complete ladder. To obtain the data, selected senior personnel (generally also completed a training emphasis (TD). These disks separately from the is used in a number of discussed in more report.

Training Emphasis

of the amount of be placed on tasks in The senior NCOs who were asked to select some sort of entry-level personnel much training should receive, from

Administration

alone do not provide making decisions documents or training factor information is analysis of the career needed task factor AFSC 2A6X4 E-6 or E-7 craftsmen) second disk for either (TE) or task difficulty were processed JIs. This information different analyses detail within the

(TE): TE is a rating emphasis that should entry-level training. completed a TE disk tasks they felt require structured training for and then indicate how emphasis these tasks 1 (extremely low

emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident training schools, field-training detachments (FTDs), mobile training teams (MTTs), formal on-the-job training (OJT), or any other organized training method. Interrater agreement for these raters was acceptable. The average TE rating was 2.13 with a standard deviation of 1.52. Any task with a TE rating of 3.65 or above is considered to have high TE.

Task Difficulty (TD): TD is an estimate of the amount of time needed to learn how to do each

task satisfactorily. The senior NCOs who completed TD disks were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was acceptable. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

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

SPECIALTY JOBS

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

The basic group used in the hierarchical clustering process is the Job. When two or more jobs have a substantial degree of similarity, in tasks performed and time spent on tasks, they are grouped together and identified as a Cluster. The structure of the career ladder is then defined in terms of clusters and jobs.

Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, one cluster, containing five jobs, and two independent jobs were identified within the career ladder. Figure 1 illustrates the clusters and jobs performed by AFSC 2A6X4 personnel.

A listing of these jobs and clusters is provided below. The stage (STG) number shown beside each title references computer printed information, the letter "N" indicates the number of personnel in each group.

- I. FUEL SYSTEMS MAINTENANCE CLUSTER (STG43, N=1,481)
 - A. AIRCRAFT PREP JOB (STG86, N=32)
 - B. F-16 GUARD JOB (STG89, N=16)
 - C. EQUIPMENT SUPPORT JOB (STG92, N=23)
 - D. B-2 FUEL SYSTEMS JOB (STG119, N=12)
 - E. FUEL SYSTEMS MAINTENANCE JOB (STG84, 1,368)
- II. QUALITY ASSURANCE JOB (STG147, N=10)
- III. SUPERVISOR JOB (STG80, N=43)

The respondents forming these clusters and jobs account for 94 percent of the survey sample. The remaining percent, for one reason or another, did not group into one of these jobs or clusters. Examples of these jobs could be a CDC writer or high level manager who does not perform technical tasks.

AFSC 2A6X4 CAREER LADDER SPECIALTY JOBS
(N = 1,638)

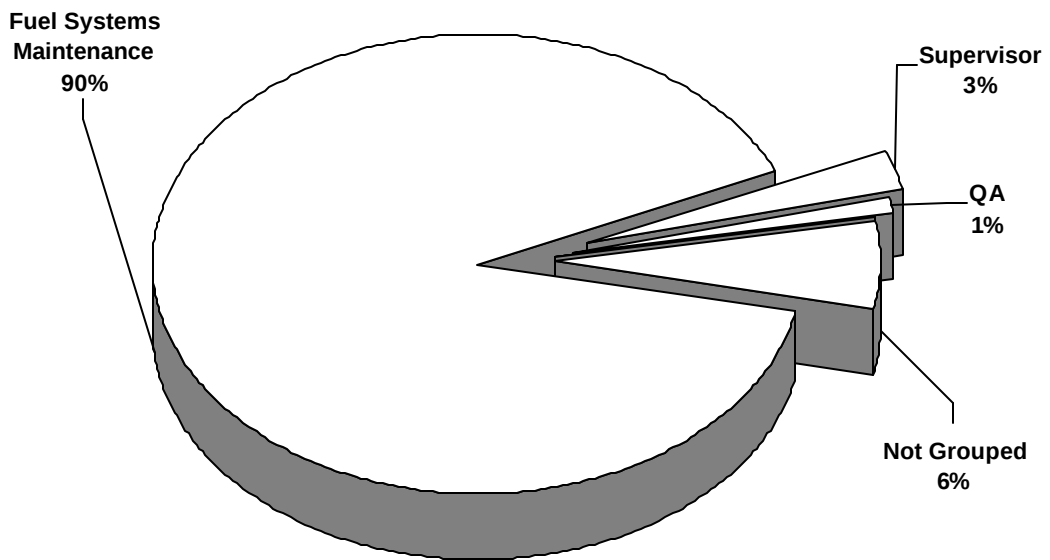


FIGURE 1

Group Descriptions

The following paragraphs contain brief descriptions of the jobs identified through the career ladder structure analysis. Table 3 presents the relative time spent on duties by members of these specialty jobs. Selected background data for these jobs are provided in Table 4. Representative tasks for all the groups are contained in Appendix A.

I. FUEL SYSTEMS MAINTENANCE CLUSTER (STG43) The 1,481 airmen performing within this job (90 percent of the survey sample) represent the core of the career field. The airmen within this job spend their time in numerous duty areas. For example, 15 percent of their time is spent Preparing Aircraft for Fuel Systems Maintenance of Duty B, 15 percent is spent Removing and Installing Aircraft Fuel Systems Component of Duty E, 15 percent performing Support Activities of Duty A, and an additional 15 percent Troubleshooting Aircraft Fuel Systems of Duty C. This job is highly technical in nature and the variety of duties shows the wide range of work performed. The five jobs within this cluster are the Aircraft Prep Job, F-16 Guard Job, Equipment Support Job, B-2 Fuel Systems Job, and the Fuel Systems Maintenance Job. These jobs will be discussed respectively below. This cluster, on average, is performing 210 tasks which illustrate their diversity in performing the core Fuel Systems Maintenance duties. Distinctive tasks performed include:

- Interpret aircraft fuel system schematics
- Clean or lubricate hand tools or special tools
- Isolate malfunctions of vent systems
- Purge fuel tanks or cells using exhaust purge method
- Inspect support equipment prior to use
- Don or doff respirators
- Position drip pans
- Apply fillet seals, such as first coat, by hand
- Clean damaged sealant areas
- Perform leak path analyses on integral fuel tanks
- Test sealants for adhesion
- Remove or install fuel level control valves
- Position nonpowered or powered AGE

The predominant paygrade for the overall Fuel Systems Maintenance Cluster is E-5 (28 percent). Fifty-six percent of these airmen are AD, averaging nearly 7 years in the career field and nearly 7 ½ years Total Active Federal Military Service (TAFMS). Twenty-eight percent of these airmen are ANG and 16 percent are AFRC.

The first job identified in this cluster, the Aircraft Prep Job, contains members spending the largest percent of their time, 27 percent, Preparing Aircraft for Fuel Systems Maintenance of Duty B. This is nearly twice the amount time spent in this duty area compared to the overall cluster. Some of the incumbents top tasks include roping off fuel system repair areas, depuddling fuel tanks and cells, and performing aircraft safe for maintenance procedures.

The F-16 Guard Job, the second job in the cluster, differs from the Aircraft Prep Job in that the incumbents are working the F-16 as their only aircraft. Eighty-two percent of the F-16 Guard Job are members of the ANG. The main focus of this job is preparing the F-16 for aircraft fuel system maintenance. The incumbents of this job are spending 30 percent of their time Preparing Aircraft for Fuel Systems Maintenance of Duty B. This is the largest percent of time spent in this duty area in contrast with all other jobs. Tasks dealing with jettison tanks and the handling of hydrazine separate this job from others in the cluster.

The third job of this cluster is the Equipment Support Job. Members of this job spend 42 percent of their time Performing Support Activities of Duty A. This is the largest amount of time spent within this duty of all jobs and nearly 3 times that of the overall cluster. Some examples of the top tasks that incumbents perform are grounding equipment other than aircraft, performing periodic tool box inspections, and inspecting support equipment prior to use.

The B-2 Fuel Systems Job, fourth in the cluster, spend 22 percent of their time, Troubleshooting Aircraft Fuel Systems. This is the most time spent in this duty area in comparison to the other jobs of the cluster. Ninety-two percent of the members of this job are stationed at Whiteman AFB, MO and report the B-2 as the primary aircraft they service. The high percent of troubleshooting done by incumbents of this job is directly related to the type of maintenance performed on the B-2's fuel system. Examples of such troubleshooting tasks are operationally checking crossfeed or engine-feed systems, operationally checking transfer systems, and operationally checking jettison or dump systems.

The fifth and last job of the cluster is the Fuel Systems Maintenance Job. This was largest job of the career field. The incumbents of this job make up 84 percent of the total survey sample and therefore exemplify the most common day-to-day activities of the majority of the AFSC 2A6X4 members. These members spend the majority of their time in duties similar to that of the overall cluster. Fifteen percent is spent Troubleshooting Aircraft Fuel Systems of Duty C, 15 percent Removing and Installing Aircraft Fuel Systems Component of Duty E, 14 percent performing Support Activities of Duty A, and an additional 14 percent of their time is spent Preparing Aircraft for Fuel Systems Maintenance of Duty B.

II. QUALITY ASSURANCE JOB (STG147). Comprising less than 1 percent of the survey sample, these 10 airmen report spending 29 percent of their time performing Inspecting Aircraft Fuel Systems of Duty D and an additional 25 percent of their time is spent Performing Management and Supervisory Activities of Duty K. The members of this job spend more time Inspecting Aircraft Fuel Systems of Duty D than any other group in the survey sample. They perform an average of 78 tasks. Representative tasks are:

- Inspect installed fuel quantity indicating system components
- Evaluate serviceability of equipment, tools, parts, or supplies
- Write inspection reports
- Evaluate personnel for compliance with performance standards
- Investigate accidents or incidents
- Conduct safety inspections of equipment or facilities

- Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program
- Review TO changes
- Complete accident or incident reports
- Conduct self-inspections or self-assessments
- Inspect safetying devices
- Inspect applied sealants

Seventy percent of these members hold the 7-skill level and 30 percent have the 5-skill level. One hundred percent of these incumbents are AD. The average time in the career field for these airmen is almost 15 years, with 15 years TAFMS. The predominant paygrade of this job is E-6 (60 percent).

III. SUPERVISOR JOB (STG80). Comprising 3 percent of the survey sample, these 43 airmen report 41 percent of their time is being spent Performing Management and Supervisory Activities of Duty K and an additional 11 percent of their time is spent Performing Training Activities of Duty L. The members of this job perform an average of 107 tasks. Representative tasks are:

- Counsel subordinates concerning personal matters
- Determine or establish work assignments or priorities
- Write recommendations for awards or decorations
- Conduct self-inspections or self-assessments
- Inspect personnel for compliance with military standards
- Interpret policies, directives, or procedures for subordinates
- Conduct supervisory performance feedback sessions
- Evaluate personnel for promotion, demotion, reclassification, or special awards
- Assign personnel to work areas or duty positions
- Write or indorse military performance reports
- Conduct general meetings, such as staff meetings, briefings, conferences, or workshops
- Evaluate personnel for compliance with performance standards

Ninety-one percent of these members hold the 7-skill level and 9 percent are 5-skill level. Ninety-five percent of these members are AD and the remaining 5 percent are AFRC. The members of this job spend more time focused on supervision and management than any other job within the survey. The predominate paygrades are E-6 and E-7.

Comparison to Previous Study

Table 5 lists the jobs and clusters identified in this report and compares them to the clusters and jobs of the 1998 survey report. Five of the six jobs identified in the previous report matched similar jobs and clusters in this report. The unmatched job was the External Tank Maintenance Job. Despite the differences in these job classifications, the core jobs of the AFSC have remained stable over time.

