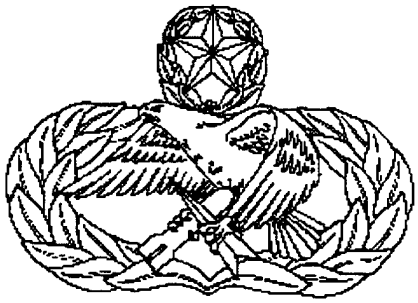
UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT



AVIONICS GUIDANCE AND CONTROL SYTEMS
AFSC 2A1X2

OSSN: 2307

SEPTEMBER 1998

OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION and TRAINING COMMAND
1550 5th STREET EAST
RANDOLPH AFB, TEXAS 78150-4449

DISTRIBUTION FOR AFSC 2A1X2 OSR

	OSR	ANL EXT	AD TNG EXT	RES TNG EXT	JOB INV
AFOMS/OMDQ	1				
AFOMS/OMYXL	10		5		10
ANG/LGMM (3500 FETCHET AVE, ANDREWS AFB MD 20331-5157)	2		2	2	
ARMY OCCUPATIONAL SURVEY BRANCH	1				
CCAF/AYX	1				
CCAF/DPAOS-3	1				
DEFENSE TECHNICAL INFORMATION CENTER	2				
HQ ACC/DPPTF	3		3		
HQ AETC/DPSE	3		3		
HQ AFMC/DPPET		3		3	
HQ AFPC/DPAAD4	1				
HQ AFPC/DPPAC	1				
HQ AFRC/LGMM (155 2ND STREET, ROBINS AFB, GA 31098-6001)	2		2	2	
HQ AFSOC/DPPMT	3		3		
HQ AMC/DPPET	3		3		
HQ PACAF/DPAET	3		3		
HQ USAFE/DPATTJ	3		3		
HQ USMC/STANDARDS BRANCH	1				
NAVMAC	1				
81 TRG/CCVT (825 HERCULES STREET, STE 101, KEESLER AFB MS 39534-2037)	1		1		
332 TRS/TRRT (613 HANGAR RD, KEESLER AFB MS 39534-2237, ATTN: MR JOHNSON)	5	1	5	5	2

TABLE OF CONTENTS

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS
(Tables, Figures, Appendices)

TABLE OF CONTENTS (CONTINUED)
(Tables, Figures, Appendices)

TABLE OF CONTENTS (CONTINUED)
(Tables, Figures, Appendices)

THIS PAGE INTENTIONALLY LEFT BLANK

PREFACE

This report presents the results of an Air Force Occupational Survey of the Avionics Guidance and Control career ladder, Air Force Specialty Code (AFSC) 2A1X2. 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.

The survey instrument was developed by Mr. Michael Brosnan. Computer programming support was provided by Ms. Rebecca Hernandez. Mr. Robert E. Boerstler, Jr. analyzed the data and wrote the final report. This report has been reviewed and approved by Lt Col 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 http://www.omsq.af.mil.

GEORGE KAILIWAI III, Lt Col, USAF
Commander
Air Force Occupational Measurement Sq

JOSEPH S. TARTELL
Chief, Occupational Analysis Flight
Air Force Occupational Measurement Sq

THIS PAGE INTENTIONALLY LEFT BLANK

SUMMARY OF RESULTS

1. **Survey Coverage**: AFSCs 2A1X2 and 2A4X1 were 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 2,131 Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command (AFRC) respondents across both career ladders, accounting for 60 percent of the total population surveyed. The majority of this specific report, however, will primarily focus on members in AFSC 2A1X2, Avionics Guidance and Control Systems.

2. **Specialty Jobs**: The specialty job analysis associated with this report included respondents from both career ladders. Three jobs and three clusters were identified, accounting for 92 percent of the total sample. The remaining 8 percent, for one reason or another, did not group into one of these jobs or clusters. The Flightline Maintenance Cluster is the predominant job or cluster accounting for 72 percent of the survey population.

3. **Career Ladder Progression**: Skill-level progression for members of this AFSC 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. Air National Guard and Air Force Reserve respondents remain much more technically oriented than their Active Duty counterparts. Additionally, there is a significant difference in the employment of the personnel in this DAFSC between AD and Reserve Forces. Ninety-one percent of the ANG members and 83 percent of the AFRC members group into the Flightline Maintenance Cluster at the 5-skill level, which includes tasks more associated with the 2A4X1 career ladder.

4. **Training Analysis**: The current STS provides comprehensive coverage of the work performed by career ladder personnel. Some STS elements warrant review of proficiency coding based on survey data. Few tasks were not referenced to the STS.

5. **Job Satisfaction**: Job satisfaction among AFSC 2A1X2 personnel is fairly low for all TAFMS groups (first-enlistment, second-enlistment, and career groups) when compared to responses from like AFSCs surveyed in the past year. Job satisfaction has also declined since the previous OSR was conducted in 1994. Reenlistment intentions for all TAFMS groups are lower when compared to like AFSCs and the previous survey.

6. **Implications**: Survey results indicate that the present classification structure, as described in the latest specialty description, accurately portrays the jobs performed only by the Active Duty members of this career ladder. The ANG and AFRC members are more aligned with the organizational maintenance tasks of AFSC 2A4X1, Aircraft Guidance and Control Systems. The Reserve Forces comprise 75 percent of the total assigned personnel of this specialty, which would lend credence to the review for a possible merger with AFSC 2A4X1. Career ladder training documents appear, on the whole, to be well supported by survey data, but require review to ensure appropriate proficiency coding. Job satisfaction is fairly low for all TAFMS groups when compared to both the comparative sample of like AFSCs and the previous survey.

THIS PAGE INTENTIONALLY LEFT BLANK

OCCUPATIONAL SURVEY REPORT (OSR)
AVIONICS GUIDANCE AND CONTROL SYSTEMS
(AFSC 2A1X2)

INTRODUCTION

This is an Occupational Survey Report (OSR) of two Air Force Specialty Codes (AFSCs), the 2A1X2, Avionics Guidance and Control and 2A4X1, Aircraft Guidance and Control career ladders conducted by the Air Force Occupational Measurement Squadron (AFOMS).

For presentation purposes, however, separate OSRs were written for each of the surveyed career ladders. As a result, this specific report concentrates substantially on the AFSC 2A1X2, Avionics Guidance and Control career ladder. 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.

The current Avionics Guidance and Control career ladder was created in October 1993 with the conversion from AFSC 455X1A/B to AFSC 2A1X2. Survey data will be used to identify current utilization patterns among career ladder personnel and evaluate career ladder documents and training programs. The last OSR published for the Avionics Guidance and Control career ladder was March 1994.

Background

As described in the AFMAN 36-2108, *Airman Classification,* 11 March 1998, *Specialty Description*, dated 30 April 1994, Avionics Guidance and Control personnel perform and supervise intermediate-level maintenance activities which includes troubleshooting and repairing avionics guidance and control systems, aircraft components, and associated in-shop support equipment.

Personnel entering the AFSC 2A1X2 career ladder must attend the Avionics Guidance and Control Apprentice course at Keesler AFB MS lasting 121 academic days. Upon completion of this AFSC awarding course, the graduate is awarded the 3-skill level.

Entry into this career ladder currently requires an Armed Forces Vocational Aptitude Test Battery (ASVAB) score of Electronics - 67; a strength factor of "J" (Weight lift of 60 lbs) is also required.

SURVEY METHODOLOGY

Inventory Development

This survey instrument was developed to include the tasks performed by AFSC 2A1X2, Avionics Guidance and Control Systems and AFSC 2A4X1, Aircraft Guidance and Control Systems personnel. The data collection instrument for this occupational survey was USAF Job Inventory (JI) Occupational Survey Study Number (OSSN) 2307, dated October 1997. A tentative task list was prepared which included tasks for both the 2A1X2 and 2A4X1 AFSCs 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 57 subject-matter experts (SMEs) at the following training location and operational installations:

BASE	UNIT VISITED
Keesler AFB MS	332 TRS
Travis AFB CA	60 CRS
Edwards AFB CA	412 CRS
March AFB CA	163 ARW 452 MXS
Hurlburt Field FL	HQ AFSOC
Barnes MAP MA	104 FW
Barksdale AFB LA	2 OG

The resulting JI contains a comprehensive listing of 1,536 tasks grouped under 18 duty headings, and a background section requesting such information as grade, base, 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 October 1997 through April 1998, base training offices at operational units worldwide administered the inventory to eligible AFSC 2A1X2 and 2A4X1 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 2A1X2/2A4X1 personnel as of October 1997. The 2,131 respondents in the final sample represent 55 percent of the total assigned personnel and 60 percent of the total personnel surveyed. Table 2 reflects the paygrade and MAJCOM distribution for this study.

TABLE 1

DAFSC DISTRIBUTION OF SURVEYED PERSONNEL

DAFSC	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
2A132	2	2
2A152	23	21
2A172	12	12
2A431	13	12
2A451	35	35
2A471	15	18

TOTAL ASSIGNED* = 3,873
TOTAL SURVEYED** = 3,538
TOTAL IN SURVEY SAMPLE = 2,131
PERCENT OF ASSIGNED IN SAMPLE = 55%
PERCENT OF SURVEYED IN SAMPLE = 60%

* Assigned strength as of November 1997

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

TABLE 2

PAYGRADE/COMMAND DISTRIBUTION OF SURVEY SAMPLE

	2A1X2		2A4X1	
PAYGRADE	Percent of Assigned	Percent of Sample	Percent of Assigned	Percent of Sample
E-1 – E-3	4	5	16	17
E-4	21	21	25	23
E-5	36	35	32	32
E-6	25	25	18	19
E-7	14	14	9	9
	2A1X2		2A4X1	
COMMAND	Percent of Assigned	Percent of Sample	Percent of Assigned	Percent of Sample
AMC	7	9	34	38
AFSOC	6	6	10	8
ACC	5	6	21	21
AETC	3	3	7	8
AFMC	2	2	2	2
USAFE	1	1	2	2
PACAF	1	1	4	5
AFRC	23	24	20	16
ANG	52	48	0	0

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.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 2A1X2 and 2A4X1 personnel (generally E-6 or E-7 craftsmen) also completed a second booklet for either training emphasis (TE) or task difficulty (TD). These booklets were processed separately from the JIs. This information is used in a number of different analyses discussed in more detail within the report.

Training Emphasis (TE): TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 83 senior NCOs who completed a TE booklet were asked to select tasks they felt require some sort of structured training for entry-level personnel and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident training schools, field training detachments (FTD), mobile training teams (MTT), formal on-the-job-training (OJT), or any other organized training method. Interrater agreement for these 93 raters was unacceptable. Since personnel in both the 2A1X2 and 2A4X1 AFSCs perform both flightline and backshop tasks, the raters could not agree on what tasks rated highest in training importance (this was true even when the data were separated by AFSC). Therefore, the TE data is considered unreliable for further analysis.

Task Difficulty (TD): TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 93 senior NCOs who completed TD booklets 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 jobs and clusters of jobs.

As stated earlier, this OSR will focus primarily on members of the AFSC 2A1X2, Avionics Guidance and Control career ladder. However, the specialty job structure presented in this section of the report includes respondents from both the 2A1X2 and 2A4X1 career fields.

Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, five independent jobs and two clusters were identified within the career ladder. Figure 1 illustrates the jobs and clusters performed by AFSC 2A1X2 and 2A4X1 personnel.

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

I. FLIGHTLINE MAINTENANCE CLUSTER (ST086, N=1,554)

II. SHOP MAINTENANCE CLUSTER (ST030, N=158)

III. UNMANNED AERIAL VEHICLE (UAV) MAINTENANCE JOB (ST373, N=10)

IV. MANAGEMENT CLUSTER (ST053, N=209)

V. QUALITY ASSURANCE JOB (ST247, N=14)

VI. INSTRUCTOR JOB (ST336, N=16)

The respondents forming these jobs and clusters account for 92 percent of the survey sample. The remaining 8 percent, for one reason or another, did not group into one of these jobs or clusters. Examples of job titles for these personnel include CDC Writer, Security Manager, Quality Manager, LAN Manager, and Resource Manager.

