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STRUCTURAL

AFSC 3E3X1

OSSN 2383

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OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
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PREFACE

This report presents the results of an Air Force Occupational Survey of AFSC 3E3X1, Structural career ladder. Authority to conduct occupational surveys is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Functional Manager, the technical training location, all major using commands, and other interested operations and training officials.

First Lieutenant Todd Osgood developed the survey instrument. Dr. Burke Burright analyzed the data and wrote the final report. Ms. Jeanie Guesman provided computer programming support and Ms. Dolores Navarro provided administrative support. Lieutenant Colonel Roger W. Barnes, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron, reviewed and approved this report for release.

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

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SUMMARY OF RESULTS

1. **Survey Coverage:** The Structural career ladder, AFSC 3E3X1, was surveyed to gather data needed to evaluate the effectiveness of training; to ensure members are receiving training for the right type of equipment; to validate training requirements; and to verify changes within career ladder, operational training, and career development course materials. Survey results are based on 1019 responses from Active Duty (AD) (679), Air National Guard (ANG) (209), and Air Force Reserve Component (AFRC) (131) personnel. Skill levels and paygrades were well represented.
2. **Career Ladder Structure:** Structure analysis identified two cluster of jobs and 11 independent jobs: Structural Cluster, Interior Doors and Walls Cluster, Concrete and Framing Job, Sheet Metal Job, Door and Lock Installation Job, Cabinetmaking Job, Masonry Job, Welding Job, Locksmith Job, Red Horse Job, PRIME BEEF job, ANG and Reserve Readiness Job, and Supervisor Job.
3. **Career Ladder Progression:** Initial 3-skill level training for AFSC 3E3X1 personnel is currently provided at the Naval Construction Battalion Center, Gulf Port, Mississippi. Members entering the career field initially take a 52-day, P-rated joint Air Force-Navy course. After completing this joint course, members go on to a 35-day Air-Force specific course, Structural Apprentice (J5ABN3E331).

The AD, ANG, and AFRC personnel exhibit somewhat different career progression patterns. The AD 3E331's do a broad range of tasks. When they advance to the 5-skill-level, active duty members become somewhat more specialized and begin to take on a few supervisory activities. Active Duty members at the 7-skill level are first-line supervisors, while AD members at the 9-skill level focus on management activities. In contrast to their AD counterparts, 7-skill level members in the ANG remain focused on "hands-on" tasks. A relatively large number of 9-skill level members sets the career progression pattern in the AR apart from the patterns found in the AD and the ANG. They focus on mobility and contingency activities and PRIME BEEF activities as well as on supervisory tasks.
4. **Training Analysis:** STS and POI analysis revealed documents that are generally well supported by survey respondents. However, the POI analysis identified several tasks that involved shield metal arc welding that deserve to be considered for inclusion in the Air Force Structural Apprentice course. It also identified three performance-coded elements in the current course that could not be supported by data from the JI. Training and functional personnel should review these items when considering possible changes to the current course.
5. **Job Satisfaction Analysis:** Overall, AFSC 3E3X1 respondents from the three components appear satisfied with their jobs. The striking exception is the reenlistment intentions of AD members in their second enlistment, which has fallen off sharply during the last 4 years.
6. **Implications:** Training documents for the AFSC are in good shape, but there are some tasks involving shield metal arc welding that should be reviewed by training personnel for inclusion in the Structural Apprentice Course.

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**OCCUPATIONAL SURVEY REPORT (OSR)
STRUCTURAL CAREER LADDER
(AFSC 3E3X1)**

INTRODUCTION

This is a report on an occupational survey of the Structural career ladder, conducted by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS). This survey data will ensure current data for use in evaluating the effectiveness of training and to verify changes within the career ladder and technical training materials. AFSC 3E3X1 personnel were last surveyed in between December, 1994, and April, 1995.

According to the specialty descriptions in the *AFSC 3E3X1 Career Field Education & Training Plan*, Structural personnel manage, construct, repair, and modify structural systems and wooden, masonry, metal, and concrete buildings. In addition, they fabricate and repair components of buildings, utility systems, and real property equipment.

Initial 3-skill level training for AFSC 3E3X1 personnel is currently provided at the Naval Construction Battalion Center, Gulf Port, Mississippi. Members entering the career field initially take a 52-day, P-rated joint Air Force-Navy course. Its focus is on masonry and construction. After completing this joint course, members go on to a 35-day Air-Force specific course, Structural Apprentice (J5ABN3E331). It focuses on sheet metal work and welding. Upon completion of these courses, personnel are awarded the 3-skill level.

Entry into AFSC 3E3X1 requires an Armed Forces Vocational Aptitude Battery score of Mechanical 44 and the Strength and Stamina requirement of "K" (lifting weight of 70 lbs.).

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SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI), OSSN 2383, dated May 1999. A tentative task list was prepared after reviewing pertinent career ladder publications, directives, and tasks from previous applicable OSRs. The preliminary task list was refined and validated through personal interviews with 19 subject-matter experts (SMEs) at the following locations:

<u>BASE</u>	<u>REASON FOR VISIT</u>
Naval Construction Battalion Center, MS	Technical Training School
Hurlburt Field, FL	Red Horse Squadron
Holloman AFB, NM	Capture bare base tasks

Others contacted included the Air Force, ANG, and AFRC career field managers, major command (MAJCOM) functional manager, and the career field training manager. The resulting JI contained a comprehensive listing of 902 tasks grouped under 26 duty headings, with a background section requesting such information as job title, functional area, organizational level, work schedule, equipment or systems used or operated, and forms. Also requested was information on grade, time in present job, Total Active Federal Military Service (TAFMS), time in career field, and job satisfaction indicators.

Survey Administration

From May - Sep 1999, base training offices at operational bases worldwide, and AG and AR units, administered the inventory to all eligible DAFSC 3E3X1 personnel. Members eligible for the survey consisted of the total assigned 3-, 5-, 7-, and 9-/CEM skill level population, excluding the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring within the time the inventories were administered to the field; and (4) personnel in their jobs less than 6 weeks. Participants were selected from a computer-generated mailing list obtained from personnel data tapes maintained by 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 tasks performed, each individual rated the tasks checked on a 9-point scale

showing relative time spent on that task, compared to other tasks performed. The ratings ranged from 1 (very small amount time spent) to 9 (very large amount time spent).

To determine relative time spent for each task, all of the incumbent's ratings are assumed to account for 100 percent of 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 spent on each task.

Survey Sample

Selection criteria were utilized to ensure the survey sample reflected an accurate representation across MAJCOMs and paygrades. Table 1 reflects distribution in the survey sample by MAJCOM. Table 2 reflects the survey distribution by paygrade groups. As shown by both tables, the survey sample accurately reflects the overall populations of each career ladder.

TABLE 1

MAJCOM REPRESENTATION OF TOTAL SAMPLE

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT OF SAMPLE</u>
AMC	6	9
ACC	16	21
USAFE	4	4
PACAF	7	11
AETC	7	9
AFMC	6	6
ANG	31	21
AFRC	16	13
OTHER	7	6
TOTAL ASSIGNED		3,088
TOTAL ELIGIBLE		2,791
TOTAL IN SAMPLE		1,019
PERCENT OF ASSIGNED IN SAMPLE		33%
PERCENT OF ELIGIBLE IN SAMPLE		37%

* OTHER INCLUDES: AFSPC, AIA, USAFA, AFSOC, AFDW, ELM

** As of May 1999

TABLE 2
PAYGRADE DISTRIBUTION OF
AD SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT OF SAMPLE</u>
E-1/E-3	21	20
E-4	25	24
E-5	30	33
E-6	14	15
E-7	8	6
E-8	2	2

* As of May 1999

TABLE 2 (CONTINUED)
PAYGRADE DISTRIBUTION OF
ANG SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT OF SAMPLE</u>
E-1/E-3	5	4
E-4	23	24
E-5	35	32
E-6	20	21
E-7	16	19
E-8	1	0

* As of May 1999

TABLE 2 (CONTINUED)

PAYGRADE DISTRIBUTION OF
AFRC SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT OF SAMPLE</u>
E2/E3	2	1
E-4	12	10
E-5	31	25
E-6	29	36
E-7	18	18
E-8	7	8
E-9	1	2

* As of May 1999

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 3E3X1 personnel (generally E-6 or E-7 craftsmen) also completed a second disk for either training emphasis (TE) or task difficulty (TD). The TE and TD disks were processed separately from the JIs. This information is used in a number of analyses discussed in more detail within this report.

Training Emphasis (TE): Training emphasis is defined as the degree of emphasis that should be placed on each task for structured training of first-enlistment personnel. Structured training is defined as resident technical schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. Forty-six experienced AFSC 3E3X1 Active Duty (AD) Noncommissioned Officers (NCOs) rated the tasks in the inventory on a 9-point scale ranging from 1 (extremely low) to 9 (extremely high training emphasis). Overall agreement among these raters was satisfactory. The average TE rating for this study is 3.03, with a standard deviation of 1.64. Tasks with a TE rating of 4.67 or greater are considered important to train new AFSC 3E3X1 personnel to perform.

Task Difficulty (TD): Task difficulty is defined as the amount of time needed to learn to perform each task satisfactorily. Forty-three experienced AFSC 3E3X1 NCOs rated the difficulty of the tasks in the inventory using a 9-point scale ranging from 1 (extremely low difficulty) to 9 (extremely high difficulty). Interrater agreement among these respondents was extremely high. TD ratings are normally adjusted so tasks of average difficulty have a value of

5.00 and a standard deviation of 1.00. Any task with a difficulty of 6.00 or greater 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 Air Force Specialty entry-level jobs.

CAREER LADDER STRUCTURE

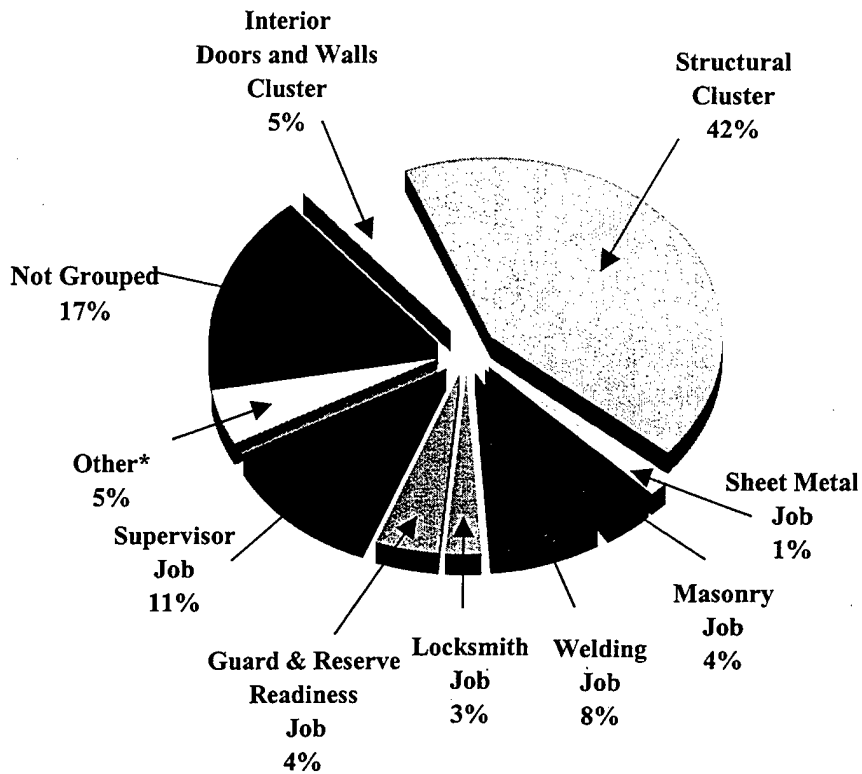
The first step in the analysis process is to identify the structure of career ladders in terms of the jobs performed by the respondents. The Comprehensive Occupational Data Analysis Program (CODAP) assists by creating an individual job description for each respondent based on the tasks performed and 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 job structure resulting from this grouping process (the various jobs within the career ladder) can be used to evaluate the changes that have occurred in the AFSCs over the past 5 years. The above terminology will be used in the discussion of the AFSC 3E3X1 career ladder.

Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, 2 clusters of jobs and 11 independent jobs were identified within the Structural career ladder. Figure 1 illustrates the jobs performed by AFSC 3E3X1 personnel. All basic duties revolve around the general structural activities. Within the Interior Doors and Walls Cluster, there are three jobs distinguished by the time spent performing specific tasks. They are the Ceilings and Walls Job, the Doors and Windows Job, and the Interior Supervisor Job. These separate jobs are discussed in the cluster description. Two distinct jobs emerged within the general Structural Cluster. They are the Structural Framers Job and the Structural Supervisors Job. ANG and AFRC members do not perform all jobs.

IDENTIFIED JOB STRUCTURE AND PERCENTAGES OF TOTAL SURVEY SAMPLE



* "Other" includes Concrete and Framing Job, Door and Lock Installation Job, Cabinetmaking Job, Red Horse Job, and PRIME BEEF Job.

FIGURE 1

**AFSC 3E3X1
STRUCTURAL
JOB STRUCTURE**

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

- I. Structural Cluster (STG0 120, N= 429)
 - A. Structural Framers Job (STG 132, N = 429)
 - B. Structural Supervisors Job (STG 162, N = 53)

- II. Interior Doors and Walls Cluster (STG 101, N = 52)
 - A. Ceiling and Walls Job (STG 126, N = 7)
 - B. Doors and Windows Job (STG 152, N = 34)
 - C. Interior Supervisor Job (STG 211, N = 8)

- III. Concrete and Framing Job (STG 132, N = 10)

- IV. Sheet Metal Job (STG 122, N = 14)

- V. Door and Lock Installation Job (STG 167, N = 13)

- VI. Cabinetmaking Job (STG 143, N = 5)

- VII. Masonry Job (STG 134, N = 38)

- VIII. Welding Job (STG 051, N = 78)

- IX. Locksmith Job (STG 291, N = 27)

- X. Red Horse Job (STG 203, N = 7)

- XI. PRIME BEEF Job (STG 129, N = 9)

- XII. Guard and Reserve Readiness Job (STG 147, N = 45)

- XIII. Supervisor Job (STG 131, N = 115)

The respondents forming these groups account for 83 percent of the survey sample. The remaining 17 percent were performing tasks that did not group with any of the other defined jobs.

Group Descriptions

The following paragraphs contain brief descriptions of the two clusters and 11 jobs identified through the career ladder structure analysis. Appendix A lists representative tasks performed by identified clusters and jobs. Tables 3, 4, 5, and 6 display time spent on duties by the total sample, AD, ANG, and AFRC personnel respectively, while Tables 7 and 8 provide total sample and AD demographic information for each cluster and job discussed within this report. Table 9 provides this same demographic information for ANG groups, while Table 10 displays the same for AFRC groups.

When describing Time In Present Job, Time In Career Field (TICF), TAFMS in the group descriptions below, data for ANG and AFRC personnel are not reflected due to the manner in which these personnel accrue their time (different from AD personnel).

I. STRUCTURAL CLUSTER (STG120). The 429 members of the Structural Cluster represent the largest group (42 percent) in the survey sample. Their job is distinguished from others by their time being spread over a number of different duties and by their performing a very large numbers of tasks. They devote at least 1 percent of their time to 22 out of 26 duty areas and the largest fraction of their time devoted to any one duty area is 16 percent in Duty D. Performing a remarkable average of 358 tasks, the members in the Structural Cluster are truly jacks-of-all-trades.

STRUCTURAL CLUSTER			
	AD	ANG	AFRC
Number of members	263	102	64
Average number of tasks performed	338	392	380
Average time in present job	4.6 yrs.	N/A	N/A.
Average time in career field	7.6 yrs	N/A	N/A
Predominant paygrades	E-5	E-5	E-6

Two jobs were identified in this cluster: the Structural Framing Job and the Structural Supervisor Job. They will be discussed below.

Representative tasks for this job include:

- installing and replacing gypsum boards
- installing and replacing hollow or solid core doors
- repairing holes in gypsum boards
- drilling holes in metal
- installing and replacing trim molding
- lubricating power and nonpower handtools
- setting up arc welding equipment
- preparing metal for welding butt joints
- preparing metal for welding lap joints
- preparing metal edges for welding

Active Duty respondents in the Structural Cluster have a predominate paygrade of E-5. They also average 7.6 years of TAFMS. Component status indicates 263 members of the Structural Cluster are on AD, 102 members belong to ANG, and the remaining 64 members to AFRC. Fifty-five percent (236) of the members in this Cluster indicate having a 3E351 DAFSC, 21 percent (90) hold the 3E331 DAFSC, 23 percent (99) hold the 3E371 DAFSC, and the remaining 1 percent (4) hold the 3E391 DAFSC.

This cluster contains two jobs. The first, the Structural Framing Job, contains 6 members who spend 26 percent of their time constructing, framing, and maintaining buildings. Key tasks include inspecting exterior walls, constructing or installing trusses, repairing and replacing floors, inspecting floor joints, and constructing and installing common rafters.

The second job is the Structural Supervisor Job. Members in this job focus on management and supervisory activities (20 percent of their time) as well as installing and maintaining building finishings (18 percent). They differ from members of the Supervisor Job (to be discussed later in this report) in that they perform a much larger number of tasks; they average 222 tasks performed compared with an average of 72 tasks performed by members in the Supervisor Job. Examples of tasks performed include: determining and establishing work assignments, inspecting personnel for compliance with military standards, and conducting on-the-job training.

II. INTERIOR DOORS AND WALLS (STG101).

The 52 members of the Interior Doors and Walls Cluster represent the smaller of the two clusters identified in this report; this cluster represents 5 percent of the total sample. Their work is distinguished from other groups by

their heavy focus on installing and maintaining building finishings (Duty D); they devote 43 percent of their time to this one duty area. Three jobs are identified in this cluster; Ceiling and Walls Job, Doors and Windows Job, and Interior Supervisor Job. These jobs will be discussed below. Members in this cluster focus on a fairly narrow range of tasks: AD members perform an average of 76 tasks, while their ANG and AFRC counterparts perform an average of 61 and 83 tasks respectively.