Summary

Structure analysis identified one cluster and two jobs. The Fuel Systems Maintenance Cluster contains the largest group of airmen in the Fuel Systems Maintenance career field. The remaining jobs of the AFSC 2A6X4 career field are Quality Assurance Job and Supervisor Job.

TABLE 3
RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

<u>DUTIES</u>	Fuel Systems Maintenance Cluster (N=1,481)	Quality Assurance Job (N=10)	Supervisor Job (N=43)
A PERFORMING SUPPORT ACTIVITIES	15	4	6
B PREPARING AIRCRAFT FOR FUEL SYSTEMS MAINTENANCE	15	6	4
C TROUBLESHOOTING AIRCRAFT FUEL SYSTEMS	15	*	2
D INSPECTING AIRCRAFT FUEL SYSTEMS	13	29	7
E REMOVING AND INSTALLING AIRCRAFT FUEL SYSTEMS COMPONENTS	15	1	1
F REPAIRING AIRCRAFT FUEL SYSTEMS COMPONENTS	4	0	*
G REPAIRING INTEGRAL FUEL TANKS	8	*	*
H PERFORMING GENERAL AIRCRAFT OR CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	2	4	*
I PERFORMING MOBILITY ACTIVITIES	2	2	8
J PERFORMING AUTOMATED MAINTENANCE SYSTEMS ACTIVITIES	3	10	9
K PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	4	25	41
L PERFORMING TRAINING ACTIVITIES	2	7	11
M PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1	7	7
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	4	3

*Less than 1%

TABLE 4
SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	Fuel Systems Maintenance Cluster (STG43) (N=1,481)	Quality Assurance Job (STG147) (N=10)	Supervisor Job (STG80) (N=43)
PERCENT OF SAMPLE	90	1	3
PERCENT IN CONUS	82	80	83
DAFSC DISTRIBUTION:			
2A634	20	0	0
2A654	50	30	9
2A674	30	70	91
COMPONENT STATUS:			
ACTIVE DUTY	56	100	95
AIR NATIONAL GUARD	28	0	0
AIR FORCE RESERVE COMMAND	16	0	5
PAYGRADE DISTRIBUTION:			
E-1 - E-3	16	0	0
E-4	23	0	0
E-5	28	20	5
E-6	23	60	42
E-7	10	20	53
AVERAGE MONTHS IN CAREER FIELD *	87	183	199
AVERAGE MONTHS TAFMS *	91	186	211
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS) *	44	0	0
PERCENT SUPERVISING	46	60	100
AVERAGE NUMBER OF TASKS PERFORMED	210	78	107
* AD Only			

TABLE 5

SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1998 SURVEYS

CURRENT SURVEY (N=1,638)	1998 SURVEY (N=1,872)
FUEL SYSTEMS MAINTENANCE CLUSTER	FUEL SYSTEMS MAINTENANCE CLUSTER
FUEL SYSTEMS MAINTENANCE CLUSTER (Aircraft Prep Job)	AIRCRAFT PREPARATION CLUSTER
FUEL SYSTEMS MAINTENANCE CLUSTER (Equipment Support Job)	MISSION SUPPORT JOB
QUALITY ASSURANCE JOB	QUALITY ASSURANCE JOB
SUPERVISOR JOB	SUPERVISOR CLUSTER
NONE	EXTERNAL TANK MAINTENANCE JOB

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 Airman Classification, Specialty Description and the Career Field Education and Training Plan (CFETP), reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the career ladder jobs and clusters are displayed in Table 6, while Table 7 offers another perspective by displaying the relative percent time spent on each duty across skill-level groups. These tables reflect the distribution of AD, ANG, and AFRC personnel. Because of the lack of 3-skill level airmen in the ANG and RES, the data concerning Aircraft Fuel Systems 3-skill level personnel is pertaining to AD members only. Personnel at the 3- and 5-skill levels work in the most technical jobs in the career field and spend most of their time on technical tasks. As incumbents move up to the 7-skill level, they begin to perform more supervisory, training, and administrative tasks but still spend a good amount of their time performing tasks considered technical in nature.

Skill-Level Descriptions

ACTIVE DUTY

DAFSC 2A634. These 308 airmen make up 19 percent of the survey sample. Ninety-six percent of these members work within the Fuel Systems maintenance Cluster (see Table 8). The 3-skill level personnel spend 17 percent of their time performing Support Activities of Duty A, 17 percent in Preparing Aircraft for Fuel System Maintenance of Duty B, and an additional 17 percent performing Troubleshooting Aircraft Fuel Systems of Duty C (see Table 9). Common tasks include applying electrical power to aircraft and applying warning tags to aircraft (see Table 10).

DAFSC 2A654. Representing 28 percent of the total survey sample, these 451 airmen spend 16 percent of their time performing Support Activities of Duty A. They also spend 14 percent in Preparing Aircraft for Fuel System Maintenance of Duty B and an additional 14 percent performing Troubleshooting Aircraft Fuel Systems of Duty C. Ninety-one percent of these members are working in the Fuel Systems maintenance Cluster. Table 11 shows 5-skill level members continue to perform tasks considered technical in nature. The 5-skill level personnel begin the trend of starting to move away from the technical tasks towards supervision and management. Differences between tasks performed in the AD 3- and 5-skill level members can be observed in Table 12.

DAFSC 2A674. These 205 airmen make up 13 percent of the survey sample. Sixty-two percent are within the Fuel Systems maintenance Cluster, 18 percent are in the Supervisor Job, and 3 percent are in the Quality Assurance Job (see Table 8). Table 13 displays data that shows the primary tasks performed are associated with supervision. Table 14 shows the tasks that differentiate between the AD 5- and 7-skill level personnel. The 7-skill level personnel are moving further away from the technical tasks of the career field towards supervision.

ANG

DAFSC 2A751. These 254 airmen represent 16 percent of the survey sample. Table 15 shows the distribution of these airmen across the career field jobs. They spend 19 percent of their time performing Support Activities of Duty A and an additional 17 percent in Preparing Aircraft for Fuel System Maintenance of Duty B (see Table 16). Typical tasks performed include bonding equipment, cleaning work areas, and depuddling fuel tanks or cells (see Table 17).

DAFSC 2A771. These 172 members account for 11 percent of the survey sample. Table 15 and 16 display a narrow shift towards supervisory activities. Table 18 displays the technical tasks performed by the 7-skill level ANG airmen. The tasks that differentiate between 5- and 7-skill levels are displayed in Table 19. This task differentiation illustrates slight shift to management and supervisory activities. The ANG 7-skill level members remain more heavily focused on the technical aspects of the job than due their AD counterparts..

AFRC

DAFSC 2A751. The 97 airmen in this category account for 6 percent of the total survey sample. Ninety-five percent of these incumbents perform work within the Fuel Systems Maintenance Cluster (see Table 20). Seventeen percent of their time is spent in Preparing Aircraft for Fuel System Maintenance of Duty B, 15 percent performing Troubleshooting Aircraft Fuel Systems of Duty C, and an additional 15 percent of their time Removing and Installing Aircraft Fuel Systems Components of Duty E (see Table 21). The performance of technical tasks is reflected once again in Table 22.

DAFSC 2A771. Table 21 shows an increase in the amount of training and supervision activities performed at this skill level in comparison to the 5-skill level. These 151 airmen represent 9 percent of the survey sample. Table 23 displays the highly technical nature of the top tasks performed by the 7-skill level personnel. A shift towards supervisory and management, as well as training, activities is illustrated in Table 24, which displays the tasks that differentiate the 5-skill level from the 7-skill level members.

Summary

Progression in the Aircraft Fuel Systems career field follows a regular pattern of a highly technical job focus at the lower skill levels, with a broadening into supervision and management at the 7-skill level. An emphasis is clearly seen in performing primarily the core cluster of Fuel Systems Maintenance at the 3-skill level, with some broadening into supervisory functions at the 5- and 7-skill level. The ANG and AFRC members at the 5- and 7-skill levels spend a higher percentage of their time performing technical tasks versus supervisory tasks than their AD counterparts (see Tables 25- 28).

TRAINING ANALYSIS

Occupational survey data are one of many sources of information that can be used to assist in the development of a training program relevant to the needs of personnel in their first enlistment. Factors that may be used in evaluating training include the overall description of the work being performed by first-enlistment personnel and their overall distribution across career ladder jobs, percentages of first-enlistment (1-48 months TAFMS) members performing specific tasks, as well as TE and TD ratings (previously explained in the **SURVEY METHODOLOGY** section). Due to the different methods of calculating TAFMS and TICF data for ANG and AFRC personnel, this information is only appropriate for AD members.

First-Enlistment Personnel

In this study, there are 366 members in their first-enlistment (1-48 months TAFMS), representing 22 percent of the total survey sample. Figure 2 reflects the distribution of first-enlistment personnel across the specialty jobs. Ninety-five percent of these airmen are in the Fuel Systems Maintenance Cluster and the remaining 5 percent were not grouped. Table 29 displays the relative percent of time spent on duties by first-enlistment personnel. As shown, these members perform technical tasks almost exclusively.

Table 30 lists representative tasks performed by first-enlistment personnel. Most involve a technical orientation. Table 31 reflects the equipment used by first-enlistment respondents.

**DISTRIBUTION OF DAFSC 2A6X4 FIRST-ENLISTMENT PERSONNEL
ACROSS SPECIALTY JOBS
(N = 366)**

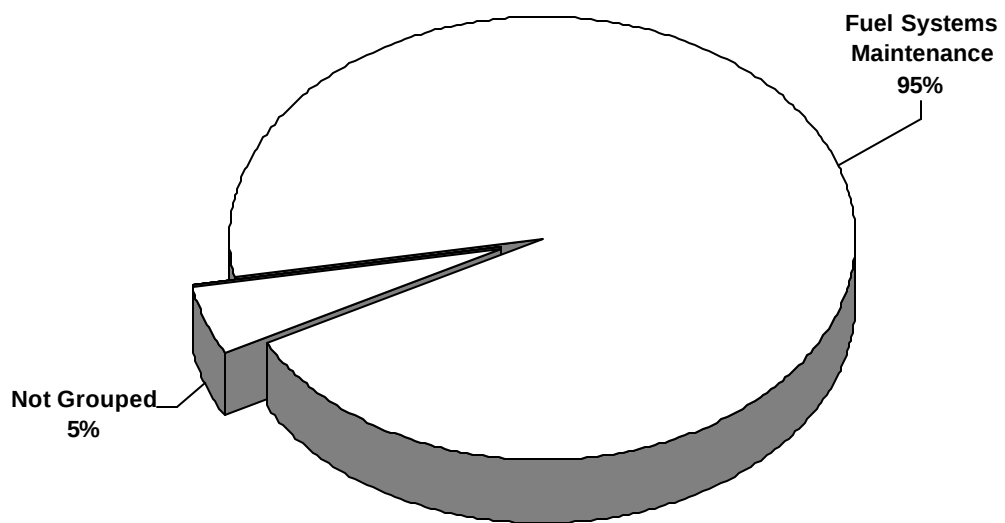


FIGURE 2

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

TE and TD data are secondary factors that can assist technical school personnel in deciding which tasks should be emphasized in entry-level training. These ratings, based on the judgments of senior career ladder NCOs working at operational units in the field, are collected to provide training personnel with a rank-ordering of those tasks in the JI considered important for first-enlistment personnel, along with a measure of the difficulty of the JI tasks. When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors, 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, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist technical school personnel, AFOMS has developed a computer program that incorporates these secondary factors and the percentage of first-enlistment personnel performing each task to produce an Automated Training Indicator (ATI) for each task. These indicators correspond to training decisions listed and defined in the Training Decision Logic Table found in Attachment 2, AETCI 36-2601, and allows course personnel to quickly focus their attention on those tasks which are most likely to qualify for initial resident course consideration.