AFSC 2A1X2/2A4X1 CAREER LADDER SPECIALTY JOBS
(N = 2,131)

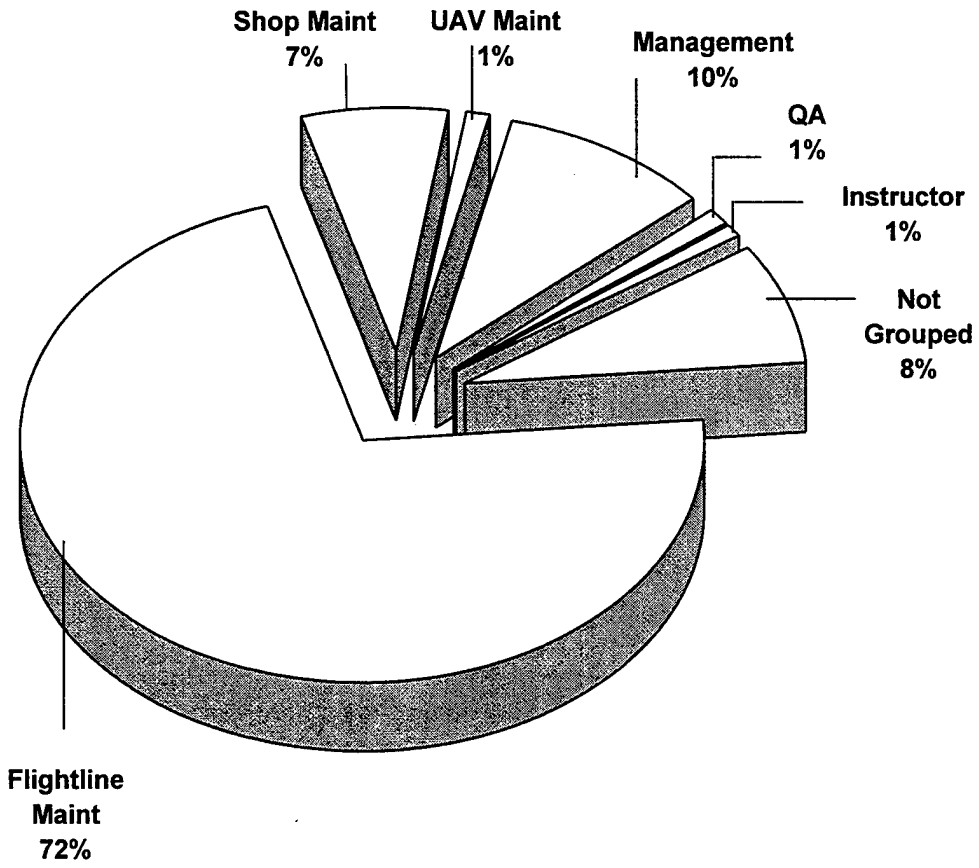


FIGURE 1

Group Descriptions

The following paragraphs contain brief descriptions of the jobs and clusters identified through the career ladder structure analysis. Table 3 presents the relative time spent on duties by members of these specialty jobs and clusters. Selected background data for these jobs and clusters are provided in Table 4. Representative tasks for all the groups are contained in Appendix A. Table 5 shows a job comparison between the current and 1994 surveys.

I. FLIGHTLINE MAINTENANCE CLUSTER (ST086). The 1,554 airmen performing within this cluster (72 percent of the survey sample) represent the core of the career ladder. They spend 51 percent of their time performing the Flight Instrument, Engine Instrument, and Flight Director and Navigation System tasks of Duties B, C, and D (Table 3). They average 286 tasks performed, the highest of any other job or cluster, indicating their diversity in performing the core Guidance and Control systems duties. Distinctive tasks performed include:

- Perform safety wire procedures
- Crimp electrical connections
- Perform leak checks of pitot-static system lines, hoses, or fittings
- Perform operational checks of airspeed indicators
- Repair electrical wiring
- Perform operational checks of altimeters
- Remove or install pitot-static system lines, hoses, or fittings
- Remove or install airspeed indicators
- Perform operational checks of airspeed indicating systems
- Remove or install common electrical system components, such as relays, circuit breakers, or switches
- Remove or install altimeters
- Apply range marks or slippage marks
- Troubleshoot pitot-static system lines, hoses, or fittings

This cluster consists of both 2A1X2 and 2A4X1 personnel. The ANG does not have the 2A4X1 AFSC, utilizing their 2A1X2 personnel for both flightline and backshop functions. The ANG 2A1X2 personnel account for 20 percent of this cluster, with AD and AFRC personnel holding the 2A1X2 specialty comprising another 12 percent (Table 4).

The jobs within this cluster are identified by the type and number of tasks performed maintaining the Guidance and Control systems of the A-10, B-52/U-2, C-5, C-17, C-130, C-141, C/KC-135, and Helicopters.

The predominant paygrades of this cluster are E-5 through E-7 (Table 4). Sixty percent of these airmen are AD, averaging nearly 7½ years in the career field and nearly 8 years in the service. Sixty-eight percent of this cluster hold the 2A4X1 AFSC while 32 percent are 2A1X2 members. Sixty percent report holding the 5-skill level and 24 percent the 7-skill level. Furthermore, 14 percent of these members are assigned to units overseas.

II. SHOP MAINTENANCE CLUSTER (ST030). The 158 airmen forming this job (7 percent of the survey sample) perform an average of 76 tasks and are distinguished by the 30 percent of their time spent performing the General Guidance and Control Systems tasks of Duty A (Table 3). Although most of the work done by these members is focused on the in-shop activities of AFSC 2A1X2, some members of this group also perform the flightline tasks associated with the 2A4X1 career ladder. Typical of the shop maintenance tasks performed include:

- Solder or desolder electrical components
- Perform electrostatic discharge sensitive device (ESD) safety procedures
- Inspect test equipment
- Crimp electrical connections
- Repair electrical wiring
- Repair crimped pin connectors
- Perform corrosion control procedures
- Troubleshoot test equipment
- Perform safety wire procedures
- Remove or install common electrical system components, such as relays, circuit breakers, or switches
- Repair test equipment
- Repair coaxial cables or connectors
- Fabricate coaxial or triaxial cables
- Repair circuit card assemblies

There were three distinct jobs identified within this cluster, all performing shop maintenance and separated by the tasks pertaining to either the A-10, the E-3/E-4/C-135, or the C-5/C-141 aircraft.

The predominant paygrade of this job is E-4 (Table 4). Seventy-three percent of these airmen are AD, averaging 6 years in the career field and 6½ years in the service. Twenty percent of these members are AFRC and seven percent ANG. Sixty-eight percent of this cluster report holding the 5-skill level and 16 percent the 7-skill level.

III. UNMANNED AERIAL VEHICLE JOB (ST373). The 10 airmen forming this job (1 percent of the survey sample) are distinguished by the 60 percent of their time spent performing the General Aircraft tasks of Duty N. Although these members perform some Guidance and Control tasks, they mainly perform crew chief duties. They average only 50 tasks performed, indicating their specialization with the UAV. Representative tasks performed by these incumbents include:

- Perform preflight, thruflight, or postflight inspections
- Assist in aircraft weight and balance functions
- Assist in aircraft engine removals or installations
- Perform ground engine runs
- Jack or level aircraft
- Remove or install aircraft wheel and tire assemblies
- Position or remove aircraft chocks
- Launch or recover aircraft
- Perform engine removal preparation procedures
- Inspect aircraft landing gear systems
- Perform safety wire procedures
- Service aircraft tires
- Participate as tow team member or supervisor
- Perform scheduled inspections, such as isochronal, periodic, or phased
- Static ground aircraft

All of these airmen are AD, averaging 3½ years in the career field and 4½ years in the service. The predominant paygrades are E-1 to E-4. Sixty percent hold the 5-skill level and 40 percent the 3-skill level (Table 4).

IV. MANAGEMENT CLUSTER (ST053). The 209 airmen forming this job (10 percent of the survey sample) perform an average of 67 tasks and are distinguished by the 54 percent of their time spent performing the Management and Supervisory tasks of Duty P (Table 3). They spend another 35 percent of their time performing the Maintenance Management, Training, and General Administrative and Technical Order tasks of Duties O, Q, R, and S. Typical of the management and supervisory tasks performed include:

- Inspect personnel for compliance with military standards
- Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting
- Counsel subordinates concerning personal matters
- Supervise military personnel

- Determine or establish work assignments or priorities
- Conduct supervisory performance feedback sessions
- Evaluate personnel for compliance with performance standards
- Interpret policies, directives, or procedures for subordinates
- Write performance reports or supervisory appraisals
- Write recommendations for awards or decorations
- Conduct self-inspections or self-assessments
- Develop or establish work schedules

Sixty-eight percent of these members are 2A4X1 and 32 percent 2A1X2 (Table 4). Eighty-three percent are AD, while 13 percent are AFRC and only 4 percent are ANG. The predominant paygrade for this cluster is E-7 with 84 percent reporting they supervise others. The AD members average almost 15 years in the career field and nearly 16 years in the service.

V. <u>QUALITY ASSURANCE (QA) JOB (ST247)</u>. The 14 members of this job (only 1 percent of the survey sample) are distinguished by the inspection tasks performed in the technical Duties A through M (Table 3). Typical of most aircraft maintenance AFSCs, the QA job is comprised of more experienced technical experts to ensure proper maintenance and safety procedures are followed. Representative tasks include:

- Inspect pitot-static system lines, hoses, or fittings
- Inspect flap position indicating system LRUs
- Inspect airspeed indicating systems
- Inspect airspeed indicators
- Inspect engine tachometer indicating system LRUs
- Inspect flap position indicating systems
- Inspect altimeters
- Inspect oil pressure indicating system LRUs
- Inspect hydraulic pressure indicating system LRUs
- Inspect engine fuel flow indicating system LRUs
- Inspect personnel for compliance with military standards
- Inspect test equipment
- Evaluate job-related suggestions

Seventy-one percent of the members of this job hold the 7-skill level. Seventy-nine percent are AD, while 14 percent are AFRC and 7 percent are ANG. Seventy-two percent of these job incumbents are 2A4X1 and 28 percent are 2A1X2. The predominant paygrades are E-5 to E-7. The AD members of this job average 13½ years in the career field and 14½ years in the service (Table 4).

VI. INSTRUCTOR JOB (ST336). Comprising 1 percent of the survey sample, these 16 airmen report 55 percent of their time performing Training tasks of Duty Q. They also spend 11 percent of their time performing the Management and Supervisory tasks of Duty P and 12 percent performing the General Administrative and Technical Order tasks of Duty S (Table 3). The members of this job perform an average of only 47 tasks, indicating their specialization in instructional duties. Representative of these tasks are:

- Conduct formal course classroom training
- Personalize lesson plans
- Administer or score tests
- Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs)
- Evaluate progress of trainees
- Develop training materials or aids
- Develop performance tests
- Write test questions
- Counsel trainees on training progress
- Inspect training materials or aids for operation or suitability
- Complete student entry or withdrawal forms

Eighty-one percent of these members hold a 5-skill level and 19 percent the 7-skill level. The average time in the career ladder for these AD airmen is almost 10½ years, with 11½ years in service. The predominant paygrade of this job is E-6 (Table 4).

Comparison to Previous Study

Table 5 lists the jobs and clusters identified in this report and compares them to the jobs and clusters of the 1994 report. Five of the six jobs identified in the previous report matched similar jobs in this report. The only exception was the Tool Crib Job from the previous survey not being identified as a specific job within this report.

The UAV job identified in this report was not identified in the 1994 report.

These differences affect a very small percentage of the survey respondents and therefore have little effect on the career ladder structure.