Interior Doors & Walls Cluster			
	AD	ANG	AFRC
Number of members	46	4	2
Average number of tasks performed	76	61	83
Average time in present job yrs	3.6	N/A	N/A
Average time in career field yrs	6.3	N/A	N/A
Predominant paygrades	E-4	E-5	E-4

Representative tasks for this cluster include:

- adjust door closers
- install or replace door closers
- install or replace door hinges
- repair holes in gypsum boards
- caulk windows, sinks, or bathtubs
- install or replace hollow or solid-core doors
- install or replace doorjambs or stops

- install or replace thresholds

Active Duty respondents in this cluster are predominately in paygrade E-4. They also average 6.3 years TAFMS. Component status indicates 88 percent of the members of the Interior Doors and Walls Cluster are on AD, with 8 percent belonging to the ANG, and the remaining 4 percent belonging to the AFRC. Fifty-two percent of the members in this group indicate that they have a DAFSC of 3C351. Forty-one percent hold DAFSC 3E331 while 7 percent hold DAFSC 3E371.

This cluster contains three jobs. The first, the Ceilings and Walls Job contains 7 members. As the name implies, they focus on tasks involving ceilings and walls. Key tasks include applying acoustical ceiling textures, installing or replacing suspended ceilings, installing or replacing wall or ceiling acoustical materials, and taping or floating gypsum board surfaces.

The second is the Doors and Windows Job. As one might expect, the 34 members in this job focus on tasks that involve doors and windows. Tasks that set this job apart include the following: installing and replacing door closers, adjusting door closers, installing and replacing door hinges, replacing glass in windows, and installing and replacing weather stripping

The eight members in the Interior Supervisor Job perform first-line supervisory tasks in addition to the kinds of tasks performed by other members of this cluster. Among the jobs in this cluster, these members have the highest average number of tasks performed: 87. Tasks that set this job apart include determining and establishing work assignments and priorities, maintaining training records and files, conducting on-the-job training, writing and endorsing military performance reports, and counseling subordinates concerning personal matters.

III. CONCRETE AND FRAMING JOB (STG 132). The majority of members (6 out of 10) comprising this job belong to ANG or the AFRC; only 4 are AD. Incumbents in this job represent less than one percent of the sample survey. They indicate spending 34 percent of their time performing tasks pertaining to constructing, framing, and maintaining buildings (Duty C); 19 percent performing tasks pertaining to constructing and maintaining concrete structures (Duty B); and 16 percent performing tasks pertaining to preparing for concrete structures (Duty A).

CONCRETE AND FRAMING JOB			
	AD	ANG	AFRC
Number of members	4	5	1
Average number of tasks performed	91	93	247
Average time in present job	2 yrs	NA	NA
Average time in career field	2yrs	NA	NA
Predominant paygrade	E-3/ E-4	E-5	E-5

AD personnel in the Concrete and Framing Job indicate they perform an average of 91 tasks, while their ANG and AFRC counterparts perform an average of 93 and 247 respectively. AD members have less than 2 years TAFMS and are the junior members in the survey sample.

Representative tasks for this job include:

- cutting reinforcing steel

- floating concrete
- removing wooden and metal forms
- drilling holes in concrete
- placing concrete in forms
- constructing and installing exterior walls
- sawing concrete
- constructing and installing ceiling joists
- constructing and installing built-up joists
- finishing concrete with power trowels
- constructing and installing bridging

IV. SHEET METAL JOB (STG122). The fourteen members in the Sheet Metal Job are all AD. They represent slightly more than one percent of the total survey sample. Members spend 25 percent of their time performing tasks that involve installing and maintaining building finishings (Duty D) and 12 percent performing tasks that involve fabricating sheet metal parts and assemblies (Duty O). They average performing 129 tasks and a majority of the members have a paygrade of E-5.

SHEET METAL JOB	
	AD
Number of members	14
Average number of tasks performed	129
Average time in present job	3.2 yrs
Average time in career field	7 yrs
Predominant paygrade	E-5

Representative tasks for this job include:

- cutting sheet metal for parts using handtools.
- installing ducts
- sealing sheet metal parts using lead tape, aluminum tape, or duct tape
- installing and replacing wall and ceiling acoustical materials
- forming sheet metal parts using handtools
- fabricating Pittsburgh-lock seams
- cutting sheet metal for parts using handtools
- fabricating ducts
- fabricating S and drive slips

V. DOOR AND LOCK INSTALLATION JOB (STG167). The 13 members in the Door and Lock Installation Job are all AD; they represent about 1 percent of the sample. They spend 21 percent of their time installing and maintaining building finishings (Duty D) and 20 percent installing and maintaining locking devices (Duty J). They average performing 159 tasks and a majority of the members have a paygrade of E-3. Members in this job are assigned about equally to carpentry shops and locksmith shops.

DOOR AND LOCK INSTALLATION JOB	
	AD
Number of members	13
Average number of tasks performed	159
Average time in present job	4.6 yrs
Average time in career field	6.1 yrs
Predominant paygrade	E-3

Representative tasks performed by members of this job are:

- adjusting door closers
- installing cylinder locking devices
- installing and maintaining panic hardware
- installing mortise locking devices
- maintaining mortise locking devices
- duplicating keys with code key machines
- duplicating keys with key duplicating machines
- installing and maintaining mechanical and cipher locks
- implementing master key systems

Sixty-two percent of the personnel in this job hold a DAFSC of 3E331, and the remaining 38 percent hold DAFSC 3E351.

VI. CABINETMAKING JOB (STG143).

The Cabinetmaking Job has the smallest number of members (5) of any job identified in the study. Two members are AD, two are ANG, and one is AFRC. Members in this job indicate they spend almost 50 percent of their time performing tasks that pertain to constructing, installing and maintaining building finishings (Duties D and F). The 5 members in this job perform an average of 89 tasks. Representative tasks performed by members of this job include:

CABINETMAKING JOB			
	AD	ANG	AFRC
Number of members	2	2	1
Average number of tasks performed	93	95	71
Average time in present job	1 yr	N/A	N/A
Average time in career field	6.4 yrs	N/A	N/A
Predominant paygrade	E-5	E-5	E-5

- constructing cabinets
- installing and replacing cabinets
- constructing picture frames
- installing and replacing storage bins
- installing bookcases
- applying interior or exterior protective coatings to exposed wood surfaces
- installing and replacing wall and corner shelves
- constructing tables
- constructing and installing floor joists, other than build-up joists

VII. MASONRY JOB (STG170).

The 38 members of the Masonry Job indicate they spend 31 percent of their time on tasks related to installing and maintaining building finishings (Duty D). They devote another 10 percent of their time to tasks in Duty E, setting and replacing ceramic, mosaic, and quarry tile. The preponderance of members in this job (35 out of 38) are AD. AD members have a predominant paygrade of E-4 and have an average of just over 6 years TAFMS.

MASONRY JOB			
	AD	ANG	AFRC
Number of members	35	2	1
Average number of tasks performed	154	184	98
Average time in present job	3.0 yrs	N/A	N/A
Average time in career field	5.3 yrs	N/A	N/A
Predominant paygrade	E-4	E-5/E-7	E-8

Representative tasks performed by members of this job are:

- removing and replacing broken ceramic, mosaic, and quarry tiles
- cutting and shaping ceramic, mosaic, and quarry tile
- applying grout to ceramic, mosaic, and quarry tiles
- setting ceramic tiles
- replacing glass in windows
- applying thin sets to masonry
- cutting glass
- repairing grout
- cutting and shaping ceramic, mosaic, and quarry tiles with power equipment

Fifty-one percent of the AD personnel in this group hold a DAFSC of 3E331, 43 percent hold DAFSC 3E351, and the remaining 6 percent hold DAFSC 3E371.

VIII. WELDING JOB (STG051). The Welding Job represents the second largest independent job after the Supervisor Job; it represents 8 percent of the sample. The 78 members in the Welding Job indicate spending 27 percent of their time performing soldering, heat treating, forging, and welding activities (Duty Q) and 10 percent of their time preparing and setting up welding, brazing, and soldering projects (Duty P). They spend an additional 9 percent of their time fabricating sheet metal parts and assemblies (Duty O). Eighty percent of the incumbents are AD, with 14 percent being in the ANG and 6 percent being in the AR. Active Duty personnel have a predominant paygrade of E-5 and average almost 9 years in the career field.

WELDING JOB			
	AD	ANG	AFRC
Number of members	62	11	5
Average number of tasks performed	215	252	167
Average time in present job	4.5 yrs	N/A	N/A
Average time in career field	8.9 yrs	N/A	N/A
Predominant paygrade	E-5	E-4	E-6

Representative tasks performed by members of this job are:

- setting up for flat position welding
- setting up arc welding equipment

- welding flat butt joints using shield metal arc weld
- cutting sheet metal for parts using shop equipment
- welding flat lap joints using shield metal arc weld
- setting up for horizontal position welding
- welding flat tee joints using shield metal arc weld
- setting up for TIG welding
- preparing metal for welding lap joints
- welding flat lap joints using TIG

Active Duty DAFSC 3E351 is the predominant skill-level for this job. Two thirds (66 percent) indicate holding the DAFSC 3E351, while another 28 percent hold DAFSC 3E331. The remaining 6 percent are holding DAFSC 3E371.

VIII. LOCKSMITH JOB (STG0291). The twenty-seven members in the Locksmith Job are all AD; they represent less than 3 percent of the sample, and are highly focused on their specialty. Members in the Locksmith Job devote 56 percent of their time to installing and maintaining locking devices (Duty J). On average, they perform only 82 tasks. Ninety-six percent indicate their primary work area is the locksmith shop. They average 8.5 years in the career field and their predominant paygrade is E-5.

LOCKSMITH JOB	
	AD
Number of members	27
Average number of tasks performed	82
Average time in present job	3.0 yrs
Average time in career field	8.5 yrs
Predominant paygrade	E-5

Representative tasks performed by members of this job include:

- duplicating keys with key duplicating machines
- repining interchangeable core locks
- duplicating keys with code key machines
- installing cylinder locking devices
- master keying interchangeable core locks
- repining regular pin locks
- master keying regular pin locks
- deciphering lock combinations
- removing and replacing padlock locking cylinders, other than high-security

X. RED HORSE JOB (STG203). The next three jobs have a strong focus on mobility and readiness. Red Horse Squadrons provide the Air Force with a mobile capability for construction. The seven members in this job focus on coordinating and supervising Red Horse activities; they represent less than 1 percent of the sample. Their jobs blend duties in three areas:

RED HORSE JOB		
	AD	AFRC
Number of members	6	1
Average number of tasks performed	163	202
Average time in present job	4.3 yrs	N/A
Average time in career field	14.7 yrs	N/A
Predominant paygrade	E-6	E-5

preparing for, constructing, and maintaining concrete structures (26 percent of their time) (Duties A & B); performing management and supervisory activities (23 percent) (Duty W); and performing mobility and contingency activities (9 percent) (Duty V). Five members (71percent) indicate that Red Horse is their primary work area. Active Duty personnel have a predominant paygrade of E-6 and average over 14.7 TAFMS.

Representative tasks performed by members of this job include:

- packing and palletizing mobility and contingency equipment for shipment or movement.
- applying oil to forms prior to placement of concrete
- placing reinforcing steel in columns, forms, or walls
- installing snap or wire ties
- preparing equipment for deployment
- consolidating concrete
- performing pallet buildup activities
- cleaning wood and metal forms
- participating in convoy activities

XI. PRIME BEEF JOB (STG129). The PRIME BEEF Job is the second of the three jobs with a strong focus on mobility and readiness. PRIME BEEF teams have the mission of maintaining operational runways and facilities under combat conditions. The nine members in this job focus on performing PRIME BEEF activities (28 percent of their time) of Duty U and performing mobility and contingency activities (24 percent) of Duty V. They also devote 13 percent of their time to management and supervisory activities. Taking all members in the PRIME BEEF Job together, they perform an average of only 71 tasks. Active Duty members average almost 18 years TAFMS.

PRIME BEEF JOB			
	AD	ANG	AFRC
Number of members	2	3	4
Average number of tasks performed	92	72	61
Average time in present job	2.6 yrs	N/A	N/A
Average time in career field	17.6 yrs	N/A	N/A
Predominant paygrade	E-6 & E-7	E-5	E-5

Representative tasks performed by members of this job include:

- performing self-aid and buddy care (SABC) techniques
- donning and doffing chemical warfare agent decontamination
- performing chemical warfare agent decontamination procedures
- inspecting mobility bags and kits
- tearing down, inspecting, cleaning, and reassembling weapons, such as M-16 rifles
- identifying, marking, and reporting suspected unexploded ordinance
- assessing base facility damage
- performing bomb damage repairs, other than crater repairs
- installing folded fiberglass mats (FFMs)
- inspecting and reporting base damages

XII. GUARD AND RESERVE READINESS JOB (STG 147).

This job is the last of the three jobs having a strong focus on mobility and readiness; its members constitute more than 4 percent of the sample. Members in the ANG and the AFRC dominate this job; they constitute almost ninety percent of the individuals in his job. Their jobs blend regular building activities with PRIME BEEF activities. Activities involving constructing, framing, and maintaining buildings (Duty C) takes 15 percent of their time while activities involving installing and maintaining building finishings (Duty D) takes 20 percent of their activities. PRIME BEEF activities (Duty U) take 10 percent of their time.

GUARD AND RESERVE READINESS JOB			
	AD	AG	AR
Number of members	5	26	14
Average number of tasks performed	140	141	151
Average time in present job	3.9 yrs	N/A	N/A
Average time in career field	4.7 yrs	N/A	N/A
Predominant paygrade	E-4	E-5	E-6

Representative tasks performed by members in this job include:

- tearing down, inspecting, cleaning, and reassembling weapons
- installing and replacing suspended ceilings
- assembling AM-2 matting
- taping and floating gypsum board surfaces
- constructing and installing interior walls
- installing folded fiberglass mats (FFMs)
- inspecting mobility bags and kits
- placing concrete in forms
- participating in convoy exercises

XI. SUPERVISOR JOB
(STG 131).

The 115 members of the Supervisor Job represent 11 percent of the survey sample; they are the senior group in the sample. The AD personnel in this job average just over 17 years TAFMS. Supervisor Job AD members have a predominate paygrade of E-6 while ANG personnel have a predominant paygrade of E-7. The AFRC members are as likely to be E-8's as E-7's.

SUPERVISOR JOB			
	AD	ANG	AFRC
Number of members	90	14	11
Average number of tasks performed	72	55	87
Average time in present job	3.8 yrs	N/A	N/A
Average time in career field	15.4 yrs	N/A	N/A
Predominant paygrade	E-6	E-7	E-7 & E-8

Incumbents in the Supervisor Job are highly focused on a narrow range of tasks. They spend 56 percent of their time performing tasks relating to the management and supervisory functions of Duty W and another 13 percent of their time performing training activities of Duty X. On average, they perform only 72 tasks, which includes both supervising personnel and performing higher level supervisory functions.

Above we identified three other jobs that combined significant management and supervisory tasks with "hands-on" tasks. They are the Structural Supervisor Job, Interior Supervisor Job, and the Red Horse Job. The members in these three jobs perform, on average, a much larger number of tasks than do the members in the Supervisor Job. Breaking out these three clusters of members into their own jobs has resulted in only those members doing a relatively small number of strictly supervisory tasks falling within Supervisor Job.

Representative tasks performed by members of this job include:

- determining and establishing work assignments or priorities
- inspecting personnel for compliance with military standards
- evaluating personnel for compliance with performance standards
- writing recommendations for awards or decorations
- developing and establishing work schedules
- interpreting policies, directives, or procedures for subordinates
- conducting general meetings, such as staff meetings, briefings, conferences, or workshops
- establishing performance standards for subordinates
- conducting supervisory orientations for newly assigned personnel
- initiating actions required due to substandard performance

TABLE 3

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
(TOTAL SAMPLE)

DUTIES	Structural Cluster (ST 120) (N= 429)	Interior Doors and Walls Cluster (ST 101) (N= 52)	Concrete and Framing Job (ST 132) (N= 10)	Sheet Metal Job (ST 122) (N= 14)	Door and Lock Installation Job (ST 167) (N= 13)
A Preparing for Concrete Structures	4	*	16	2	1
B Constructing or Maintaining Concrete Structures	4	3	19	4	3
C Constructing, Framing, or Maintaining Buildings	11	7	34	8	4
D Install or Maintaining Building Finishings	16	43	13	25	21
E Setting or Replacing Ceramic, Mosaic, or Quarry Tile	4	4	3	*	1
F Constructing or Maintaining Building Furnishings	3	3	*	1	3
G Preparing Mortar, Concrete, Stucco, or Plaster	2	1	2	2	1
H Construct or Maintaining Masonry Structures	3	*	*	2	*
I Maintaining Shop Facilities, Handtools, or Power Equipment	6	*	*	6	9
J Installing or Maintaining Locking Devices	2	5	*	2	20
K Maintaining, Assembling, or Installing Metal Components or Structures	5	5	*	9	6
L Maintaining Lifts, Doors, Gates, or Hoists	3	1	*	*	3
M Maintaining Kitchen Equipment	*	*	*	*	*
N Performing Miscellaneous CE Support Activities	*	*	1	*	*
O Fabricating Sheet Metal Parts and Assemblies	3	2	2	12	7
P Preparing and Setting up Welding, Brazing, or Soldering Projects	3	2	*	5	5
Q Performing Soldering, Heat Treating, Forging, or Welding Activities	8	2	*	6	6
R Constructing or Maintaining Roofing Systems	3	2	*	4	*
S Applying or Maintaining Plaster or Stucco to Surfaces	1	*	*	*	*
T Maintaining Missile Facilities	*	*	*	*	*
U Performing Prime Base Engineer Emergency Force (BEEF) Activities	5	3	3	1	2
V Performing Mobility and Contingency Activities	4	2	*	*	2
W Performing Management and Supervisory Activities	6	6	*	3	2
X Performing Training Activities	2	2	*	*	*
Y Performing General Administrative and Technical Order (TO) System Activities	*	*	*	*	*
Z Performing General Supply and Equipment Activities	1	*	*	*	1

* less than 1 percent

TABLE 3 (CONTINUED)
 RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
 (TOTAL SAMPLE)