Table 32 presents tasks with the highest TE rating for AFSC 2A6X4 first-enlistment airmen. An average TE rating is 2.13, with a standard deviation of 1.52, making a high TE rating (avg. + 1 SD) equal to 3.65. For example, TE raters reported that testing atmosphere or fuel cells for fire safe or health safe conditions as the task that holds the most training emphasis. Table 33 displays those tasks that AFSC 2A6X4 raters judged to be most difficult to learn. An average TD rating is 5.0, with a standard deviation of 1.0, making a high TD rating (avg. +1 SD) equal to 6.0. Task Difficulty raters reported determining cost factors for support agreements to be among the most difficult tasks to learn.

Various lists of tasks, accompanied by TE and TD ratings, and where appropriate ATI information, are contained in the TRAINING EXTRACT package and should be reviewed in detail by training school personnel. (For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the **SURVEY METHODOLOGY** section of this report.

Specialty Training Standard (STS)

A comprehensive review of STS 2A6X4 dated April 1999, compared STS items to survey data. Technical school personnel from Sheppard AFB, TX matched JI tasks to appropriate sections of the STS.

STS elements containing general knowledge information, mandatory entries, subject-matter-knowledge-only requirements, or basic supervisory responsibilities were not examined. AETCI 36-2601 states that tasks performed by 20 percent or more of any criterion group should be considered for inclusion into the STS. Normally, STS elements with matched tasks that are performed by at least 20 percent of personnel in appropriate experience or skill-level groups (such as first-job, first-enlistment and 5- and 7- skill level groups) are considered supported and should be recognized for retention in the STS. Likewise, elements having tasks with less than 20 percent members performing across all criterion groups should be considered for deletion from the STS.

Overall, the STS provides very comprehensive coverage of the work performed by personnel in this career ladder, with survey data supporting all of the essential elements.

Tasks not referenced to any element of the STS are listed at the end of the STS computer listing. These tasks were reviewed to determine if there were any tasks concentrated around any particular function or job. Examples of those technical tasks performed by 20 percent or more respondents of the STS target groups, but which were not referenced to any STS element, are displayed in Table 34. Training personnel and SMEs should review these unreferenced tasks to determine if inclusion in the STS is justified.

Plan of Instruction (POI)

AETCI 36-2203 states OSR data should be used, when available, to determine which tasks are performed by the first-enlistment personnel of the AFSC. Tasks performed or knowledge required by 30 percent or more of the personnel in each skill level of the AFSC should be considered for inclusion. In this study, tasks (that are currently instructed in the entry-level course) were matched to the 3-skill level course POI (ABR2A634) learning objectives. Any POI learning objective with low percentages (under 30 percent) of criterion group members (in this study, first job and first enlistment were used) performing matched tasks was considered unsupported. Using this standard, there were very few POI learning objectives that went unsupported.

Table 35 displays tasks that were not matched to any POI learning objective yet have average to high TE ratings. These unmatched tasks should be considered for inclusion in the POI, if not already taught in a formalized setting.

Any POI learning objective with low percentages (under 30 percent) of criterion group members (in this study, first job and first enlistment were used) performing matched tasks was considered unsupported. Using this standard, there were only a few POI learning objectives that went unsupported. Examples of these unsupported POI learning objectives are found in Table 36.

With lower than 30 percent members performing, these areas of the POI should be carefully reviewed by training personnel to determine which areas, if any, are suitable for deletion.

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 that may affect the job performance of airmen in the career ladder. Attitude 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.

Table 37 presents job satisfaction data for AD AFSC 2A6X4 TAFMS groups, together with TAFMS data for a comparative sample of AFSCs surveyed in the last 12 months. All TAFMS groups were rated in the areas of perception of job interest, utilization of talents, utilization of training, and sense of accomplishment gained from work. Data show that the Aircraft Fuel Systems career field rates slightly lower in the areas of expressed job interest, sense of accomplishment gained from work, and reenlistment intentions than the comparative group. These ratings were seen across the TAFMS groups.

An indication of how job satisfaction perceptions have changed over time is provided in Table 38, where TAFMS data for the current survey respondents are presented, along with data from the last occupational survey report. The level of job satisfaction slightly decreased when compared with the previous survey for 1-48, 49-96, and 97 + months TAFMS groups. The most noticeable differences were a marked drop in the expressed job interest, perceived utilization of talents, and accomplishment gained from work by first- and second-term airmen. The reenlistment intentions of first term and career airmen suffered a slight decrease as well.

The job satisfaction among the ANG and AFRC AFSC 2A6X4 members was high across all skill levels. The group reporting the highest overall satisfaction is the ANG 5-skill level members (see Table 39).

In Table 40, a review of the job satisfaction ratings for the AD personnel in specialty jobs and clusters are displayed. This table reveals that the lowest job interest ratings are among the Fuel Systems Maintenance Cluster members. The Fuel Systems Maintenance Cluster had the lowest ratings in expressed job interest, perceived utilization of talents, and sense of accomplishment gained. Sense of accomplishment was highest among the Quality Assurance Job. The highest reenlistment intentions are found among the members of the Quality Assurance Job. The Supervisor Job had the highest percentage of members that planned to retire.

IMPLICATIONS

This survey was initiated to provide current job and task data for use in evaluating the AFMAN 36-2108 *Specialty Description* and appropriate training documents. Survey results indicate that the present classification structure, as described in the latest specialty description, accurately portrays the jobs performed in this career ladder. Most personnel are distributed into the Fuel Systems Maintenance Cluster (90 percent).

Personnel in the Aircraft Fuel Systems career ladder perform a high degree of technical tasks throughout their skill level progression. Three- and 5- skill level personnel perform the majority of technical functions oriented toward performing support activities and preparing aircraft fuel systems for maintenance. Seven-skill level members perform supervisory and management tasks but are still highly technical.

Career ladder training documents appear, on the whole, to be well supported by survey data, but require review by training personnel to ensure those tasks not matched are considered for inclusion in the STS or POI.

Job satisfaction is slightly lower in the areas of expressed job interest and sense of accomplishment gained from work for all TAFMS groups when compared to the comparative sample of like AFSCs. The satisfaction levels have decreased slightly when compared with the previous survey. This was seen in the overall job satisfaction data displayed by the first- and second-term airmen.

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APPENDIX A
SELECTED REPRESENTATIVE TASKS PERFORMED
BY SPECIALTY JOB GROUPS

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TABLE A1

FUEL SYSTEMS MAINTENANCE CLUSTER

TASKS		PERCENT MEMBERS PERFORMING (N=1,481)
B0068	Apply warning tags to aircraft	96
B0069	Bond equipment	96
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	95
A0002	Apply electrical power to aircraft	95
A0009	Clean work areas	94
B0076	Depuddle fuel tanks or cells	94
B0101	Rope off fuel system repair areas	94
E0242	Remove or install boost pumps	93
A0055	Remove or install aircraft panels	92
B0089	Perform aircraft safe for maintenance procedures	92
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	92
G0362	Mix sealants by hand	92
B0083	Ground equipment, other than aircraft	90
B0080	Drain fuel tanks or cells	90
B0100	Review or annotate aircraft maintenance forms	89
B0095	Purge fuel tanks or cells using blow purge method	89
B0103	Test atmosphere of fuel tanks or cells for fire safe or health safe conditions	89
G0361	Mix sealants using machines	89
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	89
B0094	Pull circuit breakers	89
C0126	Localize fuel leak exits	88
G0340	Apply adhesion promoters prior to applying sealants	88
C0143	Perform leak classification	88
B0093	Position fire extinguishers	88
E0227	Connect or disconnect B-nut-type fittings	88
C0129	Operationally check crossfeed or engine-feed systems	88
A0060	Static ground aircraft	86
B0102	Set up support equipment for purging activities	86
B0088	Inform fire departments of fuel system maintenance	86
A0042	Perform periodic tool box inspections	85
C0138	Operationally check transfer systems	85
E0278	Remove or install integral fuel tank or fuel cell access doors	84
B0072	Check aircraft for proper fuel configuration, such as crossfeed valves closed or tanks drained	84
C0106	Interpret aircraft fuel system schematics	83
A0010	Clean or lubricate hand tools or special tools	83

TABLE A2
AIRCRAFT PREP JOB

TASKS		PERCENT MEMBERS PERFORMING (N=32)
B0068	Apply warning tags to aircraft	94
B0069	Bond equipment	91
B0076	Depuddle fuel tanks or cells	88
B0095	Purge fuel tanks or cells using blow purge method	84
A0055	Remove or install aircraft panels	84
A0009	Clean work areas	84
B0103	Test atmosphere of fuel tanks or cells for fire safe or health safe conditions	84
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	84
G0362	Mix sealants by hand	81
A0002	Apply electrical power to aircraft	81
G0361	Mix sealants using machines	78
B0080	Drain fuel tanks or cells	78
E0242	Remove or install boost pumps	78
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	75
A0060	Static ground aircraft	75
E0278	Remove or install integral fuel tank or fuel cell access doors	72
B0101	Rope off fuel system repair areas	72
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	72
G0344	Apply fillet seals, such as first coat, by hand	72
A0012	Contain fuel spills	72
B0083	Ground equipment, other than aircraft	69
G0348	Clean damaged sealant areas	69
G0340	Apply adhesion promoters prior to applying sealants	69
E0227	Connect or disconnect B-nut-type fittings	69
E0267	Remove or install fuel level control valves	69
B0079	Don or doff respirators	66
B0096	Purge fuel tanks or cells using exhaust purge method	66
B0089	Perform aircraft safe for maintenance procedures	63
B0102	Set up support equipment for purging activities	63
A0045	Position nonpowered or powered AGE	63
B0092	Position drip pans	63
E0243	Remove or install butterfly-type shutoff valves	63
A0047	Prepare aircraft for fuel cell removal or installation	59
E0281	Remove or install internally mounted fuel quantity probes	59
A0042	Perform periodic tool box inspections	56
B0098	Remove or install closure panels	56

TABLE A3
F-16 GUARD JOB

TASKS		PERCENT MEMBERS PERFORMING (N=16)
A0055	Remove or install aircraft panels	100
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	100
B0069	Bond equipment	100
A0009	Clean work areas	94
A0002	Apply electrical power to aircraft	94
A0060	Static ground aircraft	88
B0068	Apply warning tags to aircraft	88
B0092	Position drip pans	88
G0362	Mix sealants by hand	88
G0340	Apply adhesion promoters prior to applying sealants	88
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	81
A0012	Contain fuel spills	81
B0089	Perform aircraft safe for maintenance procedures	75
B0083	Ground equipment, other than aircraft	69
G0361	Mix sealants using machines	69
B0076	Depuddle fuel tanks or cells	69
B0078	Disconnect batteries	69
B0094	Pull circuit breakers	69
B0096	Purge fuel tanks or cells using exhaust purge method	63
B0084	Inspect aircraft for presence of chocks or moorings	63
D0223	Perform pressure checks on aircraft panels and components	63
A0046	Position or remove aircraft chocks	63
A0010	Clean or lubricate hand tools or special tools	63
B0070	Check aircraft for explosives	63
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	63
B0101	Rope off fuel system repair areas	56
B0080	Drain fuel tanks or cells	56
C0140	Perform air hose and external bubble tests	50
A0042	Perform periodic tool box inspections	50
C0158	Perform soap suds tests on fuel cells	50
B0093	Position fire extinguishers	50
D0214	Inspect tank access panels for leaks	44
H0399	Refuel or defuel aircraft	44
E0227	Connect or disconnect B-nut-type fittings	44
A0066	Participate as aircraft tow team member or supervisor	38

