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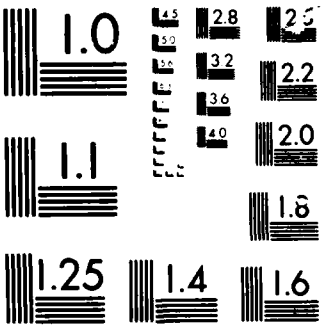
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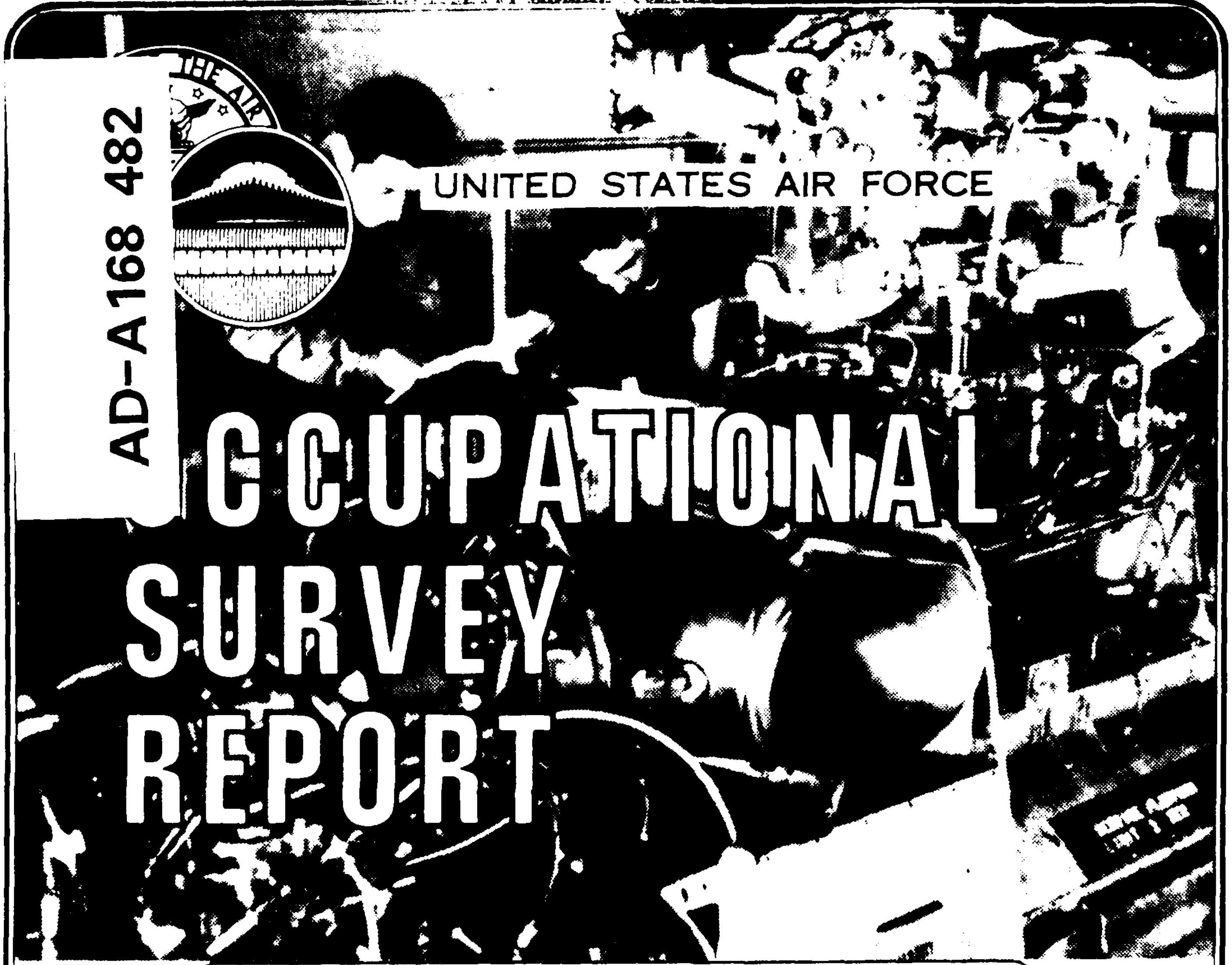

HELICOPTER MECHANIC CAREER LADDER

(AFSC 431X0C/D)
AFPT 90-431-530

MAY 1986

OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
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TABLE OF CONTENTS

	PAGE NUMBER
PREFACE	iii
SUMMARY OF RESULTS	iv
INTRODUCTION	1
Background	1
SURVEY METHODOLOGY	1
Inventory Development	1
Survey Administration	2
Survey Sample	3
Task Factor Administration	3
SPECIALTY JOBS	7
Specialty Structure Overview	8
Job Descriptions	10
Comparison of Specialty Jobs	18
ANALYSIS OF DAFSC GROUPS	19
Skill-Level Comparisons	19
AFR 39-1 Specialty Descriptions	19
ANALYSIS OF EXPERIENCE GROUPS	26
First-Enlistment Personnel	26
Job Satisfaction Data	32
TRAINING ANALYSIS	32
Training Emphasis and Task Difficulty Data	32
Training Documents	35
Summary	38
OTHER CONSIDERATIONS	43
Major Command (MAJCOM) Comparisons	43
CONUS/Overseas Comparisons	43
Comparison to Previous Survey	43
IMPLICATIONS	49

PREFACE

This report presents the results of a detailed Air Force occupational survey of the Helicopter Mechanic Specialty (AFSC 431XOC/D). The project was undertaken at the request of the 3700 Technical Training Wing, Air Training Command, Sheppard Air Force Base, Texas. Priority was established by the Occupational Analysis Program Priorities Working Group (PWG) in accordance with AFR 35-2. Computer printouts from which this report was produced are available for use by operating and training officials.

The survey instrument was developed by First Lieutenant Carl Middleton, Inventory Development Specialist. Computer programming support for this project was provided by Staff Sergeant Joseph E. Seitz, while administrative support was provided by Ms Iva L. Winslow. Mr Hank Dubois, Occupational Analyst, analyzed the survey data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Charles D. Gorman, Chief, Airman Career Ladders Analysis Branch, Occupational Analysis Division, USAF Occupational Measurement Center.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies may be obtained on request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Division (OMY), Randolph AFB, Texas 78150-5000.

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SUMMARY OF RESULTS

1. Survey Coverage: Job inventory booklets were administered to Helicopter Mechanics (AFSC 431XOC/D) worldwide. Survey results are based on the responses of 965 incumbents representing 70 percent of the assigned C-Shred personnel and 77 percent of the D-Shred personnel.

2. Specialty Jobs: The study identified seven major jobs. Over 80 percent of the incumbents were performing primarily maintenance-type tasks and were found in 4 groups differentiated by aircraft maintained (H-1, H-3, H-53, and H-60). The three remaining jobs include a large group of maintenance supervision and management personnel and two much smaller support jobs--ground support and tool crib personnel.

3. Career Ladder Progression: Personnel continue to be mechanics as they progress up the career ladder. Although supervisory and management responsibilities increase at the technician (7-skill) level, these personnel continue to spend more than 50 percent of their job time on technical tasks.

As time in service increased, the relative time spent on supervisory and technical tasks paralleled that found in skill level progression.

Job satisfaction indicators for first-enlistment, second-enlistment, and career personnel were somewhat more positive than those in other mission equipment maintenance career ladders.

4. Training Documents: The current 431XOC/D STSs and basic resident course POIs generally were supported by survey data. There were several tasks not matched to training documents that were performed by significant percentages of group members targeted for training. The computer printouts of tasks not referenced to each of these training documents should be thoroughly reviewed by training managers for possible inclusion in the next change to these career ladder training documents.

5. Implications: Analysis of survey data indicates the pattern of jobs has remained fairly stable for Helicopter Mechanics since the last survey. The present classification system accurately describes the job structure identified in the study, and a classification change to delete the C- and D-Shreds should have no effect on the present job structure. The deletion of shreds will affect training programs in that a new common Specialty Training Standard and basic resident training course must be developed. Present STSs and POIs, with supporting survey data, present a good picture of current training requirements and will provide a strong foundation for the building of new training documents.

OCCUPATIONAL SURVEY REPORT
HELICOPTER MECHANIC CAREER LADDER
(AFSC 431XOC/D)

INTRODUCTION

This is an occupational survey report (OSR) of the Helicopter Mechanic career ladder (AFSC 431XOC/D) completed by the Occupational Analysis Division, USAF Occupational Measurement Center, in March 1986. The survey was conducted in response to a request from the career ladder training manager, 3700 Technical Training Wing, Sheppard Technical Training Center, to assess current training. The last survey report of the Helicopter Mechanic specialty was published in 1978.

Background

As outlined in the current AFR 39-1 Specialty Descriptions, Helicopter Mechanic personnel are responsible for inspecting, repairing, maintaining, troubleshooting, and servicing helicopter aircraft and installed equipment. In addition, they perform maintenance staff functions and supervisory roles.

The Helicopter Mechanic career ladder has remained stable over the years. Only minor classification changes have been made, such as dropping or adding alpha shreds reflecting changes in the Air Force helicopter inventory. At the time of this survey, two shreds were being utilized in the classification of the Helicopter Mechanic career ladder: the C-Shred, identifying the portion of the specialty related to Articulated Rotor Helicopter aircraft (CH/HH-3, CH/HH-53, and HH/UH-60); and the D-Shred, identifying that portion related to Semirigid Rotor Helicopters (HH-1H and UH-1F/P/N).

Subsequent to the request to survey the 431XOC/D career ladders, a proposed classification change to delete the C- and D-Shreds was staffed, coordinated, and approved to become effective no earlier than 30 April 1986. Rationale for the classification change is to improve maintenance capability by providing a large pool of individuals trained to work on any helicopter. In addition, the change will alleviate inequities in frequency of overseas assignment between C- and D-Shred personnel. This classification change will not affect the results of this survey.

SURVEY METHODOLOGY

Inventory Development

The data collection survey instrument for this occupational survey was USAF Job Inventory AFPT 90-431-530, dated April 1984. A preliminary task list was prepared after reviewing pertinent career ladder publications and directives, tasks from previous job inventories, and data from the last OSR.

This preliminary task list was refined and validated through personal interviews with training and operational subject-matter specialists selected to cover the entire range of helicopter models and series at the locations listed below--based on the recommendations of the functional managers of the primary major commands using Helicopter Mechanic resources:

3760 TCHTG, Sheppard AFB TX - location of the C- and D-Shred basic Helicopter Mechanic courses

655 Consolidated Aircraft Maintenance Squadron, Eglin AFB FL - only H-60 maintenance location

834 Aircraft Generation Squadron, Hurlburt Field FL - H-53 and H-1N maintenance location

Det 4, Aerospace Rescue and Recovery Squadron, Little Rock AFB AR - H-1H maintenance location

6514 Test Squadron, Hill AFB UT - Cold Weather and Special Utility System location

1550 Aircrew Training and Test Wing, Kirtland AFB NM - H-1F and H-3 maintenance location

This process resulted in a final job inventory containing a list of 1,084 tasks grouped within 12 duty headings. The inventory also included a background section asking such information as maintenance courses completed, work-center assigned, aircraft maintained, and maintenance and support equipment used.

Survey Administration

From September 1984 through March 1985, Consolidated Base Personnel Offices (CBPO) at operational units worldwide administered the inventory to job incumbents holding AFSC 431X0C/D. These job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL).

Each individual who completed the inventory first completed an identification and background section and then checked each task performed in their current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from one (very small amount of time spent) through five (about average time spent) to nine (very large amount time spent).

To determine relative time spent for each task checked by a respondent, all of an incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by

the total task ratings and multiplied by 100. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Personnel were selected to participate in this survey to ensure an accurate representation across major commands (MAJCOM) and paygrade groups. All eligible AFSC 431XOC/D personnel were mailed survey booklets. (Personnel in initial technical training; projected for PCS, retirement, or discharge; those in hospital status; and those with less than 6 weeks on the job are not eligible for survey). Table 1 shows the percentage distribution, by MAJCOM, of assigned personnel in both AFSCs 431XOC and 431XOD, as of July 1984. Also listed is the percentage distribution, by MAJCOM, of respondents in the final survey sample. The 563 respondents included in the final 431XOC sample represent 84 percent of the 431XOC career ladder personnel eligible for the survey. The 402 personnel in the final 431XOD sample represent 87 percent of those eligible for survey in the 431XOD career ladder.

Table 2 reflects the paygrade distribution, while Table 3 lists the sample distribution by total active federal military service (TAFMS) groups. As reflected in these three tables, the survey sample provides a very good representation of both the C- and D-Shred populations.

Task Factor Administration

In addition to completing the job inventory, selected senior 431XOC/D personnel were also tasked to complete a second booklet for either task difficulty (TD) or training emphasis (TE). The TD and TE booklets are processed separately from the job inventories. The rating information is used in several analyses discussed in this report. MAJCOM distribution of these raters appears in Table 4.

Task Difficulty (TD). Each person completing a TD booklet was asked to rate all inventory tasks on a 9-point scale (from extremely low to extremely high) as to relative difficulty of each task. Difficulty is defined as the length of time required by an average incumbent to learn to do a task. Task difficulty data were independently collected from 109 experienced 5- or 7-skill level 431XOC/D personnel stationed worldwide. The interrater reliability (as assessed through components of variance of standard group means) was .96, which reflects high agreement among the raters. Ratings were adjusted so tasks of average difficulty would have a 5.0 rating and a standard deviation of 1.0. The resulting data are essentially a rank ordering of tasks, indicating the degree of difficulty for each task in the inventory.

Job Difficulty Index (JDI). After determining the TD index for each task item, a Job Difficulty Index (JDI) was computed for the job groups identified in the survey analysis. The JDI provides a relative measure of which jobs, in comparison to other jobs, are more or less difficult. An equation using the number of tasks performed and the average difficulty per unit time spent

TABLE 1

COMMAND REPRESENTATION OF SURVEY SAMPLE

COMMAND	431X0C		431X0D	
	PERCENT OF ASSIGNED	PERCENT OF SAMPLE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
MAC	78	79	77	75
TAC	4	3	19	20
AFSC	11	11	2	3
USAFE	5	4	*	*
ATC	1	1	1	1
OTHER	1	2	1	1

	431X0C	431X0D
TOTAL ASSIGNED	799	524
TOTAL ELIGIBLE	669	462
TOTAL IN SAMPLE	563	403
PERCENT OF ASSIGNED IN SAMPLE	70%	77%
PERCENT OF ELIGIBLE IN SAMPLE	84%	87%

NOTE: Manning figures as of July 1984
* Less than 1 percent

TABLE 2

PAYGRADE REPRESENTATION OF SURVEY SAMPLE

	431X0C		431X0D	
PAYGRADE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
AIRMAN	39	38	31	26
E-4	16	15	23	23
E-5	25	26	29	32
E-6	13	13	10	11
E-7	7	8	7	8

TABLE 3

TAFMS REPRESENTATION OF SURVEY SAMPLE

	431X0C		431X0D	
MONTHS TAFMS	PERCENT OF ASSIGNED	PERCENT OF SAMPLE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
1-48	43	42	35	34
49-96	22	23	33	33
97-144	13	14	14	16
145-192	10	10	7	8
193-240	8	8	7	6
241+	4	3	4	3

NOTE: Manning figures as of July 1984

TABLE 4

TASK FACTOR RATER MAJCOM DISTRIBUTION

COMMAND	PERCENT OF ASSIGNED	PERCENT OF TE RATERS	PERCENT OF TD RATERS
MAC	77	77	76
TAC	10	10	12
AFSC	8	8	6
ATC	1	0*	6
OTHER	4	5	0

* Training emphasis ratings are not routinely gathered from ATC personnel

(ADPUTS) as variables is the basis for the JDI. Thus, the more time a group spends on difficult tasks and the more tasks group members perform, the higher the JDI. The index ranges from 1.0 for very easy jobs to 25.0 for very difficult jobs. The measurements are adjusted so the average JDI is 13.0.