TABLE 3

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

DUTIES		Flightline Maint Cluster (ST086) (N=1,544)	Shop Maint Cluster (ST030) (N=158)	UAV Maint Job (ST373) (N=52)	Mgmt Cluster (ST053) (N=209)	Quality Assurance Job (ST247) (N=14)	Instructor Job (ST336) (N=16)
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	7	30	8	4	2	3
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	28	17	8	2	19	5
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	14	4	4	1	12	2
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	9	9	1	1	7	1
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	6	1	3	*	4	1
F	MAINTAINING POSITION INDICATING SYSTEMS	6	1	4	*	8	*
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	5	7	*	1	3	*
H	MAINTAINING AUGMENTATION SYSTEMS	1	1	0	*	1	*
I	MAINTAINING COMPASS SYSTEMS	3	3	0	1	2	*
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	4	6	1	1	3	*
K	MAINTAINING FIRE CONTROL SYSTEMS	*	*	0	*	1	0
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	2	2	*	*	1	*
M	MAINTAINING FLIGHT RECORDERS	1	*	1	*	1	0
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	6	1	60	1	3	2
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1	2	2	8	4	1
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	3	4	3	54	18	11
Q	PERFORMING TRAINING ACTIVITIES	2	2	2	12	3	55
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	1	2	*	6	5	4
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	7	2	9	2	12

* less than 1 percent

TABLE 4

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	Flightline Maint Cluster (ST086) (N=1,544)	Shop Maint Cluster (ST030) (N=158)	UAV Maint Job (ST373) (N=10)	Mgmt Cluster (ST053) (N=209)	Quality Assurance Job (ST247) (N=14)	Instructor Job (ST336) (N=16)
PERCENT OF SAMPLE	72%	7%	1%	10%	1%	1%
PERCENT IN CONUS	86%	87%	100%	81%	86%	100%
DAFSC DISTRIBUTION:						
2A132	1%	13%	0	0	0	0
2A152	20%	59%	0	9%	7%	6%
2A172	11%	12%	0	23%	21%	0
2A431	15%	3%	40%	0	0	0
2A451	40%	9%	60%	11%	22%	75%
2A471	13%	4%	0	57%	50%	19%
COMPONENT STATUS:						
ACTIVE DUTY	60%	73%	100%	83%	79%	100%
AIR NATIONAL GUARD	20%	7%	0	4%	7%	0
AIR FORCE RESERVE	20%	20%	0	13%	14%	0
PAYGRADE DISTRIBUTION:						
E-1 - E-3	14%	16%	40%	0	0	0
E-4	23%	41%	50%	3%	0	0
E-5	35%	28%	10%	19%	43%	6%
E-6	22%	11%	0	26%	21%	69%
E-7	5%	4%	0	52%	36%	25%
AVERAGE MONTHS IN CAREER FIELD *	90	72	44	177	163	128
AVERAGE MONTHS IN SERVICE *	94	79	53	190	173	138
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS) *	32%	29%	50%	0	0	0
PERCENT SUPERVISING	42%	25%	30%	84%	29%	12%
AVERAGE NUMBER OF TASKS PERFORMED	286	76	50	67	124	47

**Active Duty Only*

TABLE 5

SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1994 SURVEYS

CURRENT SURVEY (N=2,131)	1994 SURVEY (N=2,323)
I. Flightline Maintenance Cluster	I. Flightline Maintenance Cluster
II. Shop Maintenance Cluster	II. In-Shop Maintenance Cluster
III. Unmanned Aerial Vehicle (UAV) Maintenance Job	*No Similar Job Identified*
IV. Management Cluster	V. Maintenance Administration Cluster VII. Supervisory/Management Job
V. Quality Assurance (QA) Job	III. Quality Assurance (QA) Inspection Job
VI. Instructor Job	VI. Instructor Cluster
No Similar Job Identified	IV. Tool Crib 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 Tables 6-8, while Tables 9-11 offer another perspective by displaying the relative percent time spent on each duty across skill-level groups. These tables also reflect the distribution of AD, ANG, and AFRC personnel. A somewhat typical pattern of progression is noted within the AFSC 2A1X2 career ladder. Personnel at the 3- and 5-skill levels work in the technical jobs of the career ladder and spend most of their time on technical tasks. As incumbents move up to the 7-skill level, they begin to perform supervisory tasks, but still spend time performing the technical tasks of the career ladder.

Skill-Level Descriptions

DAFSC 2A132 Representing 1 percent of the survey sample, these 32 AD airmen perform an average of 89 tasks. Sixty-six percent of this group work in the Shop Maintenance Cluster (Table 6), with 31 percent performing in the Flightline Maintenance Cluster.

Table 9 reflects the percent time spent on duties by DAFSC 2A132 personnel. At the 3-skill level, their time is concentrated on the technical tasks of duties A and B. Representative tasks performed by these members are listed in Table 12.

DAFSC 2A152 The 452 members of this group account for 21 percent of the survey sample. Sixty-nine percent work in the Flightline Maintenance Cluster and 21 percent in the Shop Maintenance Cluster (Table 7). This table also reflects the differences in the job distribution of AD, ANG and AFRC forces. The AD employs 53 percent of their 5-skill level personnel in the Shop Maintenance Cluster while the ANG and AFRC have 91 and 83 percent respectively in the Flightline Maintenance Cluster. This is a significant difference in the employment of the personnel in this DAFSC between the AD and Reserve Forces.

Table 10 provides a comparison of the relative time spent on duties for the AD, ANG, and AFRC forces at the 5-skill level. This table reflects the AD devote more time to General Avionics Guidance and Control systems tasks compared to their ANG and AFRC counterparts who spend more time than the AD performing the Flight Instrument and Engine Instrument systems tasks.

table shows the 3-skill levels perform some technical tasks more than 5-skill levels, while the 5-skill levels perform supervisory tasks not performed at the 3-skill level.

Table 18 shows the tasks with the most differences between AD 5-skill levels and their ANG 5-skill level counterparts. This table clearly shows AD forces performing more in-shop tasks than the ANG forces and the ANG members performing more flightline tasks than the AD.

Table 19 compares the tasks performed by AD and AFRC 5-skill levels. The differences reflected in this table are heavily weighted toward the flightline tasks performed by AFRC members, compared to AD 5-skill levels who are more in-shop maintenance oriented.

Table 20 compares the 5-skill levels of the Reserve Forces. This table shows more ANG members performing the Compass Systems tasks of Duty I than their AFRC counterparts. It also shows the AFRC incumbents performing the Engine Instrument and Position Indicating Systems of Duties C and F.

DAFSC 2A172 These 260 members perform an average of 255 tasks and represent 12 percent of the survey sample. Table 8 shows the highest percentage of members are in the Flightline Maintenance Cluster. It also reflects the ANG and AFRC focusing more on the technical job in the Flightline Maintenance Cluster and less in the Management Cluster as their AD counterparts.

Table 11 reflects the percent time spent on duties by DAFSC 2A172 members. The main point of this table is the large amount of time spent by ANG and AFRC members performing the technical tasks of Duties B and C, while the AD is heavily involved in the Supervisory and Management tasks of Duty P.

Representative tasks performed by 7-skill level members are reflected in Tables 22-24. Table 25 reflects tasks which best differentiate between AD 5- and 7-skill levels. This table clearly shows the much higher devotion to management and supervisory tasks at the 7-skill level than the 5-skill level. Table 26 compares the ANG 5- and 7-skill levels and shows the 7-skill levels performing training and supervisory tasks at a much higher percentage than the 5-skill levels.

Table 27 reflects the tasks which best differentiate between AFRC 5- and 7-skill levels. Like their AD and ANG counterparts, the AFRC 5-skill levels are more technically oriented than the 7-skill levels who perform training and supervisory tasks at a much higher percentage.

Tables 28 and 29 reflect the differences between the AD and ANG and AD and AFRC members. Both tables show the much heavier involvement in supervisory and management tasks of the AD 7-skill level members than their more technically oriented Reserve Forces counterparts.

Table 30 compares the ANG and AFRC 7-skill levels and reflects results very similar to the 5-skill level differences of the Reserve Forces. This table shows the ANG performing Compass System tasks at a much higher percentage than the AFRC 7-skill levels.

Summary

Progression in the Avionics Guidance and Control Systems career ladder follows a regular pattern of 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 performing primarily the core job of Avionics Guidance and Control at the 5- and 7-skill levels, with some broadening into supervisory functions at the 7-skill level. While AD craftsmen at the 7-skill level begin to shift to supervisory jobs, 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

Additionally, there is a significant difference in the employment of the personnel in this DAFSC between AD and Reserve Forces. Ninety-one percent of the ANG members and 83 percent of the AFRC members group into the Flightline Maintenance Cluster at the 5-skill level, which includes tasks more associated with the 2A4X1 career ladder.

TABLE 6

DISTRIBUTION OF 3-SKILL LEVEL DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

SPECIALTY JOBS		ACTIVE 2A132 (N=32)
I.	FLIGHTLINE MAINTENANCE CLUSTER	31
II.	SHOP MAINTENANCE CLUSTER	66
III.	UNMANNED AERIAL VEHICLE (UAV) MAINTENANCE JOB	0
IV.	MANAGEMENT CLUSTER	0
V.	QUALITY ASSURANCE JOB	0
VI.	INSTRUCTOR JOB	0
	NOT GROUPED	3

TABLE 7

DISTRIBUTION OF 5-SKILL LEVEL DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

SPECIALTY JOBS		TOTAL 2A152 (N=452)	ACTIVE 2A152 (N=133)	ANG 2A152 (N=218)	AFRC 2A152 (N=101)
I.	FLIGHTLINE MAINTENANCE CLUSTER	69	21	91	83
II.	SHOP MAINTENANCE CLUSTER	21	53	4	13
III.	UNMANNED AERIAL VEHICLE (UAV) MAINTENANCE JOB	0	0	0	0
IV.	MANAGEMENT CLUSTER	4	13	0	2
V.	QUALITY ASSURANCE JOB	*	1	0	0
VI.	INSTRUCTOR JOB	*	1	0	0
	NOT GROUPED	6	11	5	2

TABLE 8

DISTRIBUTION OF 7-SKILL LEVEL DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

SPECIALTY JOBS		TOTAL 2A172 (N=260)	ACTIVE 2A172 (N=50)	ANG 2A172 (N=133)	AFRC 2A152 (N=77)
I.	FLIGHTLINE MAINTENANCE CLUSTER	66	20	84	65
II.	SHOP MAINTENANCE CLUSTER	7	8	2	17
III.	UNMANNED AERIAL VEHICLE (UAV) MAINTENANCE JOB	0	0	0	0
IV.	MANAGEMENT CLUSTER	18	52	7	14
V.	QUALITY ASSURANCE JOB	1	0	1	3
VI.	INSTRUCTOR JOB	0	0	0	0
	NOT GROUPED	8	20	6	1

TABLE 9
RELATIVE PERCENT TIME SPENT ON DUTIES BY 3-SKILL LEVEL DAFSC GROUPS

DUTIES		ACTIVE 2A132 (N=32)
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	25
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	21
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	3
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	10
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	3
F	MAINTAINING POSITION INDICATING SYSTEMS	1
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	9
H	MAINTAINING AUGMENTATION SYSTEMS	1
I	MAINTAINING COMPASS SYSTEMS	6
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	9
K	MAINTAINING FIRE CONTROL SYSTEMS	*
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	*
M	MAINTAINING FLIGHT RECORDERS	*
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	2
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	3
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	*
Q	PERFORMING TRAINING ACTIVITIES	1
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	2
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4

* less than 1 percent

TABLE 10

RELATIVE PERCENT TIME SPENT ON DUTIES BY 5-SKILL LEVEL DAFSC GROUPS

DUTIES		TOTAL 2A152 (N=452)	ACTIVE 2A152 (N=133)	ANG 2A152 (N=218)	AFRC 2A152 (N=101)
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	11	18	10	10
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	23	16	31	28
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	11	4	14	14
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	9	9	9	9
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	5	2	6	6
F	MAINTAINING POSITION INDICATING SYSTEMS	4	1	5	6
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	5	6	4	5
H	MAINTAINING AUGMENTATION SYSTEMS	1	1	1	1
I	MAINTAINING COMPASS SYSTEMS	4	4	5	3
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	4	5	5	3
K	MAINTAINING FIRE CONTROL SYSTEMS	*	*	*	0
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	2	2	2	1
M	MAINTAINING FLIGHT RECORDERS	1	*	1	2
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	1	*	2	2
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	3	4	1	2
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	7	9	1	3
Q	PERFORMING TRAINING ACTIVITIES	3	6	1	1
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	2	5	*	1
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4	8	2	3

* less than 1 percent

TABLE 11

RELATIVE PERCENT TIME SPENT ON DUTIES BY 7-SKILL LEVEL DAFSC GROUPS

DUTIES		TOTAL 2A172 (N=260)	ACTIVE 2A172 (N=50)	ANG 2A172 (N=133)	AFRC 2A172 (N=77)
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	7	5	7	8
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	20	7	23	21
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	11	3	12	13
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	7	3	9	7
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	4	1	5	5
F	MAINTAINING POSITION INDICATING SYSTEMS	4	1	4	5
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	5	3	4	6
H	MAINTAINING AUGMENTATION SYSTEMS	1	*	1	1
I	MAINTAINING COMPASS SYSTEMS	3	2	5	2
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	3	1	4	2
K	MAINTAINING FIRE CONTROL SYSTEMS	*	*	*	*
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	2	*	2	2
M	MAINTAINING FLIGHT RECORDERS	1	*	1	1
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	1	1	2	1
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	4	6	4	4
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	16	42	8	12
Q	PERFORMING TRAINING ACTIVITIES	5	10	4	5
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	2	6	1	2
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4	7	3	3