TABLE A4
EQUIPMENT SUPPORT JOB

TASKS		PERCENT MEMBERS PERFORMING (N=23)
A0009	Clean work areas	100
B0069	Bond equipment	91
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	91
B0083	Ground equipment, other than aircraft	91
A0002	Apply electrical power to aircraft	91
B0068	Apply warning tags to aircraft	87
B0089	Perform aircraft safe for maintenance procedures	87
A0060	Static ground aircraft	87
B0070	Check aircraft for explosives	87
B0076	Depuddle fuel tanks or cells	87
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	87
B0093	Position fire extinguishers	87
A0055	Remove or install aircraft panels	83
B0080	Drain fuel tanks or cells	83
A0012	Contain fuel spills	83
A0042	Perform periodic tool box inspections	78
B0086	Inspect support equipment prior to use	78
B0092	Position drip pans	78
B0096	Purge fuel tanks or cells using exhaust purge method	78
A0010	Clean or lubricate hand tools or special tools	74
B0084	Inspect aircraft for presence of chocks or moorings	74
B0101	Rope off fuel system repair areas	74
B0095	Purge fuel tanks or cells using blow purge method	74
A0021	Inspect test equipment	70
B0094	Pull circuit breakers	70
A0047	Prepare aircraft for fuel cell removal or installation	70
A0008	Clean test equipment	65
B0103	Test atmosphere of fuel tanks or cells for fire safe or health safe conditions	65
A0045	Position nonpowered or powered AGE	65
A0017	Dispose of hazardous materials	65
B0072	Check aircraft for proper fuel configuration, such as crossfeed valves closed or tanks drained	61
A0019	Inspect assigned respiratory equipment	61
B0088	Inform fire departments of fuel system maintenance	57
B0100	Review or annotate aircraft maintenance forms	57
A0046	Position or remove aircraft chocks	57

TABLE A5

B-2 FUEL SYSTEM JOB

TASKS		PERCENT MEMBERS PERFORMING (N=12)
B0089	Perform aircraft safe for maintenance procedures	100
A0002	Apply electrical power to aircraft	100
B0094	Pull circuit breakers	100
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	100
C0129	Operationally check crossfeed or engine-feed systems	100
C0138	Operationally check transfer systems	100
B0086	Inspect support equipment prior to use	92
C0134	Operationally check jettison or dump systems	92
C0127	Operationally check air refueling receiver systems	92
C0137	Operationally check tank scavenge systems	92
C0109	Isolate malfunctions of air refueling systems of receiver aircraft	92
C0120	Isolate malfunctions of manifold scavenge systems	92
C0106	Interpret aircraft fuel system schematics	92
B0078	Disconnect batteries	92
A0009	Clean work areas	83
A0021	Inspect test equipment	83
A0020	Inspect egress system safety pins	83
N0584	Inventory equipment, tools, parts, or supplies	83
A0055	Remove or install aircraft panels	83
E0246	Remove or install cooling loop system components	83
C0125	Isolate malfunctions of vent systems	83
C0119	Isolate malfunctions of jettison or dump systems	83
C0124	Isolate malfunctions of tank scavenge systems	83
B0069	Bond equipment	83
C0107	Isolate electrical malfunctions using multimeters	83
C0117	Isolate malfunctions of fuel transfer indicating systems	83
B0068	Apply warning tags to aircraft	83
C0113	Isolate malfunctions of crossfeed or engine-feed systems	83
A0010	Clean or lubricate hand tools or special tools	75
C0133	Operationally check heat sink or heat exchanger systems	75
B0072	Check aircraft for proper fuel configuration, such as crossfeed valves closed or tanks drained	75
D0174	Inspect cooling loop systems	75

TABLE A6

FUEL SYSTEMS MAINTENANCE JOB

TASKS		PERCENT MEMBERS PERFORMING (N=1,368)
B0068	Apply warning tags to aircraft	97
B0069	Bond equipment	97
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	96
B0101	Rope off fuel system repair areas	96
A0002	Apply electrical power to aircraft	96
E0242	Remove or install boost pumps	96
A0009	Clean work areas	95
B0076	Depuddle fuel tanks or cells	95
A0055	Remove or install aircraft panels	94
B0089	Perform aircraft safe for maintenance procedures	94
G0362	Mix sealants by hand	94
B0100	Review or annotate aircraft maintenance forms	93
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	93
C0126	Localize fuel leak exits	93
C0143	Perform leak classification	93
B0080	Drain fuel tanks or cells	92
B0103	Test atmosphere of fuel tanks or cells for fire safe or health safe conditions	92
B0083	Ground equipment, other than aircraft	92
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	92
C0129	Operationally check crossfeed or engine-feed systems	92
B0094	Pull circuit breakers	92
A0012	Contain fuel spills	92
B0095	Purge fuel tanks or cells using blow purge method	91
G0361	Mix sealants using machines	91
E0227	Connect or disconnect B-nut-type fittings	91
B0093	Position fire extinguishers	91
G0340	Apply adhesion promoters prior to applying sealants	90
B0088	Inform fire departments of fuel system maintenance	90
B0102	Set up support equipment for purging activities	89
C0138	Operationally check transfer systems	89
C0113	Isolate malfunctions of crossfeed or engine-feed systems	89
E0278	Remove or install integral fuel tank or fuel cell access doors	88
A0060	Static ground aircraft	88
C0125	Isolate malfunctions of vent systems	88
A0042	Perform periodic tool box inspections	87

TABLE A7
QUALITY ASSURANCE JOB

TASKS		PERCENT MEMBERS PERFORMING (N=10)
D0188	Inspect installed fuel quantity indicating system components	100
N0581	Evaluate serviceability of equipment, tools, parts, or supplies	90
K0531	Write inspection reports	90
K0516	Evaluate personnel for compliance with performance standards	90
K0525	Investigate accidents or incidents	90
D0187	Inspect installed engine-feed system components	90
D0185	Inspect installed aircraft defueling system components	90
D0197	Inspect integral fuel tanks	90
D0184	Inspect fuel cells	90
D0186	Inspect installed crossfeed system components	90
K0492	Conduct safety inspections of equipment or facilities	80
K0514	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	80
M0577	Review TO changes	80
M0561	Complete accident or incident reports	80
K0493	Conduct self-inspections or self-assessments	80
E0234	Inspect safetying devices	80
D0170	Inspect applied sealants	80
B0084	Inspect aircraft for presence of chocks or moorings	80
J0477	Initiate technical order improvement reports	80
D0196	Inspect installed transfer system components	80
D0202	Inspect removed engine-feed system components	80
D0203	Inspect removed fuel quantity indicating system components	80
D0201	Inspect removed crossfeed system components	80
D0189	Inspect installed fuel transfer indicating system components	80
D0215	Inspect vent system components	80
K0515	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	70
J0481	Review aircraft flight or maintenance records, such as AFTO Forms 781-series	70
K0513	Evaluate inspection report findings or inspection procedures	70
M0575	Participate in TCTO meetings	70
K0494	Conduct staff assistance visits, inspections, or audits	70
K0505	Develop self-inspection or self-assessment program checklists	70
L0539	Brief personnel concerning training programs or matters	70
J0480	Retrieve CAMS or GO81 listings or reports	70
K0523	Inspect personnel for compliance with military standards	70
L0542	Conduct on-the-job training (OJT)	70
L0555	Maintain training records or files	70

TABLE A8
SUPERVISOR JOB

TASKS		PERCENT MEMBERS PERFORMING (N=43)
K0497	Counsel subordinates concerning personal matters	100
K0499	Determine or establish work assignments or priorities	98
K0536	Write recommendations for awards or decorations	98
K0493	Conduct self-inspections or self-assessments	98
K0523	Inspect personnel for compliance with military standards	98
K0524	Interpret policies, directives, or procedures for subordinates	98
K0496	Conduct supervisory performance feedback sessions	98
K0517	Evaluate personnel for promotion, demotion, reclassification, or special awards	93
K0489	Assign personnel to work areas or duty positions	91
K0535	Write or indorse military performance reports	91
K0491	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	91
K0516	Evaluate personnel for compliance with performance standards	91
K0502	Develop or establish work schedules	91
K0495	Conduct supervisory orientations for newly assigned personnel	91
L0543	Counsel trainees on training progress	88
K0521	Initiate actions required due to substandard performance of personnel	88
K0492	Conduct safety inspections of equipment or facilities	86
K0530	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	84
K0514	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	81
K0498	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	81
K0510	Establish performance standards for subordinates	79
L0552	Evaluate progress of trainees	79
K0505	Develop self-inspection or self-assessment program checklists	79
K0537	Write replies to inspection reports	79
K0515	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	79
K0501	Develop or establish work methods or procedures	79
L0539	Brief personnel concerning training programs or matters	74
L0544	Determine training requirements	74
J0480	Retrieve CAMS or GO81 listings or reports	72
K0520	Implement safety or security programs	72
L0542	Conduct on-the-job training (OJT)	72
K0490	Assign sponsors for newly assigned personnel	72
K0513	Evaluate inspection report findings or inspection procedures	70
K0497	Counsel subordinates concerning personal matters	100
K0499	Determine or establish work assignments or priorities	98

APPENDIX B

TABLES 6-40

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TABLE 6

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS CAREER LADDER CLUSTERS AND SPECIALTY JOBS
(PERCENT RESPONDING)

<u>SPECIALTY JOBS</u>	DAFSC 2A634 (N=308)	DAFSC 2A654 (N=802)	DAFSC 2A674 (N=528)
FUEL SYSTEMS MAINTENANCE CLUSTER	96	93	83
QUALITY ASSURANCE JOB	0	*	1
SUPERVISOR JOB	0	*	7
NOT GROUPED	4	6	9
AVERAGE NUMBER OF TASKS PERFORMED	180	192	209
PERCENT OF SURVEY SAMPLE	19	49	32

* Less than 1 percent

TABLE 7
RELATIVE PERCENT TIME SPENT ON DUTIES BY ALL 2A6X4 DAFSC MEMBERS
(PERCENT RESPONDING)

<u>DUTIES</u>	DAFSC 2A634 (N=308)	DAFSC 2A654 (N=802)	DAFSC 2A674 (N=528)
A PERFORMING SUPPORT ACTIVITIES	17	16	12
B PREPARING AIRCRAFT FOR FUEL SYSTEMS MAINTENANCE	17	15	12
C TROUBLESHOOTING AIRCRAFT FUEL SYSTEMS	17	14	12
D INSPECTING AIRCRAFT FUEL SYSTEMS	12	13	13
E REMOVING AND INSTALLING AIRCRAFT FUEL SYSTEMS COMPONENTS	16	15	11
F REPAIRING AIRCRAFT FUEL SYSTEMS COMPONENTS	5	4	3
G REPAIRING INTEGRAL FUEL TANKS	8	8	7
H PERFORMING GENERAL AIRCRAFT OR CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	1	2	1
I PERFORMING MOBILITY ACTIVITIES	1	2	3
J PERFORMING AUTOMATED MAINTENANCE SYSTEMS ACTIVITIES	2	3	5
K PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	4	12
L PERFORMING TRAINING ACTIVITIES	1	2	4
M PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1	1	3
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	2