DUTIES	Cabinet- making Job (ST 143) (N=5)	Masonry Job (ST 134) (N=38)	Welding Job (GP 051) (N=78)	Locksmith Job (ST 291) (N=27)
A Preparing for Concrete Structures	3	3	2	*
B Constructing or Maintaining Concrete Structures	4	6	2	*
C Constructing, Framing, or Maintaining Buildings	16	8	3	1
D Install or Maintaining Building Finishes	29	31	8	6
E Setting or Replacing Ceramic, Mosaic, or Quarry Tile	2	10	1	*
F Constructing or Maintaining Building Furnishings	21	4	*	*
G Preparing Mortar, Concrete, Stucco, or Plaster	1	4	*	*
H Construct or Maintaining Masonry Structures	*	4	*	*
I Maintaining Shop Facilities, Handtools, or Power Equipment	9	5	9	6
J Installing or Maintaining Locking Devices	1	3	*	56
K Maintaining, Assembling, or Installing Metal Components or Structures	3	4	7	1
L Maintaining Lifts, Doors, Gates, or Hoists	*	1	3	*
M Maintaining Kitchen Equipment	*	*	*	*
N Performing Miscellaneous CE Support Activities	*	*	*	*
O Fabricating Sheet Metal Parts and Assemblies	*	1	8	*
P Preparing and Setting up Welding, Brazing, or Soldering Projects	*	*	10	*
Q Performing Soldering, Heat Treating, Forging, or Welding Activities	*	*	27	*
R Constructing or Maintaining Roofing Systems	2	3	2	*
S Applying or Maintaining Plaster or Stucco to Surfaces	*	2	*	*
T Maintaining Missile Facilities	*	*	*	*
U Performing Prime Base Engineer Emergency Force (BEEF) Activities	1	2	3	5
V Performing Mobility and Contingency Activities	3	2	3	4
W Performing Management and Supervisory Activities	*	1	4	10
X Performing Training Activities	2	*	2	3
Y Performing General Administrative and Technical Order (TO) System Activities	*	*	*	*
Z Performing General Supply and Equipment Activities	*	*	2	2

* less than 1 percent

TABLE 3 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
(TOTAL SAMPLE)

DUTIES	Red Horse Job (ST 203) (N=7)	PRIME BEEF Job (ST 129) (N=9)	Guard and Reserve Readiness Job (ST 147) (N=45)	Supervisor Job (ST 131) (N= 115)
A	15	2	8	*
B	11	4	8	*
C	6	4	15	*
D	6	11	20	1
E	2	*	3	*
F	2	2	3	*
G	2	*	3	*
H	5	*	2	*
I	5	2	5	2
J	*	*	*	*
K	1	1	2	*
L	*	*	*	*
M	*	*	*	*
N	*	*	*	*
O	1	1	1	*
P	*	*	*	*
Q	1	*	2	*
R	*	*	2	*
S	*	*	*	*
T	*	*	*	*
U	3	29	9	4
V	9	24	8	7
W	23	13	2	56
X	5	2	2	13
Y	*	2	*	5
Z	2	2	2	6

* less than 1 percent

TABLE 4

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
(AD)

DUTIES	Structural Cluster (ST 120) (N=263)	Interior		Concrete and Framing Job (ST 132) (N=4)	Sheet Metal Job (ST 122) (N=14)	Door and Lock Installation Job (ST 167) (N=13)
		Doors and Walls Cluster (ST 101) (N=46)	Walls Cluster (ST 101) (N=46)			
A	3	*	*	20	2	1
B	4	3	3	22	4	3
C	8	7	7	40	8	4
D	17	43	43	5	25	21
E	4	4	4	4	*	1
F	3	2	2	*	1	3
G	2	*	*	2	2	1
H	3	1	1	*	2	*
I	6	5	5	*	6	9
J	3	5	5	*	2	20
K	5	5	5	*	9	6
L	5	1	1	*	*	3
M	*	*	*	*	*	*
N	*	*	*	*	*	*
O	4	2	2	*	12	7
P	*	2	2	*	5	5
Q	9	2	2	3	6	6
R	3	3	3	*	4	*
S	*	*	*	*	*	*
T	*	*	*	*	*	*
U	4	2	2	*	1	1
V	3	3	3	*	*	2
W	6	6	6	*	3	2
X	2	2	2	*	*	*
Y	*	*	*	*	*	*
Z	2	*	*	*	*	1

* less than 1 percent

TABLE 4 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
(AD)

DUTIES	Cabinet- making Job (ST 143) (N= 2)	Masonry Job (ST 134) (N= 35)	Welding Job (GP 051) (N=62)	Locksmith Job (ST 291) (N= 27)
A Preparing for Concrete Structures	3	3	2	*
B Constructing or Maintaining Concrete Structures	2	6	2	*
C Constructing, Framing, or Maintaining Buildings	17	8	2.	1
D Install or Maintaining Building Finishings	36	32	8	6
E Setting or Replacing Ceramic, Mosaic, or Quarry Tile	2	10	*	*
F Constructing or Maintaining Building Furnishings	16	4	2	*
G Preparing Mortar, Concrete, Stucco, or Plaster	*	4	*	*
H Construct or Maintaining Masonry Structures	1	4	*	*
I Maintaining Shop Facilities, Handtools, or Power Equipment	12	5	9	6
J Installing or Maintaining Locking Devices	2	3	1	55
K Maintaining, Assembling, or Installing Metal Components or Structures	2	4	8	1
L Maintaining Lifts, Doors, Gates, or Hoists	*	1	4	*
M Maintaining Kitchen Equipment	*	*	*	*
N Performing Miscellaneous CE Support Activities	*	*	*	*
O Fabricating Sheet Metal Parts and Assemblies	*	2	9	*
P Preparing and Setting up Welding, Brazing, or Soldering Projects	*	*	10	*
Q Performing Soldering, Heat Treating, Forging, or Welding Activities	*	*	26	*
R Constructing or Maintaining Roofing Systems	3	3	2	*
S Applying or Maintaining Plaster or Stucco to Surfaces	*	2	*	*
T Maintaining Missile Facilities.	*	*	*	*
U Performing Prime Base Engineer Emergency Force (BEEF) Activities	1	2	2	5
V Performing Mobility and Contingency Activities	*	2	2	4
W Performing Management and Supervisory Activities	*	2	5	10
X Performing Training Activities	*	*	3	3
Y Performing General Administrative and Technical Order (TO) System Activities	*	*	*	*
Z Performing General Supply and Equipment Activities	*	*	1	2

* less than 1 percent

TABLE 4 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
(AD)

DUTIES	Red Horse Job (ST 203) (N=6)	PRIME BEEF Job (ST 129) (N=2)	Guard and Reserve Readiness Job (ST 147) (N=5)	Supervisor Job (ST 131) (N=90)
A Preparing for Concrete Structures	15	*	8	*
B Constructing or Maintaining Concrete Structures	12	*	8	*
C Constructing, Framing, or Maintaining Buildings	4	1	14	*
D Install or Maintaining Building Finishes	6	*	23	*
E Setting or Replacing Ceramic, Mosaic, or Quarry Tile	2	*	6	*
F Constructing or Maintaining Building Furnishings	2	*	6	*
G Preparing Mortar, Concrete, Stucco, or Plaster	2	*	5	*
H Construct or Maintaining Masonry Structures	5	*	5	*
I Maintaining Shop Facilities, Handtools, or Power Equipment	5	*	5	3
J Installing or Maintaining Locking Devices	*	*	*	*
K Maintaining, Assembling, or Installing Metal Components or Structures	1	*	2	*
L Maintaining Lifts, Doors, Gates, or Hoists	*	*	*	*
M Maintaining Kitchen Equipment	*	*	*	*
N Performing Miscellaneous CE Support Activities	*	*	*	*
O Fabricating Sheet Metal Parts and Assemblies	1	*	*	*
P Preparing and Setting up Welding, Brazing, or Soldering Projects	*	*	1	*
Q Performing Soldering, Heat Treating, Forging, or Welding Activities	1	*	1	*
R Constructing or Maintaining Roofing Systems	*	*	*	*
S Applying or Maintaining Plaster or Stucco to Surfaces	*	*	*	*
T Maintaining Missile Facilities	*	*	*	*
U Performing Prime Base Engineer Emergency Force (BEEF) Activities	2	35	3	2
V Performing Mobility and Contingency Activities	9	18	2	6
W Performing Management and Supervisory Activities	25	33	2	58
X Performing Training Activities	5	2	2	12
Y Performing General Administrative and Technical Order (TO) System Activities	*	9	*	6
Z Performing General Supply and Equipment Activities	2	1	*	7

* less than 1 percent

TABLE 5

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
(ANG)

DUTIES	Structural Cluster (ST 120) (N=102)	Interior		Concrete and Framing Job (ST 132) (N=5)	Cabinet-making Job (ST 143) (N=2)	Masonry Job (ST 134) (N=2)
		Doors and Walls Cluster (ST 101) (N=4)	Doors and Walls Cluster (ST 101) (N=4)			
A	5	*	*	14	5	6
B	5	4	4	17	7	8
C	15	3	3	30	19	9
D	15	48	48	20	22	27
E	4	4	4	2	3	10
F	3	4	4	*	23	5
G	2	3	3	3	3	4
H	3	*	*	*	*	2
I	5	4	4	*	8	3
J	2	4	4	*	*	6
K	4	2	2	1	3	3
L	2	*	*	*	*	*
M	*	*	*	*	*	*
N	*	*	*	*	*	*
O	2	2	2	*	*	*
P	2	*	*	2	*	*
Q	7	*	*	2	*	*
R	4	*	*	*	2	5
S	1	*	*	2	*	*
T	*	*	*	*	*	*
U	5	7	7	4	*	2
V	4	6	6	*	*	3
W	5	2	2	*	2	*
X	2	1	1	*	1	2
Y	*	*	*	*	*	*
Z	1	2	2	*	1	2

* less than 1 percent

TABLE 5 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
(ANG)

DUTIES	Welding Job (GP 051) (N=11)	PRIME BEEF Job (ST 129) (N= 3)	Guard and Reserve Readiness Job (ST 147) (N=26)	Supervisor Job (ST 131) (N=14)
A Preparing for Concrete Structures	3	3	8	*
B Constructing or Maintaining Concrete Structures	3	2	8	*
C Constructing, Framing, or Maintaining Buildings	7	3	14	2
D Install or Maintaining Building Finishes	7	21	20	*
E Setting or Replacing Ceramic, Mosaic, or Quarry Tile	2	*	1	*
F Constructing or Maintaining Building Furnishings	*	4	3	*
G Preparing Mortar, Concrete, Stucco, or Plaster	2	*	3	*
H Construct or Maintaining Masonry Structures	1	1	2	*
I Maintaining Shop Facilities, Handtools, or Power Equipment	7	3	5	*
J Installing or Maintaining Locking Devices		*	1	*
K Maintaining, Assembling, or Installing Metal Components or Structures	5	3	3	*
L Maintaining Lifts, Doors, Gates, or Hoists	*	*	*	*
M Maintaining Kitchen Equipment	*	*	*	*
N Performing Miscellaneous CE Support Activities	*	*	1	*
O Fabricating Sheet Metal Parts and Assemblies	7	*	*	*
P Preparing and Setting up Welding, Brazing, or Soldering Projects	11	*	1	*
Q Performing Soldering, Heat Treating, Forging, or Welding Activities	30	*	1	*
R Constructing or Maintaining Roofing Systems	2	*	3	*
S Applying or Maintaining Plaster or Stucco to Surfaces	*	*	*	*
T Maintaining Missile Facilities	*	*	*	*
U Performing Prime Base Engineer Emergency Force (BEEF) Activities	4	27	10	1
V Performing Mobility and Contingency Activities	5	25	8	10
W Performing Management and Supervisory Activities	1	3	2	56
X Performing Training Activities	*	*	1	20
Y Performing General Administrative and Technical Order (TO) System Activities	*	*	*	3
Z Performing General Supply and Equipment Activities	2	*	2	3

* less than 1 percent

TABLE 6

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
(AFRC)

DUTIES	Structural Cluster (ST 120) (N=64)	Interior Doors and Walls Cluster (ST 101) (N=2)		Concrete and Framing Job (ST 132) (N=1)	Cabinet-making Job (ST 143) (N=1)	Masonry Job (ST 134) (N=1)
		Cluster	Job			
A Preparing for Concrete Structures	5	*	9	*	4	
B Constructing or Maintaining Concrete Structures	5	5	20	4	10	
C Constructing, Framing, or Maintaining Buildings	15	12	31	7	14	
D Install or Maintaining Building Finishings	15	37	9	27	36	
E Setting or Replacing Ceramic, Mosaic, or Quarry Tile	4	4	3	26	11	
F Constructing or Maintaining Building Furnishings	4	9	3	*	13	
G Preparing Mortar, Concrete, Stucco, or Plaster	2	4	2	*	*	
H Construct or Maintaining Masonry Structures	4	*	3	*	*	
I Maintaining Shop Facilities, Handtools, or Power Equipment	5	3	1	3	1	
J Installing or Maintaining Locking Devices	1	*	*	1	*	
K Maintaining, Assembling, or Installing Metal Components or Structures	4	7	1	3	10	
L Maintaining Lifts, Doors, Gates, or Hoists	2	*	*	*	*	
M Maintaining Kitchen Equipment	*	*	*	*	*	
N Performing Miscellaneous CE Support Activities	*	*	*	2	*	
O Fabricating Sheet Metal Parts and Assemblies	2	2	*	*	*	
P Preparing and Setting up Welding, Brazing, or Soldering Projects	3	*	*	*	*	
Q Performing Soldering, Heat Treating, Forging, or Welding Activities	5	*	*	*	*	
R Constructing or Maintaining Roofing Systems	4	2	1	*	*	
S Applying or Maintaining Plaster or Stucco to Surfaces	2	*	1	*	*	
T Maintaining Missile Facilities		*	*	2	*	
U Performing Prime Base Engineer Emergency Force (BEEF) Activities	7	8	5	2	2	
V Performing Mobility and Contingency Activities	4	3	4	12	2	
W Performing Management and Supervisory Activities	5	*	1	*	*	
X Performing Training Activities	2	*	2	9	*	
Y Performing General Administrative and Technical Order (TO) System Activities	*	*	*	*	*	
Z Performing General Supply and Equipment Activities	1	1	*	3	*	

* less than 1 percent

TABLE 6 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS
(AFRC)

DUTIES	Welding Job (GP 051) (N=5)	Red Horse Job (ST 203) (N=1)	PRIME BEEF Job (ST 129) (N=4)	Guard and Reserve Readiness Job (ST 147) (N=14)	Supervisor Job (ST 131) (N=11)
A	2	10	3	8	*
B	3	10	7	8	*
C	3	17	6	15	3
D	9	8	9	20	*
E	*	2	*	*	1
F	1	3	2	4	*
G	*	1	*	2	*
H	*	2	*	2	*
I	6	6	1	3	2
J	*	*	*	*	*
K	2	1	*	1	*
L	*	*	*	*	*
M	*	*	*	*	*
N	*	*	*	*	*
O	2	*	3	*	*
P	10	*	*	*	*
Q	37	*	*	2	*
R	3	*	*	2	*
S	*	*	*	*	*
T	*	*	*	*	*
U	8	9	26	12	6
V	6	9	26	9	13
W	2	10	9	3	46
X	2	7	4	2	15
Y	*	*	*	*	4
Z	2	4	2	2	5

* less than 1 percent

TABLE 7

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
(TOTAL SAMPLE)

	Structural Cluster (ST 120) (N= 429)	Interior Doors and Walls Cluster (ST 101) (N= 52)	Concrete and Framing Job (ST 132) (N= 10)	Sheet Metal Job (ST 122) (N= 14)	Door and Lock Installation Job (ST 167) (N= 13)
PERCENT OF SAMPLE	42%	5%	1%	1%	1%
PERCENT IN CONUS	85%	77%	100%	57%	54%
DAFSC DISTRIBUTION:					
3E331	21%	37%	30%	39%	62%
3E351	55%	55%	70%	57%	38%
3E371	23%	8%	0%	14%	0%
3E391	1%	0%	0%	0%	0%
COMPONENT STATUS:					
ACTIVE DUTY	61%	88%	40%	100%	100%
AIR NATIONAL GUARD	24%	8%	50%	0%	0%
AIR FORCE RESERVE	15%	4%	10%	0%	0%
PAYGRADE DISTRIBUTION:					
E-1 - E-3	13%	27%	20%	21%	47%
E-4	24%	38%	40%	29%	15%
E-5	35%	29%	40%	43%	38%
E-6	19%	6%	0%	7%	0%
	9%	0%	0%	0%	0%
PERCENT SUPERVISING	51%	29%	20%	14%	0%
AVERAGE NUMBER OF TASKS PERFORMED	357.5	75	107	129	159

TABLE 7 (CONTINUED)
 SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
 (TOTAL SAMPLE)

	Cabinet- making Job (ST 143) (N= 5)	Masonry Job (ST 170) (N= 38)	Welding Job (ST 164) (N= 78)	Locksmith Job (ST 291) (N= 27)
PERCENT OF SAMPLE	1%	4%	8%	3%
PERCENT IN CONUS	60%	66%	83%	56%
DAFSC DISTRIBUTION:				
3E331	20%	47%	22%	15%
3E351	60%	42%	69%	81%
3E371	20%	8%	8%	4%
3E391	0%	3%	1%	0%
COMPONENT STATUS:				
ACTIVE DUTY	40%	80%	84%	100%
AIR NATIONAL GUARD	40%	14%	11%	0%
AIR FORCE RESERVE	20%	60%	5%	0%
PAYGRADE DISTRIBUTION:				
E-1 - E-3	20%	34%	13%	11%
E-4	20%	34%	27%	33%
E-5	20%	21%	44%	45%
E-6	40%	5%	13%	11%
E-7	0%	3%	3%	0%
E-8	0%	3%	0%	0%
PERCENT SUPERVISING	20%	29%	45%	56%
AVERAGE NUMBER OF TASKS PERFORMED	89	154	217	82

TABLE 7 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
(TOTAL SAMPLE)