Training Emphasis (TE). Training emphasis is a rating of which tasks require structured training for first-term personnel. Structured training is defined as training provided at resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or by any other organized training method. Individuals completing TE booklets were asked to rate tasks on a 10-point scale from no training required to extremely heavy training required. Data were independently collected from 120 experienced 5- and 7-skill level 431XOC/D personnel stationed worldwide.

Three sets of TE data were analyzed. These included TE data as rated by all the raters (120 members) and for two groups within those 120 developed from the shred of the rater, C-Shred (59 members) or D-Shred (61 members). While the interrater reliability of the overall group (as assessed through components of variance of standard group means) was .95, indicating general agreement, a task-by-task review of ratings across the maintenance backgrounds indicated there are differences in how the two groups perceive first-term training needs. Therefore, the TRAINING ANALYSIS section of this report utilizes TE ratings developed on rater shred, i.e., helicopter background.

When used in conjunction with other factors, such as percent members performing, the TD and TE ratings can provide an insight into training requirements. This may help validate the lengthening or shortening of specific units of instruction in various training programs.

SPECIALTY JOBS

The structure of jobs within the Helicopter Mechanic career ladder was examined on the basis of similarity of tasks performed and the percent time spent ratings provided by job incumbents, independent of specialty or other background factors.

For the purpose of organizing individual jobs into similar units of work, an automated job clustering program is used. This hierarchical grouping program is a basic part of the Comprehensive Occupational Data Analysis Program (CODAP) system for job analysis. Each individual job description in the sample is compared to every other job description in terms of tasks performed and the relative amount of time spent on each task in the job inventory. The automated system is designed to locate the two job descriptions with the most similar tasks and percent time ratings and combine them to form a composite job description. In successive stages, new members are added to initial groups or new groups are formed based on the similarity of tasks and percent of time ratings in each individual job description. This procedure is continued until all individuals and groups are combined to form a single composite representing the total sample. The resulting analysis of the variety of

groups of jobs serves to identify: (1) the number of characteristics of the different jobs which exist within the career ladders; (2) the tasks which tend to be performed together by the same respondents; and (3) the breadth or narrowness of the jobs which exist within the Helicopter Mechanic career ladder.

The basic identifying group used in the hierarchical job structuring process is the Job Type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as Clusters. In many career ladders, there are specialized job types too dissimilar to be grouped into any cluster. These unique groups are labeled Independent Job Types.

Specialty Structure Overview

Based on the similarity of tasks performed and the amount of time spent performing each task, five clusters and two independent job types were identified in the examination of the Helicopter Mechanic career ladder. These major jobs are illustrated in Figure 1 and are described on the following pages. The group (GRP) number shown beside each title is a reference to computer-printed information and the letter N refers to the number of personnel in the group:

I. MAINTENANCE SUPERVISION AND MANAGEMENT PERSONNEL CLUSTER (GRP007, N=157)

- A. Training Personnel (GRP017, N=13)
- B. Quality Control Inspectors (GRP031, N=23)
- C. Helicopter Maintenance and Support NCOICs (GRP039, N=55)
- D. Maintenance Control Specialists (GRP035, N=34)
- E. Headquarters Staff Personnel (GRP089, N=5)

II. H-1 FLIGHTLINE MAINTENANCE PERSONNEL CLUSTER (GRP036, N=333)

- A. H-1 Flightline Specialists (GRP133, N=279)
- B. H-1 Line Chiefs (GRP156, N=13)

III. CH/HH-3 FLIGHTLINE MAINTENANCE PERSONNEL CLUSTER (GRP057, N=220)

- A. H-3 Flightline Specialists (GRP108, N=205)
- B. H-3 Line Chiefs (GRP110, N=13)

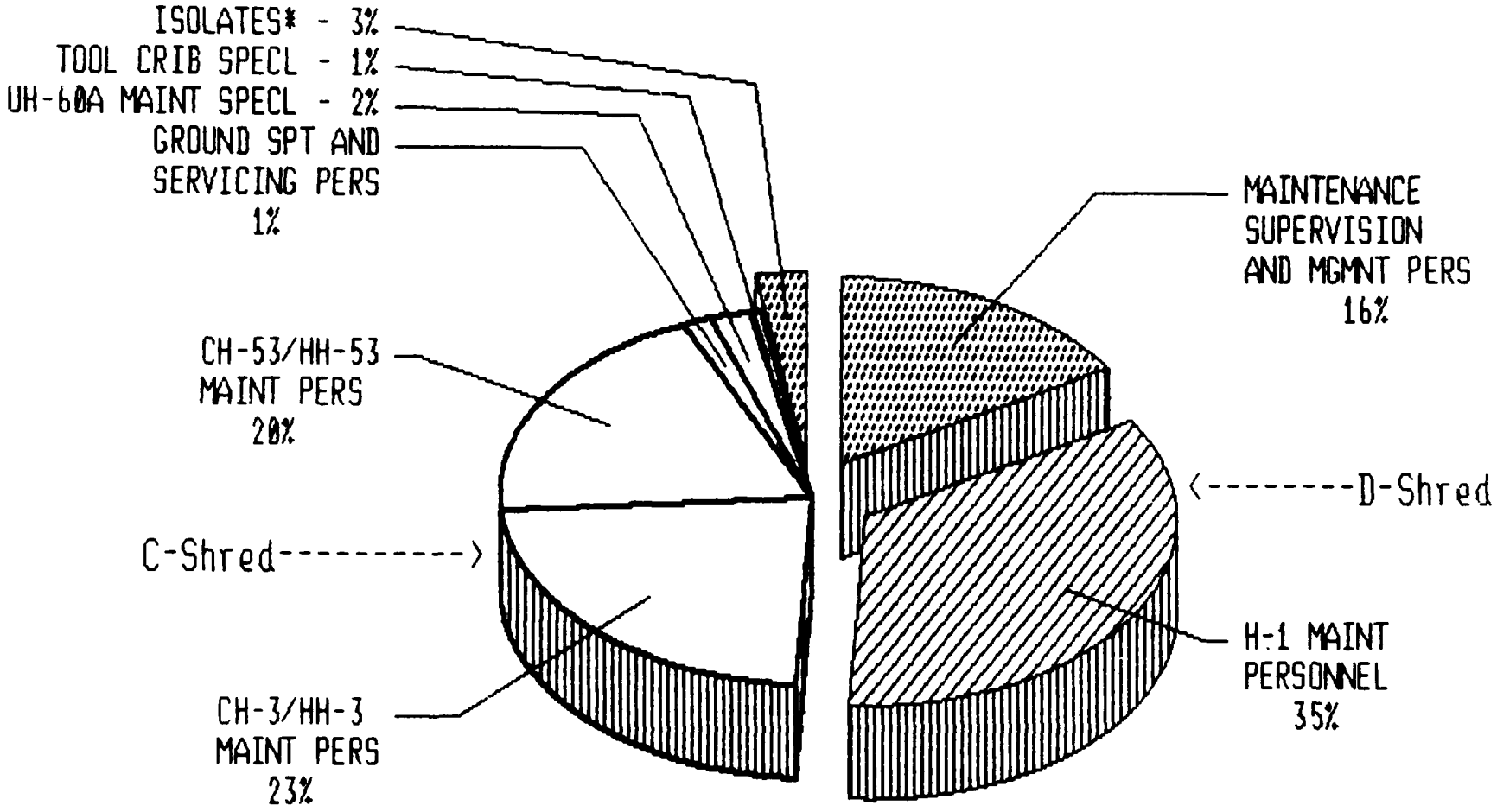
IV. CH/HH-53 FLIGHTLINE MAINTENANCE PERSONNEL CLUSTER (GRP059, N=190)

- A. H-53 Flightline Specialists (GRP134, N=170)
- B. H-53 Line Chiefs (GRP136, N=5)

V. GROUND SUPPORT AND SERVICING PERSONNEL CLUSTER (GRP034, N=14)

- A. H-53 Ground Support Specialists (GRP128, N=6)
- B. H-3 Ground Support Specialists (GRP151, N=5)

Figure 1
431XOC/D Career Ladder Structure
(N=965)



*Personnel not grouped

VI. UH-60A HELICOPTER MAINTENANCE SPECIALISTS (GRP113, N=20)

VII. TOOL CRIB SPECIALISTS (GRP091, N=6)

The 431XOC/D survey respondents forming the above jobs accounted for 97 percent of the total sample. The remaining 3 percent, referred to as isolates, were performing tasks or series of tasks that did not group them with any of the above jobs.

Job Descriptions

The structure outlined above is not unlike the majority of systems maintenance jobs in that it is represented by supervisors and managers, systems maintainers, and maintenance support personnel. The key differentiating factor for the personnel within the Maintenance Supervision and Management Personnel cluster appears to be the amount of time spent performing supervisory, administrative, or training-related tasks. The maintenance and maintenance support jobs include four clusters and two independent job types. The differentiating factors among these jobs appear to be the helicopter aircraft maintained or supported and the average number of tasks performed.

Three tables at the end of this section provide additional information about the clusters and independent job types identified in this analysis. Table 5 provides the relative time spent on each duty by the personnel in each of the major jobs identified. For example, the Supervision and Management Personnel spend 26 percent of their job time performing administrative and supply functions (Duty E), while the Tool Crib Specialists spend 72 percent of their job time maintaining tools and ground support equipment (Duty L). Table 6 provides selected background information, such as DAFSC, MAJCOM, and average months in service (TAFMS) for the major job groups. For example, 41 percent of the Supervision and Management Personnel hold DAFSC 43170C, 73 percent are assigned to MAC, and they average 162 months in the service. Table 7 provides job satisfaction data for the major groups and may help indicate where potential morale problems might exist. For example, the Tool Crib Specialists appear to be very dissatisfied, with only 16 percent finding their job interesting and only 33 percent feeling their training is being used at least fairly well.

Also included in this report is an appendix concerning the Helicopter Mechanic specialty jobs. Appendix A provides various duty and background information for all the jobs identified in the career ladder structure analysis, including the jobs within each cluster. This appendix also lists common tasks performed by members of each of the jobs identified.

Brief descriptions of each cluster and independent job type are presented below.

I. MAINTENANCE SUPERVISION AND MANAGEMENT PERSONNEL (GRP007). Seventy-two percent of these NCOs hold a DAFSC at the 7-skill level (C-Shred, 41 percent;

TABLE 5

RELATIVE TIME SPENT ON DUTIES BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES (PERCENT TIME SPENT)

DUTIES	MAINT SUPVR & MGT PERS (N=157)	H-1 MAINT PERS (N=333)	CH-3/ HH-3 MAINT PERS (N=220)	CH-53/ HH-53 MAINT PERS (N=190)	GROUND SUPT & SVC PERS (N=14)	UH-60A MAINT SPECL (N=20)	TOOL CRIB SPECL (N=6)
A ORGANIZING AND PLANNING	18	2	2	1	-	1	3
B DIRECTING AND IMPLEMENTING	16	2	2	2	-	2	3
C INSPECTING AND EVALUATING	10	1	1	1	-	1	1
D TRAINING	10	1	1	1	*	1	1
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	26	8	8	8	8	9	17
F PERFORMING GENERAL HELICOPTER MAINTENANCE	7	23	39	41	49	25	-
G PERFORMING H-1 HELICOPTER MAINTENANCE	7	58	*	*	-	*	-
H PERFORMING H-53 HELICOPTER MAINTENANCE	1	*	1	44	22	-	-
I PERFORMING H-3 HELICOPTER MAINTENANCE	2	*	43	*	13	-	-
J PERFORMING H-60 HELICOPTER MAINTENANCE	*	-	*	-	-	57	2
K PERFORMING FLYING-RELATED FUNCTIONS	1	2	1	1	*	1	-
L MAINTAINING TOOLS AND GROUND SUPPORT EQUIPMENT	2	4	3	3	8	3	72

* Denotes less than .5 percent

TABLE 6

SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS
AND INDEPENDENT JOB TYPES

	MAINT SUPVR & MGT PERS	H-1 MAINT PERS	CH-3/ HH-3 MAINT PERS	CH-53/ HH-53 MAINT PERS	GROUND SUPT & SVC PERS	UH-60A MAINT SPECL	TOOL CRIB SPECL
NUMBER IN GROUP	157	333	220	190	14	20	6
PERCENT OF TOTAL SAMPLE	16%	35%	23%	20%	1%	2%	1%
PERCENT IN CONUS	72%	88%	84%	72%	86%	100%	33%
DAFSC DISTRIBUTION (PERCENT)							
43130C	0	0	9	12	93	40	0
43130D	0	12	0	0	0	0	0
43150C	18	1	59	58	7	30	83
43150D	10	61	0	1	0	5	0
43170C	41	0	32	29	0	25	17
43170D	31	26	0	0	0	0	0
AVERAGE GRADE	E-6	E-4	E-4	E-4	E-2	E-4	E-4
AVERAGE MONTHS IN CAREER FIELD	130	59	63	53	6	46	77
AVERAGE MONTHS IN SERVICE	162	73	79	66	9	51	89
PERCENT IN FIRST ENLISTMENT	3%	40%	46%	52%	93%	60%	33%
PERCENT SUPERVISING	48%	39%	37%	35%	-	40%	33%
AVERAGE NUMBER OF TASKS PERFORMED	56	215	218	199	49	183	12
JOB DIFFICULTY INDEX (JDI) (AVERAGE JDI = 13.00)	10.2	13.5	14.4	14.5	3.3	14.3	1.0
MAJOR COMMAND DISTRIBUTION							
MAC	73%	77%	92%	68%	79%	100%	67%
TAC	11%	20%	6%	-	-	-	-
AFSC	5%	3%	1%	24%	21%	-	16%
USAFE	4%	-	-	67%	-	-	16%
OTHER	7%	-	1%	2%	-	-	-

TABLE 7

JOB SATISFACTION INFORMATION FOR CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES (PERCENT MEMBERS RESPONDING)

	MAINT SUPVR & MGT PERS (N=157)	H-1 MAINT PERS (N=333)	CH-3/ HH-3 MAINT PERS (N=220)	CH-53/ HH-53 MAINT PERS (N=190)	GROUND SUPT & SVC PERS (N=14)	UH-60A MAINT SPECL (N=20)	TOOL CRIB SPECL (N=6)
HOW DO YOU FIND YOUR JOB:							
INTERESTING	75	80	82	81	93	100	16
SO-SO	16	15	11	14	7	0	67
DULL	8	5	7	5	0	0	6
HOW WELL DOES YOUR JOB UTILIZE YOUR TALENTS:							
FAIRLY WELL TO PERFECTLY	82	87	89	87	79	90	67
VERY LITTLE OR NOT AT ALL	17	13	11	13	21	10	33
HOW WELL DOES YOUR JOB UTILIZE YOUR TRAINING:							
FAIRLY WELL TO PERFECTLY	76	92	94	96	86	75	33
VERY LITTLE OR NOT AT ALL	22	8	6	4	14	25	67
HOW SATISFIED ARE YOU WITH THE SENSE OF ACCOMPLISHMENT GAINED FROM YOUR JOB:							
SATISFIED	70	76	78	74	86	90	16
UNDECIDED	9	11	9	10	14	10	16
DISSATISFIED	19	13	13	16	0	0	67
DO YOU PLAN TO REENLIST							
YES, OR PROBABLY YES	70	72	74	64	71	70	33
NO, OR PROBABLY NO	12	26	20	33	29	25	50
NO, WILL PROBABLY RETIRE	17	2	6	2	0	5	17

* Columns may not add to 100 percent due to no response or rounding

D-Shred, 31 percent). Forty-eight percent of these incumbents supervise an average of four personnel. The group spends 80 percent of their job time performing administrative and supervisory tasks associated with their function. Tasks performed by high percentages of personnel in this cluster include:

coordinate work with related maintenance activities
determine work priorities
plan maintenance inspections of helicopters
determine requirements for space, personnel, equipment or supplies
demonstrate how to locate technical information
interpret policies, directives, or procedures for subordinates
prepare APR
counsel personnel on personal or military-related matters
assign personnel to duty positions

There were five job types in this cluster. The differentiating factors for these jobs seem to be the average number of tasks performed and the amount of time spent across various supervisory and administrative duties. Training Personnel spend a majority of their time (57 percent) performing tasks directly related to either formal resident training or unit on-the-job training (OJT) programs. Quality Control Inspectors are differentiated by tasks related to the development, implementation, and follow-up of helicopter maintenance quality control and inspection programs. Helicopter Maintenance and Support NCOICs spend 49 percent of their job time performing management duties related to organizing, directing, and inspecting and another 20 percent performing administrative and supply duties. They supervise an average of 9 personnel and have an average grade of E-6. These senior personnel are assigned as maintenance superintendents, branch chiefs, and supervisors of flightline or support equipment activities. Maintenance Control Specialists are responsible for job or maintenance control functions associated with assigned helicopters. They perform an average of 19 tasks, with 40 percent of their job time related to a variety of administrative tasks. Headquarters Staff Personnel are the most senior group identified in the survey sample (averaging over 18 years in service with an average grade of E-6 or E-7). These personnel function as managers or advisors at wing level and above. (For more information about these groups, and those to follow, see Appendix A.)