TABLE 8

DISTRIBUTION OF AFSC 2A7X1 AD SKILL LEVEL MEMBERS ACROSS CAREER LADDER JOBS

<u>SPECIALTY JOBS</u>		DAFSC 2A634 (N=308)	DAFSC 2A654 (N=451)	DAFSC 2A674 (N=205)
I.	FUEL SYSTEMS MAINTENANCE CLUSTER	96	91	62
II.	QUALITY ASSURANCE JOB	0	*	3
III.	SUPERVISOR JOB	0	*	18
	NOT GROUPED	4	7	17
	AVERAGE NUMBER OF TASKS	180	202	179
	PERCENT OF SURVEY SAMPLE	19	28	13

TABLE 9
RELATIVE PERCENT TIME SPENT ON DUTIES BY AD 2A6X4 DAFSC MEMBERS
(PERCENT RESPONDING)

<u>DUTIES</u>	DAFSC 2A634 (N=308)	DAFSC 2A654 (N=451)	DAFSC 2A674 (N=205)
A PERFORMING SUPPORT ACTIVITIES	17	16	10
B PREPARING AIRCRAFT FOR FUEL SYSTEMS MAINTENANCE	17	14	9
C TROUBLESHOOTING AIRCRAFT FUEL SYSTEMS	17	14	9
D INSPECTING AIRCRAFT FUEL SYSTEMS	12	13	12
E REMOVING AND INSTALLING AIRCRAFT FUEL SYSTEMS COMPONENTS	16	14	8
F REPAIRING AIRCRAFT FUEL SYSTEMS COMPONENTS	5	3	2
G REPAIRING INTEGRAL FUEL TANKS	8	7	4
H PERFORMING GENERAL AIRCRAFT OR CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	1	2	1
I PERFORMING MOBILITY ACTIVITIES	1	2	4
J PERFORMING AUTOMATED MAINTENANCE SYSTEMS ACTIVITIES	2	3	6
K PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	6	22
L PERFORMING TRAINING ACTIVITIES	1	3	6
M PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1	1	4
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	2	3

TABLE 10
REPRESENTATIVE TASKS PERFORMED BY AD 3-SKILL LEVEL PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=308)
A0002	Apply electrical power to aircraft	95
B0068	Apply warning tags to aircraft	94
B0069	Bond equipment	94
A0009	Clean work areas	92
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	92
B0101	Rope off fuel system repair areas	91
A0055	Remove or install aircraft panels	90
B0095	Purge fuel tanks or cells using blow purge method	90
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	90
B0076	Depuddle fuel tanks or cells	90
A0012	Contain fuel spills	90
G0362	Mix sealants by hand	89
B0093	Position fire extinguishers	88
E0242	Remove or install boost pumps	88
B0089	Perform aircraft safe for maintenance procedures	87
B0083	Ground equipment, other than aircraft	87
B0103	Test atmosphere of fuel tanks or cells for fire safe or health safe conditions	86
B0088	Inform fire departments of fuel system maintenance	86
A0060	Static ground aircraft	83
B0080	Drain fuel tanks or cells	83
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	83
G0340	Apply adhesion promoters prior to applying sealants	83
C0138	Operationally check transfer systems	83
C0143	Perform leak classification	83
C0129	Operationally check crossfeed or engine-feed systems	82
B0100	Review or annotate aircraft maintenance forms	81
A0010	Clean or lubricate hand tools or special tools	81
B0102	Set up support equipment for purging activities	81
B0094	Pull circuit breakers	81
E0227	Connect or disconnect B-nut-type fittings	81
C0126	Localize fuel leak exits	80
A0042	Perform periodic tool box inspections	79
B0072	Check aircraft for proper fuel configuration, such as crossfeed valves closed or tanks drained	79
G0361	Mix sealants using machines	78
B0092	Position drip pans	78

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL AD PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=451)
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	92
A0002	Apply electrical power to aircraft	92
B0068	Apply warning tags to aircraft	92
A0009	Clean work areas	91
B0069	Bond equipment	90
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	88
A0055	Remove or install aircraft panels	88
B0100	Review or annotate aircraft maintenance forms	87
B0089	Perform aircraft safe for maintenance procedures	87
B0076	Depuddle fuel tanks or cells	87
B0101	Rope off fuel system repair areas	87
E0227	Connect or disconnect B-nut-type fittings	87
B0095	Purge fuel tanks or cells using blow purge method	86
A0012	Contain fuel spills	86
G0362	Mix sealants by hand	85
C0129	Operationally check crossfeed or engine-feed systems	85
E0242	Remove or install boost pumps	85
B0083	Ground equipment, other than aircraft	84
B0103	Test atmosphere of fuel tanks or cells for fire safe or health safe conditions	84
B0093	Position fire extinguishers	84
B0094	Pull circuit breakers	84
C0126	Localize fuel leak exits	83
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	83
B0086	Inspect support equipment prior to use	82
B0088	Inform fire departments of fuel system maintenance	82
C0106	Interpret aircraft fuel system schematics	82
B0079	Don or doff respirators	82
G0340	Apply adhesion promoters prior to applying sealants	82
C0143	Perform leak classification	82
G0361	Mix sealants using machines	82
C0138	Operationally check transfer systems	82
B0072	Check aircraft for proper fuel configuration, such as crossfeed valves closed or tanks drained	81
B0080	Drain fuel tanks or cells	81
E0278	Remove or install integral fuel tank or fuel cell access doors	81
C0113	Isolate malfunctions of crossfeed or engine-feed systems	81

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN 3- AND 5-SKILL LEVEL AD PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 2A634 (N=308)	DAFSC 2A654 (N=451)	DIFFERENCE
K0497	Counsel subordinates concerning personal matters	7	52	-45
L0543	Counsel trainees on training progress	6	50	-44
L0552	Evaluate progress of trainees	5	47	-42
L0542	Conduct on-the-job training (OJT)	24	64	-40
K0523	Inspect personnel for compliance with military standards	10	50	-40
D0221	Perform in-process inspections (IPIs)	13	52	-39
K0524	Interpret policies, directives, or procedures for subordinates	5	43	-38
K0496	Conduct supervisory performance feedback sessions	4	42	-38
J0472	Clear Red-X conditions	6	43	-37
K0516	Evaluate personnel for compliance with performance standards	6	42	-36
K0535	Write or indorse military performance reports	4	39	-35
K0536	Write recommendations for awards or decorations	4	39	-35
K0499	Determine or establish work assignments or priorities	6	40	-34
K0489	Assign personnel to work areas or duty positions	8	41	-33
L0555	Maintain training records or files	20	50	-30
L0539	Brief personnel concerning training programs or matters	5	34	-29
J0477	Initiate technical order improvement reports	20	46	-27
K0510	Establish performance standards for subordinates	6	33	-27
K0493	Conduct self-inspections or self-assessments	22	49	-26
K0501	Develop or establish work methods or procedures	7	34	-26
K0521	Initiate actions required due to substandard performance of personnel	5	31	-26
K0517	Evaluate personnel for promotion, demotion, reclassification, or special awards	5	31	-26
L0544	Determine training requirements	4	27	-24

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL AD PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=205)
K0523	Inspect personnel for compliance with military standards	84
K0493	Conduct self-inspections or self-assessments	79
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	79
K0536	Write recommendations for awards or decorations	78
K0497	Counsel subordinates concerning personal matters	78
K0496	Conduct supervisory performance feedback sessions	77
K0524	Interpret policies, directives, or procedures for subordinates	76
K0499	Determine or establish work assignments or priorities	74
K0516	Evaluate personnel for compliance with performance standards	74
K0535	Write or indorse military performance reports	73
C0106	Interpret aircraft fuel system schematics	72
K0492	Conduct safety inspections of equipment or facilities	71
J0481	Review aircraft flight or maintenance records, such as AFTO Forms 781-series	71
K0517	Evaluate personnel for promotion, demotion, reclassification, or special awards	71
L0543	Counsel trainees on training progress	71
B0100	Review or annotate aircraft maintenance forms	71
K0489	Assign personnel to work areas or duty positions	70
J0472	Clear Red-X conditions	70
L0542	Conduct on-the-job training (OJT)	69
D0221	Perform in-process inspections (IPIs)	68
A0042	Perform periodic tool box inspections	67
A0002	Apply electrical power to aircraft	67
B0086	Inspect support equipment prior to use	66
L0555	Maintain training records or files	65
J0480	Retrieve CAMS or GO81 listings or reports	64
L0552	Evaluate progress of trainees	64
K0521	Initiate actions required due to substandard performance of personnel	64
J0475	Initiate or annotate aircraft flight or maintenance records, such as AFTO Forms 781-series	63
K0502	Develop or establish work schedules	62
K0495	Conduct supervisory orientations for newly assigned personnel	62
B0075	Complete administrative paperwork, such as checklists or entry permits, for tank entry	62

TABLE 14

TASKS WHICH BEST DIFFERENTIATE BETWEEN 5- AND 7-SKILL LEVEL AD PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 2A654 (N=451)	DAFSC 2A674 (N=205)	DIFFERENCE
A0010	Clean or lubricate hand tools or special tools	80	42	38
A0009	Clean work areas	91	55	36
B0076	Depuddle fuel tanks or cells	87	52	35
A0012	Contain fuel spills	86	55	31
A0055	Remove or install aircraft panels	88	58	30
G0362	Mix sealants by hand	85	56	29
B0069	Bond equipment	90	61	29
B0080	Drain fuel tanks or cells	81	53	28
G0361	Mix sealants using machines	82	54	28
A0008	Clean test equipment	64	36	28
E0227	Connect or disconnect B-nut-type fittings	87	59	28
B0068	Apply warning tags to aircraft	92	64	27
K0530	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	12	54	-42
K0517	Evaluate personnel for promotion, demotion, reclassification, or special awards	31	71	-40
K0537	Write replies to inspection reports	17	57	-40
K0536	Write recommendations for awards or decorations	39	78	-39
K0491	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	18	55	-38
K0490	Assign sponsors for newly assigned personnel	10	47	-37
K0502	Develop or establish work schedules	25	62	-37
K0519	Generate master entry plans	14	48	-35
K0535	Write or indorse military performance reports	39	73	-35
K0495	Conduct supervisory orientations for newly assigned personnel	28	62	-34
K0499	Determine or establish work assignments or priorities	40	74	-34
K0523	Inspect personnel for compliance with military standards	50	84	-34

TABLE 15

DISTRIBUTION OF AFSC 2A6X4 ANG SKILL LEVEL MEMBERS ACROSS CAREER LADDER JOBS

<u>SPECIALTY JOBS</u>		DAFSC 2A654 (N=254)	DAFSC 2A674 (N=172)
I.	FUEL SYSTEMS MAINTENANCE CLUSTER	97	98
II.	QUALITY ASSURANCE JOB	0	0
III.	SUPERVISOR JOB	0	0
	NOT GROUPED	3	2
	AVERAGE NUMBER OF TASKS	170	232
	PERCENT OF SURVEY SAMPLE	16	11

TABLE 16

RELATIVE PERCENT TIME SPENT ON DUTIES BY ANG 2A6X4 DAFSC MEMBERS
(PERCENT RESPONDING)

<u>DUTIES</u>		DAFSC 2A654 (N=254)	DAFSC 2A674 (N=172)
A	PERFORMING SUPPORT ACTIVITIES	19	15
B	PREPARING AIRCRAFT FOR FUEL SYSTEMS MAINTENANCE	17	14
C	TROUBLESHOOTING AIRCRAFT FUEL SYSTEMS	15	13
D	INSPECTING AIRCRAFT FUEL SYSTEMS	12	13
E	REMOVING AND INSTALLING AIRCRAFT FUEL SYSTEMS COMPONENTS	15	14
F	REPAIRING AIRCRAFT FUEL SYSTEMS COMPONENTS	5	4
G	REPAIRING INTEGRAL FUEL TANKS	9	8
H	PERFORMING GENERAL AIRCRAFT OR CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	2	2
I	PERFORMING MOBILITY ACTIVITIES	1	2
J	PERFORMING AUTOMATED MAINTENANCE SYSTEMS ACTIVITIES	2	3
K	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	5
L	PERFORMING TRAINING ACTIVITIES	*	3
M	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	*	2
N	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	2