* less than 1 percent

TABLE 12

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A132 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=32)
A0013	Perform corrosion control procedures	84
A0031	Solder or desolder electrical components	84
A0004	Crimp electrical connections	84
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	81
A0010	Inspect test equipment	81
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	75
A0015	Perform safety wire procedures	72
A0027	Repair electrical wiring	66
A0025	Repair crimped pin connectors	66
A0005	Fabricate coaxial or triaxial cables	66
B0098	Inspect altimeters	66
B0044	Bench check altimeters	63
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	59
I0992	Bench check C-12 compass system LRUs	59
A0024	Repair coaxial cables or connectors	59
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	56
B0043	Bench check airspeed indicators	56
B0097	Inspect airspeed indicators	56
G0842	Bench check E-4 autopilot system LRUs	53
G0870	Inspect E-4 autopilot system LRUs	53
A0033	Troubleshoot test equipment	53
G0920	Repair E-4 autopilot system LRUs	50
A0002	Calibrate test equipment	50
I1005	Inspect C-12 compass system LRUs	50
D0535	Inspect periscopic sextants	50
A0029	Repair test equipment	47
B0123	Inspect pitot-static system lines, hoses, or fittings	47
B0142	Perform operational checks of altimeters	47
B0133	Inspect VVIs	47
A0001	Apply range marks or slippage marks	47
G0853	Fault isolate E-4 autopilot system LRUs	44
A0023	Repair circuit card assemblies	44
D0495	Bench check periscopic sextants	44
B0096	Inspect airspeed indicating systems	44
I1018	Perform operational checks of C-12 compass systems	41
S1529	Inventory equipment, tools, parts, or supplies	41
A0017	Pot electrical connections	41
J1074	Inspect digital INS LRUs	41
G0938	Troubleshoot E-4 autopilot systems	41
D0510	Fault isolate periscopic sextants	41
B0095	Inspect aircraft clocks	41
G0889	Perform operational checks of E-4 autopilot systems	38

* Average Number of Tasks Performed - 89

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY ALL 2A152 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=452)
A0004	Crimp electrical connections	86
A0015	Perform safety wire procedures	85
A0031	Solder or desolder electrical components	84
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	83
A0027	Repair electrical wiring	80
A0010	Inspect test equipment	79
A0025	Repair crimped pin connectors	77
A0001	Apply range marks or slippage marks	75
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	74
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	74
A0013	Perform corrosion control procedures	73
B0142	Perform operational checks of altimeters	71
B0097	Inspect airspeed indicators	71
B0098	Inspect altimeters	70
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	69
B0043	Bench check airspeed indicators	69
B0141	Perform operational checks of airspeed indicators	69
B0044	Bench check altimeters	67
B0123	Inspect pitot-static system lines, hoses, or fittings	67
A0024	Repair coaxial cables or connectors	67
B0140	Perform operational checks of airspeed indicating systems	66
B0184	Remove or install pitot-static system lines, hoses, or fittings	66
B0170	Remove or install altimeters	66
B0169	Remove or install airspeed indicators	65
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	64
B0096	Inspect airspeed indicating systems	62
A0005	Fabricate coaxial or triaxial cables	59
B0129	Inspect true airspeed indicators	59
B0083	Fault isolate pitot-static system lines, hoses, or fittings	58
B0160	Perform operational checks of true airspeed indicators	58
B0159	Perform operational checks of true airspeed indicating systems	58
B0187	Remove or install true airspeed indicators	58
A0017	Pot electrical connections	57
B0091	Inspect air data computers	57
B0128	Inspect true airspeed indicating systems	57
B0240	Troubleshoot airspeed indicating systems	56
A0003	Calibrate torque-indicating devices or tools	54
B0136	Perform operational checks of air data computers	54
B0133	Inspect VVIs	54
B0069	Fault isolate airspeed indicators	54
C0280	Bench check engine tachometer indicating system LRUs	53
A0033	Troubleshoot test equipment	52
B0070	Fault isolate altimeters	52

* Average Number of Tasks Performed - 215

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A152 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=133)
A0010	Inspect test equipment	80
A0031	Solder or desolder electrical components	78
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	74
A0027	Repair electrical wiring	71
A0004	Crimp electrical connections	71
A0025	Repair crimped pin connectors	67
A0033	Troubleshoot test equipment	65
A0013	Perform corrosion control procedures	62
A0029	Repair test equipment	62
A0015	Perform safety wire procedures	62
A0024	Repair coaxial cables or connectors	60
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	59
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	59
A0002	Calibrate test equipment	56
A0005	Fabricate coaxial or triaxial cables	56
A0023	Repair circuit card assemblies	52
S1529	Inventory equipment, tools, parts, or supplies	50
B0043	Bench check airspeed indicators	48
A0017	Pot electrical connections	46
B0097	Inspect airspeed indicators	46
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	42
B0044	Bench check altimeters	42
S1536	Store equipment, tools, parts, or supplies	41
Q1470	Conduct OJT	41
P1393	Conduct self-inspections or self-assessments	39
B0098	Inspect altimeters	39
J1095	Load or verify INS computer programs	38
P1441	Inspect personnel for compliance with military standards	38
Q1485	Maintain training records or files	37
S1535	Pick up or deliver equipment, tools, parts, or supplies	37
P1392	Conduct safety inspections of equipment or facilities	37
B0062	Bench check VVIs	36
S1525	Identify and report equipment or supply problems	35
S1530	Issue or log turn-ins of equipment, tools, parts, or supplies	35
P1458	Supervise military personnel	35
I0992	Bench check C-12 compass system LRUs	35
A0001	Apply range marks or slippage marks	35
A0007	Fabricate multiconductor cables	34
P1401	Determine or establish work assignments or priorities	33
I1005	Inspect C-12 compass system LRUs	33
C0273	Bench check engine fuel flow indicating system LRUs	33
B0129	Inspect true airspeed indicators	33

* Average Number of Tasks Performed - 100

TABLE 15

REPRESENTATIVE TASKS PERFORMED BY ANG 2A152 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=218)
A0015	Perform safety wire procedures	96
A0001	Apply range marks or slippage marks	95
A0004	Crimp electrical connections	91
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	89
B0142	Perform operational checks of altimeters	89
B0141	Perform operational checks of airspeed indicators	88
B0170	Remove or install altimeters	88
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	87
B0184	Remove or install pitot-static system lines, hoses, or fittings	87
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	86
B0123	Inspect pitot-static system lines, hoses, or fittings	85
B0140	Perform operational checks of airspeed indicating systems	85
B0169	Remove or install airspeed indicators	85
A0027	Repair electrical wiring	84
A0031	Solder or desolder electrical components	83
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	83
B0098	Inspect altimeters	83
B0097	Inspect airspeed indicators	82
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	78
B0096	Inspect airspeed indicating systems	78
A0025	Repair crimped pin connectors	78
B0043	Bench check airspeed indicators	76
A0013	Perform corrosion control procedures	76
B0044	Bench check altimeters	76
B0240	Troubleshoot airspeed indicating systems	76
B0083	Fault isolate pitot-static system lines, hoses, or fittings	75
A0010	Inspect test equipment	74
B0187	Remove or install true airspeed indicators	74
B0160	Perform operational checks of true airspeed indicators	72
B0159	Perform operational checks of true airspeed indicating systems	72
A0003	Calibrate torque-indicating devices or tools	71
B0165	Remove or install air data computers	70
B0136	Perform operational checks of air data computers	69
B0128	Inspect true airspeed indicating systems	68
B0168	Remove or install aircraft clocks	67
B0070	Fault isolate altimeters	67
B0091	Inspect air data computers	67
B0129	Inspect true airspeed indicators	67
C0460	Troubleshoot engine fuel flow indicating systems	67
A0024	Repair coaxial cables or connectors	66
B0261	Troubleshoot true airspeed indicating systems	66
B0139	Perform operational checks of aircraft clocks	65
B0069	Fault isolate airspeed indicators	65

* Average Number of Tasks Performed - 250

TABLE 16

REPRESENTATIVE TASKS PERFORMED BY AFRC 2A152 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=101)
A0031	Solder or desolder electrical components	94
A0004	Crimp electrical connections	93
A0010	Inspect test equipment	90
A0015	Perform safety wire procedures	90
A0025	Repair crimped pin connectors	90
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	88
A0001	Apply range marks or slippage marks	87
B0141	Perform operational checks of airspeed indicators	85
B0142	Perform operational checks of altimeters	85
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	84
B0140	Perform operational checks of airspeed indicating systems	84
A0027	Repair electrical wiring	84
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	83
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	83
B0043	Bench check airspeed indicators	83
B0159	Perform operational checks of true airspeed indicating systems	83
C0280	Bench check engine tachometer indicating system LRUs	82
B0044	Bench check altimeters	82
B0098	Inspect altimeters	82
B0097	Inspect airspeed indicators	82
B0170	Remove or install altimeters	82
A0013	Perform corrosion control procedures	81
B0123	Inspect pitot-static system lines, hoses, or fittings	81
B0169	Remove or install airspeed indicators	81
A0024	Repair coaxial cables or connectors	81
B0187	Remove or install true airspeed indicators	80
B0184	Remove or install pitot-static system lines, hoses, or fittings	79
B0128	Inspect true airspeed indicating systems	79
B0160	Perform operational checks of true airspeed indicators	79
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	78
B0261	Troubleshoot true airspeed indicating systems	77
B0096	Inspect airspeed indicating systems	76
B0129	Inspect true airspeed indicators	76
B0083	Fault isolate pitot-static system lines, hoses, or fittings	74
C0397	Remove or install engine tachometer indicating system LRUs	73
A0005	Fabricate coaxial or triaxial cables	73
B0133	Inspect VVIs	72
B0091	Inspect air data computers	72
B0242	Troubleshoot altimeters	71
B0240	Troubleshoot airspeed indicating systems	71
C0333	Inspect engine tachometer indicating systems	71
B0136	Perform operational checks of air data computers	70
C0372	Perform operational checks of engine tachometer indicating systems	70

* Average Number of Tasks Performed - 294

TABLE 17

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY DAFSCs 2A132 AND 2A152 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A132 (N=32)	ACTIVE DAFSC 2A152 (N=133)	DIFF
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	75	42	33
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	56	29	27
B0098	Inspect altimeters	66	39	27
J1048	Bench check heads-up display (HUD) system LRUs or heads-down display (HDD) system LRUs	34	10	25
I0992	Bench check C-12 compass system LRUs	59	35	24
A0013	Perform corrosion control procedures	84	62	22
I1018	Perform operational checks of C-12 compass systems	41	19	22
D0510	Fault isolate periscopic sextants	41	19	22
G0870	Inspect E-4 autopilot system LRUs	53	32	22
D0535	Inspect periscopic sextants	50	29	21
G0842	Bench check E-4 autopilot system LRUs	53	32	21
P1393	Conduct self-inspections or self-assessments	*	39	-39
P1441	Inspect personnel for compliance with military standards	3	38	-35
P1458	Supervise military personnel	*	35	-35
P1392	Conduct safety inspections of equipment or facilities	3	37	-34
Q1475	Counsel trainees on training progress	*	32	-32
Q1481	Evaluate progress of trainees	*	32	-32
P1401	Determine or establish work assignments or priorities	3	33	-30
S1528	Initiate requisitions for equipment, tools, parts, or supplies	3	31	-28
C0273	Bench check engine fuel flow indicating system LRUs	6	33	-27
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	6	32	-26

TABLE18

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY AND ANG DAFSC 2A152 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A152 (N=133)	ANG DAFSC 2A152 (N=218)	DIFF
A0029	Repair test equipment	62	30	32
P1441	Inspect personnel for compliance with military standards	38	10	28
A0033	Troubleshoot test equipment	65	38	27
P1393	Conduct self-inspections or self-assessments	39	13	26
G0920	Repair E-4 autopilot system LRUs	31	7	23
P1392	Conduct safety inspections of equipment or facilities	37	14	23
G0842	Bench check E-4 autopilot system LRUs	32	10	22
P1461	Write performance reports or supervisory appraisals	24	3	21
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	59	38	21
G0870	Inspect E-4 autopilot system LRUs	32	11	20
B0187	Remove or install true airspeed indicators	14	74	-61
C0460	Troubleshoot engine fuel flow indicating systems	6	67	-61
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	21	83	-62
B0141	Perform operational checks of airspeed indicators	25	88	-63
B0240	Troubleshoot airspeed indicating systems	13	76	-63
B0165	Remove or install air data computers	7	70	-63
B0140	Perform operational checks of airspeed indicating systems	20	85	-65
B0184	Remove or install pitot-static system lines, hoses, or fittings	22	87	-65
B0169	Remove or install airspeed indicators	20	85	-66
B0170	Remove or install altimeters	20	88	-68