II. H-1 FLIGHTLINE MAINTENANCE PERSONNEL (GRP036). There are 333 members in this cluster of two jobs (35 percent of the sample), with 80 percent reporting. They work in flightline maintenance. Over 65 percent of these respondents identified themselves as crew chiefs, assistant crew chiefs, or flightline mechanics. The group spends 58 percent of their time performing tasks related to the H-1 lightlift helicopter for which there are several models and missions. Another 23 percent of their time is spent on general maintenance

tasks common to several rotary aircraft. Examples of tasks performed by these personnel include:

attach or detach ground handling wheels on H-1 helicopters
launch H-1 helicopters
inspect rotor systems on H-1 helicopters
clean helicopter surfaces or compartments
remove or install airframe or engine covers on H-1 helicopters
lubricate flight controls on H-1 helicopters
prepare AFTO Forms 349 (Maintenance Data Collection Record)
install main rotor assemblies on H-1 helicopters
service main rotor assemblies on H-1 helicopters
drain fuel sumps on H-1 helicopters

There were two job types identified in this cluster. The first, H-1 Flightline Specialists, performs a job most similar to that of the entire cluster. Within this group of 279 there are some job variations, based on the model of H-1 aircraft assigned and length of time assigned to that aircraft. Personnel maintain one or a combination of the following models:

MODEL (Uniqueness)	Percent Maintaining
UH-1N (Utility, 2-Engine Model)	52
TH-1F (Training)	25
UH-1F (Utility)	23
HH-1H (Rescue)	23
UH-1P (Combat Version)	9

The second job, H-1 Line Chiefs, identifies those personnel responsible for first-line supervision in the cluster. While these more senior personnel (average paygrade of E-6 compared to E-4 for the previous group) still spend 53 percent of their time on maintenance tasks, they are spending 40 percent of their job time on supervisory and administrative tasks.

III. CH/HH-3 FLIGHTLINE MAINTENANCE PERSONNEL (GRP057). These 220 members account for 23 percent of the total survey sample. Eighty-six percent of these respondents indicate they work in flightline maintenance, with 79 percent indicating they work on CH-3 aircraft (cargo version) and 78 percent on HH-3 (rescue version). They spend 43 percent of their job time on H-3 maintenance-unique tasks and 39 percent on general helicopter maintenance tasks. A sampling of tasks performed includes:

remove or install airframe access panels, hatches, or cowling on helicopters
clean helicopter surfaces or compartments
attach or detach towing devices on H-3 helicopters
launch H-3 helicopters
inspect rotor systems on H-3 helicopters
prepare AFTO Forms 349 (Maintenance Data Collection Record)
inspect flight control systems on H-3 helicopters
service helicopter hydraulic systems
lubricate main rotor head on H-3 or H-53 helicopters
refuel helicopters using gravity procedures

Two jobs were identified in this cluster--H-3 Flightline Specialists and H-3 Line Chiefs--somewhat parallel to those found in the H-1 cluster. The H-3 Flightline Specialists are different from the H-1 comparative job in that there are no subgroups within the H-3 job.

IV. CH/HH-53 FLIGHTLINE MAINTENANCE PERSONNEL (GRP059). Of these 190 respondents (20 percent of the survey sample), 83 percent work on the HH-53 and 30 percent on the CH-53. This group spends 44 and 41 percent of their job time performing H-53 and general helicopter maintenance tasks, respectively. Tasks commonly identified with this cluster include:

remove or install airframe access panels, hatches, or cowling on helicopters
clean helicopter surfaces or compartments
perform aircraft postflight inspections on H-53 helicopters
inspect landing gear systems on H-3 or H-53 helicopters
refuel helicopters using pressure procedure
service helicopter hydraulic systems
launch H-53 helicopters
lubricate main rotor head on H-3 or H-53 helicopters
tie down blades on H-53 helicopters
inspect transmission drive systems on H-53 helicopters

The structure of this cluster is identical to that of the CH/HH-3 Flightline Maintenance Personnel Cluster (GRP057). Parallel job types are identified, i.e., H-53 Flightline Specialists and H-53 Line Chiefs. The first, represents a group of respondents performing the full range of H-53 helicopter maintenance, and the second, a group of more senior first-line supervisors.

V. GROUND SUPPORT AND SERVICING PERSONNEL (GRP034). This very junior group of 14 airmen (average paygrade, E-2) perform an average of 49 tasks and spend 49 percent of their job time performing general helicopter maintenance tasks. These members perform a very limited job consisting of somewhat routine servicing and ground handling tasks. Two jobs are found in this cluster--different only in the aircraft supported--H-53 Ground Support Specialists and H-3 Ground Support Specialists. Examples of tasks performed by the H-53 job incumbents include:

inspect tools or tool kits
clean helicopter surfaces or compartments
connect or disconnect external electrical power to helicopters
attach or detach towing devices on H-53 helicopters
inspect rotor systems on H-53 helicopters
refuel helicopters using pressure procedure

Tasks performed by H-3 job incumbents include:

attach or detach towing devices on H-3 helicopters
refuel helicopters using pressure procedure
launch H-3 helicopters
tie down blades on H-3 helicopters
service helicopter engine oil systems
inspect visible turbine blades

VI. UH-60A HELICOPTER MAINTENANCE SPECIALISTS (GRP113). The 20 members of this independent job type are all assigned to the 655 Consolidated Aircraft Maintenance Squadron, the only organization performing H-60 helicopter maintenance at the time of the survey. These personnel spend 57 percent of their job time performing H-60 unique tasks and 25 percent on tasks in the general helicopter maintenance duty. Some tasks representative of this group follow:

launch H-60 helicopters
recover H-60 helicopters
remove or install main rotor blades on H-60 helicopters
remove or install batteries on H-60 helicopters
remove or install stabilators on H-60 helicopters
inspect rotor systems on H-60 helicopters

VII. TOOL CRIB SPECIALISTS (GRP091). The six members of this independent job type represent the most limited job identified in the survey. They perform an average of 12 tasks and 72 percent of their job time is spent maintaining tools and ground support equipment. The Job Difficulty Index (JDI) for this job is 1.0, indicating these incumbents perform the easiest job of all major groups identified (see Table 6). Examples of tasks performed by these members include:

inventory equipment, tools, tool kits, or supplies
inspect tools or tool kits
clean handtools or special equipment
issue equipment, tools, tool kits, or supplies
prepare AFTO Forms 350 (Reparable Item Processing Tag)
maintain supply records

As mentioned earlier in this section, these journeyman-level (DAFSC 43150C/70C) personnel express very low job satisfaction (see Table 7), possibly resulting from the narrow job they perform.

Comparison of Specialty Jobs

The three large maintenance groups (H-1, H-3, and H-53) appear to represent the same basic job being performed on different aircraft. That is, the tasks they are most likely to perform are identical--differentiated only by aircraft maintained. The smaller H-60 job group differs somewhat from the previous three in that these personnel spend much less time performing Duty F tasks (general helicopter maintenance). However, all four maintenance groups spend considerable time in the maintenance of rotor and flight control systems, transmission and drive systems, and aircraft utility systems (see Appendix A).

Table 6 reflects similar background characteristics for the four aircraft maintenance groups. The noticeable exception is skill-level distribution and experience level of the H-60 maintenance group. Forty percent possess a DAFSC 43130C and 60 percent are in their first enlistment.

Data displayed in Table 7 reflect that job satisfaction does not appear to be a problem in this specialty. Although the Supervision and Management group has expressed slightly lower job satisfaction, the Tool Crib Specialists are the only seriously divergent group in terms of expressed job satisfaction.

In summary, the specialty job analysis suggests the present classification structure is working well. Aircraft-oriented groups are formed in consonance with the classification structure, with C- and D-Shred personnel matched to the appropriate job groups. Job satisfaction responses indicate individuals and training generally are well matched to the job characteristics of the career ladder. The group at the low end of the job satisfaction range

represents less than 1 percent of the survey sample and performs a very limited job.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational analysis. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information is used to evaluate how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the Specialty Training Standard (STS), reflect what career ladder personnel are actually doing in the field.

A comparison of duty and task performance between 3- and 5-skill level personnel, in both the 431X0C and 431X0D career ladders, indicates the jobs they perform essentially are the same. Therefore, 3- and 5-skill level personnel will be discussed as one group in this report.

Skill Level Comparisons

As in most career ladders, the job performed by the 3- and 5-skill level personnel, in both C- and D- Shreds, is predominately technical in nature. Table 8 reflects these personnel spend 83 and 85 percent of their job time, respectively, performing maintenance-related activities (Duties F through L). Tables 9 and 10 reflect those tasks performed by the highest percentages of 3- and 5-skill level personnel of the two career ladder shreds. Those tasks include inspecting, servicing, and lubricating helicopter systems and components; removing or installing systems and components; and preparing maintenance records and forms.

The duties and tasks performed by 7-skill level personnel indicate these personnel are indeed technicians, but spend a significant amount of job time in the areas of supervision and management. Table 8 reflects 43170C personnel spend 41 percent of their job time in such duties and 43170D personnel slightly less than that (38 percent). Tables 11 and 12 list tasks performed by these groups that reflect both the technical and supervisory/management aspects of their jobs.

These findings are not unexpected, given the career ladder structure discussed in the SPECIALTY JOBS section. Distribution of DAFSC group members across the major career ladder jobs as displayed in Table 13.

AFR 39-1 Specialty Description

The foregoing 3-, 5-, and 7-skill level survey data were compared to the AFR 39-1 Specialty Descriptions for the Helicopter Mechanic (AFSC 43110/43130/43150) and the Helicopter Technician (AFSC 43170), dated

TABLE 8

RELATIVE TIME SPENT ON DUTIES BY 431XOC/D SKILL LEVEL GROUPS
(PERCENT TIME SPENT)

DUTIES	C-SHRED		D-SHRED	
	43130/50 PERSONNEL	43170 PERSONNEL	43130/50 PERSONNEL	43170 PERSONNEL
A ORGANIZING AND PLANNING	2	9	2	8
B DIRECTING AND IMPLEMENTING	2	9	2	8
C INSPECTING AND EVALUATING	1	41 — 6	1	38 — 5
D TRAINING	2	4	1	4
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	10	13	9	13
F PERFORMING GENERAL HELICOPTER MAINTENANCE	39	24	23	16
G PERFORMING H-1 HELICOPTER MAINTENANCE	*	*	56	40
H PERFORMING H-53 HELICOPTER MAINTENANCE	18	14	*	*
I PERFORMING H-3 HELICOPTER MAINTENANCE	83 — 19	15	85 — *	*
J PERFORMING H-60 HELICOPTER MAINTENANCE	2	2	*	*
K PERFORMING FLYING-RELATED FUNCTIONS	1	1	2	2
L MAINTAINING TOOLS AND GROUND SUPPORT EQUIPMENT	4	3	4	3

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY 43130C/50C PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=357)
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	85
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	85
F269	SERVICE HELICOPTER HYDRAULIC SYSTEMS	84
F271	SERVICE HELICOPTER TIRES	84
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	84
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	82
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	82
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	82
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	81
F180	INSPECT LANDING GEAR SYSTEMS ON H-3 OR H-53 HELICOPTERS	80
F190	LUBRICATE MAIN ROTOR HEAD ON H-3 OR H-53 HELICOPTERS	80
F187	LUBRICATE AIRFRAME COMPONENTS ON HELICOPTERS	80
F248	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-3 OR H-53 HELICOPTERS	80
F226	REMOVE OR INSTALL ELECTRICAL LIGHTING COMPONENTS OR BULBS	79
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA, CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT)	79
F199	OPERATE PORTABLE LIGHTING UNITS	79
F234	REMOVE OR INSTALL HELICOPTER PASSENGER SEATS	79
F225	REMOVE OR INSTALL CHIP DETECTORS	79
F220	REMOVE MAIN ROTOR ASSEMBLIES FROM H-3 OR H-53 HELICOPTERS	79
F179	INSPECT INSTRUMENT COVER GLASSES FOR SLIPPAGE OR BREAKAGE	78
F200	OPERATE SERVICING AIR COMPRESSORS	78
F236	REMOVE OR INSTALL HELICOPTER WINDSHIELDS OR NON-JETTISONABLE WINDOWS	77
E131	PREPARE AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	77
F183	INSPECT VISIBLE TURBINE BLADES	77
F219	REFUEL HELICOPTERS USING PRESSURE PROCEDURE	76
F189	LUBRICATE LANDING GEAR COMPONENTS ON H-3 OR H-53 HELICOPTERS	76
E122	PREPARE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	76
F276	SERVICE TRANSMISSIONS	75
F258	REMOVE OR INSTALL TAIL ROTOR DRIVE THOMAS COUPLING ASSEMBLIES ON H-3, H-53, OR H-60 HELICOPTERS	75