* Less than 1 percent

TABLE 17

REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL ANG PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=254)
B0069	Bond equipment	95
A0009	Clean work areas	94
B0076	Depuddle fuel tanks or cells	94
A0002	Apply electrical power to aircraft	93
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	92
B0068	Apply warning tags to aircraft	92
B0080	Drain fuel tanks or cells	91
A0012	Contain fuel spills	91
A0060	Static ground aircraft	89
B0101	Rope off fuel system repair areas	89
A0055	Remove or install aircraft panels	88
B0089	Perform aircraft safe for maintenance procedures	87
G0361	Mix sealants using machines	87
E0242	Remove or install boost pumps	87
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	86
A0010	Clean or lubricate hand tools or special tools	85
G0362	Mix sealants by hand	85
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	84
B0083	Ground equipment, other than aircraft	83
G0340	Apply adhesion promoters prior to applying sealants	82
C0143	Perform leak classification	82
A0042	Perform periodic tool box inspections	81
B0094	Pull circuit breakers	81
B0096	Purge fuel tanks or cells using exhaust purge method	80
B0103	Test atmosphere of fuel tanks or cells for fire safe or health safe conditions	80
B0092	Position drip pans	80
C0126	Localize fuel leak exits	78
B0102	Set up support equipment for purging activities	77
B0095	Purge fuel tanks or cells using blow purge method	76
B0100	Review or annotate aircraft maintenance forms	76
B0093	Position fire extinguishers	76
E0227	Connect or disconnect B-nut-type fittings	76
G0348	Clean damaged sealant areas	76
B0079	Don or doff respirators	76
C0129	Operationally check crossfeed or engine-feed systems	75

TABLE 18

REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL ANG PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=172)
A0009	Clean work areas	98
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	98
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	98
A0002	Apply electrical power to aircraft	98
A0055	Remove or install aircraft panels	97
E0242	Remove or install boost pumps	97
B0080	Drain fuel tanks or cells	96
B0100	Review or annotate aircraft maintenance forms	95
B0068	Apply warning tags to aircraft	95
B0069	Bond equipment	95
G0361	Mix sealants using machines	95
B0076	Depuddle fuel tanks or cells	95
C0126	Localize fuel leak exits	94
B0101	Rope off fuel system repair areas	94
B0094	Pull circuit breakers	94
B0083	Ground equipment, other than aircraft	93
C0106	Interpret aircraft fuel system schematics	93
C0143	Perform leak classification	93
C0129	Operationally check crossfeed or engine-feed systems	93
G0362	Mix sealants by hand	93
C0125	Isolate malfunctions of vent systems	93
A0042	Perform periodic tool box inspections	92
E0227	Connect or disconnect B-nut-type fittings	92
B0093	Position fire extinguishers	92
B0089	Perform aircraft safe for maintenance procedures	91
B0096	Purge fuel tanks or cells using exhaust purge method	91
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	91
A0060	Static ground aircraft	91
A0043	Perform safety observer activities for tank entry personnel	90
B0075	Complete administrative paperwork, such as checklists or entry permits, for tank entry	90
D0214	Inspect tank access panels for leaks	90
D0187	Inspect installed engine-feed system components	90
B0092	Position drip pans	90
D0216	Inspect vent systems	89

TABLE 19
TASKS WHICH BEST DIFFERENTIATE 5- AND 7-SKILL LEVEL ANG PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 2A751 (N=254)	DAFSC 2A771 (N=172)	DIFFERENCE
J0472	Clear Red-X conditions	14	72	-57
L0542	Conduct on-the-job training (OJT)	21	72	-51
L0543	Counsel trainees on training progress	11	59	-47
K0499	Determine or establish work assignments or priorities	7	53	-46
L0555	Maintain training records or files	14	59	-45
L0552	Evaluate progress of trainees	9	54	-45
D0221	Perform in-process inspections (IPIs)	33	77	-44
K0489	Assign personnel to work areas or duty positions	11	55	-44
L0539	Brief personnel concerning training programs or matters	6	47	-41
L0558	Schedule personnel for training	6	46	-40
N0585	Issue or log turn-ins of equipment, tools, parts, or supplies	19	56	-38
K0501	Develop or establish work methods or procedures	7	45	-38
L0544	Determine training requirements	7	42	-36
J0486	Update workcenter training reports in CAMS or GO81	9	44	-35
A0018	Fabricate ground wires	35	70	-35
K0492	Conduct safety inspections of equipment or facilities	30	65	-35
K0518	Generate confined space permit plans	13	48	-35
J0479	Perform time compliance technical order (TCTO) inspections	45	79	-34
K0497	Counsel subordinates concerning personal matters	8	42	-34
L0547	Develop training programs, plans, or procedures	3	35	-33
C0131	Operationally check ground defueling systems	63	83	-21

TABLE 20

DISTRIBUTION OF AFSC 2A6X4 AFRC SKILL LEVEL MEMBERS ACROSS CAREER LADDER JOBS

<u>SPECIALTY JOBS</u>		DAFSC 2A654 (N=97)	DAFSC 2A674 (N=151)
I.	FUEL SYSTEMS MAINTENANCE CLUSTER	95	95
II.	QUALITY ASSURANCE JOB	0	0
III.	SUPERVISOR JOB	0	1
	NOT GROUPED	5	4
	AVERAGE NUMBER OF TASKS	200	224
	PERCENT OF SURVEY SAMPLE	6	9

TABLE 21

RELATIVE PERCENT TIME SPENT ON DUTIES BY AFRC 2A7X1 DAFSC MEMBERS
(PERCENT RESPONDING)

<u>DUTIES</u>	DAFSC 2A654 (N=97)	DAFSC 2A674 (N=151)
A PERFORMING SUPPORT ACTIVITIES	14	12
B PREPARING AIRCRAFT FOR FUEL SYSTEMS MAINTENANCE	17	15
C TROUBLESHOOTING AIRCRAFT FUEL SYSTEMS	15	13
D INSPECTING AIRCRAFT FUEL SYSTEMS	12	13
E REMOVING AND INSTALLING AIRCRAFT FUEL SYSTEMS COMPONENTS	15	14
F REPAIRING AIRCRAFT FUEL SYSTEMS COMPONENTS	5	4
G REPAIRING INTEGRAL FUEL TANKS	10	9
H PERFORMING GENERAL AIRCRAFT OR CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	2	1
I PERFORMING MOBILITY ACTIVITIES	2	2
J PERFORMING AUTOMATED MAINTENANCE SYSTEMS ACTIVITIES	2	3
K PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	3	7
L PERFORMING TRAINING ACTIVITIES	1	4
M PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1	2
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1

TABLE 22

REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL AFRC PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=97)
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	95
A0009	Clean work areas	95
B0069	Bond equipment	95
B0068	Apply warning tags to aircraft	95
B0076	Depuddle fuel tanks or cells	95
A0002	Apply electrical power to aircraft	92
B0080	Drain fuel tanks or cells	91
G0361	Mix sealants using machines	90
B0101	Rope off fuel system repair areas	89
B0089	Perform aircraft safe for maintenance procedures	89
G0340	Apply adhesion promoters prior to applying sealants	89
B0102	Set up support equipment for purging activities	89
E0242	Remove or install boost pumps	89
C0126	Localize fuel leak exits	88
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	88
B0095	Purge fuel tanks or cells using blow purge method	87
B0103	Test atmosphere of fuel tanks or cells for fire safe or health safe conditions	87
B0094	Pull circuit breakers	87
G0362	Mix sealants by hand	87
C0138	Operationally check transfer systems	87
B0079	Don or doff respirators	85
B0078	Disconnect batteries	85
B0093	Position fire extinguishers	84
B0096	Purge fuel tanks or cells using exhaust purge method	84
G0344	Apply fillet seals, such as first coat, by hand	84
C0167	Test sealants for adhesion	84
B0083	Ground equipment, other than aircraft	82
A0042	Perform periodic tool box inspections	82
A0055	Remove or install aircraft panels	82
B0100	Review or annotate aircraft maintenance forms	82
G0343	Apply fillet seals with guns	82
G0348	Clean damaged sealant areas	81
E0278	Remove or install integral fuel tank or fuel cell access doors	81
B0092	Position drip pans	81

TABLE 23

REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL AFRC PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=151)
A0002	Apply electrical power to aircraft	96
A0009	Clean work areas	95
A0005	Check personnel for proper clothing or equipment, spark- or flame-producing devices, or removal of jewelry	95
B0101	Rope off fuel system repair areas	95
B0068	Apply warning tags to aircraft	94
B0080	Drain fuel tanks or cells	93
B0103	Test atmosphere of fuel tanks or cells for fire safe or health safe conditions	93
E0242	Remove or install boost pumps	93
B0069	Bond equipment	92
B0090	Perform foreign object debris (FOD) or toolbox inspections prior to maintenance	91
B0100	Review or annotate aircraft maintenance forms	91
G0362	Mix sealants by hand	91
B0079	Don or doff respirators	90
B0094	Pull circuit breakers	90
B0076	Depuddle fuel tanks or cells	89
B0083	Ground equipment, other than aircraft	89
G0361	Mix sealants using machines	89
B0095	Purge fuel tanks or cells using blow purge method	89
C0126	Localize fuel leak exits	88
A0055	Remove or install aircraft panels	87
A0042	Perform periodic tool box inspections	87
B0089	Perform aircraft safe for maintenance procedures	87
D0214	Inspect tank access panels for leaks	87
B0102	Set up support equipment for purging activities	87
G0344	Apply fillet seals, such as first coat, by hand	87
C0143	Perform leak classification	87
B0088	Inform fire departments of fuel system maintenance	87
G0340	Apply adhesion promoters prior to applying sealants	86
B0072	Check aircraft for proper fuel configuration, such as crossfeed valves closed or tanks drained	86
C0157	Perform red talcum powder tests	86
C0145	Perform leak path analyses on integral fuel tanks	86
E0231	Connect or disconnect Wiggins-type, wig-o-flex, or minimal-type fittings	86
B0075	Complete administrative paperwork, such as checklists or entry permits, for tank entry	85
B0078	Disconnect batteries	85

TABLE 24

REPRESENTATIVE TASKS WHICH BEST DIFFERENTIATE BETWEEN 5- AND 7-SKILL LEVEL AFRC PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 2A654 (N=97)	DAFSC 2A674 (N=151)	DIFFERENCE
K0496 Conduct supervisory performance feedback sessions	11	49	-38
K0516 Evaluate personnel for compliance with performance standards	21	59	-38
K0535 Write or indorse military performance reports	11	47	-36
K0489 Assign personnel to work areas or duty positions	22	56	-35
K0499 Determine or establish work assignments or priorities	24	58	-34
L0552 Evaluate progress of trainees	29	62	-33
K0517 Evaluate personnel for promotion, demotion, reclassification, or special awards	15	47	-32
L0543 Counsel trainees on training progress	31	62	-31
K0497 Counsel subordinates concerning personal matters	26	57	-31
K0523 Inspect personnel for compliance with military standards	29	59	-30
L0544 Determine training requirements	18	46	-29
K0495 Conduct supervisory orientations for newly assigned personnel	13	42	-29
L0555 Maintain training records or files	30	58	-28
L0558 Schedule personnel for training	20	48	-28
K0501 Develop or establish work methods or procedures	24	50	-27
L0539 Brief personnel concerning training programs or matters	21	48	-27
K0518 Generate confined space permit plans	26	53	-27
K0515 Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	25	50	-26
K0514 Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	22	48	-26