TABLE 19

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY AND AFRC DAFSC 2A152 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A152 (N=133)	AFRC DAFSC 2A152 (N=101)	DIFF
B0159	Perform operational checks of true airspeed indicating systems	14	83	-69
C0397	Remove or install engine tachometer indicating system LRUs	5	73	-68
B0187	Remove or install true airspeed indicators	14	80	-67
B0261	Troubleshoot true airspeed indicating systems	10	77	-67
C0391	Remove or install engine fuel flow indicating system LRUs	5	70	-66
C0466	Troubleshoot engine tachometer indicating systems	5	70	-65
C0372	Perform operational checks of engine tachometer indicating systems	5	70	-65
B0140	Perform operational checks of airspeed indicating systems	20	84	-64
B0170	Remove or install altimeters	20	82	-63
F0820	Troubleshoot flap position indicating systems	4	65	-62
B0169	Remove or install airspeed indicators	20	81	-62
F0746	Inspect flap position indicating systems	5	66	-62
F0768	Perform operational checks of flap position indicating systems	5	66	-62
F0767	Perform operational checks of elevator trim position indicating systems	2	63	-62
B0165	Remove or install air data computers	7	67	-61
F0781	Remove or install flap position indicating system LRUs	5	65	-61
C0460	Troubleshoot engine fuel flow indicating systems	6	66	-60
B0141	Perform operational checks of airspeed indicators	25	85	-60
B0160	Perform operational checks of true airspeed indicators	19	79	-60
C0333	Inspect engine tachometer indicating systems	12	71	-59

TABLE 20

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ANG AND AFRC DAFSC 2A152 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ANG DAFSC 2A152 (N=218)	AFRC DAFSC 2A152 (N=101)	DIFF
I1020	Perform operational checks of J-4 compass systems	35	4	31
I1010	Inspect J-4 compass systems	36	5	31
I1012	Inspect N-1 compass systems	45	14	31
B0146	Perform operational checks of AOA systems	54	24	30
I1021	Perform operational checks of N-1 compass systems	44	14	30
I1025	Remove or install J-4 compass system LRUs	34	4	30
I1009	Inspect J-4 compass system LRUs	34	4	30
I1011	Inspect N-1 compass system LRUs	44	14	30
I0994	Bench check J-4 compass system LRUs	31	2	29
I0995	Bench check N-1 compass system LRUs	41	12	29
I1026	Remove or install N-1 compass system LRUs	43	14	29
B0053	Bench check ground proximity warning system (GPWS) LRUs or ground collision avoidance system (GCAS) LRUs	18	54	-36
C0385	Perform operational checks of torque indicating systems	25	61	-36
C0293	Calibrate torque indicating systems	26	59	-34
C0410	Remove or install torque indicating system LRUs	26	59	-34
F0819	Troubleshoot elevator trim position indicating systems	25	59	-34
F0743	Inspect elevator trim position indicating system LRUs	25	59	-34
F0767	Perform operational checks of elevator trim position indicating systems	31	63	-33
C0282	Bench check fuel pressure indicating system LRUs	22	54	-33
C0479	Troubleshoot torque indicating systems	26	57	-32
F0765	Perform operational checks of aileron or lateral trim position indicating systems	27	58	-31

TABLE 21

REPRESENTATIVE TASKS PERFORMED BY ALL 2A172 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=260)
A0010	Inspect test equipment	78
A0004	Crimp electrical connections	77
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	73
A0031	Solder or desolder electrical components	73
A0027	Repair electrical wiring	73
A0015	Perform safety wire procedures	71
B0098	Inspect altimeters	71
A0001	Apply range marks or slippage marks	71
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	70
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	70
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	70
B0097	Inspect airspeed indicators	70
A0025	Repair crimped pin connectors	70
B0123	Inspect pitot-static system lines, hoses, or fittings	68
Q1470	Conduct OJT	67
P1401	Determine or establish work assignments or priorities	65
A0013	Perform corrosion control procedures	65
B0096	Inspect airspeed indicating systems	65
B0142	Perform operational checks of altimeters	65
B0141	Perform operational checks of airspeed indicators	65
B0184	Remove or install pitot-static system lines, hoses, or fittings	65
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	64
B0044	Bench check altimeters	64
B0170	Remove or install altimeters	64
B0169	Remove or install airspeed indicators	64
P1458	Supervise military personnel	63
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	63
B0140	Perform operational checks of airspeed indicating systems	63
S1529	Inventory equipment, tools, parts, or supplies	62
B0129	Inspect true airspeed indicators	62
Q1485	Maintain training records or files	61
Q1481	Evaluate progress of trainees	61
B0128	Inspect true airspeed indicating systems	61
Q1475	Counsel trainees on training progress	60
B0043	Bench check airspeed indicators	60
B0240	Troubleshoot airspeed indicating systems	60
C0322	Inspect engine fuel flow indicating systems	60
B0160	Perform operational checks of true airspeed indicators	59
P1441	Inspect personnel for compliance with military standards	58
O1379	Perform time compliance technical order (TCTO) inspections	58
A0008	Inspect aircraft shock mounts	57
B0083	Fault isolate pitot-static system lines, hoses, or fittings	56

* Average Number of Tasks Performed - 255

TABLE 22

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A172 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=50)
P1401	Determine or establish work assignments or priorities	78
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	76
P1393	Conduct self-inspections or self-assessments	74
P1391	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	72
P1458	Supervise military personnel	72
P1392	Conduct safety inspections of equipment or facilities	70
P1441	Inspect personnel for compliance with military standards	70
P1396	Conduct supervisory performance feedback sessions	68
P1398	Counsel subordinates concerning personal matters	68
P1431	Evaluate personnel for compliance with performance standards	68
P1461	Write performance reports or supervisory appraisals	66
P1405	Develop or establish work schedules	66
P1462	Write recommendations for awards or decorations	62
P1432	Evaluate personnel for promotion, demotion, reclassification, or special awards	62
P1404	Develop or establish work methods or procedures	60
Q1480	Evaluate personnel to determine training needs	60
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	60
P1395	Conduct supervisory orientations for newly assigned personnel	60
Q1481	Evaluate progress of trainees	60
P1442	Interpret policies, directives, or procedures for subordinates	58
P1399	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	58
Q1485	Maintain training records or files	58
P1388	Assign personnel to work areas or duty positions	58
P1456	Schedule work assignments or priorities	58
P1419	Establish performance standards for subordinates	58
Q1475	Counsel trainees on training progress	58
P1435	Evaluate work schedules	56
P1434	Evaluate safety or security programs	54
P1436	Evaluate workload requirements	54
Q1470	Conduct OJT	54
P1424	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	52
S1529	Inventory equipment, tools, parts, or supplies	52
P1429	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	52
P1438	Initiate actions required due to substandard performance of personnel	52
P1454	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	50
Q1479	Evaluate effectiveness of training programs, plans, or procedures	48
P1420	Establish procedures for accountability of equipment, tools, parts, or supplies	48
A0010	Inspect test equipment	48
S1526	Initiate documentation to turn in excess or surplus property	48
A0031	Solder or desolder electrical components	48

* Average Number of Tasks Performed - 119

TABLE 23

REPRESENTATIVE TASKS PERFORMED BY ANG 2A172 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=133)
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	88
A0001	Apply range marks or slippage marks	87
A0004	Crimp electrical connections	86
A0015	Perform safety wire procedures	84
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	84
A0027	Repair electrical wiring	84
B0098	Inspect altimeters	83
B0097	Inspect airspeed indicators	83
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	83
B0123	Inspect pitot-static system lines, hoses, or fittings	82
A0010	Inspect test equipment	82
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	81
B0141	Perform operational checks of airspeed indicators	81
B0142	Perform operational checks of altimeters	80
A0031	Solder or desolder electrical components	80
B0184	Remove or install pitot-static system lines, hoses, or fittings	80
A0025	Repair crimped pin connectors	80
B0096	Inspect airspeed indicating systems	79
B0170	Remove or install altimeters	79
B0169	Remove or install airspeed indicators	79
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	78
B0140	Perform operational checks of airspeed indicating systems	78
B0240	Troubleshoot airspeed indicating systems	77
B0044	Bench check altimeters	77
B0095	Inspect aircraft clocks	77
B0187	Remove or install true airspeed indicators	76
C0322	Inspect engine fuel flow indicating systems	74
B0168	Remove or install aircraft clocks	74
B0139	Perform operational checks of aircraft clocks	74
B0129	Inspect true airspeed indicators	73
A0013	Perform corrosion control procedures	72
B0128	Inspect true airspeed indicating systems	72
B0043	Bench check airspeed indicators	72
A0003	Calibrate torque-indicating devices or tools	71
B0160	Perform operational checks of true airspeed indicators	71
B0261	Troubleshoot true airspeed indicating systems	71
B0159	Perform operational checks of true airspeed indicating systems	70
Q1470	Conduct OJT	68
O1379	Perform time compliance technical order (TCTO) inspections	68
B0083	Fault isolate pitot-static system lines, hoses, or fittings	68
B0036	Adjust pressure altimeters	68
F0710	Adjust flap position indicating system transmitters	68
A0008	Inspect aircraft shock mounts	67

* Average Number of Tasks Performed - 289

TABLE 24

REPRESENTATIVE TASKS PERFORMED BY AFRC 2A172 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=77)
A0010	Inspect test equipment	90
A0027	Repair electrical wiring	81
A0004	Crimp electrical connections	79
A0025	Repair crimped pin connectors	79
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	78
A0031	Solder or desolder electrical components	78
B0097	Inspect airspeed indicators	78
B0098	Inspect altimeters	75
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	74
A0015	Perform safety wire procedures	74
Q1470	Conduct OJT	73
B0123	Inspect pitot-static system lines, hoses, or fittings	73
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	73
Q1481	Evaluate progress of trainees	70
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	70
Q1485	Maintain training records or files	70
A0013	Perform corrosion control procedures	70
Q1475	Counsel trainees on training progress	70
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	70
B0096	Inspect airspeed indicating systems	70
C0321	Inspect engine fuel flow indicating system LRUs	70
B0129	Inspect true airspeed indicators	70
B0128	Inspect true airspeed indicating systems	70
P1441	Inspect personnel for compliance with military standards	69
P1458	Supervise military personnel	69
B0043	Bench check airspeed indicators	69
A0001	Apply range marks or slippage marks	69
S1529	Inventory equipment, tools, parts, or supplies	68
B0169	Remove or install airspeed indicators	68
B0170	Remove or install altimeters	68
B0142	Perform operational checks of altimeters	66
B0044	Bench check altimeters	66
B0141	Perform operational checks of airspeed indicators	66
C0322	Inspect engine fuel flow indicating systems	66
B0184	Remove or install pitot-static system lines, hoses, or fittings	66
P1392	Conduct safety inspections of equipment or facilities	65
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	65
C0333	Inspect engine tachometer indicating systems	65
B0160	Perform operational checks of true airspeed indicators	65
Q1480	Evaluate personnel to determine training needs	64
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	64
P1401	Determine or establish work assignments or priorities	64

* Average Number of Tasks Performed - 286

TABLE 25

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY DAFSCs 2A152 AND 2A172 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A152 (N=133)	ACTIVE DAFSC 2A172 (N=50)	DIFF
A0025	Repair crimped pin connectors	67	28	39
A0027	Repair electrical wiring	71	34	37
A0002	Calibrate test equipment	56	20	36
B0043	Bench check airspeed indicators	48	14	34
A0033	Troubleshoot test equipment	65	32	33
A0029	Repair test equipment	62	30	32
A0024	Repair coaxial cables or connectors	60	28	32
A0010	Inspect test equipment	80	48	32
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	74	44	30
A0031	Solder or desolder electrical components	78	48	30
P1391	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	13	72	-58
P1432	Evaluate personnel for promotion, demotion, reclassification, or special awards	11	62	-51
P1438	Initiate actions required due to substandard performance of personnel	6	52	-46
P1431	Evaluate personnel for compliance with performance standards	22	68	-46
P1395	Conduct supervisory orientations for newly assigned personnel	14	60	-46
P1401	Determine or establish work assignments or priorities	33	78	-45
P1405	Develop or establish work schedules	21	66	-45
P1396	Conduct supervisory performance feedback sessions	23	68	-45
P1454	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	4	50	-45
P1419	Establish performance standards for subordinates	14	58	-44

TABLE 26

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ANG DAFSCs 2A152 AND 2A172 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ANG DAFSC 2A152 (N=218)	ANG DAFSC 2A172 (N=133)	DIFF
O1369	Clear Red-X conditions	15	59	-45
P1401	Determine or establish work assignments or priorities	16	61	-45
Q1475	Counsel trainees on training progress	13	55	-42
Q1470	Conduct OJT	26	68	-42
P1458	Supervise military personnel	15	56	-41
Q1481	Evaluate progress of trainees	16	56	-40
P1441	Inspect personnel for compliance with military standards	10	48	-38
Q1485	Maintain training records or files	20	56	-37
Q1490	Schedule training	9	44	-36
Q1480	Evaluate personnel to determine training needs	14	49	-35
P1410	Direct training functions	10	43	-33
P1395	Conduct supervisory orientations for newly assigned personnel	4	38	-33
Q1472	Determine training requirements	9	41	-32
P1442	Interpret policies, directives, or procedures for subordinates	4	35	-31
Q1479	Evaluate effectiveness of training programs, plans, or procedures	4	35	-30
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	13	42	-29
Q1477	Develop training programs, plans, or procedures	11	40	-29
S1534	Maintain precision measurement equipment (PME) calibration schedules	16	46	-29
O1376	Initiate technical order improvement reports	20	49	-29
O1378	Perform maintenance management systems interfaces with standard base supply systems (SBSSs)	10	39	-29