TABLE 10

REPRESENTATIVE TASKS PERFORMED BY 43130D/50D PERSONNEL

	TASKS	PERCENT MEMBERS PERFORMING (N=264)
G307	ATTACH OR DETACH GROUND HANDLING WHEELS ON H-1 HELICOPTERS	92
G308	ATTACH OR DETACH TOW BARS ON H-1 HELICOPTERS	91
G336	INSPECT LANDING GEAR ON H-1 HELICOPTERS	89
G507	TIE DOWN BLADES ON H-1 HELICOPTERS	89
G338	INSPECT ROTOR SYSTEMS ON H-1 HELICOPTERS	88
G355	LUBRICATE MAIN ROTOR HEAD ON H-1 HELICOPTERS	88
G331	INSPECT FLIGHT CONTROL SYSTEMS ON H-1 HELICOPTERS	88
G352	LAUNCH H-1 HELICOPTERS	88
G415	REMOVE OR INSTALL BATTERIES ON H-1 HELICOPTERS	88
G351	JACK H-1 HELICOPTERS	88
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	87
G349	INSTALL MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	87
F234	REMOVE OR INSTALL HELICOPTER PASSENGER SEATS	86
G426	REMOVE OR INSTALL DOORS ON H-1 HELICOPTERS	86
G354	LUBRICATE FLIGHT CONTROLS ON H-1 HELICOPTERS	86
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	86
G471	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-1 HELICOPTERS	85
G473	REMOVE OR INSTALL MAIN ROTOR PITCH CONTROL RODS ON H-1 HELICOPTERS	85
G474	REMOVE OR INSTALL MAIN ROTOR STABILIZER BAR ON H-1 HELICOPTERS	85
G410	REMOVE MAIN ROTOR ASSEMBLIES FROM H-1 HELICOPTERS	84
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	84
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA, CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT)	84
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	84
G356	LUBRICATE TAIL ROTOR ASSEMBLIES ON H-1 HELICOPTERS	84
G293	ADJUST DOOR OR WINDOW LATCH MECHANISMS ON H-1 HELICOPTERS	83
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	83
G503	SERVICE MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	83
G412	REMOVE OR INSTALL AIRFRAME OR ENGINE COVERS ON H-1 HELICOPTERS	82
G350	INSTALL TAIL ROTOR ASSEMBLIES ON H-1 HELICOPTERS	82
E131	PREPARE AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	81
G320	DRAIN FUEL SUMPS ON H-1 HELICOPTERS	81

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY 43170C PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=206)
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	74
A5	DETERMINE WORK PRIORITIES	74
C70	PREPARE APR	74
B47	SUPERVISE C-SHRED HELICOPTER MECHANICS (AFSC 43150C)	69
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	69
E122	PREPARE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	67
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	66
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA, CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT	64
F201	OPERATE TOW VEHICLES	63
E131	PREPARE AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	63
F180	INSPECT LANDING GEAR SYSTEMS ON H-3 OR H-53 HELICOPTERS	63
F210	POSITION OR SPOT NONPOWERED AIRCRAFT SUPPORT EQUIPMENT	62
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	62
B25	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	61
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	60
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	60
F203	PERFORM FREEDOM-OF-MOVEMENT OR INTERFERENCE CHECKS OF HELICOPTER FLIGHT CONTROL SYSTEMS	60
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	60
F199	OPERATE PORTABLE LIGHTING UNITS	59
E132	PREPARE AFTO FORMS 781J (AEROSPACE VEHICLE-ENGINE FLIGHT)	58
F211	POSITION OR SPOT POWERED AIRCRAFT SUPPORT EQUIPMENT	58
F175	IDENTIFY PRESENCE OF CORROSION ON HELICOPTERS	58
F155	ADJUST TAIL ROTOR PITCH CONTROL LINKS ON H-3 OR H-53 HELICOPTERS	57
F183	INSPECT VISIBLE TURBINE BLADES	57
F179	INSPECT INSTRUMENT COVER GLASSES FOR SLIPPAGE OR BREAKAGE	57
F200	OPERATE SERVICING AIR COMPRESSORS	57
F152	ADJUST AUTOROTATION ON H-3 OR H-53 HELICOPTERS	57
F154	ADJUST PRETRACK ON H-3 OR H-53 HELICOPTERS	57
F176	INSPECT ELECTRICAL SYSTEM COMPONENTS	56
F269	SERVICE HELICOPTER HYDRAULIC SYSTEMS	56

TABLE 12

REPRESENTATIVE TASKS PERFORMED BY 43170D PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=138)
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	83
G331	INSPECT FLIGHT CONTROL SYSTEMS ON H-1 HELICOPTERS	81
G338	INSPECT ROTOR SYSTEMS ON H-1 HELICOPTERS	80
G336	INSPECT LANDING GEAR ON H-1 HELICOPTERS	79
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	78
G335	INSPECT HYDRAULIC SYSTEMS ON H-1 HELICOPTERS	78
G339	INSPECT TAIL ROTOR RIGGING ON H-1 HELICOPTERS	76
G337	INSPECT MAIN ROTOR RIGGING ON H-1 HELICOPTERS	76
A5	DETERMINE WORK PRIORITIES	75
B25	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	75
C70	PREPARE APR	73
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA, CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT)	73
E131	PREPARE AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	72
G351	JACK H-1 HELICOPTERS	72
E122	PREPARE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	71
B51	SUPERVISE D-SHRED HELICOPTER MECHANICS (AFSC 43150D)	70
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	70
A16	PLAN MAINTENANCE OR INSPECTIONS OF HELICOPTERS	70
F201	OPERATE TOW VEHICLES	70
E132	PREPARE AFTO FORMS 781J (AEROSPACE VEHICLE-ENGINE FLIGHT)	70
G308	ATTACH OR DETACH TOW BARS ON H-1 HELICOPTERS	70
G307	ATTACH OR DETACH GROUND HANDLING WHEELS ON H-1 HELICOPTERS	69
L1064	INSPECT TOOLS OR TOOL KITS	68
F203	PERFORM FREEDOM-OF-MOVEMENT OR INTERFERENCE CHECKS OF HELICOPTER FLIGHT CONTROL SYSTEMS	68
E98	COMPLETE STATUS TAGS FOR CONDITION OF PROPERTY	67
G353	LEVEL H-1 HELICOPTERS	67
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	65
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	65
G533	TROUBLESHOOT MAIN ROTOR SYSTEMS ON H-1 HELICOPTERS	64
G507	TIE DOWN BLADES ON H-1 HELICOPTERS	64
G323	INSPECT BATTERIES ON H-1 HELICOPTERS	64
F173	IDENTIFY PRESENCE OF CORROSION ON HELICOPTERS	64

TABLE 13

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS MAJOR CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)

JOB GROUPS	C-SHRED		D-SHRED	
	43130/50 (N=357)	43170 (N=206)	43130/50 (N=264)	43170 (N=138)
I. MAINTENANCE SUPERVISION AND MANAGEMENT PERSONNEL	8	31	6	36
II. H-1 FLIGHTLINE MAINTENANCE PERSONNEL	*	0	92	63
III. CH/HH-3 FLIGHTLINE MAINTENANCE PERSONNEL	42	34	0	0
IV. CH/HH-53 FLIGHTLINE MAINTENANCE PERSONNEL	37	27	*	0
V. GROUND SUPPORT AND SERVICING PERSONNEL	4	0	0	0
VI. UH-60A MAINTENANCE SPECIALIST	4	2	*	0
VII. TOOL CRIB SPECIALISTS	1	*	0	0
PERCENT NOT GROUPED	3	5	1	1

* Denotes less than .5 percent

15 September 1983. These descriptions are intended to give a broad overview of the duties and tasks performed by each skill level of the career ladder. These descriptions appeared complete and accurately reflected the range of duties and responsibilities of the career ladder at the time of the occupational survey.

ANALYSIS OF EXPERIENCE GROUPS

In this study, as in most others, an analysis of total active federal military service (TAFMS) groups is undertaken to provide a description of how the jobs and the perception of those jobs within a career ladder change over time. As is typical in most career ladders, as time in service and experience increase, there is a corresponding increase in performance of duties involving supervisory, managerial, and training tasks (see Table 14). Conversely, as time spent in supervisory and administrative duties increases, relative time on tasks in the maintenance areas generally declines.

Regardless of shred, the 1-48 months TAFMS groups spend 90 percent or more of their job time performing helicopter maintenance activities. The 49-96 months C- and D-Shred groups spend 25 and 22 percent of their job time, respectively, performing tasks outside of the direct maintenance arena. The remainder of the respondents, career airmen having over 97+ months in service, respectively, spend 44 and 39 percent of their time performing supervisory or administrative functions. While shifts in areas of responsibility are obvious and parallel changes discussed in earlier comments on DAFSC progression, it is also evident that career field incumbents primarily are maintenance oriented.

First-Enlistment Personnel

The 1-48 months (first-enlistment) personnel are the most relevant for examining ABR training programs; therefore, these incumbents are further highlighted to provide a foundation for examination of career field utilization and training. Figure 2 shows the distribution of first-enlistment personnel across the major jobs discussed earlier in this report. Of the 369 first-enlistment personnel in the study (38 percent of the total 431XOC/D sample), 90 percent were working in three large aircraft-unique maintenance groups. Small percentages are found in ground support or tool crib jobs.

Tables 15 and 16 list tasks performed by the greatest percentages of 431XOC and 431XOD first-enlistment personnel. Generally, these most common tasks involve servicing, lubricating, inspecting, or removing and installing, systems or systems components of assigned aircraft. In addition to tasks performed, training personnel are interested in special tools or equipment used by first-enlistment personnel. A comparison of such usage between C- and D-Shred incumbents indicates differences attributable to assigned aircraft uniqueness, e.g., rotor system or landing system. Table 17 lists examples of equipment used by either C- or D-Shred first-enlistment personnel. A more

Figure 2
Distribution Of 431X0 First-Enlistment Personnel
Across Major Jobs
(N=369)

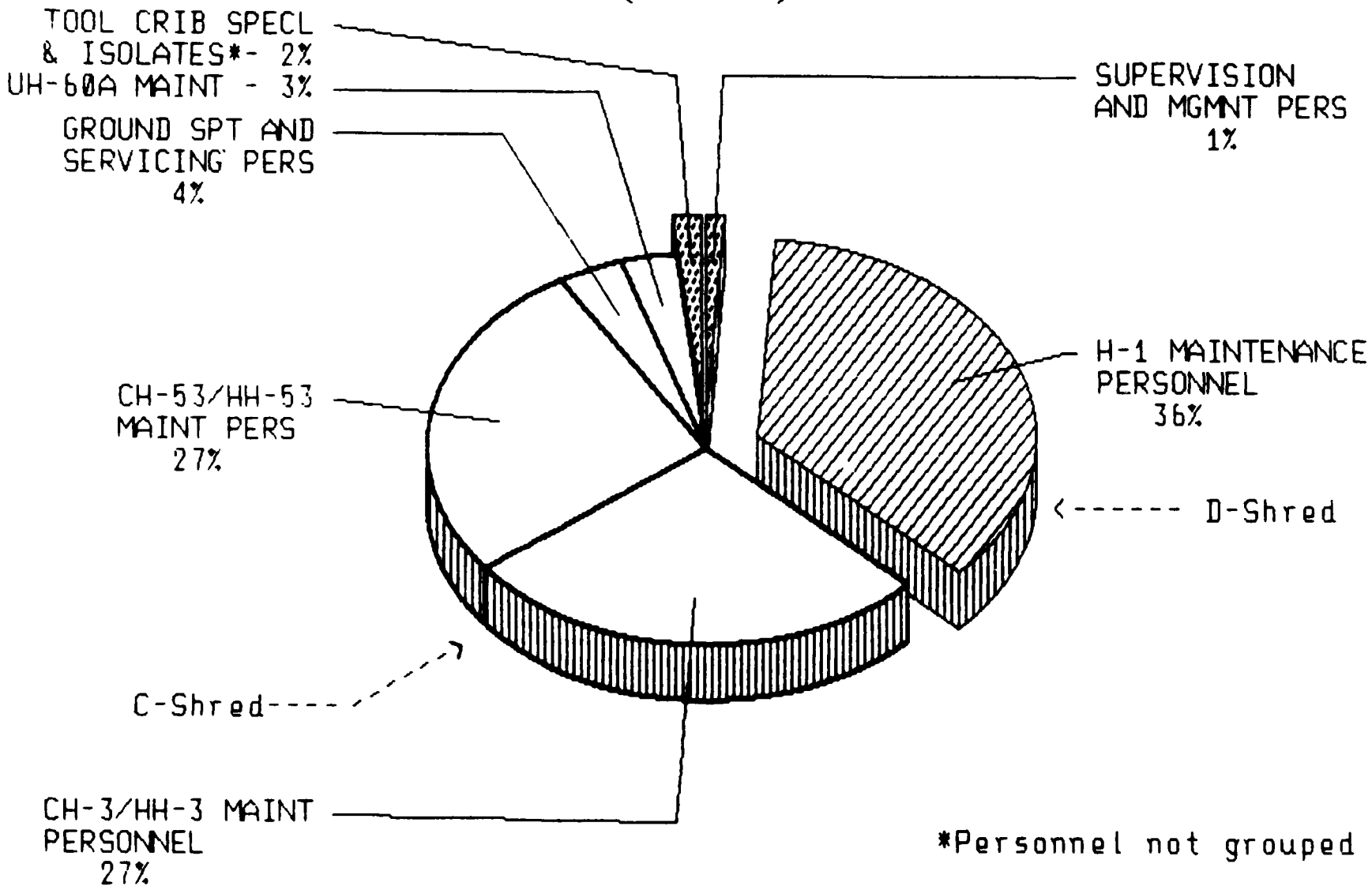


TABLE 14

RELATIVE TIME SPENT ON DUTIES BY 431XOC/D TAFMS EXPERIENCE GROUPS
(PERCENT TIME SPENT)

DUTIES	431XOC			431XOD		
	1-48 (N=234)	49-96 (N=127)	97+ (N=202)	1-48 (N=135)	49-96 (N=132)	97+ (N=135)
A ORGANIZING AND PLANNING	1	4	9	*	4	8
B DIRECTING AND IMPLEMENTING	*	4	9	1	4	9
C INSPECTING AND EVALUATING	*	2	6	*	1	5
D TRAINING	1	3	5	*	2	4
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	8	12	15	7	11	13
F PERFORMING GENERAL HELICOPTER MAINTENANCE	42	33	23	25	21	16
G PERFORMING H-1 HELICOPTER MAINTENANCE	*	*	*	60	51	41
H PERFORMING H-53 HELICOPTER MAINTENANCE	20	16	12	-	*	*
I PERFORMING H-3 HELICOPTER MAINTENANCE	20	17	15	*	*	*
J PERFORMING H-60 HELICOPTER MAINTENANCE	3	3	2	*	-	-
K PERFORMING FLYING-RELATED FUNCTIONS	1	1	1	2	2	1
L MAINTAINING TOOLS AND GROUND SUPPORT EQUIPMENT	4	5	3	5	4	3