TABLE 25

TASK WHICH BEST DIFFERENTIATE BETWEEN 5-SKILL LEVEL AD PERSONNEL AND 5-SKILL LEVEL ANG PERSONNEL

TASKS		AD 2A654 (N=451)	ANG 2A654 (N=254)	DIFFERENCE
K0497	Counsel subordinates concerning personal matters	52	8	44
L0542	Conduct on-the-job training (OJT)	64	21	42
K0496	Conduct supervisory performance feedback sessions	42	2	40
L0543	Counsel trainees on training progress	50	11	38
L0552	Evaluate progress of trainees	47	9	38
K0535	Write or indorse military performance reports	39	2	37
K0536	Write recommendations for awards or decorations	39	3	36
L0555	Maintain training records or files	50	14	36
A0033	Operate maintenance dispatch vehicles	76	41	36
K0523	Inspect personnel for compliance with military standards	50	15	35
J0477	Initiate technical order improvement reports	46	11	35
K0524	Interpret policies, directives, or procedures for subordinates	43	9	34
K0516	Evaluate personnel for compliance with performance standards	42	8	33
B0082	Ensure tow bars are installed on aircraft in hangers	62	29	33
K0499	Determine or establish work assignments or priorities	40	7	33
E0299	Remove or install valve body actuators	51	20	32
K0510	Establish performance standards for subordinates	33	3	30
K0489	Assign personnel to work areas or duty positions	41	11	30
J0472	Clear Red-X conditions	43	14	29
A0037	Perform chemical tests on fuel cells	52	23	29
C0149	Perform phenolphthalein chemical tests, such as skunk, on fuel cells	53	24	29
L0539	Brief personnel concerning training programs or matters	34	6	29
E0241	Remove or install backing boards	46	18	28
K0521	Initiate actions required due to substandard performance of personnel	31	3	28
K0517	Evaluate personnel for promotion, demotion, reclassification, or special awards	31	4	26
K0501	Develop or establish work methods or procedures	34	7	26
J0487	Verify accuracy of CAMS or GO81 daily inputs	38	12	26

TABLE 26

TASKS WHICH BEST DIFFERENTIATE BETWEEN 5-SKILL LEVEL AD PERSONNEL AND 5-SKILL LEVEL AFRC PERSONNEL

TASKS		AD 2A654 (N=451)	AFRC 2A654 (N=97)	DIFFERENCE
B0082	Ensure tow bars are installed on aircraft in hangers	62	29	33
K0496	Conduct supervisory performance feedback sessions	42	11	31
K0535	Write or indorse military performance reports	39	11	27
K0497	Counsel subordinates concerning personal matters	52	26	26
A0037	Perform chemical tests on fuel cells	52	27	25
B0081	Ensure removal of LOX bottles from aircraft	44	19	25
A0033	Operate maintenance dispatch vehicles	76	52	25
B0070	Check aircraft for explosives	74	49	25
K0536	Write recommendations for awards or decorations	39	14	24
C0149	Perform phenolphthalein chemical tests, such as skunk, on fuel cells	53	30	24
G0341	Apply corrosion preventive coatings	31	56	-24
A0032	Operate auxiliary power units (APUs)	14	36	-22
C0142	Perform dye injection tests	25	45	-21
E0236	Perform bonding checks on aircraft components	56	74	-19
C0158	Perform soap suds tests on fuel cells	49	68	-19
B0078	Disconnect batteries	67	85	-18
E0273	Remove or install gamah couplings	10	28	-18
F0323	Repair butterfly-type shutoff valves	11	28	-17
F0330	Test boost pumps	33	51	-17
G0343	Apply fillet seals with guns	66	82	-16
C0128	Operationally check APU fuel supply systems	24	40	-16
E0274	Remove or install gamah seals	8	25	-16

TABLE 27

TASKS WHICH BEST DIFFERENTIATE BETWEEN 7-SKILL LEVEL AD PERSONNEL AND 7-SKILL LEVEL ANG PERSONNEL

TASKS	AD 2A674 (N=205)	ANG 2A674 (N=172)	DIFFERENCE
K0535 Write or indorse military performance reports	73	12	62
K0536 Write recommendations for awards or decorations	78	24	54
K0496 Conduct supervisory performance feedback sessions	77	23	53
K0521 Initiate actions required due to substandard performance of personnel	64	24	41
K0517 Evaluate personnel for promotion, demotion, reclassification, or special awards	71	30	41
K0523 Inspect personnel for compliance with military standards	84	46	38
K0524 Interpret policies, directives, or procedures for subordinates	76	39	37
K0537 Write replies to inspection reports	57	20	36
K0497 Counsel subordinates concerning personal matters	78	42	36
K0516 Evaluate personnel for compliance with performance standards A0060	74	40	34
A0010 Clean or lubricate hand tools or special tools	42	88	-46
B0080 Drain fuel tanks or cells	53	96	-43
A0009 Clean work areas	55	98	-43
B0076 Depuddle fuel tanks or cells	52	95	-43
H0399 Refuel or defuel aircraft	30	72	-42
A0063 Tow AGE	30	72	-42
A0008 Clean test equipment	36	78	-42
A0046 Position or remove aircraft chocks	32	74	-42
B0096 Purge fuel tanks or cells using exhaust purge method	50	91	-41
G0361 Mix sealants using machines	54	95	-41
A0018 Fabricate ground wires	30	70	-40
B0092 Position drip pans	50	90	-40

TABLE 28

TASKS WHICH BEST DIFFERENTIATE BETWEEN 7-SKILL LEVEL AD PERSONNEL AND 7-SKILL LEVEL AFRC PERSONNEL

TASKS		AD 2A674 (N=205)	AFRC 2A674 (N=151)	DIFFERENCE
K0536	Write recommendations for awards or decorations	78	39	38
K0524	Interpret policies, directives, or procedures for subordinates	76	44	32
K0530	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	54	23	31
K0537	Write replies to inspection reports	57	28	29
M0561	Complete accident or incident reports	52	24	28
K0521	Initiate actions required due to substandard performance of personnel	64	36	28
K0496	Conduct supervisory performance feedback sessions	77	49	28
B0081	Ensure removal of LOX bottles from aircraft	40	13	27
B0071	Check aircraft for liquid oxygen (LOX) bottles	42	15	27
B0082	Ensure tow bars are installed on aircraft in hangers	49	23	27
K0535	Write or indorse military performance reports	73	47	26
K0523	Inspect personnel for compliance with military standards	84	59	25
B0078	Disconnect batteries	44	85	-42
A0009	Clean work areas	55	95	-41
G0345	Apply protective topcoat sealants	35	75	-40
B0091	Perform lock-out/tag-out procedures	41	81	-40
A0010	Clean or lubricate hand tools or special tools	42	82	-40
B0080	Drain fuel tanks or cells	53	93	-40
B0099	Remove or install internal braces, such as formers	38	77	-39
A0008	Clean test equipment	36	74	-38
E0243	Remove or install butterfly-type shutoff valves	46	83	-37
G0348	Clean damaged sealant areas	48	85	-37
B0076	Depuddle fuel tanks or cells	52	89	-37

TABLE 29

RELATIVE PERCENT TIME SPENT ON DUTIES BY
FIRST-ENLISTMENT PERSONNEL
(N=366)

DUTIES	PERCENT TIME SPENT
A PERFORMING SUPPORT ACTIVITIES	18
B PREPARING AIRCRAFT FOR FUEL SYSTEMS MAINTENANCE	17
C TROUBLESHOOTING AIRCRAFT FUEL SYSTEMS	17
D INSPECTING AIRCRAFT FUEL SYSTEMS	11
E REMOVING AND INSTALLING AIRCRAFT FUEL SYSTEMS COMPONENTS	16
F REPAIRING AIRCRAFT FUEL SYSTEMS COMPONENTS	5
G REPAIRING INTEGRAL FUEL TANKS	8
H PERFORMING GENERAL AIRCRAFT OR CROSS UTILIZATION TRAINING (CUT) ACTIVITIES	1
I PERFORMING MOBILITY ACTIVITIES	1
J PERFORMING AUTOMATED MAINTENANCE SYSTEMS ACTIVITIES	2
K PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1
L PERFORMING TRAINING ACTIVITIES	1
M PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1
N PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1

TABLE 30

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=366)
G0340	Apply adhesion promoters prior to applying sealants	82
C0143	Perform leak classification	82
C0129	Operationally check crossfeed or engine-feed systems	82
B0094	Pull circuit breakers	81
E0227	Connect or disconnect B-nut-type fittings	81
C0138	Operationally check transfer systems	81
C0126	Localize fuel leak exits	79
G0361	Mix sealants using machines	77
B0092	Position drip pans	77
A0047	Prepare aircraft for fuel cell removal or installation	77
C0113	Isolate malfunctions of crossfeed or engine-feed systems	77
C0167	Test sealants for adhesion	77
E0278	Remove or install integral fuel tank or fuel cell access doors	76
E0281	Remove or install internally mounted fuel quantity probes	76
A0045	Position nonpowered or powered AGE	75
A0019	Inspect assigned respiratory equipment	74
C0145	Perform leak path analyses on integral fuel tanks	74
E0267	Remove or install fuel level control valves	74
E0243	Remove or install butterfly-type shutoff valves	74
C0125	Isolate malfunctions of vent systems	74
B0075	Complete administrative paperwork, such as checklists or entry permits, for tank entry	73
C0157	Perform red talcum powder tests	72
C0106	Interpret aircraft fuel system schematics	72
E0262	Remove or install fuel cells	71
G0348	Clean damaged sealant areas	71
C0132	Operationally check ground refueling systems	71
B0084	Inspect aircraft for presence of chocks or moorings	70
B0070	Check aircraft for explosives	69
A0054	Purge removed components prior to shipment	69
A0017	Dispose of hazardous materials	69
C0136	Operationally check pressurization systems	68
E0226	Clean and prepare cell cavities for installation	68
A0033	Operate maintenance dispatch vehicles	67
G0344	Apply fillet seals, such as first coat, by hand	67
E0283	Remove or install manifold segments	67
E0301	Remove or install vent system components	67
B0079	Don or doff respirators	66

TABLE 31

EQUIPMENT USED BY
FIRST-ENLISTMENT AFSC 2A6X4 PERSONNEL
(PERCENT MEMBERS RESPONDING)

EQUIPMENT	1ST ENL (N=366)
TORQUE WRENCHES	95
MAINTANNENCE STANDS, LIKE B-1/B-4A	92
BOWSERS	91
MAINTENANCE STANDS	88
SEALANT SCRAPERS	86
MULTIMETERS	85
SEALANT GUNS	83
CANVAS TOOL BAGS	83
ADAPTER KITS/TORQUE WRENCHES, LIKE STAR FITTINGS	82
LOW PAC AIR COMPRESSORS	81
HDU-13M HEATER BLOWERS	81
PRESSURE GAUGES	79
SEALANT SPATULAS	78
MC7 AIR COMPRESSORS	76
SPANNER WRENCHES	76
WATER MANOMETERS	76
SCREW REMOVAL TOOLS (JOHNSON BARS)	73
IN-FLIGHT REFUELING (IFR) RECEPTACLE TESTERS	73
COMBUSTIBLE AND TOXIC GAS INDICATORS	73
PRESSURIZATION AND VENT SYSTEM TEST KITS	72
PNUEMATIC FANS	71
AMBIENT AIR BREATHING PUMPS	71
FUEL MANIFOLD PLUGS	70
VACUUM CLEANERS	68
STRAP WRENCHES	67
LEAK TRACING DEVICE	67
INJECTOR KITS	66