TABLE 27

TASKS WHICH BEST DIFFERENTIATE BETWEEN
AFRC DAFSCs 2A152 AND 2A172 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		AFRC DAFSC 2A152 (N=101)	AFRC DAFSC 2A172 (N=77)	DIFF
C0280	Bench check engine tachometer indicating system LRUs	82	58	24
B0241	Troubleshoot airspeed indicators	70	48	22
B0262	Troubleshoot true airspeed indicators	70	48	22
B0159	Perform operational checks of true airspeed indicating systems	83	61	22
B0242	Troubleshoot altimeters	71	49	22
B0140	Perform operational checks of airspeed indicating systems	84	62	22
B0261	Troubleshoot true airspeed indicating systems	77	57	20
Q1490	Schedule training	24	62	-39
P1404	Develop or establish work methods or procedures	25	62	-38
P1461	Write performance reports or supervisory appraisals	9	45	-37
P1462	Write recommendations for awards or decorations	7	44	-37
Q1477	Develop training programs, plans, or procedures	16	53	-37
Q1475	Counsel trainees on training progress	34	70	-36
Q1480	Evaluate personnel to determine training needs	29	64	-35
P1431	Evaluate personnel for compliance with performance standards	21	56	-35
Q1485	Maintain training records or files	37	70	-34
P1395	Conduct supervisory orientations for newly assigned personnel	9	43	-34
P1441	Inspect personnel for compliance with military standards	35	69	-34
P1405	Develop or establish work schedules	22	55	-33
P1442	Interpret policies, directives, or procedures for subordinates	22	55	-33
P1456	Schedule work assignments or priorities	19	52	-33

TABLE 28

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY AND ANG DAFSC 2A172 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A172 (N=50)	ANG DAFSC 2A172 (N=133)	DIFF
P1461	Write performance reports or supervisory appraisals	66	11	55
P1396	Conduct supervisory performance feedback sessions	68	20	48
P1391	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	72	29	43
P1431	Evaluate personnel for compliance with performance standards	68	30	38
P1462	Write recommendations for awards or decorations	62	25	37
P1438	Initiate actions required due to substandard performance of personnel	52	15	37
P1435	Evaluate work schedules	56	20	36
P1398	Counsel subordinates concerning personal matters	68	32	36
P1419	Establish performance standards for subordinates	58	22	36
P1392	Conduct safety inspections of equipment or facilities	70	34	36
B0187	Remove or install true airspeed indicators	10	76	-66
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	22	88	-66
A0003	Calibrate torque-indicating devices or tools	6	71	-65
C0322	Inspect engine fuel flow indicating systems	10	74	-64
F0768	Perform operational checks of flap position indicating systems	2	65	-63
B0168	Remove or install aircraft clocks	12	74	-62
B0139	Perform operational checks of aircraft clocks	12	74	-62
B0170	Remove or install altimeters	18	79	-61
F0710	Adjust flap position indicating system transmitters	8	68	-60
B0240	Troubleshoot airspeed indicating systems	18	77	-59

TABLE 29

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY AND AFRC DAFSC 2A172 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A172 (N=50)	AFRC DAFSC 2A172 (N=77)	DIFF
P1391	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	72	40	32
P1454	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	50	21	29
P1396	Conduct supervisory performance feedback sessions	68	43	25
P1390	Complete graduate assessment surveys (GASs)	42	18	24
P1435	Evaluate work schedules	56	32	24
R1493	Annotate security forms for facilities or security containers	30	6	24
P1452	Plan self-inspection or self-assessment programs	42	19	23
P1436	Evaluate workload requirements	54	32	22
P1429	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	52	31	21
P1438	Initiate actions required due to substandard performance of personnel	52	31	21
C0322	Inspect engine fuel flow indicating systems	10	66	-56
B0043	Bench check airspeed indicators	14	69	-55
B0187	Remove or install true airspeed indicators	10	65	-55
C0333	Inspect engine tachometer indicating systems	12	65	-53
B0097	Inspect airspeed indicators	26	78	-52
B0129	Inspect true airspeed indicators	18	70	-52
C0321	Inspect engine fuel flow indicating system LRUs	18	70	-52
B0128	Inspect true airspeed indicating systems	18	70	-52
B0094	Inspect air temperature indicating systems	10	62	-52
C0329	Inspect engine oil temperature indicating systems	6	57	-51

TABLE 30

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ANG AND AFRC DAFSC 2A172 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ANG DAFSC 2A172 (N=133)	AFRC DAFSC 2A172 (N=77)	DIFF
I1021	Perform operational checks of N-1 compass systems	56	8	48
I1026	Remove or install N-1 compass system LRUs	54	8	46
I1012	Inspect N-1 compass systems	55	9	46
I1041	Troubleshoot N-1 compass systems	53	8	46
I1001	Fault isolate N-1 compass system LRUs	52	8	44
I0995	Bench check N-1 compass system LRUs	50	6	44
I1036	Repair N-1 compass systems	49	5	44
I1011	Inspect N-1 compass system LRUs	51	9	42
I1040	Troubleshoot J-4 compass systems	44	3	42
I1020	Perform operational checks of J-4 compass systems	44	3	41
P1461	Write performance reports or supervisory appraisals	11	45	-35
P1392	Conduct safety inspections of equipment or facilities	34	65	-31
C0360	Inspect turbine inlet temperature systems	22	53	-31
B0115	Inspect GPWS LRUs or GCAS LRUs	29	57	-29
C0473	Troubleshoot oil cooler flap systems	17	44	-28
C0404	Remove or install oil cooler flap system indicators	16	44	-28
C0282	Bench check fuel pressure indicating system LRUs	19	45	-27
C0375	Perform operational checks of fuel pressure indicating systems	26	53	-27
B0053	Bench check ground proximity warning system (GPWS) LRUs or ground collision avoidance system (GCAS) LRUs	16	43	-26
C0469	Troubleshoot fuel pressure indicating systems	26	52	-26

TRAINING ANALYSIS

Occupational survey data are one of many sources of information which can be used to assist in the development of a training program relevant to the needs of personnel in their first enlistment. Factors which 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).

First-Enlistment Personnel

In this study, there are 43 members in their first-enlistment (1-48 months TAFMS), representing 2 percent of the total survey sample. Figure 2 reflects the distribution of first-enlistment personnel within the career ladder. Sixty-seven percent of these airmen are performing Shop Maintenance duties compared to 28% performing Flightline Maintenance duties. Table 31 displays the relative percent of time spent on duties by first-enlistment personnel. Reviewing the table, first-enlistment personnel spend 89 percent of their time performing the technical tasks of Duties A-J.

Table 32 lists representative tasks performed by first-enlistment personnel. Most involve the General Guidance and Control tasks of Duty A.

Table 33 reflects the Test Equipment used by active duty first-enlistment respondents, while Table 34 lists the Forms used.

DISTRIBUTION OF 2A1X2 FIRST-ENLISTMENT PERSONNEL ACROSS SPECIALTY JOBS (N = 43)

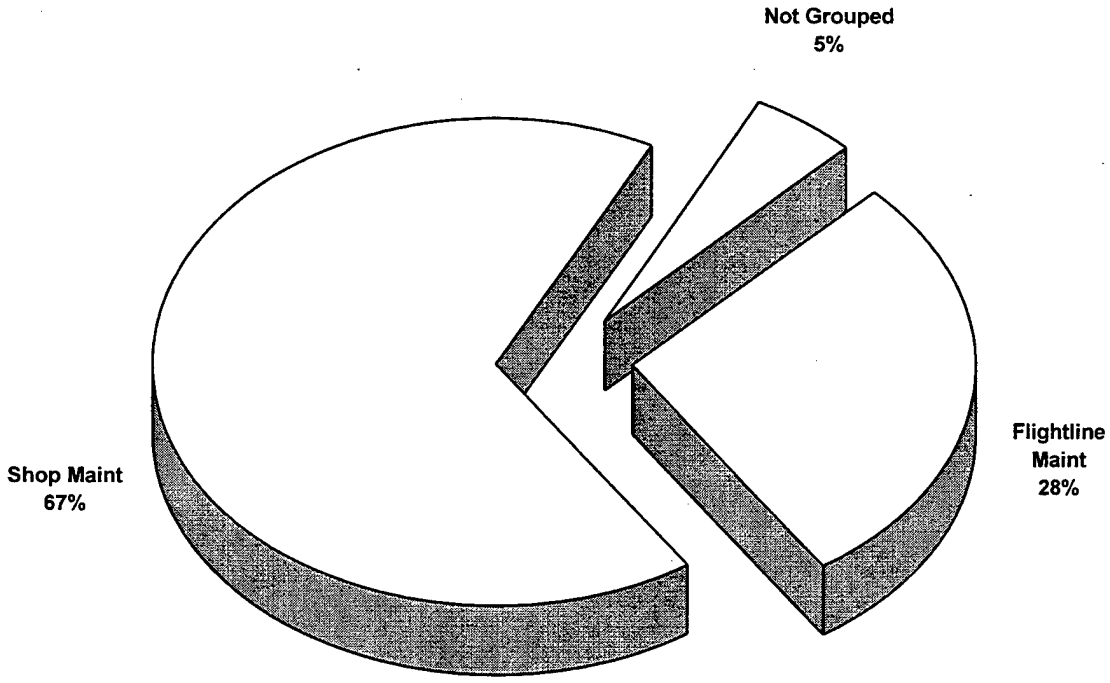


FIGURE 2

TABLE 31

RELATIVE PERCENT TIME SPENT ON DUTIES BY
ACTIVE DUTY FIRST-ENLISTMENT PERSONNEL
(N=43)

	DUTIES	PERCENT TIME SPENT
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	24
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	21
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	4
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	12
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	3
F	MAINTAINING POSITION INDICATING SYSTEMS	1
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	9
H	MAINTAINING AUGMENTATION SYSTEMS	1
I	MAINTAINING COMPASS SYSTEMS	6
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	8
K	MAINTAINING FIRE CONTROL SYSTEMS	*
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	1
M	MAINTAINING FLIGHT RECORDERS	*
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	1
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1
Q	PERFORMING TRAINING ACTIVITIES	1
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	1
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4

TABLE 32

REPRESENTATIVE TASKS PERFORMED BY AFSC 2A1X2
ACTIVE DUTY FIRST-ENLISTMENT PERSONNEL
(N=43)

TASKS		PERCENT MEMBERS PERFORMING
A0010	Inspect test equipment	86
A0031	Solder or desolder electrical components	86
A0004	Crimp electrical connections	81
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	79
A0013	Perform corrosion control procedures	77
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	65
A0015	Perform safety wire procedures	65
B0044	Bench check altimeters	65
A0005	Fabricate coaxial or triaxial cables	65
A0025	Repair crimped pin connectors	65
A0027	Repair electrical wiring	63
A0024	Repair coaxial cables or connectors	63
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	60
B0098	Inspect altimeters	60
I0992	Bench check C-12 compass system LRUs	58
B0043	Bench check airspeed indicators	58
A0033	Troubleshoot test equipment	56
A0002	Calibrate test equipment	51
A0029	Repair test equipment	51
B0097	Inspect airspeed indicators	51
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	49
D0535	Inspect periscopic sextants	49
G0870	Inspect E-4 autopilot system LRUs	47
I1005	Inspect C-12 compass system LRUs	47
G0842	Bench check E-4 autopilot system LRUs	44
G0920	Repair E-4 autopilot system LRUs	44
A0023	Repair circuit card assemblies	44
B0133	Inspect VVIs	44
A0001	Apply range marks or slippage marks	44
B0129	Inspect true airspeed indicators	44
B0062	Bench check VVIs	42
D0495	Bench check periscopic sextants	42
B0142	Perform operational checks of altimeters	42
J1045	Bench check digital INS LRUs	40
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	40
G0853	Fault isolate E-4 autopilot system LRUs	40
B0123	Inspect pitot-static system lines, hoses, or fittings	40
A0017	Pot electrical connections	40