* Denotes less than .5 percent

TABLE 15

REPRESENTATIVE TASKS PERFORMED BY
431XOC FIRST-ENLISTMENT PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=234)
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	93
F271	SERVICE HELICOPTER TIRES	92
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	92
F269	SERVICE HELICOPTER HYDRAULIC SYSTEMS	91
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	91
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	89
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	88
F180	INSPECT LANDING GEAR SYSTEMS ON H-3 OR H-53 HELICOPTERS	88
F190	LUBRICATE MAIN ROTOR HEAD ON H-3 OR H-53 HELICOPTERS	87
F187	LUBRICATE AIRFRAME COMPONENTS ON HELICOPTERS	87
F199	OPERATE PORTABLE LIGHTING UNITS	87
F226	REMOVE OR INSTALL ELECTRICAL LIGHTING COMPONENTS OR BULBS	87
F248	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-3 OR H-53 HELICOPTERS	86
F220	REMOVE MAIN ROTOR ASSEMBLIES FROM H-3 OR H-53 HELICOPTERS	86
F225	REMOVE OR INSTALL CHIP DETECTORS	86
F219	REFUEL HELICOPTERS USING PRESSURE PROCEDURE	85
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK	85
F200	OPERATE SERVICING AIR COMPRESSORS	85
F234	REMOVE OR INSTALL HELICOPTER PASSENGER SEATS	85
F179	INSPECT INSTRUMENT COVER GLASSES FOR SLIPPAGE OR BREAKAGE	84
F183	INSPECT VISIBLE TURBINE BLADES	83
F236	REMOVE OR INSTALL HELICOPTER WINDSHIELDS OR NONJETTISONABLE WINDOWS	83
F258	REMOVE OR INSTALL TAIL ROTOR DRIVE THOMAS COUPLING ASSEMBLIES ON H-3, H-53, OR H-60 HELICOPTERS	82
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	82
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA, CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT)	82
F189	LUBRICATE LANDING GEAR COMPONENTS ON H-3 OR H-53 HELICOPTERS	82
E131	PREPARE AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	82
F175	IDENTIFY PRESENCE OF CORROSION ON HELICOPTERS	81
F155	ADJUST TAIL ROTOR PITCH CONTROL LINKS ON H-3 OR H-53 HELICOPTERS	79

TABLE 16

REPRESENTATIVE TASKS PERFORMED BY
431X0D FIRST-ENLISTMENT PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=135)
G307	ATTACH OR DETACH GROUND HANDLING WHEELS ON H-1 HELICOPTERS	97
G308	ATTACH OR DETACH TOW BARS ON H-1 HELICOPTERS	96
G351	JACK H-1 HELICOPTERS	95
G507	TIE DOWN BLADES ON H-1 HELICOPTERS	93
G336	INSPECT LANDING GEAR ON H-1 HELICOPTERS	93
G355	LUBRICATE MAIN ROTOR HEAD ON H-1 HELICOPTERS	93
G415	REMOVE OR INSTALL BATTERIES ON H-1 HELICOPTERS	93
F234	REMOVE OR INSTALL HELICOPTER PASSENGER SEATS	93
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	92
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	92
G354	LUBRICATE FLIGHT CONTROLS ON H-1 HELICOPTERS	92
G426	REMOVE OR INSTALL DOORS ON H-1 HELICOPTERS	92
G352	LAUNCH H-1 HELICOPTERS	91
G338	INSPECT ROTOR SYSTEMS ON H-1 HELICOPTERS	90
G356	LUBRICATE TAIL ROTOR ASSEMBLIES ON H-1 HELICOPTERS	90
G349	INSTALL MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	90
G473	REMOVE OR INSTALL MAIN ROTOR PITCH CONTROL RODS ON H-1 HELICOPTERS	90
G471	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-1 HELICOPTERS	90
G474	REMOVE OR INSTALL MAIN ROTOR STABILIZER BAR ON H-1 HELICOPTERS	89
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	88
G331	INSPECT FLIGHT CONTROL SYSTEMS ON H-1 HELICOPTERS	88
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	88
G350	INSTALL TAIL ROTOR ASSEMBLIES ON H-1 HELICOPTERS	88
G503	SERVICE MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	87
G410	REMOVE MAIN ROTOR ASSEMBLIES FROM H-1 HELICOPTERS	87
G486	REMOVE OR INSTALL TAIL ROTOR BLADES ON H-1 HELICOPTERS	87
G293	ADJUST DOOR OR WINDOW LATCH MECHANISMS ON H-1 HELICOPTERS	87
F269	SERVICE HELICOPTER HYDRAULIC SYSTEMS	86
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	85
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	85
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA, CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT)	85
F187	LUBRICATE AIRFRAME COMPONENTS ON HELICOPTERS	85

TABLE 17

EXAMPLES OF EQUIPMENT USED BY
431XOC/D FIRST-ENLISTMENT PERSONNEL

	PERCENT MEMBERS RESPONDING	
TOOLS AND SPECIAL EQUIPMENT	431XOC (N=234)	431XOD (N=135)
DAMPER WRENCHES	74	14
DEPTH GAUGES	47	67
GROUND HANDLING WHEELS	15	96
MAIN ROTOR BLADE CHECK AND FILL UNITS	82	20
MAIN ROTOR DAMPER SERVICING UNITS	71	29
NITROGEN REGULATORS	63	7
PROPELLER PROTRACTORS	55	62
RIGGING SETS	88	35
ROTOR BALANCE EQUIPMENT	43	88
TENSIOMETERS	83	73
TIRE SERVICING KITS	92	54
TRACKING FLAGS	48	52
VIBREX EQUIPMENT	80	90
AIRCRAFT SUPPORT EQUIPMENT		
MC-1 AIR-COMPRESSORS	49	20
MC-1A AIR COMPRESSORS	61	20
MC-2A AIR COMPRESSORS	43	28
MD3 AUXILIARY ELECTRICAL POWER UNITS	84	87
NF-2 AUXILIARY ELECTRICAL POWER UNITS	68	38
HYDRAULIC SERVICING CARTS	85	37
NITROGEN SERVICING CARTS	84	8
BT-400 PORTABLE GROUND HEATER AND BLOWER	41	42
COLEMAN TRACTORS	52	14
INDUSTRIAL WAREHOUSE TUGS	28	67
HOBURT ELECTRICAL POWER UNITS	42	11

extensive list of equipment used can be found in the TRAINING EXTRACT accompanying this report.

Job Satisfaction Data

Tables 18 and 19 present data reflecting job interest, perceived utilization of talents and training, and reenlistment intentions of first-enlistment, second-enlistment, and career personnel for each of the Helicopter Mechanic Shreds. Data are presented along with comparative sample data for personnel from all mission equipment maintenance career ladders surveyed in 1985. When compared to the comparative sample, both C- and D-Shred personnel in all TAFMS groups generally have higher job satisfaction indicators. Job interest and perceived utilization of training are substantially higher for first- and second-enlistment groups of both 431X0 shreds. Finally, career personnel (97+ months TAFMS) in this career ladder are the most similar to their comparative sample.

TRAINING ANALYSIS

Occupational survey data are one of the many sources of information which can be used to assist training managers in the development of training programs relevant to the needs of personnel working in their first assignments in a career ladder. Factors which may be used to evaluate training are, primarily, the percent first-job (1-24 months TAFMS) or first-enlistment (1-48 months TAFMS) members performing tasks, and secondarily, considerations such as training emphasis (TE) and task difficulty (TD) ratings, mission criticality of tasks, or availability of training equipment or instructors. Percent members performing (PMP) 431X0C/D tasks, and TE and TD factors were used in evaluating the two Specialty Training Standards (STS) and the two Plans of Instruction (POI) for the 431X0C/D career ladder. Training personnel from the 3700 Technical Training Wing, Sheppard Air Force Base, Texas, matched inventory tasks to appropriate sections of the POIs and STSs. It was this matching upon which comparisons were based. A complete computer listing displaying the percent members performing, TE ratings, and TDratings for each task statement, along with POI and STS matchings, was forwarded to the school for their use in any further detailed review of training documents. A summary of that information is described below.

Training Emphasis and Task Difficulty Data

As discussed in the Task Factor Administration section, TE and TD data can be used to provide information on training needs as perceived by experienced technicians within the specialty. This information, when used in support of percent members performing, can aid training managers in determining if STS or POI adjustments or revisions are needed.

Because the TE and TD ratings are the composite opinion of experienced career ladder personnel on training for a 1-48 months TAFMS person, such data

TABLE 18

COMPARISON OF JOB SATISFACTION INFORMATION FOR 431XOC TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	431XOC (N=234)	COMPARATIVE SAMPLE (N=2,321)	431XOC (N=127)	COMPARATIVE SAMPLE (N=1,118)	431XOC (N=202)	COMPARATIVE SAMPLE (N=1,593)
HOW DO YOU FIND YOUR JOB:						
INTERESTING	(83)	61	(80)	68	75	73
SO-SO	11	22	16	19	15	14
DULL	6	16	4	12	8	11
HOW WELL DOES YOUR JOB UTILIZE YOUR TALENTS:						
FAIRLY WELL TO PERFECTLY	(88)	72	87	86	83	80
VERY LITTLE OR NOT AT ALL	12	28	13	14	17	19
HOW WELL DOES YOUR JOB UTILIZE YOUR TRAINING:						
FAIRLY WELL TO PERFECTLY	(92)	84	(90)	82	83	80
VERY LITTLE OR NOT AT ALL	9	16	10	18	16	20
DO YOU PLAN TO REENLIST:						
YES, OR PROBABLY YES	58	57	(81)	73	73	74
NO OR PROBABLY NO	41	40	19	26	5	10
NO, WILL PROBABLY RETIRE	-	-	-	-	20	15

* Columns may not add to 100 percent due to no response or rounding

NOTE: Comparative sample includes all Mission Equipment Maintenance career ladders surveyed in 1985 (AFSCs include 303X2, 411X1, 423X3, 427X4, 463X0)

TABLE 19

COMPARISON OF JOB SATISFACTION INFORMATION FOR 431XOD TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	431XOD (N=135)	COMPARATIVE SAMPLE (N=2,321)	431XOD (N=132)	COMPARATIVE SAMPLE (N=1,118)	431XOD (N=135)	COMPARATIVE SAMPLE (N=1,593)
HOW DO YOU FIND YOUR JOB:						
INTERESTING	88	61	78	68	73	73
SO-SO	6	22	17	19	20	14
DULL	6	16	5	12	6	11
HOW WELL DOES YOUR JOB UTILIZE YOUR TALENTS:						
FAIRLY WELL TO PERFECTLY	90	72	86	78	81	80
VERY LITTLE OR NOT AT ALL	10	28	14	21	18	19
HOW WELL DOES YOUR JOB UTILIZE YOUR TRAINING:						
FAIRLY WELL TO PERFECTLY	96	84	91	82	84	80
VERY LITTLE OR NOT AT ALL	4	16	9	18	14	20
DO YOU PLAN TO REENLIST:						
YES, OR PROBABLY YES	60	57	77	73	79	74
NO OR PROBABLY NO	40	40	23	26	10	10
NO, WILL PROBABLY RETIRE	-	-	-	-	11	15

* Columns may not add to 100 percent due to no response or rounding

NOTE: Comparative sample includes all Mission Equipment Maintenance career ladders surveyed in 1985 (AFSCs include 303X2, 411X1, 423X3, 427X4, 463X0)

can assist training developers in deciding what tasks should be emphasized in entry-level training. Tasks receiving high ratings on both task factors accompanied by moderate to high personnel performing percentages, may warrant resident training. Those tasks receiving high task factor ratings, but low personnel performing percentages, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best left out of training for new 431X0 personnel, but this decision must be weighed against percent performing data, command concerns, and criticality of the task to readiness, contingency planning, or safety programs.

Training Documents

STS 431X0C. A comprehensive review of STS 431X0C, dated March 1984, compared STS items to survey data. STS paragraphs containing general information or subject-matter-knowledge requirements were not evaluated. Overall, the technical elements of the STS with tasks referenced to them were well supported in terms of being performed by substantial percentages of 431X0C reference groups. All but a few elements were performed by at least 20 percent of the respondents in their first enlistment or at the 5- or 7-skill levels. Technical elements which reflected low percent members performing (less than 20 percent) or which were without matched tasks are listed in Table 20. These elements should be reviewed by career ladder managers to determine the appropriateness of their inclusion in the STS. These elements may not have been matched because inventory tasks relative to that item were unclear or omitted. If tasks are unclear or were omitted, subject-matter specialists are requested to draft the necessary task statements and forward them to USAFOMC/OMYV for inclusion in the next inventory constructed for this career ladder.

A number of job inventory tasks were not referenced to STS elements. For the most part, these tasks not referenced involved supervision and management duties. There were, however, several tasks pertaining to general helicopter maintenance or maintenance common to both H-3 and H-53 aircraft which were performed by more than 20 percent of the personnel in any of the referenced groups. Some examples of these "not referenced" tasks are listed in Table 21. Such tasks should be covered by some existing element or a new item should be added to the STS.

POI 3ABR43130C. Based on previously mentioned assistance from technical school personnel in matching inventory tasks to the 3ABR43130C POI, dated 10 July 1984, a computer product was generated, displaying the results of the matching process. Information furnished for consideration includes percent members performing data for first-job (1-24 months TAFMS) and first-enlistment personnel, and secondary factor TE and TD ratings.

Generally, POI blocks and objectives were well supported by survey data, based on percentages of personnel performing tasks or with considerations given to TE or TD ratings of matched tasks. Block V, Unit 2, pertaining to the removal and installation of flight control components, was an exception. Objectives accounting for 7 of the 16 hours allocated to this unit were not supported by referenced tasks. These objectives correlate to STS elements

TABLE 20

LOW PERFORMANCE OR UNREFERENCED 431XOC STS ELEMENTS
(EXCLUDING KNOWLEDGE-ONLY ELEMENTS)

STS ELEMENTS		PERCENT PERFORMING*
10f	LOAD HELICOPTER ON TRANSPORT VEHICLES	13
10i	ASSIST IN WEIGHT AND BALANCE FUNCTIONS	10
14c(8)/14d(8)	REMOVE/INSTALL CENTERING CYLINDERS	NO MATCH
14c(9)/14d(9)	REMOVE/INSTALL QUADRANTS	NO MATCH
14c(10/14d(10)	REMOVE/INSTALL CABLES	NO MATCH
22d(2)	ADJUST APU FUEL CONTROLS	15

* Percent shown is the highest percent reported for a task matched to the STS element

TABLE 21

EXAMPLES OF TASKS NOT REFERENCED TO STS PERFORMED BY 431X0C PERSONNEL
(OVER 20 PERCENT MEMBERS PERFORMING)

TASKS*		FIRST ENLISTMENT (N=234)	DAFSC 43150C (N=293)	DAFSC 43170C (N=206)
F226	REMOVE OR INSTALL ELECTRICAL LIGHTING COMPONENTS OR BULBS	87	81	51
F202	PACK OR UNPACK HELICOPTER COMPONENTS OR ASSEMBLIES	69	68	51
F247	REMOVE OR INSTALL MAIN ROTOR BLADE TIP CAPS	65	66	46
F227	REMOVE OR INSTALL ELECTRICAL OR LIGHTING SYSTEM PANELS ON H-3 OR H-53 HELICOPTERS	47	52	40
F237	REMOVE OR INSTALL HYDRAULIC HEAT EXCHANGERS ON H-3 OR H-53 HELICOPTERS	42	45	33
F256	REMOVE OR INSTALL SUPERVISORY PANELS ON H-3 OR H-53 HELICOPTERS	37	43	35
F229	REMOVE OR INSTALL ENGINE HOSES, TUBING, OR ELECTRICAL CONNECTORS	37	42	30
I720	INSPECT TRANSMISSION DRIVE SYSTEMS ON H-3 HELICOPTERS	37	41	38
I704	BLEED WHEEL BRAKE SYSTEMS ON H-3 HELICOPTERS	36	38	24
F290	WEIGH HELICOPTERS	36	37	29
I722	INSTALL ENGINES ON H-3 HELICOPTERS	24	28	19

* Tasks are listed in descending order of performance by DAFSC 43150C personnel

pertaining to flight control component removal and installation listed in Table 20 as not supported, i.e., STS elements 14c(8)(9)(10) and 14d(8)(9)(10). Survey data reflect a review of training relating to flight control system components appears appropriate.