TABLE 32

TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS

TASKS	TNG EMP	PERCENT MEMBERS PERFORMING		TSK DIF
		2A6X4 1ST JOB (N=150)	2A6X4 1ST ENL (N=366)	
B0103 Test atmosphere or fuel cells for fire safe or health safe conditions	6.56	79	86	4.90
B0089 Perform aircraft safe foe maintenance procedures	6.17	81	87	4.40
B0076 Depuddle fuel tanks or cells	5.66	85	91	3.59
C0143 Perform leak classification	5.59	75	82	5.09
A0043 Perform safety observer activities for tank entry personnel	5.51	61	63	3.80
B0079 Don or doff respirators	5.46	49	66	3.51
B0100 Review or annotate aircraft maintenance forms	5.44	75	81	5.41
G0344 Apply fillet seals, such as first coat, by hand	5.41	60	67	5.08
B0102 Set up support equipment for purging activities	5.39	76	80	3.99
B0095 Purge fuel tank or cells using blow purge method	5.39	87	89	4.20
B0072 Check aircraft for proper fuel configuration, such as crossfeed valves closed or tank drained	5.37	78	80	4.31
C0126 Localize fuel leak exits	5.32	73	79	5.59
B0069 Bond equipment	5.32	92	95	2.57
A0005 Check personnel for proper clothing or equipment, spark or flame producing devices, or removal of jewelry	5.29	87	90	1.95
C0106 Interpret aircraft fuel systems schematics	5.24	63	72	6.46
B0070 Check aircraft for explosives	5.15	87	89	3.69
A0012 Contain fuel spills	5.10	64	74	3.75

TE MEAN = 2.13; S.D. = 1.52; HIGH = 3.65

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

TABLE 33
TASKS RATED HIGHEST IN TASK DIFFICULTY

TASKS		TSK DIF	PERCENT MEMBERS PERFORMING		TNG EMP
			2A6X4 1ST JOB	2A6X4 1ST ENL	
			(N=150)	(N=366)	
I0437	Determine cost factors for support agreements	7.61	3	2	.15
A0015	Direct hydrazine spill clean up procedures	7.27	9	14	2.32
I0438	Determine specific source of personnel requirements	7.08	3	2	.15
C0107	Isolate electronic malfunctions using Multimeters	6.98	35	46	4.27
F0315	Refuel or defuel hydrazine tanks	6.97	18	16	2.73
K0506	Draft budget requirements	9.94	3	2	.41
H0392	Perform ground engine runs	6.84	4	6	.07
F0327	Repair quantity harnesses	6.76	7	9	.73
I0434	Coordinate specific source of personnel requirements with appropriate agencies	6.73	3	2	.29
C0109	Isolate malfunctions of air refueling systems or receiver aircraft	6.72	37	49	3.98
I0436	Coordinate specific source of personnel requirements with appropriate agencies	6.71	3	2	.29
I0439	Develop contingency exercise mobility (CEM) orders	6.71	1	2	.15
K0508	Draft supplements or changes to directives, such as policy directives, instructions, or manuals	6.71	2	2	.29
K0507	Draft host tenant or interservice agreements	6.69	2	2	.17
C0122	Isolate malfunctions of vent systems	6.64	51	62	3.95
E0262	Remove or install fuel cells	6.57	68	71	4.39
K0536	Write recommendations for awards or decorations	6.57	5	3	1.63
C0125	Isolate malfunctions of vent systems	6.52	61	74	4.20

TE MEAN = 2.13; S.D. = 1.52; HIGH = 3.65

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

TABLE 34

EXAMPLES OF TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE
GROUP MEMBERS AND NOT REFERENCED TO THE STS
(PERCENT MEMBERS PERFORMING)

TASKS	TSK DIF	2A6X4 1ST JOB (N=150)	2A6X4 1ST ENL (N=366)	TNG EMP
A0002 Apply electrical power to aircraft	3.81	91	95	4.98
A0008 Clean test equipment	1.81	60	66	2.20
A0054 Purge removed components prior to shipment	3.36	65	69	3.02
B0070 Check aircraft for explosives	3.54	65	69	5.15
B0084 Inspect aircraft for presence of chocks or mooring	2.28	65	70	3.46
B0089 Perform aircraft safe for maintenance procedures	4.40	81	87	6.17
B0092 Position drip pans	2.00	73	77	2.15
B0094 Pull circuit breakers	3.43	77	81	3.80
B0098 Remove or install closure panels	3.86	54	57	3.46
C0106 Interpret aircraft fuel schematics	3.46	63	72	5.24

TE MEAN = 2.13; S.D. = 1.52; HIGH = 3.65

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

TABLE 35

EXAMPLES OF TASKS PERFORMED BY MORE THAN 30 PERCENT
OF MEMBERS NOT MATCHED TO POI LEARNING OBJECTIVES
(PERCENT MEMBERS PERFORMING)

POI ELEMENTS/ MATCHED TASKS		TNG EMP	2A6X4 1ST JOB (N=150)	2A6X4 1ST ENL (N=366)	TSK DIF
A0033	Operate maintenance dispatch vehicles	2.78	59	67	2.32
A0046	Position or remove aircraft chocks	1.78	42	46	1.07
A0054	Purge removed components prior to shipment	3.36	65	69	3.02
B0070	Check aircraft for explosives	3.54	65	69	5.15
B0083	Ground equipment, other than aircraft	2.65	86	86	4.88
B0084	Inspect aircraft for presence of chocks or mooring	2.28	65	70	3.46
B0094	Pull circuit breakers	3.43	77	81	3.80
C0140	Perform air hose and external bubble tests	5.28	61	65	4.10
C0157	Perform red talcum powder tests	3.97	67	72	4.80

TE MEAN = 2.13; S.D. = 1.52; HIGH = 3.65

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

TABLE 36

EXAMPLES OF UNSUPPORTED POI OBJECTIVES
(LESS THAN 30 PERCENT MEMBERS PERFORMING)

POI ELEMENTS/MATCHED TASKS		TNG EMP	PERCENT MEMBERS PERFORMING		TASK DIFF
			2A6X4 1ST JOB (N=150)	2A6X4 1ST ENL (N=366)	
I.5.a. (4).	Tech order system publication improvement report and reply J0477 Initiate technical order improvement reports	3.07	15	20	5.75
I.6.b. (3).	Product quality deficiency reporting (PQDR) J0474 Identify problem areas, other than equipment or supply using deficiency, service, or status reports, such as reports of deficiency (RODs)	1.51	6	6	6.09

TE MEAN = 2.13; S.D. = 1.52; HIGH = 3.65

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

TABLE 37

COMPARISON OF JOB SATISFACTION INDICATORS BY AD TAFMS GROUPS WITH A COMPARATIVE SAMPLE
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	2001 2A6X4 (N=366)	COMP SAMPLE* (N=3,328)	2001 2A6X4 (N=198)	COMP SAMPLE* (N=1,625)	2001 2A6X4 (N=400)	COMP SAMPLE* (N=4,862)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	53	70	51	71	71	76
SO-SO	27	18	29	18	20	16
DULL	20	12	20	11	9	8
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY	61	82	75	82	88	87
NOT AT ALL/ VERY LITTLE	29	18	25	18	12	13
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	92	90	89	89	87	86
NOT AT ALL/ VERY LITTLE	8	10	11	11	13	14
<u>SENSE OF ACCOMPLISHMENT GAINED FROM WORK:</u>						
SATISFIED	62	70	56	98	68	74
NEUTRAL	20	15	26	15	12	11
DISSATISFIED	18	15	18	17	20	15
<u>REENLISTMENT INTENTIONS:</u>						
YES, OR PROBABLY YES	42	47	57	58	62	64
NO, OR PROBABLY NO	58	53	43	42	7	10
PLAN TO RETIRE	0	0	0	0	31	26

*Comparative sample of AFSCs surveyed in the last 12 months include: 2A0X1 B, 2A1X4, 2A3X3 A, 2A3X3 B, 2A3X3 J, 2A6X1, 2A6X2, 2A6X3, 2A6X5, 2A6X6, 2A7X1, and 2A7X3.

TABLE 38

COMPARISON OF JOB SATISFACTION INDICATORS FOR AD AFSC 2A6X4
TAFMS GROUPS IN CURRENT STUDY TO PREVIOUS STUDY
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	2001 2A6X4 (N=366)	1998 2A6X4 (N=448)	2001 2A6X4 (N=198)	1998 2A6X4 (N=205)	2001 2A6X4 (N=400)	1998 2A6X4 (N=549)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	53	57	51	60	71	64
SO-SO	27	27	29	28	20	25
DULL	20	16	20	12	9	11
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY	61	71	75	82	88	85
LITTLE OR NOT AT ALL	29	29	25	18	12	15
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	92	92	89	95	87	89
LITTLE OR NOT AT ALL	8	8	11	5	13	11
<u>SENSE OF ACCOMPLISHMENT GAINED FROM WORK:</u>						
SATISFIED	62	67	56	65	68	66
NEUTRAL	20	19	26	15	12	15
DISSATISFIED	18	14	18	20	20	19
<u>REENLISTMENT INTENTIONS:</u>						
YES OR PROBABLY YES	42	49	57	57	62	69
NO OR PROBABLY NO	58	51	43	43	7	9
PLAN TO RETIRE	0	0	0	0	31	22

TABLE 39

COMPARISON OF JOB SATISFACTION INDICATORS FOR ANG AND AFRC AFSC
2A6X4 SKILL LEVEL GROUPS
(PERCENT MEMBERS RESPONDING)

	5-SKILL LEVEL		7-SKILL LEVEL	
	ANG 2A6X4 (N=254)	AFRC 2A6X4 (N=97)	ANG 2A6X4 (N=172)	AFRC 2A6X4 (N=151)
<u>EXPRESSED JOB INTEREST:</u>				
INTERESTING	86	74	82	73
SO-SO	9	16	12	19
DULL	5	10	6	8
<u>PERCEIVED UTILIZATION OF TALENTS:</u>				
FAIRLY WELL TO PERFECTLY	90	86	90	87
LITTLE OR NOT AT ALL	10	14	10	13
<u>PERCEIVED UTILIZATION OF TRAINING:</u>				
FAIRLY WELL TO PERFECTLY	94	92	94	93
LITTLE OR NOT AT ALL	6	8	6	7
<u>SENSE OF ACCOMPLISHMENT GAINED FROM WORK:</u>				
SATISFIED	86	76	86	74
NEUTRAL	9	16	5	19
DISSATISFIED	5	8	9	7

TABLE 40

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

	Fuel Systems Maintenance Cluster (ST43) (N=831)	Quality Assurance Job (ST147) (N=10)	Supervisor Job (ST80) (N=41)
<u>EXPRESSED JOB INTEREST:</u>			
INTERESTING	59	80	76
SO-SO	26	20	22
DULL	15	0	2
<u>PERCEIVED UTILIZATION OF TALENTS:</u>			
FAIRLY WELL TO PERFECTLY	80	90	90
LITTLE OR NOT AT ALL	20	10	10
<u>PERCEIVED UTILIZATION OF TRAINING:</u>			
FAIRLY WELL TO PERFECTLY	90	90	88
LITTLE OR NOT AT ALL	10	10	12
<u>SENSE OF ACCOMPLISHMENT GAINED FROM WORK:</u>			
SATISFIED	63	80	73
NEUTRAL	19	0	12
DISSATISFIED	18	20	15
<u>REENLISTMENT INTENTIONS:</u>			
YES OR PROBABLY YES	54	100	44
NO OR PROBABLY NO	35	0	7
PLAN TO RETIRE	11	0	49

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