	Red Horse Job (ST 203) (N= 7)	PRIME BEEF Job (ST 129) (N= 9)	Guard and Reserve Readiness Job (ST 147) (N= 45)	Supervising And Training Job (ST 131) (N= 115)
PERCENT OF SAMPLE	1%	1%	4%	11%
PERCENT IN CONUS	86%	100%	96%	68%
DAFSC DISTRIBUTION:				
3E331	0%	0%	7%	0%
3E351	57%	56%	71%	19%
3E371	43%	33%	22%	67%
3E391	0%	11%	0%	14%
COMPONENT STATUS:				
ACTIVE DUTY	86%	23%	11%	78%
AIR NATIONAL GUARD	0%	33%	58%	12%
AIR FORCE RESERVE	14%	44%	31%	10%
PAYGRADE DISTRIBUTION:				
E-1 - E-3	0%	0%	7%	0%
E-4	0%	0%	16%	0%
E-5	29%	33%	40%	11%
E-6	57%	45%	33%	35%
E-7	14%	22%	4%	39%
E-8	0%	0%	0%	14%
E-9	0%	0%	0%	1%
PERCENT SUPERVISING	100%	33%	33%	98%
AVERAGE NUMBER OF TASKS PERFORMED	169	71	144	72

TABLE 8

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
(AD)

	Structural Cluster (ST 120) (N= 263)	Interior Doors and Walls Cluster (ST 101) (N= 46)	Concrete and Framing Job (ST 132) (N= 4)	Sheet Metal Job (ST 122) (N= 14)	Door and Lock Installation Job (ST 167) (N= 13)
PERCENT OF SAMPLE	46%	8%	2%	3%	2%
PERCENT IN CONUS	80%	74%	100%	57%	54%
DAFSC DISTRIBUTION:					
3E331	34%	41%	75%	39%	62%
3E351	56%	52%	25%	57%	38%
3E371	10%	7%	0%	14%	0%
3E391	0%	0%	0%	0%	0%
PAYGRADE DISTRIBUTION:					
E-1 - E-3	19%	31%	50%	21%	47%
E-4	29%	36%	50%	29%	15%
E-5	38%	26%	0%	43%	38%
E-6	11%	7%	0%	7%	0%
E-7	3%	0%	0%	0%	0%
AVERAGE MONTHS IN CAREER FIELD	91	75	22	84	73
AVERAGE MONTHS TAFMS	91	75	22	84	75
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	33%	43%	75%	28%	54%
PERCENT SUPERVISING	50%	30%	25%	14%	0%
AVERAGE NUMBER OF TASKS PERFORMED	338	76	91	129	159

TABLE 8 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
(AD)

	Cabinet- making Job (ST 143) (N= 2)	Masonry Job (ST 170) (N= 35)	Welding Job (ST 164) (N= 62)	Locksmith Job (ST 291) (N= 27)
PERCENT OF SAMPLE PERCENT IN CONUS	0% 50%	6% 63%	11% 84%	5% 56%
DAFSC DISTRIBUTION:				
3E331	50%	51%	27%	15%
3E351	50%	43%	67%	81%
3E371	0%	6%	6%	4%
3E391	0%	0%	0%	0%
PAYGRADE DISTRIBUTION:				
E-1 - E-3	50%	37%	15%	11%
E-4	0%	34%	26%	33%
E-5	50%	23%	48%	45%
E-6	0%	6%	11%	11%
E-7	0%	0%	0%	0%
E-8	0%	0%	0%	0%
AVERAGE MONTHS IN CAREER FIELD	77	64	107	103
AVERAGE MONTHS TAFMS	83	73	112	115
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	50%	51%	22%	18%
PERCENT SUPERVISING	0%	26%	48%	56%
AVERAGE NUMBER OF TASKS PERFORMED	93	154	215	82

TABLE 8 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
(AD)

	Red Horse Job (ST 203) (N=6)	PRIME BEEF Job (ST 129) (N=2)	Guard and Reserve Readiness Job (ST 147) (N=5)	Supervising And Training Job (ST 131) (N=90)
PERCENT OF SAMPLE	1%	4%	1%	16%
PERCENT IN CONUS	83%	100%	80%	62%
DAFSC DISTRIBUTION:				
3E331	0%	0%	60%	0%
3E351	50%	0%	40%	23%
3E371	50%	100%	0%	68%
3E391	0%	0%	0%	9%
PAYGRADE DISTRIBUTION:				
E-1 - E-3	0%	0%	40%	0%
E-4	0%	0%	40%	0%
E-5	33%	0%	20%	13%
E-6	50%	100%	0%	44%
E-7	17%	0%	0%	32%
E-8	0%	0%	0%	11%
E-9	0%	0%	0%	0%
AVERAGE MONTHS IN CAREER FIELD	173	212	56	185
AVERAGE MONTHS TAFMS	176	213	58	206
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	0%	0%	60%	0%
PERCENT SUPERVISING	100%	50%	20%	98%
AVERAGE NUMBER OF TASKS PERFORMED	163	92	140	72

TABLE 9

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
(ANG)

	Structural Cluster (ST 120) (N= 102)	Interior Doors and Walls Cluster (ST 101) (N= 4)	Concrete and Framing Job (ST 132) (N= 5)	Cabinet-making Job (ST 143) (N= 2)	Masonry Job (ST 170) (N= 2)
PERCENT OF SAMPLE	60%	2%	3%	1%	1%
PERCENT IN CONUS	90%	100%	100%	100%	100%
DAFSC DISTRIBUTION:					
3E331	1%	0%	0%	0%	0%
3E351	56%	75%	100%	100%	50%
3E371	43%	25%	0%	0%	50%
3E391	0%	0%	0%	0%	0%
PAYGRADE DISTRIBUTION:					
E-1 - E-3	4%	0%	0%	0%	0%
E-4	22%	25%	40%	50%	50%
E-5	28%	75%	60%	0%	0%
E-6	25%	0%	0%	50%	0%
E-7	21%	0%	0%	0%	50%
PERCENT SUPERVISING	48%	25%	20%	50%	50%
AVERAGE NUMBER OF TASKS PERFORMED	392	61	93	95	184

TABLE 9 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
(ANG)

	Welding Job (ST 164) (N= 11)	PRIME BEEF Job (ST 129) (N= 3)	Guard and Reserve Readiness Job (ST 147) (N= 26)	Supervising And Training Job (ST 131) (N= 14)
PERCENT OF SAMPLE	7%	4%	15%	8%
PERCENT IN CONUS	73%	100%	96%	86%
DAFSC DISTRIBUTION:				
3E331	0%	0%	0%	0%
3E351	82%	100%	73%	7%
3E371	18%	0%	27%	86%
3E391	0%	0%	0%	7%
PAYGRADE DISTRIBUTION:				
E-1 - E-3	9%	0%	4%	0%
E-4	46%	0%	15%	0%
E-5	27%	100%	46%	7%
E-6	9%	0%	27%	7%
E-7	9%	0%	8%	79%
E-8	0%	0%	0%	7%
PERCENT SUPERVISING	27%	0%	38%	100%
AVERAGE NUMBER OF TASKS PERFORMED	252	72	141	55

TABLE 10

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
(AFRC)

	Structural Cluster (ST 120) (N=64)	Interior Doors and Walls Cluster (ST 101) (N=2)	Concrete and Framing Job (ST 132) (N=1)	Cabinet-making Job (ST 143) (N=1)	Masonry Job (ST 170) (N=1)
PERCENT OF SAMPLE	62%	2%	1%	1%	1%
PERCENT IN CONUS	94%	100%	100%	100%	100%
DAFSC DISTRIBUTION:					
3E331	0%	0%	0%	0%	0%
3E351	50%	100%	100%	100%	0%
3E371	44%	0%	0%	0%	0%
3E391	6%	0%	0%	0%	100%
PAYGRADE DISTRIBUTION:					
E-1 - E-3	0%	0%	0%	0%	0%
E-4	6%	100%	0%	0%	0%
E-5	31%	0%	100%	0%	0%
E-6	44%	0%	0%	100%	0%
E-7	16%	0%	0%	0%	0%
E-8	3%	0%	0%	0%	100%
PERCENT SUPERVISING	61%	0%	0%	0%	100%
AVERAGE NUMBER OF TASKS PERFORMED	380	83	247	71	98

TABLE 10 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS
(AFRC)

	Welding Job (ST 164) (N= 5)	Red Horse Job (ST 203) (N= 1)	PRIME BEEF Job (ST 129) (N= 4)	Guard and Reserve Readiness Job (ST 147) (N= 14)	Supervising And Training Job (ST 131) (N= 11)
PERCENT OF SAMPLE	5%	1%	4%	13%	10%
PERCENT IN CONUS	100%	100%	100%	100%	91%
DAFSC DISTRIBUTION:					
3E331	0%	0%	0%	0%	0%
3E351	80%	100%	50%	79%	0%
3E371	0%	0%	25%	21%	36%
3E391	20%	0%	25%	0%	64%
PAYGRADE DISTRIBUTION:					
E-1 - E-3	0%	0%	0%	0%	0%
E-4	0%	0%	0%	7%	0%
E-5	40%	0%	0%	36%	0%
E-6	40%	100%	50%	57%	0%
E-7	20%	0%	50%	0%	45%
E-8	0%	0%	0%	0%	45%
E-9	0%	0%	0%	0%	10%
PERCENT SUPERVISING	40%	100%	50%	29%	100%
AVERAGE NUMBER OF TASKS PERFORMED	167	202	61	151	87

Comparison of Current Group Descriptions to Previous Study

The results of the specialty job analysis were compared to the previous OSR, dated March 1997. The results are in Table 11.

The earlier report included civilian employees but only military members on AD. This report included military members in the ANG and AFRC as well as those on AD; however, it excluded civilian employees. So, the results of the two studies are not fully comparable. The cluster analysis for this report groups respondents somewhat differently than the cluster analysis done for the earlier report.

Both reports identified a large core cluster made up of individuals who performed a very large number of tasks. This report called it the Structural Cluster while the previous report called it the Carpentry Cluster. Regardless of its name, this large group of generalists seems to be growing as a fraction of the career field. The growth might reflect the recent emphases on multi-skilling.

Some of the specialized jobs appear to be declining as a fraction of the career field. For example, the Metal Mechanics Cluster represents 22 percent of the sample in the 1997 survey; the Sheet Metal Job and the Welding Job represent only 9 of the current survey. Similar declines can be seen in the interior framing and masonry areas.

The prior study identified several small jobs that this study did not identify. They included the Roofing Job, Roof Framing Job, and Safety Job. With the inclusion of ANG and AFRC members in the current survey, the Guard and Reserve Readiness Job emerged as a new job in the current analysis.

Summary

In summary, structure analysis identified two clusters and eleven jobs: Interior Doors and Walls Cluster, Structural Cluster, Concrete and Framing Job, Sheet Metal Job, Door and Lock Installation Job, Cabinetmaking Job, Welding Job, Locksmith Job, Read Horse Job, PRIME BEEF Job, ANG and Reserve Readiness Job and Supervisor Job. Comparing the clusters and job identified in this OSR with the ones identified in the prior OSR suggest that the fraction of multi-skilled generalists in the Structural career field is growing .

TABLE 11

SPECIALTY JOB COMPARISONS BETWEEN CURRENT AND 1997 SURVEY

CURRENT SURVEY (N = 1019)	PERCENT OF SAMPLE	1997 SURVEY (N = 1393)	PERCENT OF SAMPLE
INTERIOR DOORS & WALLS CLUSTER	5	STRUCTURAL CLUSTER	10
STRUCTURAL CLUSTER	42	CARPENTRY CLUSTER	27
CONCRETE & FRAMING JOB	*	CONCRETE STRUCTURE JOB	*
SHEET METAL JOB	1	METAL MECHANICS CLUSTER	22
WELDING JOB	8		
DOOR & LOCK INSTALLATION JOB	1	LOCKSMITH JOB	2
LOCKSMITH JOB	3		
CABINETMAKING JOB	*	WOODCRAFT JOB	*
MASONRY JOB	4	MASONRY CLUSTER	7
		TILE JOB	*
RED HORSE JOB	*	MOBILITY JOB	2
PRIME BEEF JOB	*		
GUARD & RESERVE READINESS JOB	4		
SUPERVISOR JOB	11	SUPERVISORY JOB	7
		QUALITY ASSURANCE JOB	1
		STRUCTURAL PLANNING JOB	1
		SABER JOB	1
		INSTRUCTING/TRAINING JOB	1

- Indicates no match in report

* Indicate less than 1 %

SKILL AND EXPERIENCE ANALYSIS

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. DAFSC analysis examines differences in tasks performed between skill levels. This information may then be used to evaluate how well career ladder documents, such as AFMAN 36-2108 *Airman Classifications*, reflect what career ladder personnel are actually doing in the field.

AD

AFSC 3E3X1: The distribution of AFSC 3E3X1 AD skill-level groups across the career ladder clusters and jobs is displayed in Table 12. As can be seen, the largest share of DAFSC 3E331, 3E351 and 3E371 members are in the Structural Cluster. The majority of DAFSC 3E371 and 3E391 members are in the Supervisor Job. As personnel progress through the career ladder, they move into traditional management and supervisory roles at the 7-skill level, which reflects typical career ladder progression.

Table 13 offers a different perspective by displaying the relative percent time spent on each duty across skill-level groups. As seen in Table 13, members of the 3- and 5-skill level spend their time on a range of duties. As expected, 3-skill level personnel have little to do with management and supervisory activities (Duty W); however, 5-skill level personnel are beginning to take on a few management and supervisory activities while not focusing on them. A major focus on management and training activities shows up among 7-skill level members; they spend more than half (49 percent) of their time on such activities. The eight 9-skill level AD members in the sample devote themselves almost exclusively to management, supervision, training and readiness activities. Specific skill-level group discussions are presented below.

Descriptions and Comparisons of Skill-Level Groups

DAFSC 3E331: Three-skill level AD members perform an average of 236 tasks and average just under two and a half years in the specialty. Table 12 shows that, of the 199 members in this group, 90 perform in the Structural Cluster. They spread their work over many duty areas, with small focuses on building finishings and welding activities (see Table 13). Examples of these tasks can be found in Table 14 and they include installing or replacing door hinges and closers.

DAFSC 3E351: Five-skill level members comprise the largest group in this career ladder. The 348 members of this group perform an average of 202 tasks. As with their 3-skill level counterparts, the largest fraction of 5-skill level members (146 out of 348) is in the Structural Cluster (see Table 12). Table 13 indicates that these members spread their activities over many duty areas, with a minor focus, again, on building finishing (16 percent of their time). Five-skill level members indicate they are spending 11 percent of their time on tasks relating to management and supervisory activities. Representative tasks for these incumbents are listed in Table 15. A comparison between the 3- and 5-skill level showed the performance of

TABLE 12

DISTRIBUTION OF AFSC 3E3X1 AD SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS

<u>JOB</u>	<u>3E331</u> (N = 199)	<u>3E351</u> (N = 348)	<u>3E371</u> (N = 124)	<u>3E391</u> (N = 8)
INTERIOR DOORS AND WALLS CLUSTER	19	24	3	0
STRUCTURAL CLUSTER	90	146	27	0
CONCRETE & FRAMING JOB	3	1	0	0
SHEET METAL JOB	4	8	2	0
DOOR AND LOCK INSTALLATION JOB	8	5	0	0
CABINETMAKING JOB	1	1	0	0
MASONRY JOB	18	15	2	0
WELDING JOB	17	41	4	0
LOCKSMITH JOB	4	22	1	0
RED HORSE JOB	0	3	3	0
PRIME BEEF JOB	0	0	2	0
GUARD AND RESERVE READINESS JOB	3	2	0	0
SUPERVISOR JOB	0	21	61	8
NOT GROUPED	32	59	19	0

TABLE 13

TIME SPENT ON DUTIES BY MEMBERS OF AFSC 3E3X1 AD
SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES	DAFSC 3E331 (N=199)	DAFSC 3E351 (N=348)	DAFSC 3E371 (N=124)	DAFSC 3E391 (N=8)
A	3	2	1	*
B	4	3	1	*
C	9	6	3	*
D	21	16	7	*
E	4	3	1	*
F	2	2	1	*
G	3	1	*	*
H	3	2	*	*
I	6	7	4	*
J	5	6	1	*
K	6	5	2	*
L	3	2	1	*
M	*	*	*	*
N	*	*	*	*
O	4	4	2	*
P	4	2	1	*
Q	10	7	2	*
R	3	2	1	*
S	*	*	*	*
T	*	*	*	*
U	3	4	5	4
V	3	4	6	4
W	1	11	41	75
X	*	5	8	6
Y	*	1	4	6
Z	*	3	5	3

* Less than 1 percent.