A review of tasks not referenced to the POI identified over 90 tasks performed by more than 30 percent of the first-enlistment 431X0C personnel. Fifty-three of these tasks had high TE ratings, indicating some form of structured training for first-enlistment personnel is appropriate. Table 22 lists several of these tasks. Some tasks received below average TD ratings, so they may not be good items for basic resident training. Additionally, certain of these nonreferenced tasks may not be suitable for entry-level training due to limited availability of training resources, such as instructor personnel, maintenance simulators, or training airframes. Nevertheless, personnel responsible for training should review the entire list of nonreferenced tasks found in the Training Extract accompanying this report to determine what training revisions are necessary.

STS 431X0D. Data indicate the 431X0D STS is well supported by percentages of personnel performing tasks matched to STS elements. Only two elements require review due to limited performance or nonreferenced tasks (see Table 23).

As was the case on the C-Shred STS, several tasks were not referenced to the D-Shred STS, where performance was greater than 20 percent in any one of the experience or DAFSC reference groups. Table 24 lists examples of these unmatched tasks. Functional and training managers should note those tasks relating to removal and installation of power plants and related systems when reviewing the entire list of tasks not referenced. The current STS limits power plant task performance to servicing, troubleshooting, cleaning, and rigging.

POI 3ABR43130D. In general, survey data are supportive of course objectives for POI 3ABR43130D, dated 27 July 1984. Only in objective II2D, relating to operational checks of utility hydraulic systems, did data reflect less than 30 percent performance by first-enlistment personnel. There were 75 tasks not matched to the POI performed by 30 percent or more of the first-enlistment personnel with 39 of those tasks having a high TE rating. Table 25 lists several examples of those tasks. Managers should again note those not-referenced tasks pertaining to power plants and related systems to determine what impact they might have on ABR training.

Summary

This assessment of 431X0 STS and POI revealed, for the most part, that those training documents appeared adequate as written. Those tasks not matched to documents, particularly to the POI, could indicate overlooked matches or a problem suggesting refinements or modifications are needed. Survey data, including training extracts, should be reviewed by training managers to determine what changes may be needed to enhance the effectiveness of training.

TABLE 22

EXAMPLES OF TASKS NOT REFERENCED TO POI 3ABR43130C WITH PROBABILITY OF FIRST-ENLISTMENT PERFORMANCE GREATER THAN 30 PERCENT

TASKS		PERCENT MEMBERS PERFORMING			
		FIRST JOB (N=121)	FIRST ENL (N=234)	TNG EMP*	TASK DIFF**
F172	DRAIN FUEL SUMPS ON H-3 OR H-53 HELICOPTERS	56	68	4.92	3.03
F225	REMOVE OR INSTALL CHIP DETECTORS	85	86	4.92	3.68
F270	SERVICE HELICOPTER ROTOR BRAKE SYSTEMS	69	78	4.72	3.11
I811	RIG MAIN ROTOR FLIGHT CONTROLS ON H-3 HELICOPTERS	33	35	4.54	6.86
I812	RIG TAIL ROTOR FLIGHT CONTROLS ON H-3 HELICOPTERS	36	39	4.24	6.63
F284	TROUBLESHOOT HELICOPTER APPs OR APUs	41	56	4.16	6.31
H661	RIG MAIN ROTOR FLIGHT CONTROLS ON H-53 HELICOPTERS	27	35	3.98	7.04
H571	INSTALL TAIL ROTOR ASSEMBLIES ON H-53 HELICOPTERS	31	38	3.96	6.09
F198	OPERATE PORTABLE HYDRAULIC TEST STANDS	40	39	3.90	5.70
F247	REMOVE OR INSTALL MAIN ROTOR BLADE TIP CAPS	57	65	3.88	3.54
H639	REMOVE OR INSTALL MAIN GEARBOXES ON H-53 HELICOPTERS	31	37	3.84	6.63
F223	REMOVE OR INSTALL ARMOR PLATING	47	56	3.60	4.67

* MEAN TE = 1.54, SD = 1 55
** MEAN TD = 5.00, SD = 1.00

TABLE 23

LOW PERFORMANCE OR UNREFERENCED 431XOD STS ELEMENTS
(EXCLUDING KNOWLEDGE-ONLY ELEMENTS)

STS ELEMENTS		PERCENT PERFORMING*
16b(4)	ADJUST (TAIL ROTOR) GRIP SPACING	NO MATCH
17b(2)	PERFORM OPERATIONAL CHECK OF (HYDRAULIC) UTILITY SYSTEMS	15

* Percent shown in the highest percent reported for a task matched to the STS element

TABLE 24

EXAMPLES OF TASKS NOT REFERENCED TO STS PERFORMED BY 431XOD PERSONNEL
(OVER 20 PERCENT MEMBERS PERFORMING)

TASKS*		FIRST ENLISTMENT (N=135)	DAFSC 43150C (N=225)	DAFSC 43170C (N=138)
G319	CONNECT OR DISCONNECT ENGINE CONTROLS ON H-1 HELICOPTERS	58	65	51
F233	REMOVE OR INSTALL HELICOPTER ENGINE OIL FILTERS	59	54	38
G528	TROUBLESHOOT INSTRUMENT SYSTEMS ON H-1 HELICOPTERS	37	46	44
G310	BALANCE MAIN ROTOR HUB ON H-1 HELICOPTERS USING STATIC METHOD	58	65	51
G409	REMOVE ENGINES ON H-1N HELICOPTERS	39	40	28
G348	INSTALL ENGINES ON H-1N HELICOPTERS	37	40	29
G451	REMOVE OR INSTALL EXTERNAL ENGINE OIL SYSTEM COMPONENTS ON H-1N HELICOPTERS	34	40	26
G433	REMOVE OR INSTALL ENGINE CONTROL SYSTEM COMPONENTS ON H-1N HELICOPTERS	32	37	25
G456	REMOVE OR INSTALL FUEL CELLS ON H-1H/N HELICOPTERS	31	35	27
F217	REFUEL HELICOPTERS USING CLOSED CIRCUIT PROCEDURE	35	33	20

* Tasks are listed in descending order of performance by DAFSC 43150D personnel

TABLE 25

EXAMPLES OF TASKS NOT REFERENCED TO POI 3ABR43130D WITH PROBABILITY OF FIRST-ENLISTMENT PERFORMANCE GREATER THAN 30 PERCENT

TASKS		PERCENT MEMBERS PERFORMING			
		FIRST JOB (N=58)	FIRST ENL (N=135)	TNG EMP*	TASK DIFF**
G309	BALANCE MAIN ROTOR ASSEMBLY ON H-1 HELICOPTERS USING DYNAMIC METHOD	33	50	6.46	6.20
G349	INSTALL MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	86	90	6.39	5.19
G533	TROUBLESHOOT MAIN ROTOR SYSTEMS ON H-1 HELICOPTERS	43	59	5.56	6.31
G518	TROUBLESHOOT FLIGHT CONTROL SYSTEMS ON H-1 HELICOPTERS	38	56	4.98	6.47
G454	REMOVE OR INSTALL FUEL BOOST PUMPS ON H-1 HELICOPTERS	41	57	4.54	5.32
G348	INSTALL ENGINES ON H-1N HELICOPTERS	22	37	4.34	7.17
G453	REMOVE OR INSTALL EXTERNAL TRANSMISSION OIL FILTERS ON H-1 HELICOPTERS	62	69	4.19	4.05
F225	REMOVE OR INSTALL CHIP DETECTORS	74	78	3.36	3.68
G536	TROUBLESHOOT ROTOR BRAKES ON H-1 HELICOPTERS	35	49	3.34	4.47
F233	REMOVE OR INSTALL HELICOPTER ENGINE OIL FILTERS	52	59	3.25	4.17

* MEAN TE = 1.44, SD = 1.85
** MEAN TD = 5.00, SD = 1.00

OTHER CONSIDERATIONS

Major Command (MAJCOM) Comparisons

The background data and duties performed by personnel in the three MAJCOMs with significant populations of 431XO personnel--MAC, TAC, and AFSC--were compared to determine if job content varied as a function of MAJCOM assignment. One of the major reasons for such a comparison is to detect differences across MAJCOMs that might affect structured training programs. Table 26 compares duty differences across the three MAJCOM groups, while Table 27 reflects the percentage of MAJCOM personnel performing maintenance by aircraft type. A comparison of data in these tables indicates MAJCOM differences are a function of assigned aircraft.

CONUS/Overseas Comparisons

Comparisons were also made of background data and tasks performed by 5-skill level personnel assigned within the continental United States (CONUS) and overseas locations. Five-skill level personnel in the CONUS number 357, while those overseas totaled 159. The average number of tasks performed by these group members were 194 for the CONUS group and 185 for the overseas incumbents. The two groups are nearly equal in all job satisfaction indicators, with favorable reenlistment intentions a little better for the overseas group (74 percent versus 67 percent planning to reenlist). Table 28 compares duty differences between these groups which reflect the assigned aircraft differences shown in Table 29.

Comparison to Previous Survey

The results of this 431XOC/D survey were compared to those of the previous Occupational Survey Report, AFPT 90-431-288, dated 30 November 1977. This comparison may help to identify changes in the career ladder due to new missions, new equipment, changing management policies, etc. Generally, the two surveys reported consistent findings, with differences appearing in the following areas.

A review of the 431XOC/D career ladder structure (specialty jobs) reveals two easily explained changes have occurred in the last 8 years. Table 30 lists the major jobs identified in the respective surveys. The current survey identified a relatively small, but new, job--UH-60A Maintenance Specialist. The H-60 helicopter is a recent addition to the Air Force inventory and, at the time of the survey was assigned to a single installation. The second change noted is the absence of the Flight Mechanic job in the 1985 survey. Twelve percent of the 1977 survey sample was identified as Flight Mechanics--personnel performing primarily inflight duties, such as monitoring in-flight operation of aircraft systems, briefing passengers, and preflighting aircraft. A 1979 classification change moved the flight mechanic duties out of the 431XO career ladder to the Flight Engineer (Helicopter Qualified) career ladder (AFSC 113XOB).

TABLE 26

RELATIVE TIME SPENT ON DUTIES BY 431XOC/D MAJCOM GROUPS
(PERCENT TIME SPENT)

DUTIES	MAJCOM MAC (N=747)	TAC (N=96)	AFSC (N=76)
A ORGANIZING AND PLANNING	4	5	4
B DIRECTING AND IMPLEMENTING	4	4	3
C INSPECTING AND EVALUATING	3	2	2
D TRAINING	2	2	2
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	11	12	10
F PERFORMING GENERAL HELICOPTER MAINTENANCE	28	23	35
G PERFORMING H-1 HELICOPTER MAINTENANCE	21	42	9
H PERFORMING H-53 HELICOPTER MAINTENANCE	8	0	29
I PERFORMING H-3 HELICOPTER MAINTENANCE	12	6	*
J PERFORMING H-60 HELICOPTER MAINTENANCE	2	*	1
K PERFORMING FLYING-RELATED FUNCTIONS	1	1	*
L MAINTAINING TOOLS AND GROUND SUPPORT EQUIPMENT	4	3	5

* Denotes less than .5 percent

TABLE 27

COMPARISON OF AIRCRAFT MAINTAINED BY 431XOC/D MAJCOM GROUPS
(PERCENT MEMBERS RESPONDING)

AIRCRAFT MAINTAINED	MAJCOMS		
	MAC (N=747)	TAC (N=96)	AFSC (N=76)
CH-3	29	17	4
HH-3	29	1	7
CH-53	9	2	16
HH-53	24	2	66
TH-1F	12	14	3
UH-1F	9	26	1
HH-1H	11	5	7
UH-1N	27	41	7
UH-1P	0	32	0
UH-60A	4	0	0
UH-60D	0	0	3

TABLE 28

RELATIVE TIME SPENT ON DUTIES BY DAFSC 43150C/D CONUS AND OVERSEAS PERSONNEL
(PERCENT TIME SPENT)

DUTIES	CONUS MEMBERS (N=357)	OVERSEAS MEMBERS (N=159)
A ORGANIZING AND PLANNING	2	2
B DIRECTING AND IMPLEMENTING	2	3
C INSPECTING AND EVALUATING	1	1
D TRAINING	2	2
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	10	11
F PERFORMING GENERAL HELICOPTER MAINTENANCE	29	34
G PERFORMING H-1 HELICOPTER MAINTENANCE	31	11
H PERFORMING H-53 HELICOPTER MAINTENANCE	11	8
I PERFORMING H-3 HELICOPTER MAINTENANCE	7	22
J PERFORMING H-60 HELICOPTER MAINTENANCE	1	0
K PERFORMING FLYING-RELATED FUNCTIONS	1	1
L MAINTAINING TOOLS AND GROUND SUPPORT EQUIPMENT	3	5

* Denotes less than .5 percent

TABLE 29

COMPARISON OF AIRCRAFT MAINTAINED BY
5-SKILL LEVEL CONUS AND OVERSEAS GROUPS
(PERCENT MEMBERS RESPONDING)

AIRCRAFT MAINTAINED	DAFSC 43150C/D CONUS (N=357)	DAFSC 43150C/D OVERSEAS (N=159)
CH-3	17	45
HH-3	13	54
CH-53	10	11
HH-53	26	26
TH-1F	16	2
UH-1F	13	2
HH-1H	10	4
UH-1N	33	16
UH-1P	5	1
UH-60A	3	0
UH-60D	0	0

TABLE 30

COMPARISON OF MAJOR JOBS IDENTIFIED
IN THE 1977 AND 1985 SURVEYS

MAJOR JOBS	PERCENT OF SAMPLE 1977	1985
MAINTENANCE SUPERVISION AND MANAGEMENT/SUPPORT SUPPORT GROUPS	14	18
FLIGHT MECHANICS	12	*
H-1 MAINTENANCE PERSONNEL	28	35
CH/HH-3 MAINTENANCE PERSONNEL	17	23
CH/HH-53 MAINTENANCE PERSONNEL	16	20
UH-60A MAINTENANCE SPECIALISTS	*	2
PERSONNEL NOT GROUPED	12	3

* Not identified in survey

Job satisfaction data were reviewed for both 1977 and 1985 first-enlistment groups (see Table 31). In 1985, personnel in both the C- and D-Shred groups expressed much higher job satisfaction than in 1977. Especially noteworthy are the increases in perceived utilization of training and reenlistment intentions.

IMPLICATIONS

The jobs of Helicopter Mechanics, as defined by survey data, appear to remain very much the same, regardless of the type of aircraft to which they are assigned. Whether these personnel are flightline mechanics, crew chiefs, maintenance controllers, or NCOICs, the activities they perform are basically the same, regardless of the aircraft they maintain or support. Aircraft systems are generally common across aircraft, with rotor and landing systems the obvious differences. In short, occupational survey data support the impending classification change which does away with shreds for this specialty.

A new Specialty Training Standard to effect the classification change deleting the C- and D-Shreds is currently being developed with the development of a single basic resident course POI to follow. Analysis of the current STS and POI indicates these documents are good foundations for the above development efforts. Survey data, including TRAINING EXTRACT printouts, should be used in writing, editing, and coordinating the training documents.