* Average Number of Tasks Performed - 92

TABLE 33

TEST EQUIPMENT USED BY ACTIVE DUTY
FIRST-ENLISTMENT AFSC 2A1X2 PERSONNEL

EQUIPMENT	1ST ENL (N=43)
Multimeter, Digital	95
Oscilloscope	81
Voltmeter, Digital	81
Multimeter, Analog	60
Voltmeter, Analog	60
Scorsby Table	56
Test Set, ADI	56
Test Set, TTU-205D/F Digital Pitot Static	56
Test Set, TTU-229E Attitude Encoder	56
Breakout Box	53
Test Bench, E-4 Autopilot	53
Decade Resistor	51
Test Set, TTU-27E Tachometer	51
Analyzer, Line	47
Signal Generator	44
Voltmeter, Phase	44
Tester, C-12 Compass Field	44
Program Load Unit	42
Test Set, TTU-205 Pressure-Temperature	40
Tester, Tube	40
Bench Set, AN/SAM-208 Inertial Navigation Sys	35
Test Set, 476E-4A Horizontal Situation Indicator	35
Collimeter	33
Test Set, 980L Analog Flight Director	33
Test Set, GTF-6 Capacitance Fuel Quantity	33
Test Set, AHRS	30
Theodolite	30
Frequency Counter	28
Inertial Test Rack	28
Test Set, Rate Gyro	28
Test Set, TTU-23E Synchro	28
Analyzer, Attitude Heading Reference System	26

TABLE 34

FORMS USED BY ACTIVE DUTY
FIRST-ENLISTMENT AFSC 2A1X2 PERSONNEL

FORM	1ST ENL (N=43)
DD 1574, Serviceable Tag – Materiel	98
DD 1577-1, Unserviceable (Condemned) Label	93
DD 1577, Unserviceable (Condemned) Tag	84
AF 2005, Issue/Turn-In Request	79
AFTO 22, Technical Order Improvement Record	72
AFTO 350, Repairable Item Processing Tag	70
DD 1575, Suspended Tag – Materiel	49
AF 2413, Supply Control Log	47
AFTO 349, Maintenance Data Collection Record	47
AF 1297, Temporary Issue Receipt	44
DD 1574-1, Serviceable Label – Materiel	42
SF 368, Product Quality Deficiency Report	42
AF 2520, Repair Cycle Control Log	40
DD2332, Product Quality Deficiency Report Exhibit	37
AF 55, Employee Safety and Health Record	33
AFTO 256, No Calibration Required	28
AF 1492, Warning Tag	23
AFTO 187, Technical Order Publications Request	23
AFTO 244, Industrial/Support Equipment Record	23

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 (see high rated tasks presented in Table 35). 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.

TE ratings of 2A1X2 first-enlistment airmen were very low, making this data unacceptable for quantitative analysis.

Table 35 shows TD raters reported performing magnetic surveys of compass rose and performing electrical swings of compass systems to be among the most difficult tasks to learn. However, due to the low numbers of individuals performing these types of tasks, they would be inappropriate for inclusion in a resident curriculum and are more appropriately taught as OJT items.

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.)

TABLE 35

TASKS RATED HIGHEST IN TASK DIFFICULTY

TASKS		TASK DIFF	PERCENT MEMBERS PERFORMING 2A1X2 1ST JOB (N=13)	2A1X2 1ST ENL (N=43)	2A132 (N=32)	2A152 (N=133)	2A172 (N=50)
I1015	Perform magnetic surveys of compass rose	8.45	8	7	6	4	10
I1014	Perform electrical swings of compass systems	8.25	0	5	6	1	10
I1016	Perform optical transfers of compass transmitters	7.93	0	2	3	0	6
E0700	Troubleshoot capacitance liquid quantity indicating systems, other than AC or DC capacitance fuel quantity indicating systems	7.37	0	2	3	2	6
N1363	Tear down or build up helicopters	7.28	0	2	3	0	4
E0637	Fault isolate capacitance liquid quantity indicating system LRUs, other than AC or DC capacitance fuel quantity indicating system LRUs	7.24	8	2	3	2	4
I1002	Index remote compass transmitters of compass systems	7.16	0	0	0	0	6
E0636	Fault isolate AC capacitance fuel quantity indicating system LRUs	7.15	0	2	3	11	10
E0699	Troubleshoot AC capacitance fuel quantity indicating systems	7.14	8	9	13	10	12
E0638	Fault isolate CG/FLAS LRUs	7.09	0	0	0	0	0
E0639	Fault isolate DC capacitance fuel quantity indicating system LRUs	7.04	0	2	3	4	4
E0703	Troubleshoot digital fuel quantity indicating systems	7.04	8	9	13	7	4
E0684	Repair capacitance liquid quantity indicating systems, other than AC or DC capacitance fuel quantity indicating systems	6.99	0	2	3	2	4
H0987	Troubleshoot FCASs	6.99	0	2	3	2	0
H0990	Troubleshoot SASs	6.96	0	2	3	4	4
J1129	Repair analog INS LRUs	6.94	23	7	6	12	6
A0023	Repair circuit card assemblies	6.93	38	44	44	52	26
J1131	Repair digital INS LRUs	6.90	31	16	19	17	4
D0610	Troubleshoot ENSs	6.90	0	5	6	7	8
E0702	Troubleshoot DC capacitance fuel quantity indicating systems	6.87	8	7	9	2	2
I1013	Perform compensation adjustments to compass systems	6.84	8	7	9	1	6
E0682	Repair AC capacitance fuel quantity indicating systems	6.81	8	7	9	7	8
A0012	Modify test equipment	6.80	8	21	16	23	22
E0683	Repair capacitance liquid quantity indicating system LRUs, other than AC or DC capacitance fuel quantity indicating system LRUs	6.79	8	2	3	2	2
E0640	Fault isolate digital fuel quantity indicating system LRUs	6.78	0	5	6	3	8
A0033	Troubleshoot test equipment	6.77	46	56	53	65	32
A0029	Repair test equipment	6.74	38	51	47	62	30

* **Average TD Rating is 5.00**

Specialty Training Standard (STS)

A comprehensive review of STS 2A1X2, dated April 1994, compared STS items to survey data (based on the previously mentioned assistance from subject-matter experts in matching JI tasks to STS elements). STS elements containing general knowledge information, mandatory entries, subject-matter-knowledge-only requirements, or basic supervisory responsibilities were not examined. Task knowledge and performance elements of the STS were compared against the standard set forth in AETCI 36-2601 and AFI 36-2623 (i.e., include tasks performed or knowledge required by 30 percent or more of the personnel in a skill level [criterion group] of the AFS).

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. Some elements with no performance coding have high percentages of personnel performing matched tasks and should be reviewed by training personnel for possible inclusion in the basic course (Table 36).

Examples of STS elements currently coded with proficiency codes and not supported by survey data are displayed in Table 37. These elements warrant review by training personnel to ensure continued inclusion in the basic course is warranted.

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. Those technical tasks performed by 30 percent or more respondents of the STS target groups, but which were not referenced to any STS element, are displayed in Table 38. Training personnel and SMEs should review these unreferenced tasks to determine if inclusion in the STS is justified.

TABLE 36

EXAMPLES OF TECHNICAL TASKS PERFORMED BY AFSC 2A1X2 GROUP MEMBERS SUGGESTED FOR PROFICIENCY CODE REVIEW TO PERFORMANCE CODING (PERCENT MEMBERS PERFORMING)

TASKS		PERCENT MEMBERS PERFORMING 3-SKL LVL (N=68)	5-SKL LVL (N=138)	7-SKL LVL (N=146)	TASK DIFF
13.	**COMPASS SYSTEM**				
13b.	Perform Inspection - - - -				
I1005	Inspect C-12 compass system LRUs	50	33	26	4.35
I1006	Inspect C-12 compass systems	31	22	16	4.52
13c.	Perform Operational Checks - - - -				
I1018	Perform operational checks of C-12 compass systems	41	19	16	5.42
13e.	Bench Check - - - -				
I0992	Bench check C-12 compass system LRUs	59	35	18	5.63
13f.	Isolate LRU Malfunctions - - - -				
I0098	Fault isolate C-12 compass system LRUs	34	27	12	5.82
13g.	Repair Malfunctions - - - -				
I1029	Repair C-12 compass system LRUs	38	26	10	6.00

* **Average TD Rating is 5.00**

TABLE 37

EXAMPLES OF STS ITEMS NOT SUPPORTED BY ACTIVE DUTY SURVEY DATA
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

TASKS			PERCENT MEMBERS PERFORMING 3-SKL LVL (N=68)	5-SKL LVL (N=138)	7-SKL LVL (N=146)	TASK DIFF
14.	**ATTITUDE HEADING REFERENCE SYSTEM**					
14b.	Perform Inspection	2b - - -				
D0517	Inspect HARSs or AHHSs		9	5	4	3.80
14c.	Perform Operational Check	2b - - -				
D0545	Perform operational checks of AHRSs or AHHSs		9	7	6	5.24
15.	**FLIGHT DIRECTOR SYSTEM**					
15c.	Perform Operational Check	2b - - -				
D0548	Perform operational checks of dual-flight director systems		3	2	8	5.30
D0550	Perform operational checks of flight director systems, other than dual-flight director systems					
15d.	Troubleshoot System	2b - - -				
D0609	Troubleshoot dual-flight director systems		3	6	8	6.45
D0611	Troubleshoot flight director systems, other than dual-flight director systems		0	5	10	6.47
17.	**STABILITY AUGMENTATION SYSTEM**					
17b.	Perform Inspection	2b - - -				
H0964	Inspect SAS LRUs		6	11	4	4.40
H0965	Inspect SASs		3	5	4	4.38
17c.	Perform Operational Check	2b - - -				
H0970	Perform operational checks of SASs		3	5	4	5.64

* **Average TD Rating is 5.00**

TABLE 38

EXAMPLES OF TECHNICAL TASKS PERFORMED BY 30 PERCENT OR MORE ACITVE DUTY GROUP MEMBERS AND NOT REFERENCED TO THE STS

TASKS		PERCENT MEMBERS PERFORMING 3-SKL LVL (N=193)	5-SKL LVL (N=996)	7-SKL LVL (N=608)	TASK DIFF
A0003	Calibrate torque-indicating devices or tools	34	20	6	3.65
A0008	Inspect aircraft shock mounts	34	23	22	1.15
A0018	Remove or install aircraft shock mounts	34	19	16	3.25
B0034	Adjust airspeed indicators	31	21	8	3.82
B0036	Adjust pressure altimeters	31	17	14	3.85
B0095	Inspect aircraft clocks	41	31	18	1.46

* **Average TD Rating is 5.00**

JOB SATISFACTION ANALYSIS

An examination of the job satisfaction indicators of various groups can give career ladder managers a better understanding of some of the factors which may affect the job performance of airmen in the career ladder. 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 39 presents job satisfaction data for AFSC 2A1X2 TAFMS groups, together with TAFMS data for a comparative sample of Mission Equipment Management career ladders surveyed in 1997. All TAFMS groups rated perception of job interest, utilization of talents, utilization of training, and sense of accomplishment gained from work much lower than the comparative sample. The first-enlistment and career groups have much lower reenlistment intentions than the comparative sample. It is very interesting to note how job satisfaction of career ladder personnel declines with time in service through the second enlistment for all indicators.

An indication of how job satisfaction perceptions have changed over time is provided in Table 40, where again TAFMS data for the current survey respondents are presented, along with data from the last occupational survey report. Reviewing this table, current survey satisfaction ratings for job interest, perceived utilization of talents, perceived utilization of training, sense of accomplishment from work, and reenlistment intentions are rated lower than the previous survey for all TAFMS groups. Reenlistment intentions for all TAFMS groups are much lower than the 1994 survey. There is an alarming decline in reenlistment intentions for the career group, down from 75 percent from the previous survey to only 59 percent in the current survey.

In Table 41, a review of the job satisfaction ratings for the specialty jobs and clusters identified in this survey reveals very low satisfaction ratings for all areas among the Shop Maintenance Cluster and UAV Maintenance Job.

TABLE 39

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1998 2A1X2 (N=43)	COMP SAMPLE* (N=3,883)	1998 2A1X2 (N=72)	COMP SAMPLE* (N=2,651)	1998 2A1X2 (N=100)	COMP SAMPLE* (N=6,033)
EXPRESSED JOB INTEREST:						
INTERESTING	53	68	50	65	58	74
SO-SO	26	17	26	20	20	17
DULL	21	15	24	15	22	9
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	65	72	57	75	78	84
LITTLE OR NOT AT ALL	35	28	43	25	22	16
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	72	84	62	82	67	80
LITTLE OR NOT AT ALL	28	16	38	18	33	20
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	51	64	47	66	58	72
NEUTRAL	21	17	11	15	15	11
DISSATISFIED	28	19	42	19	27	17
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	49	52	68	66	59	71
NO, OR PROBABLY NO	51	48	32	34	17	8
PLAN TO RETIRE	0	0	0	0	24	21

* Comparative sample of Mission Equipment Management career ladders surveyed in 1997 include the 2A3X2A/B/C, 2A5X3A/B/C, 2A6X3, 2A6X5, 2A7X1, 2A7X3, 2E1X1, 2E8X1, 2MOX2, 2W0X1, AND 2W2X1 AFSCs.