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY
AD DAFSC 3E331 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=199)	
D0148	Install or replace door hinges	91
D0147	Install or replace door closers	89
D0129	Adjust door closers	86
D0150	Install or replace doorjambs or stops	85
K0357	Drill holes in metal	84
D0132	Caulk windows, sinks, or bathtubs	83
D0175	Install or replace suspended ceilings	83
D0178	Install or replace trim molding, such as baseboards, wainscoting, or door or window casings	82
B0042	Drill holes in concrete	82
D0158	Install or replace hollow or solid-core doors	81
I0298	Inspect handtools	79
D0177	Install or replace thresholds	77
D0136	Cut glass	76
D0192	Repair holes in gypsum boards	74
D0182	Install or replace windows	74
D0181	Install or replace weather stripping	71
D0137	Erect or disassemble scaffolding	71
D0156	Install or replace gypsum boards	71
D0194	Replace glass in windows	68
K0365	Grind down grooves or sharp edges	68
D0131	Apply interior or exterior protective coatings, such as varnishes, paints, or stains, to exposed wood surfaces	67
B0047	Install anchor bolts or fastening devices	67
O0460	Cut sheet metal for parts using shop equipment	67
J0333	Install or maintain panic hardware	66
O0459	Cut sheet metal for parts using handtools	66
D0196	Tape and float gypsum board surfaces	65
P0502	Set up for oxyacetylene cutting	64
I0306	Maintain handtools, other than lubricating	64
C0076	Construct or install interior walls	64
D0142	Install or replace asphalt or vinyl floor tiles	64
E0198	Apply grout to ceramic, mosaic, or quarry tiles	64
V0801	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	63
D0180	Install or replace wall or ceiling acoustical materials	63
I0291	Adjust or maintain shop-installed power equipment	63
K0364	Fasten parts with studs or bolts using powder-actuated tools, such as HILTI	63

Average Number of Tasks Performed: 236

TABLE 15
 REPRESENTATIVE TASKS PERFORMED BY
 AD DAFSC 3E351PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=348)	
I0298	Inspect handtools	79
K0357	Drill holes in metal	76
D0148	Install or replace door hinges	76
D0129	Adjust door closers	73
D0147	Install or replace door closers	73
D0175	Install or replace suspended ceilings	72
D0156	Install or replace gypsum boards	70
D0150	Install or replace doorjambes or stops	70
D0158	Install or replace hollow or solid-core doors	69
D0178	Install or replace trim molding, such as baseboards, wainscoting, door or window casings	68
D0192	Repair holes in gypsum boards	67
D0177	Install or replace thresholds	67
V0801	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	67
D0132	Caulk windows, sinks, or bathtubs	66
B0042	Drill holes in concrete	66
I0306	Maintain handtools, other than lubricating	65
I0299	Inspect portable electric or pneumatic power tools	63
D0136	Cut glass	61
D0137	Erect or disassemble scaffolding	61
X0857	Conduct on-the-job training (OJT)	60
V0792	Perform self-aid and buddy care (SABC) techniques	60
I0291	Adjust or maintain shop-installed power equipment	60
B0047	Install anchor bolts or fastening devices	60
D0142	Install or replace asphalt or vinyl floor tiles	59
O0459	Cut sheet metal for parts using handtools	59
D0181	Install or replace weather stripping	59
O0460	Cut sheet metal for parts using shop equipment	59
I0285	Adjust bench grinder tool rests	58
V0775	Don or doff chemical warfare personal protective clothing	58
W0811	Counsel subordinates concerning personal matters	58
D0196	Tape and float gypsum board surfaces	57
W0834	Inspect personnel for compliance with military standards	57
D0182	Install or replace windows	56
P0502	Set up for oxyacetylene cutting	55
D0131	Apply interior or exterior protective coatings	55

Average Number of Tasks Performed: 202

management, supervision, and training duties by 5-skill level members as the most important difference. Table 16 indicates individuals in the two groups are doing basically the same jobs with more 5-skill levels starting to take on some supervisory and training tasks.

DAFSC 3E371: Seven-skill level personnel perform an average of 125 tasks. Almost half (61 of 124) of these members have moved into supervisory jobs (see Table 12). Table 13 indicates that management and supervisory duties constitute the dominate focus (41 percent of their time) of 7-skill level members. Table 17 shows the pervasiveness of supervisory and training tasks among 7-skill level members.

Table 18 shows the tasks that best distinguish between 5- and 7-skill level members. It indicates a clear shift from "hands-on" building finishing tasks to supervisory tasks. A much higher percentage of 7-skill level members perform typical supervisory tasks than do their 5-skill level counterparts. Examples of tasks with the biggest difference in members performing supervisory tasks include the following: writing recommendations for awards or decorations; interpreting policies, directives, or procedures for subordinates; scheduling personnel for TDY assignments, leaves, or passes; and conducting general meetings such as staff meetings.

DAFSC 3E391: The 8 members in the 9-skill level group perform an average of 56 tasks. Table 12 indicates that all the members are in supervisory jobs, while Table 13 indicates that they devote virtually all their time to supervisory, readiness, training, and related tasks. All the 7-skill level members perform supervisory tasks, such interpreting policies, inspecting personnel for compliance with military standards, and reviewing budget requirements. (see Table 19).

Tasks that best distinguish between DAFSC 3E371 and DAFSC 3E391 personnel are shown in Table 20. More 7-skill level personnel are performing training and tool inspection and control tasks than are their 9-skill level counterparts. The 9-skill level members are performing more higher-level management tasks, like drafting budget requirements and writing job and position descriptions. This suggests that moving from 7- to the 9-skill level involves shifting from first-line supervisory and training tasks to higher-level management tasks.

ANG

Table 21 shows the distribution of DAFSC 3E3X1 skill-level groups across career ladder clusters and jobs for ANG personnel. As can be seen in Table 21, members are highly concentrated at the 5- and 7- skill levels. Unitary samples at the 3- and 9-skill levels prevents meaningful analyses of progression from the 3- to the 5-skill level and from the 7- to the 9-skill level for the ANG. So, the discussion below will be limited to the 5- and 7-skill levels.

The largest fraction of individuals at both skill levels were in the Structural Cluster. As one might expect, significant numbers at both skill levels were also in the Guard and Reserve Readiness Job. The analysis failed to identify any members of the ANG who were in the Sheet Metal Job, Door and Lock Installation Job, Locksmith Job, or Red Horse Job.

TABLE 16

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 3E331 AND DAFSC 3E351 AD PERSONNEL

TASKS	DAFSC 3E331 (N=199)	DAFSC 3E351 (N=348)	DIFFERENCE
D0130 Apply acoustical ceiling textures	60	36	24
C0098 Repair or replace built-up floor joists	35	14	21
W0811 Counsel subordinates concerning personal matters	9	58	-49
W0834 Inspect personnel for compliance with military standards	9	57	-48
W0808 Conduct supervisory performance feedback sessions	4	52	-48
X0858 Counsel trainees on training progress	7	52	-45
W0828 Evaluate personnel for compliance with performance standards	5	47	-43
W0850 Write or indorse military performance reports	4	46	-42
X0867 Evaluate progress of trainees	5	46	-41

TABLE 17
 REPRESENTATIVE TASKS PERFORMED BY
 DAFSC 3E371 AD PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N= 124)	
W0834	Inspect personnel for compliance with military standards	86
W0811	Counsel subordinates concerning personal matters	86
W0813	Determine or establish work assignments or priorities	81
W0828	Evaluate personnel for compliance with performance standards	81
W0851	Write recommendations for awards or decorations	81
W0850	Write or indorse military performance reports	81
W0835	Interpret policies, directives, or procedures for subordinates	81
W0808	Conduct supervisory performance feedback sessions	80
W0812	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	74
W0809	Conduct safety inspections of equipment or facilities	74
W0810	Conduct supervisory orientations for newly assigned personnel	74
W0829	Evaluate personnel for promotion, demotion, reclassification, or special awards	72
W0803	Assign personnel to work areas or duty positions	70
W0824	Establish performance standards for subordinates	70
W0840	Recommend personnel for training	70
W0805	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	69
W0819	Develop or establish work schedules	67
X0869	Maintain training records or files	66
X0858	Counsel trainees on training progress	66
W0806	Conduct self-inspections or self-assessments	65
W0827	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	65
X0857	Conduct on-the-job training (OJT)	64
W0845	Sketch work drawings	64
W0818	Develop or establish work methods or procedures	62
W0825	Establish procedures for accountability of equipment, tools, parts, or supplies	62
X0859	Determine training requirements	62
X0854	Brief personnel concerning training programs or matters	62
W0833	Initiate actions required due to substandard performance of personnel	62
W0831	Implement safety or security programs	60
W0804	Assign sponsors for newly assigned personnel	60

Average Number of Tasks Performed: 125

TABLE 18

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 3E351 AND DAFSC 3E371 AD PERSONNEL

TASKS	DAFSC 3E351 (N=248)	DAFSC 3E371 (N=124)	DIFFERENCE
D0147	73	28	44
K0357	76	32	44
D0148	76	32	44
D0129	73	32	40
D0150	70	30	40
D0175	72	32	40
D0156	70	33	37
D0136	61	24	37
Q0522	53	15	37
D0177	67	30	37
W0851	42	81	-40
W0835	41	81	-40
W0844	18	59	-40
W0805	28	69	-40
W0813	42	81	-39
W0804	22	60	-38
W0852	11	48	-38
W0841	5	44	-38
W0819	31	67	-36
W0825	26	62	-36

TABLE 19

REPRESENTATIVE TASKS PERFORMED
BY DAFSC 3E391 AD PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=8)
W0835 Interpret policies, directives, or procedures for subordinates	100
W0834 Inspect personnel for compliance with military standards	100
W0841 Review budget requirements	100
W0828 Evaluate personnel for compliance with performance standards	100
W0805 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	100
W0811 Counsel subordinates concerning personal matters	100
W0824 Establish performance standards for subordinates	100
W0808 Conduct supervisory performance feedback sessions	100
W0820 Draft budget requirements	100
W0803 Assign personnel to work areas or duty positions	100
W0847 Write job or position descriptions	100
W0851 Write recommendations for awards or decorations	88
W0850 Write or indorse military performance reports	88
W0829 Evaluate personnel for promotion, demotion, reclassification, or special awards	88
W0813 Determine or establish work assignments or priorities	88
W0832 Initiate personnel action requests	88
W0812 Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	88
W0826 Evaluate inspection report findings or inspection procedures	88
W0802 Annotate time and attendance sheets for civilian employees	88
W0833 Initiate actions required due to substandard performance of personnel	88
W0843 Review drafts of supplements or changes to directives, such as policy directives, instructions, or manuals	75
W0827 Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	75
W0814 Develop organizational or functional charts	75
W0840 Recommend personnel for training	75
X0866 Evaluate effectiveness of training programs, plans, or procedures	75
W0825 Establish procedures for accountability of equipment, tools, parts, or supplies	75
W0817 Develop inputs to mobility, contingency, disaster preparedness, or unit emergency or alert plans	75
W0852 Write replies to inspection reports	75

Average Number of Tasks Performed: 56

TABLE 20

TASK WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 3E371 AND DAFSC 3E391 AD PERSONNEL

TASKS	DAFSC 3E371 (N=124)	DAFSC 3E391 (N=8)	DIFFERENCE
X0858	66	13	54
X0857	64	13	51
I0298	45	*	45
Z0902	44	*	44
Z0899	43	*	43
X0869	66	25	41
V0793	40	*	40
I0302	39	*	39
I0299	37	*	37
I0306	37	*	37
W0820	36	100	-64
W0841	44	100	-56
W0847	46	100	-54
W0826	36	88	-51
W0843	26	75	-49
W0822	15	63	-48
X0866	30	75	-45
W0814	32	75	-43
W0832	47	88	-41

TABLE 21

DISTRIBUTION OF AFSC 3E3X1 ANG SKILL-LEVEL
MEMBERS ACROSS CAREER LADDER JOBS

<u>JOB</u>	<u>3E351</u> <u>(N = 131)</u>	<u>3E371</u> <u>(N = 76)</u>
INTERIOR DOORS AND WALLS CLUSTER	3	1
STRUCTURAL CLUSTER	57	44
CONCRETE & FRAMING JOB	5	0
CABINETMAKING JOB	1	1
MASONRY JOB	1	1
WELDING JOB	9	2
PRIME BEEF JOB	3	0
GUARD AND RESERVE READINESS JOB	19	7
SUPERVISOR JOB	1	12
NOT GROUPED	32	8

Descriptions and Comparisons of Skill-Level Groups

DAFSC 3E351: Of the 131 DAFSC 3E351 ANG members, the largest fraction (57 personnel) indicates they are performing tasks in the Structural Cluster. And, as indicated by Table 22, no large amount of time is being spent on one particular duty. The largest amounts of their time (32 percent) are being spent in Constructing, Framing, and Maintaining Buildings (Duty C) and Installing and Maintaining Building Finishings (Duty D). Table 23 lists representative tasks performed by ANG DAFSC 3E351 personnel. Examples of these tasks include the following: installing and replacing suspended ceilings; installing and replacing door hinges; and caulking windows, sinks and bathtubs.

DAFSC 3E371: As with their 5-skill level counterparts, the largest fraction of DAFSC 3E371 personnel (44 out of 76) are in the Structural Cluster (see Table 23). Also like their 5-skill level counterparts, 7-skill level ANG members spread their time among a great number of duty areas. The most noticeable difference is greater percentage (15 percent) of time spent on management and supervision activities. Table 24 lists those tasks done by the highest percentages of ANG 7-skill level members; it suggests a continued dominance of "hands-on" tasks mixed with a few readiness, supervisory and training tasks. Examples include the following: tearing down, inspecting, cleaning, and reassembling weapons; conducting on-the-job training (OJT); and taping and floating gypsum board surfaces. A 5- to 7-skill level comparison was accomplished and task differences are shown in Table 25. Supervisory and training tasks are the only ones that set 7-skill level jobs apart from 5-skill level jobs in the ANG. This suggests that in the ANG DAFSC 3E371 jobs are basically DAFSC 3E351 jobs with the addition of supervisory and training duties.

AFRC

The 131 AFRC members in the survey sample represent the smallest of the three components. But like their ANG counterparts, the largest fractions of the AFRC 5- and 7-skill level personnel are performing jobs in the Structural Cluster. A notable number of AFRC members could be found in the Guard and Reserve Readiness Job at the 5-skill level but not at the 7-skill level. The analysis failed to identify any AFRC members in the Sheet Metal Job, in the Door and Lock Installation Job, or in the Locksmith Job.

DAFSC 3E351: As Table 26 indicates, largest fraction of DAFSC 3E351 AFRC personnel (32 out of 67) are in the Structural Cluster. Like their counterparts in the AD and the ANG, AFRC 3E351's spread themselves over a large number of duty areas. Representative tasks performed by these personnel are found in Table 28.

DAFSC 3E371: Twenty-eight of the 45 DAFSC 3E371 personnel are also in the Structural Cluster (see Table 26). As indicated in Table 27, they focus about forty percent of their time in three duty areas: constructing, framing, and maintaining buildings (14 percent); installing and maintaining building finishings (13 percent); and performing management and supervisory activities (12 percent). Representative tasks performed by members of this group are found in Table 29. The tasks that best distinguish between DAFSC 3E351 and DAFSC 3E371 are

TABLE 22

TIME SPENT ON DUTIES BY MEMBERS OF AFSC 3E3X1 ANG
SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)

<u>DUTIES</u>	DAFSC 3E351 (N = 131)	DAFSC 3E371 (N = 76)
A PREPARING FOR CONCRETE STRUCTURES	6	4
B CONSTRUCTING OR MAINTAINING CONCRETE STRUCTURES	6	4
C CONSTRUCTING, FRAMING, OR MAINTAINING BUILDINGS	14	11
D INSTALLING OR MAINTAINING BUILDING FINISHINGS	18	13
E SETTING OR REPLACING CERAMIC, MOSAIC, OR QUARRY TILE	2	3
F CONSTRUCTING OR MAINTAINING BUILDING FURNISHINGS	3	3
G PREPARING MORTAR, CONCRETE, STUCCO, OR PLASTER	2	2
H CONSTRUCTING OR MAINTAINING MASONRY STRUCTURES	2	2
I MAINTAINING SHOP FACILITIES, HANDTOOLS, OR POWER EQUIPMENT	5	5
J INSTALLING OR MAINTAINING LOCKING DEVICES	2	1
K MAINTAINING, ASSEMBLING, OR INSTALLING METAL COMPONENTS OR STRUCTURES	3	4
L MAINTAINING LIFTS, DOORS, GATES, OR HOISTS	2	1
M MAINTAINING KITCHEN EQUIPMENT	*	*
N PERFORMING MISCELLANEOUS CE SUPPORT ACTIVITIES	*	*
O FABRICATING SHEET METAL PARTS AND ASSEMBLIES	2	2
P PREPARING AND SETTING UP WELDING, BRAZING, OR SOLDERING PROJECTS	2	2
Q PERFORMING, SOLDERING, HEAT TREATING, FORGING, OR WELDING ACTIVITIES	*	4
R CONSTRUCTING OR MAINTAINING ROOFING SYSTEMS	3	3
S APPLYING OR MAINTAINING PLASTER OR STUCCO	*	1
T MAINTAINING MISSILE FACILITIES	*	*
U PERFORMING PRIME BEEF ACTIVITIES	7	5
V PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	7	6
W PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	2	15
X PERFORMING TRAINING ACTIVITIES	*	6
Y PERFORMING GENERAL ADMINISTRATIVE AND TO SYSTEM ACTIVITIES	*	*
Z PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	2

TABLE 23

REPRESENTATIVE TASKS PERFORMED BY
DAFSC 3E351 ANG PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=131)
D0175	79
D0148	79
D0132	79
C0074	79
C0071	77
C0076	76
D0131	75
C0073	74
B0043	74
B0051	73
B0052	73
V0801	73
D0192	73
K0357	72
D0156	71
U0727	71
D0147	71
D0158	71
B0045	71
B0056	70
B0047	70
D0182	68
C0065	68
D0178	66
I0298	66
B0042	66
C0070	66
D0150	65
C0072	65
D0137	65
D0196	63
D0181	63
C0063	63

Average Number of Tasks Performed: 231

TABLE 24

PEPRESENTATIVE TASKS PERFORMED BY
ANG DAFSC 3E371

TASKS		PERCENT MEMBERS PERFORMING (N=76)
V0801	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	82
X0857	Conduct on-the-job training (OJT)	78
D0196	Tape and float gypsum board surfaces	75
D0192	Repair holes in gypsum boards	74
V0775	Don or doff chemical warfare personal protective clothing	72
K0357	Drill holes in metal	72
D0131	Apply interior or exterior protective coatings, such as varnishes, paints, or stains, to exposed wood surfaces	72
C0076	Construct or install interior walls	72
D0129	Adjust door closers	72
D0132	Caulk windows, sinks, or bathtubs	72
C0073	Construct or install floors	72
W0834	Inspect personnel for compliance with military standards	71
V0792	Perform self-aid and buddy care (SABC) techniques	71
I0298	Inspect handtools	71
D0156	Install or replace gypsum boards	71
I0299	Inspect portable electric or pneumatic power tools	71
C0071	Construct or install exterior walls	71
D0148	Install or replace door hinges	71
D0147	Install or replace door closers	71
B0045	Float concrete	71
C0065	Construct or install common rafters	71
D0178	Install or replace trim molding, such as baseboards, wainscoting, door or window casings	70
D0158	Install or replace hollow or solid-core doors	70
B0051	Place concrete in forms	70
B0056	Screed concrete	70
C0074	Construct or install headers	70
B0052	Remove wooden or metal forms	70
B0043	Finish concrete with handtools	70