TABLE 31

COMPARISON OF JOB SATISFACTION DATA FOR 431XOC AND 431XOD
FIRST-ENLISTMENT PERSONNEL IN THE 1977 AND 1985 SURVEYS

	FIRST ENLISTMENT (1-48 MONTHS TAFMS)			
	DAFSC 431XOC		DAFSC 431XOD	
	1977	1985	1977	1985
FIND JOB INTERESTING	72	83	75	88
TALENTS USED AT LEAST FAIRLY WELL	82	88	80	90
TRAINING USED AT LEAST FAIRLY WELL	85	92	87	96
PLAN TO REENLIST	38	55	40	60

APPENDIX A

REPRESENTATIVE TASKS

AND

SELECTED BACKGROUND DATA FOR CAREER LADDER STRUCTURE GROUPS

TABLE A1

GROUP ID NUMBER AND TITLE: GRP007, HELICOPTER MAINTENANCE SUPERVISION AND MANAGEMENT PERSONNEL CLUSTER
NUMBER IN GROUP: 157 PERCENT OF SAMPLE: 16%
MAJCOM DISTRIBUTION: MAC (73%), TAC (11%), AFSC (5%)

LOCATION: CONUS (72%), OVERSEAS (28%)
DAFSC DISTRIBUTION: 43170C (41%), 43150C (18%), 43170D (31%), 43150D (10%)
AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 162
AVERAGE MONTHS IN CAREER FIELD: 130

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	74
A5	DETERMINE WORK PRIORITIES	71
A16	PLAN MAINTENANCE OR INSPECTIONS OF HELICOPTER	51
B43	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	51
B25	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	51
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	50
C70	PREPARE APR	49
A74	DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	47
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	45
A11	ESTABLISH ORGANIZATIONAL POLICIES, MAINTENANCE OPERATING INSTRUCTIONS (MOI), OR STANDING OPERATING PROCEDURES (SOP)	43
E100	DRAFT CORRESPONDENCE OR REPORTS	43
C71	REVIEW AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	43
C58	EVALUATE INSPECTION REPORTS OR PROCEDURES	42
C56	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	41
B26	DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	38
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	38
E119	PREPARE AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	38
A23	SCHEDULE LEAVES OR PASSES	38
E144	REQUEST AIRCRAFT SUPPORT EQUIPMENT SUPPORT	37
E147	SCHEDULE HELICOPTER MAINTENANCE	37
B33	DIRECT SPECIAL INSPECTIONS	37
A19	PLAN WORK ASSIGNMENTS	37
A12	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	37
A9	DEVELOP WORK METHODS OR PROCEDURES	36
B29	DIRECT FLIGHTLINE MAINTENANCE	36
C68	INDORSE AIRMAN PERFORMANCE REPORTS (APR)	36
D92	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	35
A14	PLAN BRIEFINGS	35
A2	ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	35
E104	MAINTAIN DAILY STATUS REPORTS	34
E110	MAINTAIN TO FILES	34

TABLE A2

GROUP ID NUMBER AND TITLE: GRP017, TRAINING PERSONNEL
NUMBER IN GROUP: 13 PERCENT OF CLUSTER: 8%
MAJCOM DISTRIBUTION: MAC (62%), ATC (31%), TAC (7%)

LOCATION: CONUS (85%), OVERSEAS (15%)
DAFSC DISTRIBUTION: 43170C (46%), 43150C (23%), 43170D (15%), 43150D (15%)
AVERAGE GRADE: E-5 AVERAGE MONTHS IN SERVICE: 131
AVERAGE MONTHS IN CAREER FIELD: 108

GROUP DIFFERENTIATING TASKS		PERCENT MEMBERS PERFORMING
D95	SCORE TESTS	100
D75	ADMINISTER TESTS	92
D91	EVALUATE TRAINING METHODS OR TECHNIQUES	77
D81	COUNSEL TRAINEES ON TRAINING PROGRESS	77
D92	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	69
D94	PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	69
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	62
D87	DIRECT OR IMPLEMENT TRAINING PROGRAMS OTHER THAN OJT	62
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	62
D84	DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	62
D83	DETERMINE OJT TRAINING REQUIREMENTS	54
D97	WRITE TRAINING REPORTS	54
D79	CONDUCT RESIDENT COURSE CLASSROOM TRAINING	46
D96	WRITE TEST QUESTIONS	46
B25	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	46
D89	EVALUATE OJT TRAINEES	46
D93	PLAN OJT	46
D86	DIRECT OR IMPLEMENT OJT PROBLEMS	46
D76	ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	46
A5	DETERMINE WORK PRIORITIES	46
E100	DRAFT CORRESPONDENCE OR REPORTS	38
D78	CONDUCT OJT	38
D80	CONDUCT TRAINING CONFERENCES OR BRIEFINGS	38
E151	UPDATE OR MAINTAIN WORK PROGRESS CHARTS OR STATUS BOARDS	31
C58	EVALUATE INSPECTION REPORTS OR PROCEDURES	31
A11	ESTABLISH ORGANIZATIONAL POLICIES, MAINTENANCE OPERATING INSTRUCTIONS (MOI), OR STANDING OPERATING PROCEDURES (SOP)	31
D90	EVALUATE PROGRESS OF RESIDENT COURSE STUDENTS	23
A12	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	23
E101	KEYPUNCH MAINTENANCE INFORMATION INTO THE MAINTENANCE MANAGEMENT INFORMATION CONTROL SYSTEM (MMICS)	23
E105	MAINTAIN LEVELS OF OFFICE FORMS OR SUPPLIES	23
D88	ESTABLISH STUDY REFERENCE FILES	23
E149	TYPE CORRESPONDENCE, RECORDS, REPORTS, OR FORMS	23
C69	INVESTIGATE ACCIDENTS OR INCIDENTS	23
E103	MAINTAIN CORRESPONDENCE FILES	23
E144	REQUEST AIRCRAFT SUPPORT EQUIPMENT SUPPORT	23

TABLE A3

GROUP ID NUMBER AND TITLE: GRP031, QUALITY CONTROL INSPECTORS
NUMBER IN GROUP: 23 PERCENT OF CLUSTER: 15%
MAJCOM DISTRIBUTION: MAC (83%), TAC (13%)

LOCATION: CONUS (78%), OVERSEAS (22%)
DAFSC DISTRIBUTION: 43170C (30%), 43150C (4%), 43170D (48%), 43150D (17%)
AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 143
AVERAGE MONTHS IN CAREER FIELD: 110

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
C71	REVIEW AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	96
E119	PREPARE AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	91
B38	IMPLEMENT OR FOLLOW-UP ON QUALITY CONTROL PROGRAMS	87
E110	MAINTAIN ID FILES	83
A A8	DEVELOP QUALITY CONTROL PROGRAMS	83
L1064	INSPECT TOOLS OR TOOL KITS	78
A11	ESTABLISH ORGANIZATIONAL POLICIES, MAINTENANCE OPERATING INSTRUCTIONS (MOI), OR STANDING OPERATING PROCEDURES (SOP)	78
C58	EVALUATE INSPECTION REPORTS OR PROCEDURES	74
E176	INSPECT ELECTRICAL SYSTEM COMPONENTS	74
F262	RESEARCH AIR FORCE TOS OR STANDARD PUBLICATIONS	70
B37	IMPLEMENT OR FOLLOW-UP ON FOREIGN OBJECT DAMAGE (FOD) PROGRAMS	70
E146	REVIEW INSPECTION CHECKLISTS FOR CURRENT REQUIREMENTS	70
F264	RESEARCH NUMERICAL INDEX REQUIREMENT TABLE (NIRT) TO LOCATE TECHNICAL ORDER NUMBERS AND TITLES	65
A16	PLAN MAINTENANCE OR INSPECTIONS OF HELICOPTERS	65
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	65
C69	INVESTIGATE ACCIDENTS OR INCIDENTS	65
C56	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	61
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	61
F179	INSPECT INSTRUMENT COVER GLASSES FOR SLIPPAGE OR BREAKAGE	61
F183	INSPECT VISIBLE TURBINE BLADES	61
K1019	BRIEF PILOT OR CREW ON STATUS OF AIRCRAFT	57
F175	IDENTIFY PRESENCE OF CORROSION ON HELICOPTERS	57
G338	INSPECT ROTOR SYSTEMS ON H-1 HELICOPTERS	57
G336	INSPECT LANDING GEAR ON H-1 HELICOPTERS	57
F177	INSPECT FIRST AID KITS	57
K1021	COMPUTE WEIGHT AND BALANCE DATA FOR H-1 HELICOPTERS	52
G331	INSPECT FLIGHT CONTROL SYSTEMS ON H-1 HELICOPTERS	52
E108	MAINTAIN STANDARD PUBLICATION FILES	52
G335	IMPLEMENT OR FOLLOW-UP ON CORROSION CONTROL PROGRAMS	52
F186	INTERPRET SCHEMATICS	52
F185	INTERPRET HELICOPTER MARKINGS	52

TABLE A4

GROUP ID NUMBER AND TITLE: GRP039, HELICOPTER MAINTENANCE AND SUPPORT NCOICs
NUMBER IN GROUP: 55 PERCENT OF CLUSTER: 35%
MAJCOM DISTRIBUTION: MAC (65%), AFSC (11%), USAFE (9%), TAC (7%)

LOCATION: CONUS (71%), OVERSEAS (29%)
DAFSC DISTRIBUTION: 43170C (56%), 43150C (9%), 43170D (35%)
AVERAGE GRADE: E-6, E-7 AVERAGE MONTHS IN SERVICE: 200
AVERAGE MONTHS IN CAREER FIELD: 159

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
B25	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	95
B43	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	93
A5	DETERMINE WORK PRIORITIES	91
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	91
C70	PREPARE APR	91
C68	INDORSE AIRMAN PERFORMANCE REPORTS (APR)	85
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	85
A23	SCHEDULE LEAVES OR PASSES	80
A19	PLAN WORK ASSIGNMENTS	78
A4	DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	78
C56	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	76
A2	ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	75
C58	EVALUATE INSPECTION REPORTS OR PROCEDURES	73
A12	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	71
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	71
C54	ANALYZE WORKLOAD REQUIREMENTS	69
A9	DEVELOP WORK METHODS OR PROCEDURES	69
E138	PREPARE OR MAINTAIN DUTY ROSTERS	69
E100	DRAFT CORRESPONDENCE OR REPORTS	67
E98	COMPLETE STATUS TAGS FOR CONDITION OF PROPERTY	67
A16	PLAN MAINTENANCE OR INSPECTIONS OF HELICOPTERS	65
C67	EVALUATE WORK SCHEDULES	65
D92	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	65
B45	REVIEW MAN-HOUR REPORTING FORMS	64
A11	ESTABLISH ORGANIZATIONAL POLICIES, MAINTENANCE OPERATING INSTRUCTIONS (MOI), OR STANDING OPERATING PROCEDURES (SOP)	62
C57	EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	62
C60	EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	62
B29	DIRECT FLIGHTLINE MAINTENANCE	60
E150	UPDATE JOB CONTROL ON ESTIMATED TIME IN COMMISSION (ETIC) OF MAINTENANCE JOBS	60
B33	DIRECT SPECIAL INSPECTIONS	60
C72	SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	60

TABLE A5

GROUP ID NUMBER AND TITLE: GRP035, MAINTENANCE CONTROL SPECIALISTS
NUMBER IN GROUP: 34 PERCENT OF CLUSTER: 22%
MAJCOM DISTRIBUTION: MAC (82%), TAC(9%)

LOCATION: CONUS (65%), OVERSEAS (35%)
DAFSC DISTRIBUTION: 43170C (41%), 43150C (21%), 43170D (21%), 43150D (17%)
AVERAGE GRADE: E-5 AVERAGE MONTHS IN SERVICE: 126
AVERAGE MONTHS IN CAREER FIELD: 104

GROUP DIFFERENTIATING TASKS		PERCENT MEMBERS PERFORMING
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	91
A5	DETERMINE WORK PRIORITIES	91
E144	REQUEST AIRCRAFT SUPPORT EQUIPMENT SUPPORT	62
E104	MAINTAIN DAILY STATUS REPORTS	62
E147	SCHEDULE HELICOPTER MAINTENANCE	62
E151	UPDATE OR MAINTAIN WORK PROGRESS CHARTS OR STATUS BOARDS	59
B26	DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	59
A16	PLAN MAINTENANCE OR INSPECTIONS OF HELICOPTERS	59
B29	DIRECT FLIGHTLINE MAINTENANCE	50
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	47
E101	KEYPUNCH MAINTENANCE INFORMATION INTO THE MAINTENANCE MANAGEMENT INFORMATION CONTROL SYSTEM (MMICS)	44
E148	SCHEDULE NONDESTRUCTIVE INSPECTIONS	44
B28	DIRECT FIELD MAINTENANCE	41
E102	MAINTAIN AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	41
A4	DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	41
B32	DIRECT SCHEDULED INSPECTIONS	41
B34	DIRECT UTILIZATION OF EQUIPMENT	41
B33	DIRECT SPECIAL INSPECTIONS	38
E150	UPDATE JOB CONTROL ON ESTIMATED TIME IN COMMISSION (ETIC) OF MAINTENANCE JOBS	32
A21	PREPARE MONTHLY MAINTENANCE PLANS	32
E135	PREPARE AFTO 95 (SIGNIFICANT HISTORICAL DATA)	29
C70	PREPARE APR	29
B24	CONDUCT STAFF MEETINGS	29
E106	MAINTAIN MISSION-ESSENTIAL EQUIPMENT RECORDS	26
E116	PREPARE AF FORMS 369 (AFORMS AIRCREW/MISSION FLIGHT DATA DOCUMENT)	24
A14	PLAN BRIEFINGS	21
A19	PLAN WORK ASSIGNMENTS	21
D78	CONDUCT OJT	21
B27	DIRECT DOCK INSPECTIONS OR MAINTENANCE	18
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	18

TABLE A6

GROUP ID NUMBER AND TITLE: GRP089, HEADQUARTERS STAFF PERSONNEL
NUMBER IN GROUP: 5 PERCENT OF CLUSTER: 3%
MAJCOM DISTRIBUTION: MAC (80%), TAC (20%)

LOCATION: CONUS (100%)
DAFSC DISTRIBUTION: 43170C (60%), 43150C (20%), 43170D (20%)
AVERAGE GRADE: E-6, E-7 AVERAGE MONTHS IN SERVICE: 219
AVERAGE MONTHS IN CAREER FIELD: 191

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
E100	DRAFT CORRESPONDENCE OR REPORTS	100
C74	WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	100
E103	MAINTAIN CORRESPONDENCE FILES	100
C71	REVIEW AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	100
E119	PREPARE AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	100
C65	EVALUATE SUGGESTIONS	80
C56	EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	60
C60	EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	60
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	60
C58	EVALUATE INSPECTION REPORTS OR PROCEDURES	60
B43	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	40
E104	MAINTAIN DAILY STATUS REPORTS	40
A14	PLAN BRIEFINGS	40
B33	DIRECT SPECIAL INSPECTIONS	40
C63	EVALUATE SAFETY PROGRAMS	40
C62	EVALUATE PROCEDURES FOR STORAGE, INVENTORY, OR INSPECTION OF PROPERTY ITEMS	40
B32	DIRECT SCHEDULED INSPECTIONS	40
E136	PREPARE CLASS II MODIFICATIONS RECORDS	40
B48	SUPERVISE C-SHRED HELICOPTER TECHNICIANS (AFSC 43170C)	20
B52	SUPERVISE D-SHRED HELICOPTER TECHNICIANS (AFSC 43170D)	20
D80	CONDUCT TRAINING CONFERENCES OR BRIEFINGS	20
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	20
F262	RESEARCH AIR FORCE TOS OR STANDARD PUBLICATIONS	20
F263	RESEARCH ARMY TOS OR STANDARD PUBLICATIONS	20
E146	REVIEW INSPECTION CHECKLISTS FOR CURRENT REQUIREMENTS	20
A16	PLAN MAINTENANCE OR INSPECTIONS OF HELICOPTERS	20
B35	IMPLEMENT COST REDUCTION PROGRAMS	20
B41	IMPLEMENT SUGGESTION PROGRAMS	20
A20	PREPARE JOB DESCRIPTIONS	20
C54	ANALYZE WORKLOAD REQUIREMENTS	20
D91	EVALUATE TRAINING METHODS OR TECHNIQUES	20
B36	IMPLEMENT OR FOLLOW-UP ON CORROSION CONTROL PROGRAMS	20