TABLE 40

COMPARISON OF CURRENT SURVEY AND PREVIOUS SURVEY BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1998 2A1X2 (N=43)	1994 455X1 (N=600)	1998 2A1X2 (N=72)	1994 455X1 (N=570)	1998 2A1X2 (N=100)	1994 455X1 (N=1,153)
EXPRESSED JOB INTEREST:						
INTERESTING	53	85	50	74	58	78
SO-SO	26	10	26	15	20	13
DULL	21	5	24	11	22	9
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	65	86	57	78	78	80
LITTLE OR NOT AT ALL	35	14	43	22	22	20
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	72	88	62	76	67	80
LITTLE OR NOT AT ALL	28	12	38	24	33	20
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	51	82	47	73	58	72
NEUTRAL	21	8	11	8	15	10
DISSATISFIED	28	10	42	19	27	18
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	49	65	68	74	59	75
NO, OR PROBABLY NO	51	35	32	26	17	8
PLAN TO RETIRE	0	0	0	0	24	17

TABLE 41

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

	Flightline Maint Cluster (N=922)	Shop Maint Cluster (N=117)	UAV Maint Job (N=10)	Mgmt Cluster (N=173)	Quality Assurance Job (N=11)	Instructor Job (N=16)
EXPRESSED JOB INTEREST:						
INTERESTING	75	48	40	70	82	94
SO-SO	17	21	20	15	18	6
DULL	8	31	40	15	0	0
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	84	60	20	78	100	94
LITTLE OR NOT AT ALL	16	40	80	22	0	6
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	87	65	40	65	91	75
LITTLE OR NOT AT ALL	13	35	60	35	9	25
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	72	43	50	66	73	94
NEUTRAL	14	13	10	13	18	6
DISSATISFIED	14	44	40	21	9	0
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	63	57	60	57	55	88
NO, OR PROBABLY NO	30	42	40	10	18	12
WILL RETIRE	7	1	0	33	27	0

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 only by the AD members of this career ladder. The ANG and AFRC members are more aligned with the organizational maintenance tasks of AFSC 2A4X1, Aircraft Guidance and Control Systems. The Reserve Forces comprise 75 percent of the total assigned personnel of this specialty, which would lend credence to the review for a possible merger with AFSC 2A4X1.

Career ladder training documents appear, on the whole, to be well supported by survey data, but require review to ensure appropriate proficiency coding.

Job satisfaction is fairly low for all TAFMS when compared to both the comparative sample of like AFSCs and the previous survey.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY SPECIALTY JOB GROUPS

TABLE A1

Flightline Maintenance Cluster

TASKS		PERCENT MEMBERS PERFORMING (N=1,544)
A0015	Perform safety wire procedures	96
A0004	Crimp electrical connections	95
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	94
B0141	Perform operational checks of airspeed indicators	93
A0027	Repair electrical wiring	92
B0142	Perform operational checks of altimeters	92
B0184	Remove or install pitot-static system lines, hoses, or fittings	92
B0169	Remove or install airspeed indicators	92
B0140	Perform operational checks of airspeed indicating systems	91
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	90
B0170	Remove or install altimeters	90
A0001	Apply range marks or slippage marks	90
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	89
A0025	Repair crimped pin connectors	89
B0123	Inspect pitot-static system lines, hoses, or fittings	87
B0097	Inspect airspeed indicators	86
B0098	Inspect altimeters	85
B0096	Inspect airspeed indicating systems	84
B0240	Troubleshoot airspeed indicating systems	83
A0031	Solder or desolder electrical components	83
B0083	Fault isolate pitot-static system lines, hoses, or fittings	79
B0159	Perform operational checks of true airspeed indicating systems	79
B0187	Remove or install true airspeed indicators	79
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	78
B0160	Perform operational checks of true airspeed indicators	78
C0460	Troubleshoot engine fuel flow indicating systems	78
A0013	Perform corrosion control procedures	76
A0024	Repair coaxial cables or connectors	76
C0391	Remove or install engine fuel flow indicating system LRUs	76
A0010	Inspect test equipment	75
B0069	Fault isolate airspeed indicators	74
B0128	Inspect true airspeed indicating systems	74
B0190	Remove or install VVIs	74
B0261	Troubleshoot true airspeed indicating systems	74
F0768	Perform operational checks of flap position indicating systems	74
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	73
B0163	Perform operational checks of VVIs	73
B0129	Inspect true airspeed indicators	73
C0366	Perform operational checks of engine fuel flow indicating systems	73

TABLE A2

Shop Maintenance Cluster

TASKS		PERCENT MEMBERS PERFORMING (N=158)
A0031	Solder or desolder electrical components	88
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	82
A0010	Inspect test equipment	82
A0004	Crimp electrical connections	81
A0027	Repair electrical wiring	77
A0025	Repair crimped pin connectors	70
A0013	Perform corrosion control procedures	65
A0033	Troubleshoot test equipment	65
A0015	Perform safety wire procedures	64
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	61
A0029	Repair test equipment	61
A0024	Repair coaxial cables or connectors	59
A0005	Fabricate coaxial or triaxial cables	58
A0023	Repair circuit card assemblies	55
B0043	Bench check airspeed indicators	54
A0002	Calibrate test equipment	48
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	46
J1095	Load or verify INS computer programs	45
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	44
A0017	Pot electrical connections	44
B0044	Bench check altimeters	43
S1529	Inventory equipment, tools, parts, or supplies	42
B0097	Inspect airspeed indicators	42
B0039	Bench check air data computers	40
A0001	Apply range marks or slippage marks	39
B0062	Bench check VVIs	39
S1536	Store equipment, tools, parts, or supplies	37
B0098	Inspect altimeters	35
L1189	Bench check fuel saving advisory system (FSAS) LRUs	35
J1045	Bench check digital INS LRUs	34
C0273	Bench check engine fuel flow indicating system LRUs	33
S1535	Pick up or deliver equipment, tools, parts, or supplies	32
B0057	Bench check stall warning system LRUs	32
C0278	Bench check engine pressure ratio (EPR) indicating system LRUs	32
A0007	Fabricate multiconductor cables	31
A0011	Load or certify maintenance data recorder cassette cartridges	31
A0028	Repair multiconductor cables	30
S1530	Issue or log turn-ins of equipment, tools, parts, or supplies	30
S1525	Identify and report equipment or supply problems	30
D0486	Bench check AHRS LRUs or AHHS LRUs	30
G0841	Bench check digital AFCS LRUs	30

TABLE A3

Unmanned Aerial Vehicle (UAV) Job

TASKS		PERCENT MEMBERS PERFORMING (N=10)
N1325	Perform preflight, thruflight, or postflight inspections	100
N1299	Assist in aircraft weight and balance functions	100
N1298	Assist in aircraft engine removals or installations	100
N1321	Perform ground engine runs	100
N1311	Jack or level aircraft	100
N1345	Remove or install aircraft wheel and tire assemblies	100
N1332	Position or remove aircraft chocks	90
N1312	Launch or recover aircraft	90
N1320	Perform engine removal preparation procedures	90
N1305	Inspect aircraft landing gear systems	90
A0015	Perform safety wire procedures	90
N1355	Service aircraft tires	90
N1316	Participate as tow team member or supervisor	80
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	70
N1361	Static ground aircraft	70
N1359	Service engine oil systems	70
B0146	Perform operational checks of AOA systems	70
B0106	Inspect AOA systems	70
N1347	Remove or install landing gear components	70
N1336	Refuel or defuel aircraft using over-the-wing method	60
N1340	Remove or install aircraft doors or panels	60
N1331	Position powered or nonpowered Aerospace Ground Equipment (AGE)	60
N1364	Transport test equipment or units to or from flightline	50
N1342	Remove or install aircraft light lenses, light bulbs, or batteries	50
N1326	Perform supplemental inspections, such as acceptance, calendar, or time replacement item	50
N1314	Marshall aircraft	50
N1338	Remove or install aircraft brake assemblies	50
Q1470	Conduct OJT	50
N1337	Refuel or defuel aircraft using single-point method	40
B0140	Perform operational checks of airspeed indicating systems	40
N1319	Perform end-of-runway inspections	30
N1365	Wash aircraft	20

TABLE A4

Management Cluster

TASKS		PERCENT MEMBERS PERFORMING (N=209)
P1441	Inspect personnel for compliance with military standards	81
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	80
P1398	Counsel subordinates concerning personal matters	79
P1458	Supervise military personnel	78
P1401	Determine or establish work assignments or priorities	75
P1396	Conduct supervisory performance feedback sessions	74
P1431	Evaluate personnel for compliance with performance standards	72
P1442	Interpret policies, directives, or procedures for subordinates	71
P1461	Write performance reports or supervisory appraisals	70
P1462	Write recommendations for awards or decorations	70
P1393	Conduct self-inspections or self-assessments	68
P1405	Develop or establish work schedules	65
P1391	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	65
P1388	Assign personnel to work areas or duty positions	64
P1395	Conduct supervisory orientations for newly assigned personnel	63
P1392	Conduct safety inspections of equipment or facilities	62
P1432	Evaluate personnel for promotion, demotion, reclassification, or special awards	61
P1456	Schedule work assignments or priorities	60
P1419	Establish performance standards for subordinates	58
Q1485	Maintain training records or files	56
P1404	Develop or establish work methods or procedures	56
P1435	Evaluate work schedules	55
P1399	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	55
P1438	Initiate actions required due to substandard performance of personnel	55
Q1481	Evaluate progress of trainees	54
Q1475	Counsel trainees on training progress	54
P1454	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	51
Q1480	Evaluate personnel to determine training needs	51
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	50
Q1472	Determine training requirements	48
P1426	Evaluate job-related suggestions	46
P1434	Evaluate safety or security programs	45
P1424	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	45
Q1490	Schedule training	44
P1410	Direct training functions	43
S1525	Identify and report equipment or supply problems	43
P1389	Assign sponsors for newly assigned personnel	43
P1437	Indorse performance reports or supervisory appraisals	42

TABLE A5

Quality Assurance

TASKS		PERCENT MEMBERS PERFORMING (N=14)
B0123	Inspect pitot-static system lines, hoses, or fittings	100
F0745	Inspect flap position indicating system LRUs	100
B0096	Inspect airspeed indicating systems	100
B0097	Inspect airspeed indicators	100
C0332	Inspect engine tachometer indicating system LRUs	100
F0746	Inspect flap position indicating systems	93
B0098	Inspect altimeters	93
C0348	Inspect oil pressure indicating system LRUs	93
B0117	Inspect hydraulic pressure indicating system LRUs	93
C0321	Inspect engine fuel flow indicating system LRUs	93
P1441	Inspect personnel for compliance with military standards	86
A0010	Inspect test equipment	86
P1426	Evaluate job-related suggestions	86
B0091	Inspect air data computers	86
B0128	Inspect true airspeed indicating systems	86
B0129	Inspect true airspeed indicators	86
C0328	Inspect engine oil temperature indicating system LRUs	86
B0094	Inspect air temperature indicating systems	86
B0118	Inspect hydraulic pressure indicating systems	86
B0093	Inspect air temperature indicating system LRUs	86
P1392	Conduct safety inspections of equipment or facilities	79
R1515	Participate in TCTO meetings	79
J1074	Inspect digital INS LRUs	79
C0317	Inspect engine EGT indicating system LRUs	79
R1518	Review TO changes	79
A0008	Inspect aircraft shock mounts	79
B0133	Inspect VVIs	79
C0349	Inspect oil pressure indicating systems	79
C0322	Inspect engine fuel flow indicating systems	79
C0333	Inspect engine tachometer indicating systems	79
P1431	Evaluate personnel for compliance with performance standards	71
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	71
J1075	Inspect digital INSs	71
C0318	Inspect engine EGT indicating systems	71
P1429	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	71
F0743	Inspect elevator trim position indicating system LRUs	71
A0009	Inspect data buses	71
N1305	Inspect aircraft landing gear systems	71
N1304	Inspect aircraft hydraulic systems	71
C0329	Inspect engine oil temperature indicating systems	71
B0095	Inspect aircraft clocks	71