Average Number of Tasks Performed: 275

TABLE 25

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 3E351 AND DAFSC 3E371 ANG PERSONNEL

TASKS	DAFSC 3E351 (N=131)	DAFSC 3E371 (N=76)	DIFFERENCE
X0857	24	78	-54
X0858	15	67	-53
W0834	21	71	-50
W0813	16	64	-48
W0840	13	57	-44
W0829	8	53	-44
W0803	15	58	-43
W0810	12	54	-42
W0835	11	53	-42
X0854	11	53	-42

TABLE 26

DISTRIBUTION OF AFSC 3E3X1 SKILL-LEVEL
AFRC MEMBERS ACROSS CAREER LADDER JOBS

<u>JOB</u>	<u>3E351</u> <u>(N = 67)</u>	<u>3E371</u> <u>(N = 45)</u>	<u>3E391</u> <u>(N = 18)</u>
INTERIOR DOORS AND WALLS CLUSTER	2	0	0
STRUCTURAL CLUSTER	32	28	4
CONCRETE & FRAMING JOB	1	0	0
CABINETMAKING JOB	1	0	0
MASONRY JOB	0	0	1
WELDING JOB	4	0	1
RED HORSE JOB	1	0	0
PRIME BEEF JOB	2	1	1
GUARD AND RESERVE READINESS JOB	11	3	0
SUPERVISOR JOB	0	4	7
NOT GROUPED	13	9	4

TABLE 27

TIME SPENT ON DUTIES BY MEMBERS OF
AFSC 3E3X1 SKILL-LEVEL AFRC GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES	DAFSC 3E351 (N=67)	DAFSC 3E371 (N=45)	DAFSC 3E391 (N=18)
A PREPARING FOR CONCRETE STRUCTURES	6	5*	3
B CONSTRUCTING OR MAINTAINING CONCRETE STRUCTURES	6	5	2
C CONSTRUCTING, FRAMING, OR MAINTAINING BUILDINGS	12	14	9
D INSTALLING OR MAINTAINING BUILDING FINISHINGS	17	13	5
E SETTING OR REPLACING CERAMIC, MOSAIC, OR QUARRY TILE	3	2	1
F CONSTRUCTING OR MAINTAINING BUILDING FURNISHINGS	4	3	1
G PREPARING MORTAR, CONCRETE, STUCCO, OR PLASTER	2	1	*
H CONSTRUCTING OR MAINTAINING MASONRY STRUCTURES	3	2	1
I MAINTAINING SHOP FACILITIES, HANDTOOLS, OR POWER EQUIPMENT	5	4	
J INSTALLING OR MAINTAINING LOCKING DEVICES	1		
K MAINTAINING, ASSEMBLING, OR INSTALLING METAL COMPONENTS OR STRUCTURES	3	2	2
L MAINTAINING LIFTS, DOORS, GATES, OR HOISTS	1	*	*
M MAINTAINING KITCHEN EQUIPMENT	*	*	*
N PERFORMING MISCELLANEOUS CE SUPPORT ACTIVITIES	*	*	*
O FABRICATING SHEET METAL PARTS AND ASSEMBLIES	2	1	*
P PREPARING AND SETTING UP WELDING, BRAZING, OR SOLDERING PROJECTS	2	1	2
Q PERFORMING, SOLDERING, HEAT TREATING, FORGING, OR WELDING ACTIVITIES	6	2	9
R CONSTRUCTING OR MAINTAINING ROOFING SYSTEMS	4	3	*
S APPLYING OR MAINTAINING PLASTER OR STUCCO	1	*	*
T MAINTAINING MISSLE FACILITIES	*	*	*
U PERFORMING PRIME BEEF ACTIVITIES	7	9	9
V PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	7	6	11
W PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	2	12	35
X PERFORMING TRAINING ACTIVITIES	1	6	6
Y PERFORMING GENERAL ADMINISTRATIVE AND TO SYSTEM ACTIVITIES	*	*	*
Z PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	3	2

* Less than 1 percent.

TABLE 28

REPRESENTATIVE TASKS PERFORMED BY
DAFSC 3E351 AFRC PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=67)
D0196	85
V0801	85
D0175	85
D0192	84
C0076	84
D0156	81
D0148	81
D0132	81
C0065	81
D0178	79
U0738	79
D0137	79
V0792	78
D0129	78
D0180	78
B0042	78
C0074	78
D0158	76
B0052	76
B0043	76
I0298	75
B0051	75
D0147	75
U0718	73
C0073	73
V0785	72
B0045	72
D0177	72

Average Number of Tasks Performed: 273

TABLE 29

REPRESENTATIVE TASKS PERFORMED BY
DAFSC 3E371 AFRC PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=45)
V0801	87
V0792	82
B0042	82
D0175	80
C0074	80
D0137	80
C0076	78
U0727	76
V0785	76
U0719	76
D0178	76
C0070	76
C0092	76
D0148	76
D0156	73
U0738	73
I0298	73
D0131	73
C0071	73
U0757	73
D0132	73
D0129	73
X0857	71
D0192	71
B0043	71
U0736	71
C0073	71
B0052	71
C0090	71

displayed in Table 30. It suggests a shifting from tasks related to concrete and welding at the 5-skill level to ones involving supervision and training at the 7-skill level.

DAFSC 3E391. Our sample contained more 9-skill level members in the AFRC (18) than it did in the AD (11). Of the 18 DAFSC 3E391 personnel in the survey sample, seven were in Supervisory Jobs, while the other 11 were sprinkled among other clusters and jobs or could not be grouped. The personnel in this group indicate they spend 35 percent of their time performing management and supervisory tasks, 11 percent of their time performing mobility and contingency activities, and 9 percent of their time performing PRIME BEEF activities (see Table 27). This groups focus on readiness, supervisory and training tasks are apparent in Table 31. Differences between this group and their DAFSC 3E371 counterparts are displayed in Table 32. Their focus on PRIME BEEF and mobility and contingency tasks, as well as on supervisory tasks, sets these DAFSC 3E391's apart from their DAFSC 3E371 counterparts.

TRAINING ANALYSIS

Occupational survey data are sources of information that can be used to assist in the development of relevant training programs for entry-level personnel. Factors used to evaluate entry-level Structural training include jobs being performed by first-enlistment personnel, overall distribution of first-enlistment personnel across career ladder jobs, percent first-job (1-24 months TAFMS) and first-enlistment (1-48 months TAFMS) members spend performing specific tasks, and ratings of relative TE and TD.

First-Enlistment Personnel

In this study, there are 194 AD AFSC 3E3X1 members in their first enlistment (1-48 months TAFMS), representing 19 percent of the survey sample. Table 33 shows that first-enlistment 3E3X1 members spread their time across many duty areas. However, they do spend 39 percent of their time in three duty areas: constructing, framing, and maintaining buildings (Duty C); installing and maintaining building finishings (Duty D); and performing soldering, heat treating, forging, and welding activities (Duty Q). Representative tasks performed by members in this group are listed in Table 34. Note that the four tasks performed by the highest percentages of first-enlistment members all involve doors. Figure 2 shows the jobs in which AD first enlistment personnel are found. Note that they can be found in all jobs except those that focus on readiness and supervision.

TABLE 30

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 3E351 AND DAFSC 3E371 AFRC PERSONNEL

TASKS	3E351 (N=67)	3E371 (N=45)	DIFFERENCE
I0287	46	11	35
G0243	60	29	31
H0263	37	11	26
G0244	52	27	26
D0190	48	22	26
I0286	39	13	25
Q0577	34	9	25
Q0613	34	9	25
Q0601	34	9	25
G0256	40	16	25
X0867	15	56	-41
W0828	15	56	-41
X0854	9	47	-38
W0851	10	49	-38
X0857	34	71	-37
W0840	19	56	-36
W0850	10	47	-36
X0869	34	69	-35
W0829	12	47	-35
X0858	18	51	-33

TABLE 31

REPRESENTATIVE TASKS PERFORMED BY
DAFSC 3E391 AFRC PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=18)	
W0808	Conduct supervisory performance feedback sessions	78
W0851	Write recommendations for awards or decorations	78
W0803	Assign personnel to work areas or duty positions	72
W0829	Evaluate personnel for promotion, demotion, reclassification, or special awards	72
W0834	Inspect personnel for compliance with military standards	72
V0775	Don or doff chemical warfare personal protective clothing	67
W0813	Determine or establish work assignments or priorities	67
W0850	Write or indorse military performance reports	67
V0801	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	67
W0805	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	61
W0828	Evaluate personnel for compliance with performance standards	61
W0840	Recommend personnel for training	61
W0819	Develop or establish work schedules	61
W0827	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	61
W0812	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	56
W0809	Conduct safety inspections of equipment or facilities	56
W0810	Conduct supervisory orientations for newly assigned personnel	56
W0818	Develop or establish work methods or procedures	56
W0831	Implement safety or security programs	56
W0811	Counsel subordinates concerning personal matters	56
W0835	Interpret policies, directives, or procedures for subordinates	56
X0859	Determine training requirements	56
X0858	Counsel trainees on training progress	56
V0792	Perform self-aid and buddy care (SABC) techniques	56

TABLE 32

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 3E371 AND DAFSC 3E391 AFRC PERSONNEL

TASKS	3E371 (N=45)	3E391 (N=18)	DIFFERENCE
B0042	82	22	60
C0074	80	22	58
C0076	78	22	56
B0043	71	17	54
U0719	76	22	53
C0070	76	22	53
D0137	80	28	52
D0131	73	22	51
C0071	73	22	51
D0132	73	22	51
V0776	2	50	-48
W0814	13	50	-37
V0773	2	39	-37
W0852	16	50	-34
W0815	4	39	-34
W0808	44	78	-33
W0805	29	61	-32
V0791	2	33	-31
U0731	9	39	-30
U0730	20	50	-30

TABLE 33

REPRESENTATIVE TIME SPENT ON DUTIES BY
AFSC 3E3X1 FIRST-ENLISTMENT AD PERSONNEL

DUTY*	RELATIVE PERCENT OF JOB TIME (N= 194)
D	21
Q	9
C	9
I	6
K	6
J	5
E	5
B	5
O	4
P	4
U	3
A	3
H	3
R	3
V	3
L	2
F	2
G	2

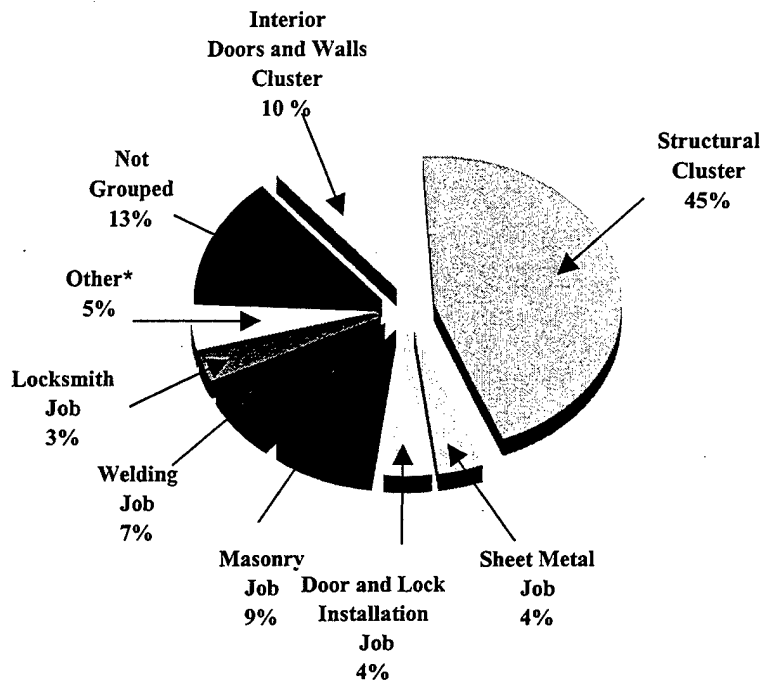
* Duties with relative percent of job time greater than 1 percent.

TABLE 34

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

TASKS	PERCENT MEMBERS PERFORMING (N=194)	
D0148	Install or replace door hinges	91
D0147	Install or replace door closers	88
D0129	Adjust door closers	86
D0150	Install or replace doorjambs or stops	85
K0357	Drill holes in metal	84
D0132	Caulk windows, sinks, or bathtubs	83
D0175	Install or replace suspended ceilings	82
B0042	Drill holes in concrete	82
D0178	Install or replace trim molding, such as baseboards, wainscoting, or door or window casings	81
D0158	Install or replace hollow or solid-core doors	80
I0298	Inspect handtools	78
D0136	Cut glass	77
D0177	Install or replace thresholds	75
D0192	Repair holes in gypsum boards	74
D0137	Erect or disassemble scaffolding	73
D0182	Install or replace windows	73
D0156	Install or replace gypsum boards	72
B0047	Install anchor bolts or fastening devices	69
D0194	Replace glass in windows	68
D0181	Install or replace weather stripping	68
D0131	Apply interior or exterior protective coatings, such as varnishes, paints, or stains, to exposed wood surfaces	66
O0460	Cut sheet metal for parts using shop equipment	65
K0365	Grind down grooves or sharp edges	65
E0198	Apply grout to ceramic, mosaic, or quarry tiles	64
D0180	Install or replace wall or ceiling acoustical materials	64
D0196	Tape and float gypsum board surfaces	64
C0076	Construct or install interior walls	64
E0222	Set ceramic tiles	64
J0333	Install or maintain panic hardware	63
O0459	Cut sheet metal for parts using handtools	63
P0502	Set up for oxyacetylene cutting	63
V0801	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	63

**DISTRIBUTION OF AFSC 3E3X1 FIRST-ENLISTMENT
PERSONNEL ACROSS SPECIALTY JOBS**



* Other includes the Concrete and Framing Job, Cabinetmaking Job, Guard and Reserve Readiness Job.

FIGURE 2

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

TE and TD data are secondary task factors that can help training development personnel decide which tasks to emphasize for entry-level training. These ratings, based on the judgments of senior career ladder NCOs at operational units, provide training personnel with a rank-ordering of those tasks considered important for airmen with 1-48 months TAFMS training and a measure of the relative difficulty of those tasks. When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors (TE and TD), accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for new personnel. These decisions must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist training development personnel, AFOMS developed a computer program that uses these task factors and the percentage of first-enlistment personnel performing tasks to produce Automated Training Indicators (ATI). ATIs correspond to training decisions listed and defined in the Training Decision Logic Table found in Attachment 1, AETCI 36-2601. ATIs allow training developers to quickly focus attention on those tasks that are most likely to qualify for resident course consideration.

Tasks having the highest TE ratings for AFSC 3E3X1 personnel with 1-48 months TAFMS are listed in Table 35. Included for each task are the percentage of 1-24 months TAFMS performing the task, the percentage of 1-48 months performing the task, 5- and 7-skill level performing the task, and the TD rating. As illustrated in Table 35, tasks with the highest TE ratings deal with fabricating sheet metal parts and assemblies and preparing and setting up welding, brazing, or soldering projects. These tasks are performed by high percentages of 1-24 months and 1-48 months TAFMS personnel. All but one has an average or high TD rating.

The most tasks with high TD ratings have already been included in the STS or have low percent of members performing and should not be considered for structured training.

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

TABLE 35

AFSC 3E3X1 TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS

TASKS	TNG EMP	PERCENT MEMBERS PERFORMING				TSK DIF
		1-24 MOS TAFM	1-48 MOS TAFM	5- LVL	7- LVL	
O460 Cut sheet metal for parts using shop equipment	6.27	58	65	59	25	4.43
O476 Lay out sheet metal for parts fabrication using parallel-line method	6.23	35	47	44	19	6.35
O477 Lay out sheet metal for parts fabrication using radical-line method	6.23	27	37	33	13	6.92
O478 Lay out sheet metal for parts fabrication using triangulation method	6.18	26	34	27	10	7.22
O475 Form sheet metal parts using shop equipment	6.18	47	53	44	16	5.32
Q555 Weld flat butt joints using TIG	6.18	31	38	32	6	5.66
P502 Set up for oxyacetylene cutting	6.18	54	63	55	19	4.87
P491 Set up arc welding equipment	6.14	47	58	54	21	5.02
O459 Cut sheet metal for parts using handtools	6.09	60	63	66	23	4.20
D158 Install or replace hollow or solid-core doors	6.09	78	80	81	69	4.68
D175 Install or replace suspended ceilings	6.09	80	82	72	32	5.43
I308 Perform leak tests on oxyacetylene equipment	6.09	46	50	49	20	3.61
Q554 Weld flat butt joints using shield metal arc weld	6.09	48	59	47	16	5.06
Q558 Weld flat edge joints using shield metal arc weld	6.00	47	57	45	17	5.19

TE MEAN = 3.03; S.D. = 1.64; HIGH ≥ 4.67

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

Specialty Training Standard (STS) Analysis

At the time of this study, 3E3X1's senior enlisted leadership had a revision of its STS in final draft. To ensure the relevance of this study, our comprehensive review focused on the draft of the revised STS for AFSC 3E3X1. It was made by comparing survey data to STS elements. Technical school personnel from the 366th Training Squadron, Det 6, Naval Construction Battalion Center, Gulf Port, Mississippi, matched JI tasks to appropriate STS sections and subsections. A complete computer listing displaying the percent members performing tasks, TE and TD ratings for each task, where applicable, along with the STS matching, has been forwarded to the technical school for their further review of training documents. STS elements with performance objectives were reviewed for TE and TD and percent members performing information, as stipulated in AETCI 36-2601, dated 5 July 1996. STS paragraphs containing general knowledge information, subject-matter knowledge requirements, or supervisory responsibilities were not reviewed. Typically, STS elements matched to tasks which have sufficiently high TE and TD ratings and are performed by at least 20 percent of personnel in appropriate skill-level groups such as first-job (1-24 months TAFMS), and first enlistment (1-48 months TAFMS) should be considered for inclusion in the STS. Likewise, elements matched to tasks with less than 20 percent performing in all of these groups should be considered for deletion from the STS.

STS paragraphs containing performance information were reviewed. Of the 39 performance coded elements in the STS, all are well supported by occupational survey data. However, Table 36 lists examples of tasks not referenced to STS elements with 20 percent or more 1-24 months and 1-48 months TAFMS members performing. The majority of these tasks have high percent members performing numbers, high TE ratings, and average TD ratings. One has the highest ATI rating of 18. Training personnel should review these tasks for possible inclusion in the STS.

Plan of Instruction (POI) Analysis

Initial training for the Structural Career Field has two parts. Members entering the career field first take a 52-day joint Air Force-Navy course given at the Naval Construction Battalion Center in Gulf Port, Mississippi. This joint course focuses on carpentry and masonry. Since a Plan of Instruction does not exist for this course, we were not able to match JI tasks to related training objectives for this course.

Air Force graduates from the joint course go on to a 35-day Air Force-unique course; it is Structural Apprentice (J5ABN3E331). Also taught at the Naval Construction Battalion Center, this second course focuses on sheet metal fabrication, welding, and Air Force unique tasks. This course has a Plan of Instruction--- POI J5ABN3E331 000, dated 24 February 1999.

JI tasks were matched to related training objectives for this entry-level course with assistance from the 366th Training Squadron SMEs. The method employed was similar to that of the STS percent members performing data for first-job (1-24 months TAFMS), first-enlistment (1-48 months TAFMS) personnel, and TE and TD.

TABLE 36

EXAMPLES OF TASKS NOT REFERENCED TO STS ELEMENTS
WITH 20 PERCENT OR MORE PERFORMING

TASKS	PERCENT MEMBERS PERFORMING				TSK DIF	ATI
	TNG EMP	1-24 MOS TAFM	1-48 MOS TAFM			
P491 Set up arc welding equipment	6.14	47	58		5.02	18
I0298 Inspect handtools	5.55	73	78		2.08	13
Q602 Weld vertical butt joints using shield metal arc weld	5.55	38	48		6.05	12
I299 Inspect portable electric or pneumatic power tools	5.23	58	60		3.26	13
I302 Inspect shop-installed power equipment	5.05	40	48		4.17	12
Q581 Weld horizontal tee joints using oxyacetylene equipment	5.05	28	29		5.79	11

TE MEAN = 3.03; S.D. = 1.64; HIGH ≥ 4.67

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

POI blocks, units of instruction, and learning objectives were compared to the standard set forth in AETCI 36-2601, dated 5 July 1996 (30 percent or more of the first-enlistment group performing tasks trained, along with sufficiently high TE and TD ratings on those tasks). By this guidance, tasks trained in the course which do not meet these criteria should be considered for elimination from the formal course, if not justified on some other acceptable basis.

Review of tasks matched to the POI revealed that the POI is well supported by occupational survey data. Of the 73 performance coded elements in course J5ABN3E331 000, Structural Apprentice, only 3 were found to be unsupported. As can be seen in Table 37, elements I.4.a, III.4.q, and V.2.n all had less than the required 30 percent members performing. Training personnel should review this element for possible deletion from the course.

Since our POI analysis covered only the second, Air Force-unique course, many JI tasks could not be referred to specific training objectives. However, our POI analysis did identify a few tasks with high ATIs that seem appropriate for the Air Force-unique training. Table 38 contains examples of such tasks. Almost all these tasks involve shield metal arc welding. They should be reviewed by training personnel for inclusion in the POI.

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. Therefore, the survey disks included attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions. The responses of the current survey sample were analyzed by making comparisons among TAFMS groups of the AFSC 3E3X1 career ladder and a comparative sample from other support career ladders surveyed in 1998 and by comparing the current survey and the 1995 survey. They were also analyzed by looking across specialty groups identified in the **SPECIALTY JOBS** section of the report.

Table 39 compares first-enlistment (1-48 months TAFMS), second enlistment (49-96 months TAFMS), and career (97+ months TAFMS) group data to corresponding enlistment groups from other support groups surveyed in 1998. These data give a relative measure of how job satisfaction of AFSC 3E3X1 personnel compares with similar Air Force specialties. With the exception of reenlistment intentions, structural personnel in their first two enlistments reported generally lower job satisfaction than members of the comparative sample. However, reenlistment intentions of the first and second enlistment groups are higher than the intentions of the comparative sample groups. Once members of the Structural career field are in for 97+ months, they indicate levels of job satisfaction similar to members of other support career fields.

An indication of changes in job satisfaction perceptions within the career ladder is in Table 40, which presents TAFMS group data for 1999 survey respondents and data from respondents to the last OSR of the career ladder in 1995. Most measures of job satisfaction have remained fairly stable for members in their first enlistment and have improved for members in their second

TABLE 37

J5ABN3E331 COURSE OBJECTIVES
WITH LESS THAN 30 PERCENT MEMBERS PERFORMING

OBJECT/ TASKS	PERCENT MEMBERS PERFORMING		TNG EMP	TSK DIF	ATI
	1-24 MOS TAFM	1-48 MOS TAFM			
I.4.a Given a drip pan as a metal project and six major dimensions, sketch a working drawing of the drip pan and label each major dimension. Five of the six dimensions must be correct.					
/W0845 Sketch work drawing.	20	24	4.59	2.86	2
III.4.q Given a hangar door trainer and working as a team member, safely remove and replace components by following the written procedures.					
/L0414 Repair or replace mechanical door or gate wheels or pulleys	20	24	5.14	2.91	2
VI.2.n Using the necessary hand tools, maintain inert gas welding equipment.					
/I0314 Perform operator maintenance on tungsten inert gas (TIG) welding Equipment.	20	27	4.83	5.09	11

TE MEAN = 3.03; S.D. = 1.64; HIGH ≥ 4.67

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

TABLE 38

EXAMPLES OF TASKS WITH 30 PERCENT OR MORE PERFORMING
NOT REFERENCED TO POI OBJECTIVES

TASKS	TNG		1-24		1-48		TSK		ATI
	EMP		MOS	TAFM	MOS	TAFM	DIF		
Q558	6.0		47	57			5.19	18	
Q570	5.82		39	52			5.70	18	
Q578	5.82		44	56			5.76	18	
Q582	5.73		39	52			7.78	18	
P485	5.55		38	53			4.25	18	
Q594	5.50		44	54			5.81	18	

TE MEAN = 3.03; S.D. = 1.64; HIGH ≥ 4.67

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

TABLE 39

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 3E3X1 TAFMS GROUPS IN CURRENT SURVEY TO A COMPARATIVE SAMPLE (PERCENT MEMBERS RESPONDING)

	1-48 MONTHS		49-96 MONTHS T1CF		97+ MONTHS	
	3E3X1 (N=194)	COMP SAMPLE (N=249)	3E3X1 (N=105)	COMP SAMPLE (N=190)	3E3X1 (N=380)	COMP SAMPLE (N=585)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	69	77	73	80	78	81
SO-SO	19	13	16	10	14	12
DULL	12	10	11	10	8	7
<u>PERCEIVED USE OF TALENTS</u>						
FAIRLY WELL TO PERFECT	73	84	84	82	85	83
NONE TO VERY LITTLE	27	16	16	18	15	17
<u>PERCEIVED USE OF TRAINING</u>						
FAIRLY WELL TO PERFECT	79	88	78	85	81	74
NONE TO VERY LITTLE	21	12	22	15	19	26
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	53	47	66	56	74	72
NO OR PROBABLY NO	47	53	34	44	8	11
WILL RETIRE	0	0	0	0	18	17

The Comparative Sample includes Support AFSCs surveyed in 1998: Public Affairs (3N0X1), Radio and Television Broadcasting (3N0X2), and Still Photographic (3V0X2).

TABLE 40

COMPARISON OF JOB SATISFACTION INDICATORS OF
CURRENT SURVEY TO PREVIOUS SURVEY
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS		49-96 MONTHS		97+ MONTHS	
	2000 (N=194)	1997 (N=456)	2000 (N=105)	1997 (N=252)	2000 (N=677)	1997 (N=677)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	69	68	73	66	78	70
SO-SO	19	18	16	19	14	19
DULL	12	13	11	14	8	10
<u>PERCEIVED USE OF TALENTS</u>						
FAIRLY WELL TO PERFECT	73	77	84	68	85	76
NONE TO VERY LITTLE	27	22	16	31	15	24
<u>PERCEIVED USE OF TRAINING</u>						
FAIRLY WELL TO PERFECT	79	76	78	67	81	69
NONE TO VERY LITTLE	21	23	22	32	19	30
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	53	57	66	80	74	73
NO OR PROBABLY NO	47	42	34	19	8	11
WILL RETIRE	0	0	0	0	18	15

enlistment and in their career phase. The exception is the reenlistment intentions of members in their second enlistment, which have fallen off by 23 percent during the last four years.

Tables 41 - 43 presents job satisfaction for AD, ANG, and AFRC incumbents, with the major jobs identified in the career ladder structure for AFSC 3E3X1. An examination of these data may reveal indications of concern to functional managers. Active Duty members expressing the least amount of job satisfaction included those in the Interior D&W Cluster and the Door & Lock Installation Job. Active Duty members in the Concrete and Framing Job, the Sheet Metal Job and the Masonry Job have lower reenlistment intentions that most other members. With the exception of a few specific individuals, ANG and AFRC members indicate average to high job satisfaction.

TABLE 41

JOB SATISFACTION INDICATORS FOR
IDENTIFIED JOB GROUPS AND CLUSTERS (PERCENT MEMBERS RESPONDING)
(AD)

	STRUC- TURAL CLUSTER (N = 263)	INTERIOR D&W CLUSTER (N = 46)	CONCRETE & FRAMING JOB (N = 4)	SHEET METAL JOB (N = 14)	D&L INSTALLATION JOB (N = 13)
<u>EXPRESSED JOB INTEREST</u>					
INTERESTING	79	59	50	57	62
SO-SO	14	26	0	36	23
DULL	7	15	50	7	15
<u>PERCEIVED USE OF TALENTS</u>					
FAIRLY WELL TO PERFECT	84	72	50	79	69
NONE TO VERY LITTLE	16	28	50	21	31
<u>PERCEIVED USE OF TRAINING</u>					
FAIRLY WELL TO PERFECT	85	74	50	79	92
NONE TO VERY LITTLE	15	26	50	21	8
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>					
SATISFIED	75	61	25	86	54
NEUTRAL	13	24	25	7	8
DISSATISFIED	12	15	50	7	38
<u>REENLISTMENT INTENTIONS</u>					
YES OR PROBABLY YES	70	70	25	57	62
NO OR PROBABLY NO	25	26	75	36	38
WILL RETIRE	5	4	0	7	0

TABLE 41 (CONTINUED)

JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS AND CLUSTERS (PERCENT MEMBERS RESPONDING) (AD)

	CABINET- MAKING JOB (N = 2)	MASONRY JOB (N = 35)	WELDING JOB (N = 62)	LOCKSMITH JOB (N = 27)
<u>EXPRESSED JOB INTEREST</u>				
INTERESTING	50	72	71	92
SO-SO	50	17	19	4
DULL	0	11	10	4
<u>PERCEIVED USE OF TALENTS</u>				
FAIRLY WELL TO PERFECT	100	77	89	89
NONE TO VERY LITTLE	0	23	11	11
<u>PERCEIVED USE OF TRAINING</u>				
FAIRLY WELL TO PERFECT	50	83	81	78
NONE TO VERY LITTLE	50	17	19	22
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>				
SATISFIED	50	63	81	89
NEUTRAL	0	20	8	7
DISSATISFIED	50	17	11	4
<u>REENLISTMENT INTENTIONS</u>				
YES OR PROBABLY YES	100	57	69	82
NO OR PROBABLY NO	0	37	23	11
WILL RETIRE	0	6	8	7

TABLE 41 (CONTINUED)

JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS AND CLUSTERS (PERCENT MEMBERS RESPONDING) (AD)

	RED HORSE JOB (N = 6)	PRIME BEEF JOB (N = 2)	G&R READNESS JOB (N = 5)	SUPER-VISOR JOB (N = 90)
<u>EXPRESSED JOB INTEREST</u>				
INTERESTING	100	100	80	82
SO-SO	0	0	20	8
DULL	0	0	0	10
<u>PERCEIVED USE OF TALENTS</u>				
FAIRLY WELL TO PERFECT	100	100	100	85
NONE TO VERY LITTLE	0	0	0	15
<u>PERCEIVED USE OF TRAINING</u>				
FAIRLY WELL TO PERFECT	100	100	100	76
NONE TO VERY LITTLE	0	0	0	24
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>				
SATISFIED	83	100	100	80
NEUTRAL	0	0	0	7
DISSATISFIED	17	0	0	13
<u>REENLISTMENT INTENTIONS</u>				
YES OR PROBABLY YES	100	50	60	60
NO OR PROBABLY NO	0	0	40	9
WILL RETIRE	0	50	0	31

TABLE 43

JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS AND CLUSTERS (PERCENT MEMBERS RESPONDING) (AFRC)

	STRUC-TURAL CLUSTER (N = 64)	INTERIOR D&W CLUSTER (N = 2)	CONCRETE & FRAMING JOB (N = 1)	CABINET-MAKING JOB (N = 1)	MASONRY JOB (N = 1)
<u>EXPRESSED JOB INTEREST</u>					
INTERESTING	85	50	0	100	100
SO-SO	9	50	100	0	0
DULL	6	0	0	0	0
<u>PERCEIVED USE OF TALENTS</u>					
FAIRLY WELL TO PERFECT	91	50	100	100	100
NONE TO VERY LITTLE	9	50	0	0	0
<u>PERCEIVED USE OF TRAINING</u>					
FAIRLY WELL TO PERFECT	77	100	100	100	100
NONE TO VERY LITTLE	13	0	0	0	0
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>					
SATISFIED	84	100	0	100	100
NEUTRAL	5	0	100	0	0
DISSATISFIED	11	0	0	0	0

TABLE 42 (CONTINUED)

JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS AND CLUSTERS (PERCENT MEMBERS RESPONDING) (ANG)

	WELDING JOB (N = 11)	PRIME BEEF JOB (N = 3)	G&R READNESS JOB (N = 26)	SUPER-VISOR JOB (N = 14)
<u>EXPRESSED JOB INTEREST</u>				
INTERESTING	91	67	85	93
SO-SO	9	0	15	7
DULL	0	33	0	0
<u>PERCEIVED USE OF TALENTS</u>				
FAIRLY WELL TO PERFECT	73	67	88	93
NONE TO VERY LITTLE	27	33	12	7
<u>PERCEIVED USE OF TRAINING</u>				
FAIRLY WELL TO PERFECT	91	67	88	93
NONE TO VERY LITTLE	9	33	12	7
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>				
SATISFIED	73	67	85	93
NEUTRAL	0	0	15	0
DISSATISFIED	27	33	0	7

TABLE 42

JOB SATISFACTION INDICATORS FOR
IDENTIFIED JOB GROUPS AND CLUSTERS
(PERCENT MEMBERS RESPONDING)
(ANG)

	STRUC- TURAL CLUSTER (N = 102)	INTERIOR D&W CLUSTER (N = 4)	CONCRETE & FRAMING JOB (N = 5)	CABINET- MAKING JOB (N = 2)	MASONRY JOB (N = 2)
<u>EXPRESSED JOB INTEREST</u>					
INTERESTING	88	100	100	50	100
SO-SO	10	0	0	0	0
DULL	2	0	0	50	0
<u>PERCEIVED USE OF TALENTS</u>					
FAIRLY WELL TO PERFECT	93	100	100	50	100
NONE TO VERY LITTLE	7	0	0	50	0
<u>PERCEIVED USE OF TRAINING</u>					
FAIRLY WELL TO PERFECT	91	100	80	50	50
NONE TO VERY LITTLE	9	0	20	50	50
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>					
SATISFIED	90	75	80	50	100
NEUTRAL	8	0	20	0	0
DISSATISFIED	2	25	0	50	0

TABLE 43 (CONTINUED)

JOB SATISFACTION INDICATORS FOR
IDENTIFIED JOB GROUPS AND CLUSTERS
(PERCENT MEMBERS RESPONDING)
(AFRC)

	WELDING JOB (N = 5)	RED HORSE JOB (N = 1)	PRIME BEEF JOB (N = 4)	G&R READNESS JOB (N = 14)	SUPER- VISOR JOB (N = 11)
<u>EXPRESSED JOB INTEREST</u>					
INTERESTING	80	100	100	64	91
SO-SO	20	0	0	0	9
DULL	0	0	0	36	0
<u>PERCEIVED USE OF TALENTS</u>					
FAIRLY WELL TO PERFECT	80	0	100	71	91
NONE TO VERY LITTLE	20	100	0	29	9
<u>PERCEIVED USE OF TRAINING</u>					
FAIRLY WELL TO PERFECT	100	0	100	64	91
NONE TO VERY LITTLE	0	100	0	36	9
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>					
SATISFIED	80	100	100	72	91
NEUTRAL	0	0	0	21	0
DISSATISFIED	20	0	0	7	9

IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted primarily to ensure current data for use in evaluating the effectiveness of training within the Structural career ladder. Data compiled from this survey support the career structure of the AFSC.

Specialty Job Analysis indicates the AFSC 3E3X1 career ladder continues to be dominated by one, large core cluster of jobs. Called the Structural Cluster in this report, it includes more than 40 percent of the members of the career field. The members in this cluster spread their time over a large number of duty areas and perform a very large number of tasks. Active Duty members in the Structural Cluster perform an average of 338 tasks.

In contrast to members in the Structural Cluster, members in Supervisory Jobs are highly focused on a narrow range of supervisory tasks. Active Duty members in Supervisory Jobs perform an average of only 72 tasks.

The AD, ANG, and AFRC exhibit somewhat different career progression patterns for their Structural members. In AD, 3E331's do a broad range of tasks. When they advance to the 5-skill-level, AD members become somewhat more specialized and begin to take on a few supervisory activities. Active Duty members at the 7-skill level are first-line supervisors, while AD members at the 9-skill level focus on management activities

In contrast to their AD counterparts, 7-skill level members in the ANG remain focused on "hands-on" tasks. They do few readiness, supervisory, and training tasks.

The large number of 9-skill level members sets the career progression pattern in the AFRC apart from the patterns found in the AD and ANG. These members focus on mobility and contingency activities and PRIME BEEF activities as well as on management and supervisory tasks.

STS and POI analysis revealed documents that are generally well supported by survey respondents. A survey of senior members of the Structural career field indicted that tasks involving fabricating metal assemblies and preparing and setting up welding projects should get the greatest emphases in apprentice-level training. The POI analysis identified several tasks that involved shield metal arc welding that deserve to be considered for inclusion in the Air Force Structural Apprentice course. It also identified three performance-coded elements in the current course that could not be supported by data from the JI. Training and functional personnel should review these items when considering possible changes to the current course.

No serious job satisfaction problems appear to exist within the AFSC 3E3X1 career ladder. When compared to the prior survey, most measures of job satisfaction have remained fairly stable for members in their first enlistment and have improved for members in their second enlistment and in their career phase. The exception is the reenlistment intentions of AD members in their second enlistment, which has fallen off sharply during the last 4 years.

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY
MEMBERS OF SPECIALTY CLUSTERS AND JOBS

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TABLE A1
STRUCTURAL CLUSTER

TASKS	PERCENT MEMBERS PERFORMING (N=429)
D0148	97
D0158	96
D0147	96
D0175	95
D0156	94
D0132	94
D0178	94
D0150	94
D0129	93
D0192	93
K0357	93
D0177	92
I0298	92
B0042	91
D0137	91
D0181	89
D0182	89
C0076	88
D0142	88
D0196	86
B0047	86
D0136	86
C0074	86
V0801	86
D0131	85
I0306	83
C0070	82
U0727	82
B0043	82
D0180	82

TABLE A2

INTERIOR DOORS AND WALLS CLUSTER

TASKS	PERCENT MEMBERS PERFORMING (N=52)
D0148	100
D0129	98
D0147	96
D0132	96
D0192	92
D0175	90
D0158	90
D0150	88
D0178	88
D0177	83
D0181	79
D0136	79
K0357	77
D0156	77
D0194	71
D0182	71
D0180	69
D0142	69
I0298	67
D0195	63
C0107	62
D0131	62
D0137	62
B0042	60
D0196	58
J0333	58
D0130	56
B0047	56
C0116	52

TABLE A3
CONCRETE AND FRAMING JOB

TASKS	PERCENT MEMBERS PERFORMING (N=10)	
B0045	Float concrete	100
B0052	Remove wooden or metal forms	100
B0042	Drill holes in concrete	100
B0051	Place concrete in forms	100
C0071	Construct or install exterior walls	100
B0043	Finish concrete with handtools	100
B0056	Screed concrete	100
B0055	Saw concrete	100
C0074	Construct or install headers	100
B0047	Install anchor bolts or fastening devices	100
C0063	Construct or install ceiling joists	100
C0073	Construct or install floors	100
C0070	Construct or install double top plates	90
C0076	Construct or install interior walls	90
C0060	Construct or install built-up floor joists	90
C0072	Construct or install floor joists, other than built-up floor joists	90
C0068	Construct or install cripples	90
B0048	Install construction, expansion, or contraction joints	90
C0065	Construct or install common rafters	90
A0026	Place reinforcing wire in slabs	90
B0046	Inspect concrete for defects, such as cracks, scaling, spalls, popouts, honeycombs, or settlement	80
B0044	Finish concrete with power trowels	80
C0059	Construct or install bridging	80
C0082	Construct or install sole plates	80
C0066	Construct or install corner bracings	80
C0086	Construct or install trusses	80
C0075	Construct or install hip rafters	80
C0067	Construct or install corner posts	80
A0031	Tie reinforcing steel	80
A0029	Remove broken concrete	80
A0020	Cut reinforcing steel	70
A0017	Construct or install slab forms	70
A0003	Bend reinforcing steel	70
B0035	Break concrete with cold chisels	70
C0064	Construct or install collar ties	70

TABLE A4
SHEET METAL JOB

TASKS	PERCENT MEMBERS PERFORMING (N=14)	
D0192	Repair holes in gypsum boards	100
O0459	Cut sheet metal for parts using handtools	100
D0147	Install or replace door closers	100
D0148	Install or replace door hinges	100
D0175	Install or replace suspended ceilings	93
O0460	Cut sheet metal for parts using shop equipment	93
D0129	Adjust door closers	93
D0150	Install or replace doorjamb or stops	93
K0369	Install ducts	93
O0474	Form sheet metal parts using handtools	93
O0479	Seal sheet metal parts using lead tape, aluminum tape, or duct tape	93
D0132	Caulk windows, sinks, or bathtubs	93
O0469	Fabricate S and drive slips	93
O0466	Fabricate Pittsburgh-lock seams	93
D0156	Install or replace gypsum boards	86
D0180	Install or replace wall or ceiling acoustical materials	86
D0158	Install or replace hollow or solid-core doors	86
O0475	Form sheet metal parts using shop equipment	86
B0042	Drill holes in concrete	86
K0358	Fabricate ducts	86
O0476	Lay out sheet metal for parts fabrication using parallel-line method	86
P0497	Set up for flat position welding	86
D0196	Tape and float gypsum board surfaces	79
K0357	Drill holes in metal	79
D0131	Apply interior or exterior protective coatings, such as varnishes, paints, or stains, to exposed wood surfaces	79
D0177	Install or replace thresholds	79
P0491	Set up arc welding equipment	79
P0499	Set up for horizontal position welding	79
O0461	Design sheet metal assemblies or parts	71
K0382	Repair or replace ducts	71

TABLE A5

DOOR AND LOCK INSTALLATION JOB

TASKS	PERCENT MEMBERS PERFORMING (N=13)	
D0129	Adjust door closers	100
J0328	Install cylinder locking devices	100
J0333	Install or maintain panic hardware	100
J0329	Install mortise locking devices	100
J0339	Maintain mortise locking devices	100
J0336	Maintain cylinder locking devices	100
D0148	Install or replace door hinges	92
D0147	Install or replace door closers	92
K0357	Drill holes in metal	92
J0323	Duplicate keys with code key machines	92
J0325	Duplicate keys with key duplicating machines	92
J0332	Install or maintain mechanical or cipher locks	92
D0156	Install or replace gypsum boards	92
J0327	Implement master key systems	92
D0158	Install or replace hollow or solid-core doors	85
J0350	Repin interchangeable core locks	85
I0298	Inspect handtools	85
J0343	Modify locking device parts	85
D0175	Install or replace suspended ceilings	85
D0178	Install or replace trim molding, such as baseboards, wainscoting, or door or window casings	85
D0191	Prepare interior or exterior surfaces for painting, staining, or varnishing	85
D0177	Install or replace thresholds	85
B0042	Drill holes in concrete	85
P0484	Prepare metal for welding butt joints	85
P0491	Set up arc welding equipment	85
D0192	Repair holes in gypsum boards	77
J0341	Master key interchangeable core locks	77
O0460	Cut sheet metal for parts using shop equipment	77
D0132	Caulk windows, sinks, or bathtubs	77
O0459	Cut sheet metal for parts using handtools	77
J0319	Change cipher lock combinations	77
D0150	Install or replace doorjambs or stops	77

TABLE A6
CABINETMAKING JOB

TASKS	PERCENT MEMBERS PERFORMING (N=5)	
D0175	Install or replace suspended ceilings	100
F0228	Construct picture frames	100
F0235	Install or replace storage bins	100
C0076	Construct or install interior walls	100
I0298	Inspect handtools	100
D0132	Caulk windows, sinks, or bathtubs	100
D0178	Install or replace trim molding, such as baseboards, wainscoting, or door or window casings	100
D0148	Install or replace door hinges	100
B0042	Drill holes in concrete	100
C0072	Construct or install floor joists, other than built-up floor joists	100
C0073	Construct or install floors	100
D0181	Install or replace weather stripping	100
D0147	Install or replace door closers	100
D0182	Install or replace windows	100
F0233	Install or replace cabinets	80
F0227	Construct cabinets	80
D0131	Apply interior or exterior protective coatings, such as varnishes, paints, or stains, to exposed wood surfaces	80
F0232	Install bookcases	80
F0236	Install or replace wall or corner shelves	80
D0129	Adjust door closers	80
F0229	Construct tables	80
F0225	Construct benches	80
D0176	Install or replace swinging doors	80
I0302	Inspect shop-installed power equipment	80
D0158	Install or replace hollow or solid-core doors	80
C0071	Construct or install exterior walls	80
I0299	Inspect portable electric or pneumatic power tools	80
C0074	Construct or install headers	80
D0177	Install or replace thresholds	80
F0230	Construct wall or corner shelves	60
F0226	Construct bookcases	60
F0242	Repair cabinets	60

TABLE A7
MASONRY JOB

TASKS	PERCENT MEMBERS PERFORMING (N=38)
D0148	100
D0129	97
D0147	97
D0178	97
D0175	95
D0132	95
D0150	95
D0156	92
D0158	92
K0357	92
D0136	89
D0137	89
E0198	89
B0042	87
I0298	87
D0177	87
D0192	84
D0182	84
E0219	84
D0194	82
D0181	82
E0203	82
E0222	82
E0217	79
D0142	76
D0180	74
B0047	74
G0249	74
G0251	74
D0183	74
E0212	74

TABLE A8
WELDING JOB

TASKS		PERCENT MEMBERS PERFORMING (N=78)
P0497	Set up for flat position welding	97
P0491	Set up arc welding equipment	96
P0502	Set up for oxyacetylene cutting	96
P0484	Prepare metal for welding butt joints	95
P0486	Prepare metal for welding lap joints	95
K0357	Drill holes in metal	94
Q0562	Weld flat lap joints using shield metal arc weld	94
Q0566	Weld flat tee joints using shield metal arc weld	94
P0488	Prepare metal edges for welding	94
Q0554	Weld flat butt joints using shield metal arc weld	92
P0487	Prepare metal for welding tee joints	92
P0485	Prepare metal for welding corner or edge joints	92
Q0558	Weld flat edge joints using shield metal arc weld	91
P0499	Set up for horizontal position welding	91
Q0578	Weld horizontal lap joints using shield metal arc weld	88
Q0574	Weld horizontal edge joints using shield metal arc weld	88
Q0582	Weld horizontal tee joints using shield metal arc weld	87
Q0610	Weld vertical lap joints using shield metal arc weld	87
Q0602	Weld vertical butt joints using shield metal arc weld	87
O0460	Cut sheet metal for parts using shop equipment	86
Q0614	Weld vertical tee joints using shield metal arc weld	83
Q0570	Weld horizontal butt joints using shield metal arc weld	83
P0507	Set up for vertical position welding	83
I0310	Perform operator maintenance on oxyacetylene equipment	83
I0287	Adjust brakes for metal thicknesses	83
O0459	Cut sheet metal for parts using handtools	82
O0474	Form sheet metal parts using handtools	82
Q0522	Cut carbon steels using oxyacetylene equipment	82
P0495	Set up for TIG welding	82

TABLE A9
LOCKSMITH JOB

TASKS	PERCENT MEMBERS PERFORMING (N=27)
J0325 Duplicate keys with key duplicating machines	100
J0350 Repin interchangeable core locks	100
J0323 Duplicate keys with code key machines	100
J0328 Install cylinder locking devices	100
J0336 Maintain cylinder locking devices	100
J0339 Maintain mortise locking devices	100
J0346 Perform preventive maintenance on code key machines or key duplicating machines	100
J0332 Install or maintain mechanical or cipher locks	96
J0333 Install or maintain panic hardware	96
J0329 Install mortise locking devices	96
J0319 Change cipher lock combinations	96
J0343 Modify locking device parts	96
J0320 Decipher lock combinations	96
J0349 Remove or replace padlock locking cylinders, other than high-security	96
J0341 Master key interchangeable core locks	93
J0351 Repin regular pin locks	93
J0342 Master key regular pin locks	93
J0327 Implement master key systems	93
J0334 Install or maintain safe locks	89
J0347 Pick locks	89
J0338 Maintain master key system records	85
J0322 Drill open malfunctioning safe-lock mechanisms	81
J0337 Maintain key request logs	78
J0321 Drill open high-security padlocks	78
J0345 Perform maintenance checks or repairs on safes	74
J0348 Remove or replace high-security padlock locking cylinders	74
D0129 Adjust door closers	70
J0340 Manipulate safe combinations	67
J0335 Interpret safe or safe-lock schematics	67
I0298 Inspect handtools	67
J0324 Duplicate keys with impression methods	63
I0306 Maintain handtools, other than lubricating	63
D0148 Install or replace door hinges	63

TABLE A10
RED HORSE JOB

TASKS	PERCENT MEMBERS PERFORMING (N=7)
A0017 Construct or install slab forms	100
B0051 Place concrete in forms	100
B0052 Remove wooden or metal forms	100
A0026 Place reinforcing wire in slabs	100
W0811 Counsel subordinates concerning personal matters	100
A0025 Place reinforcing steel in columns, forms, or walls	100
A0023 Install snap or wire ties	100
A0031 Tie reinforcing steel	100
B0056 Screed concrete	100
V0795 Prepare equipment for deployments	100
V0783 Pack or palletize mobility or contingency equipment for shipment or movement	100
W0850 Write or indorse military performance reports	100
B0043 Finish concrete with handtools	100
W0851 Write recommendations for awards or decorations	100
B0042 Drill holes in concrete	100
B0048 Install construction, expansion, or contraction joints	100
V0801 Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	100
V0792 Perform self-aid and buddy care (SABC) techniques	100
A0001 Apply oil to forms prior to placement of concrete	100
W0803 Assign personnel to work areas or duty positions	86
W0809 Conduct safety inspections of equipment or facilities	86
W0808 Conduct supervisory performance feedback sessions	86
W0829 Evaluate personnel for promotion, demotion, reclassification, or special awards	86
A0020 Cut reinforcing steel	86
W0831 Implement safety or security programs	86
W0840 Recommend personnel for training	86
W0813 Determine or establish work assignments or priorities	86
B0040 Consolidate concrete	86
V0789 Perform pallet buildup activities	86

TABLE A11
PRIME BEEF JOB

TASKS	PERCENT MEMBERS PERFORMING (N=9)	
V0792	Perform self-aid and buddy care (SABC) techniques	100
V0786	Perform chemical warfare agent decontamination procedures	100
V0777	Inspect mobility bags or kits	100
V0801	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	100
U0736	Identify, mark, and report suspected unexploded ordnance (UXO)	100
U0738	Install folded fiberglass mats (FFMs)	100
V0775	Don or doff chemical warfare personal protective clothing	89
U0744	Operate RRR equipment	89
U0720	Assess base facility damage	89
U0745	Perform bomb damage repairs, other than crater repairs	89
V0785	Perform camouflage procedures	89
U0737	Inspect and report base damages	89
V0793	Perform cover and concealment techniques for work party security	78
V0783	Pack or palletize mobility or contingency equipment for shipment or movement	78
U0718	Assemble AM-2 matting	78
V0784	Participate in convoy exercises	78
V0794	Perform or set up site security	78
U0735	Identify bomb crater damages	78
U0727	Construct hard back tent frames	78
U0759	Tow AM-2 matting	78
U0719	Assemble, anchor, or reanchor fiberglass mats	67
U0757	Repair or replace hard back tent frames	67
V0795	Prepare equipment for deployments	67
U0733	Erect or repair bare base structures	67
V0778	Inspect packed or palletized mobility or contingency equipment prior to transport	56
U0758	Tear down bare base structures	56
U0724	Construct field fortifications	56
U0725	Construct field latrines	56

TABLE A12

GUARD AND RESERVE READINESS JOB

TASKS		PERCENT MEMBERS PERFORMING (N=45)
D0175	Install or replace suspended ceilings	98
C0076	Construct or install interior walls	93
B0051	Place concrete in forms	91
D0137	Erect or disassemble scaffolding	91
C0074	Construct or install headers	91
B0052	Remove wooden or metal forms	89
D0156	Install or replace gypsum boards	87
D0192	Repair holes in gypsum boards	87
D0158	Install or replace hollow or solid-core doors	87
B0043	Finish concrete with handtools	87
D0148	Install or replace door hinges	87
V0801	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	84
D0196	Tape and float gypsum board surfaces	84
D0129	Adjust door closers	84
D0131	Apply interior or exterior protective coatings, such as varnishes, paints, or stains, to exposed wood surfaces	82
D0178	Install or replace trim molding, such as baseboards, wainscoting, or door or window casings	82
B0045	Float concrete	82
D0132	Caulk windows, sinks, or bathtubs	82
U0718	Assemble AM-2 matting	80
C0071	Construct or install exterior walls	80
C0073	Construct or install floors	80
B0042	Drill holes in concrete	80
C0070	Construct or install double top plates	78
B0047	Install anchor bolts or fastening devices	78
B0056	Screed concrete	76
D0142	Install or replace asphalt or vinyl floor tiles	76
A0017	Construct or install slab forms	76
D0147	Install or replace door closers	73
A0026	Place reinforcing wire in slabs	73
U0738	Install folded fiberglass mats (FFMs)	71
A0031	Tie reinforcing steel	71
C0065	Construct or install common rafters	71

TABLE A13
SUPERVISOR JOB

TASKS	PERCENT MEMBERS PERFORMING (N=115)	
W0834	Inspect personnel for compliance with military standards	98
W0811	Counsel subordinates concerning personal matters	95
W0813	Determine or establish work assignments or priorities	93
W0835	Interpret policies, directives, or procedures for subordinates	93
W0828	Evaluate personnel for compliance with performance standards	92
W0851	Write recommendations for awards or decorations	91
W0808	Conduct supervisory performance feedback sessions	90
W0840	Recommend personnel for training	89
W0812	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	88
W0810	Conduct supervisory orientations for newly assigned personnel	88
W0850	Write or indorse military performance reports	86
W0829	Evaluate personnel for promotion, demotion, reclassification, or special awards	85
W0824	Establish performance standards for subordinates	85
W0819	Develop or establish work schedules	84
W0803	Assign personnel to work areas or duty positions	83
W0833	Initiate actions required due to substandard performance of personnel	82
W0805	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	81
W0818	Develop or establish work methods or procedures	78
X0867	Evaluate progress of trainees	77
W0827	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	77
X0858	Counsel trainees on training progress	77
W0809	Conduct safety inspections of equipment or facilities	77
X0859	Determine training requirements	75
W0806	Conduct self-inspections or self-assessments	75

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