TABLE A7

GROUP ID NUMBER AND TITLE: GRP036, H-1 FLIGHTLINE MAINTENANCE PERSONNEL
NUMBER IN GROUP: 333 PERCENT OF SAMPLE: 35%
MAJCOM DISTRIBUTION: MAC (77%), TAC (20%), AFSC 3%)

LOCATION: CONUS (88%), OVERSEAS (12%)
DAFSC DISTRIBUTION: 43130D (12%), 43150D (61%), 43170D (26%)
AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 73
AVERAGE MONTHS IN CAREER FIELD: 59

TYPE AIRCRAFT MAINTAINED: TH-1F (25%) UH-1N (57%)
UH-1F (22%) UH-1P (8%)
KH-1H (22%)

	GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G307	ATTACH OR DETACH GROUND HANDLING WHEELS ON H-1 HELICOPTERS	99
G308	ATTACH OR DETACH TOW BARS ON H-1 HELICOPTERS	99
G336	INSPECT LANDING GEAR ON H-1 HELICOPTERS	96
G507	TIE DOWN BLADES ON H-1 HELICOPTERS	96
G338	INSPECT ROTOR SYSTEMS ON H-1 HELICOPTERS	95
G331	INSPECT FLIGHT CONTROL SYSTEMS ON H-1 HELICOPTERS	95
G355	LUBRICATE MAIN ROTOR HEAD ON H-1 HELICOPTERS	95
G351	JACK H-1 HELICOPTERS	95
G415	REMOVE OR INSTALL BATTERIES ON H-1 HELICOPTERS	94
G349	INSTALL MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	94
G426	REMOVE OR INSTALL DOORS ON H-1 HELICOPTERS	94
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	93
G352	LAUNCH H-1 HELICOPTERS	93
G354	LUBRICATE FLIGHT CONTROLS ON H-1 HELICOPTERS	93
F234	REMOVE OR INSTALL HELICOPTERS PASSENGER SEATS	92
G471	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-1 HELICOPTERS	92
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	92
G410	REMOVE MAIN ROTOR ASSEMBLIES FROM H-1 HELICOPTERS	92
G474	REMOVE OR INSTALL MAIN ROTOR STABILIZER BAR ON H-1 HELICOPTERS	92
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	92
G473	REMOVE OR INSTALL MAIN ROTOR PITCH CONTROL RODS ON H-1 HELICOPTERS	91
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA, CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT)	91
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	91
G356	LUBRICATE TAIL ROTOR ASSEMBLIES ON H-1 HELICOPTERS	91
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	90
G350	INSTALL TAIL ROTOR ASSEMBLIES ON H-1 HELICOPTERS	90
G293	ADJUST DOOR OR WINDOW LATCH MECHANISMS ON H-1 HELICOPTERS	()
G503	SERVICE MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	90

TABLE A8

GROUP ID NUMBER AND TITLE: GRP133, H-1 FLIGHTLINE SPECIALISTS
NUMBER IN GROUP: 279 PERCENT OF CLUSTER: 84%
MAJCOM DISTRIBUTION: MAC (77%), TAC (20%)

LOCATION: CONUS (89%), OVERSEAS (11%)
DAFSC DISTRIBUTION: 43130D (9%), 43150D (66%), 43170D (24%)
AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 70
AVERAGE MONTHS IN CAREER FIELD: 57

TYPE AIRCRAFT MAINTAINED: TH-1F (25%) UH-1N (55%)
UH-1F (23%) UH-1P (9%)
HH-1H (23%)

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G307	ATTACH OR DETACH GROUND HANDLING WHEELS ON H-1 HELICOPTERS	100
G308	ATTACH OR DETACH TOW BARS ON H-1 HELICOPTERS	100
G415	REMOVE OR INSTALL BATTERIES ON H- HELICOPTERS	99
G355	LUBRICATE MAIN ROTOR HEAD ON H-1 HELICOPTERS	((
G349	INTALL MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	99
G507	TIE DOWN BLADES ON H-1 HELICOPTERS	98
G331	INSPECT FLIGHT CONTROL SYSTEMS ON H-1 HELICOPTERS	98
G336	INSPECT LANDING GEAR ON H-1 HELICOPTERS	98
G426	REMOVE OR INSTALL DOORS ON H-1 HELICOPTERS	98
G338	INSPECT ROTOR SYSTEMS ON H-1 HELICOPTERS	98
G354	LUBRICATE FLIGHT CONTROLS ON H-1 HELICOPTERS	98
G474	REMOVE OR INSTALL MAIN ROTOR STABILIZER BASE ON H-1 HELICOPTERS	98
G351	JACK H-1 HELICOPTERS	98
G473	REMOVE OR INSTALL MAIN ROTOR PITCH CONTROL RODS ON H-1 HELICOPTERS	97
G356	LUBRICATE TAIL ROTOR ASSEMBLIES ON H-1 HELICOPTERS	97
G472	REMOVE OR INSTALL MAIN ROTOR DAMPERS ON H-1 HELICOPTERS	97
G352	LAUNCH H-1 HELICOPTERS	96
G471	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-1 HELICOPTERS	96
G487	REMOVE OR INSTALL TAIL ROTOR DRIVE COUPLINGS ON H-1 HELICOPTERS	96
G293	ADJUST DOOR OR WINDOW LATCH MECHANISMS ON H-1 HELICOPTERS	96
F234	REMOVE OR INSTALL HELICOPTER PASSENGER SEATS	96
G350	INSTALL TAIL ROTOR ASSEMBLIES ON H-1 HELICOPTERS	96
G486	REMOVE OR INSTALL TAIL ROTOR BLADES ON H-1 HELICOPTERS	96
G475	REMOVE OR INSTALL MAIN ROTOR SWASHPLATES ON H-1 HELICOPTERS	96
G410	REMOVE MAIN ROTOR ASSEMBLIES FROM H-1 HELICOPTERS	96
G503	SERVICE MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	95
G488	REMOVE OR INSTALL TAIL ROTOR DRIVE SHAFTS ON H-1 HELICOPTERS	95
G477	REMOVE OR INSTALL MAST ASSEMBLIES ON H-1 HELICOPTERS	95
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	95

TABLE A9

GROUP ID NUMBER AND TITLE: GRP156, H-1 LINE CHIEFS
NUMBER IN GROUP: 13 PERCENT OF CLUSTER: 4%
MAJCOM DISTRIBUTION: MAC (77%), TAC (15%), AFSC (8%)

LOCATION: CONUS (85%), OVERSEAS (15%)
DAFSC DISTRIBUTION: 43170D (92%), 43150D (8%)
AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 173
AVERAGE MONTHS IN CAREER FIELD: 115

TYPE AIRCRAFT MAINTAINED: TH-1F (15%) UH-1N (54%)
UH-1F (15%) UH-1P (8%)
HH-1H (31%)

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
B25	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	100
C58	EVALUATE INSPECTION REPORTS OR PROCEDURES	100
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	100
G338	INSPECT ROTOR SYSTEMS ON H-1 HELICOPTERS	100
G331	INSPECT FLIGHT CONTROL SYSTEMS ON H-1 HELICOPTERS	100
G307	ATTACH OR DETACH GROUND HANDLING WHEELS ON H-1 HELICOPTERS	100
G308	ATTACH OR DETACH TOW BARS ON H-1 HELICOPTERS	100
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	100
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	100
G291	ADJUST AUTOROTATION ON H-1 HELICOPTER MAIN ROTOR SYSTEMS	100
G406	RECOVER H-1 HELICOPTERS	100
G295	ADJUST MAIN ROTOR BLADE TRIM TAB ON H-1 HELICOPTERS	100
G352	LAUNCH H-1 HELICOPTERS	100
G349	INSTALL MAIN ROTOR ASSEMBLIES ON H-1 HELICOPTERS	100
F201	OPERATE TOW VEHICLES	100
G410	REMOVE MAIN ROTOR ASSEMBLIES FROM H-1 HELICOPTERS	100
G351	JACK H-1 HELICOPTERS	100
B45	REVIEW MAN-HOUR REPORTING FORMS	92
B29	DIRECT FLIGHTLINE MAINTENANCE	92
C70	PREPARE APR	92
B51	SUPERVISE D-SHRED HELICOPTER MECHANICS (AFSC 43150D)	92
B43	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	92
A16	PLAN MAINTENANCE OR INSPECTIONS OF HELICOPTERS	92
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	92
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	92
E131	PREPARE AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	92
A9	DEVELOP WORK METHODS OR PROCEDURES	92
E132	PREPARE AFTO FORMS 781J (AEROSPACE VEHICLE-ENGINE FLIGHT)	92
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	92

TABLE A10

GROUP ID NUMBER AND TITLE: GRP057, CH-3/HH-3 FLIGHTLINE MAINTENANCE PERSONNEL
NUMBER IN GROUP: 220 PERCENT OF SAMPLE: 23%
MAJCOM DISTRIBUTION: MAC (92%), TAC (6%)

LOCATION: CONUS (46%), OVERSEAS (54%)
DAFSC DISTRIBUTION: 43130C (9%), 43150C (59%), 43170C (32%)
AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 79
AVERAGE MONTHS IN CAREER FIELD: 63

TYPE OF AIRCRAFT MAINTAINED: CH-3 (79%) CH-53 (7%)
HH-3 (78%) HH-53 (9%)

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
I725	JACK H-3 HELICOPTERS	97
I701	ATTACH OR DETACH TOWING DEVICES ON H-3 HELICOPTERS	93
F180	INSPECT LANDING GEAR SYSTEMS ON H-3 OR H-53 HELICOPTERS	96
I714	INSPECT FLIGHT CONTROL SYSTEMS ON H-3 HELICOPTERS	96
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	95
I718	INSPECT ROTOR SYSTEMS ON H-3 HELICOPTERS	95
F269	SERVICE HELICOPTER HYDRAULIC SYSTEMS	94
I818	TIE DOWN BLADES ON H-3 HELICOPTERS	94
F248	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-3 OR H-53 HELICOPTERS	94
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	93
I726	LAUNCH H-3 HELICOPTERS	93
I721	INSPECT TRANSMISSIONS ON H-3 HELICOPTERS	93
F190	LUBRICATE MAIN ROTOR HEAD ON H-3 OR H-53 HELICOPTERS	93
F220	REMOVE MAIN ROTOR ASSEMBLIES FROM H-3 OR H-53 HELICOPTERS	93
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	93
I712	INSPECT ENGINES ON H-3 HELICOPTERS	92
I759	QUICK-RIG TAIL ROTOR FLIGHT CONTROLS ON H-3 HELICOPTERS	92
I730	PERFORM AIRCRAFT MAINTENANCE PREFLIGHT INSPECTIONS ON H-3 HELICOPTERS	92
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	92
I716	INSPECT HYDRAULIC SYSTEMS ON H-3 HELICOPTERS	92
F271	SERVICE HELICOPTER TIRES	92
F234	REMOVE OR INSTALL HELICOPTER PASSENGER SEATS	92
F199	OPERATE PORTABLE LIGHTING UNITS	92
I724	INSTALL TAIL ROTOR ASSEMBLIES ON H-3 HELICOPTERS	92
I732	PERFORM AIRCRAFT POSTFLIGHT INSPECTIONS ON H-3 HELICOPTERS	91
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	91
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA, CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT)	91
I738	PERFORM OPERATIONAL CHECKS OF AIRCRAFT LIGHTING SYSTEMS ON H-3 HELICOPTERS	91

TABLE A11

GROUP ID NUMBER AND TITLE: GRP108, H-3 FLIGHTLINE SPECIALISTS
NUMBER IN GROUP: 205 PERCENT OF CLUSTER: 93%
MAJCOM DISTRIBUTION: MAC (92%), TAC (6%)

LOCATION: CONUS (47%), OVERSEAS (53%)
DAFSC DISTRIBUTION: 43130C (9%), 43150C (63%), 43170C (27%)
AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 71
AVERAGE MONTHS IN CAREER FIELD: 57

TYPE AIRCRAFT MAINTAINED: CH-3 (81%)
HH-3 (76%)

GROUP	DIFFERENTIATING TASKS	MEMBERS PERFORMING
F180	INSPECT LANDING GEAR SYSTEMS ON H-3 OR H-53 HELICOPTERS	100
I725	JACK H-3 HELICOPTERS	99
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	98
F190	LUBRICATE MAIN ROTOR HEAD ON H-3 OR H-53 HELICOPTERS	98
I730	PERFORM AIRCRAFT MAINTENANCE PREFLIGHT INSPECTIONS ON H-3 HELICOPTERS	98
I726	LAUNCH H-3 HELICOPTERS	98
I701	ATTACH OR DETACH TOWING DEVICES ON H-3 HELICOPTERS	98
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	97
F271	SERVICE HELICOPTER TIRES	97
F234	REMOVE OR INSTALL HELICOPTER PASSENGER SEATS	97
F189	LUBRICATE LANDING GEAR COMPONENTS ON H-3 OR H-53 HELICOPTERS	97
F248	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-3 OR H-53 HELICOPTERS	97
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	96
I714	INSPECT FLIGHT CONTROL SYSTEMS ON H-3 HELICOPTERS	96
I818	TIE DOWN BLADES ON H-3 HELICOPTERS	96
I738	PERFORM OPERATIONAL CHECKS OF AIRCRAFT LIGHTING SYSTEMS ON H-3 HELICOPTERS	96
I732	PERFORM AIRCRAFT POSTFLIGHT INSPECTIONS ON H-3 HELICOPTERS	96
I718	INSPECT ROTOR SYSTEMS ON H-3 HELICOPTERS	96
F220	REMOVE MAIN ROTOR ASSEMBLIES FROM H-3 OR H-53 HELICOPTERS	96
I766	REMOVE OR INSTALL BATTERIES ON H-3 HELICOPTERS	96
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	95
I735	PERFORM AIRCRAFT THRUFLIGHT INSPECTIONS ON H-3 HELICOPTERS	95
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	95
F199	OPERATE PORTABLE LIGHTING UNITS	95
I760	RECOVER H-3 HELICOPTERS	94
F187	LUBRICATE AIRFRAME COMPONENTS ON HELICOPTERS	94
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	94
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA, CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT)	94
I724	INSTALL TAIL ROTOR ASSEMBLIES ON H-3 HELICOPTERS	94

TABLE A12

GROUP ID NUMBER AND TITLE: GRP110, H-3 LINE CHIEFS
NUMBER IN GROUP: 13 PERCENT OF CLUSTER: 6%
MAJCOM DISTRIBUTION: MAC (92%)

LOCATION: CONUS (31%), OVERSEAS (69%)
DAFSC DISTRIBUTION: 43170C (100%)
AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 196
AVERAGE MONTHS IN CAREER FIELD: 156

TYPE AIRCRAFT MAINTAINED: CH-3 (54%)
HH-3 (100%)

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
B48	SUPERVISE C-SHRED HELICOPTER TECHNICIANS (AFSC 43170C)	100
A5	DETERMINE WORK PRIORITIES	100
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	100
I719	INSPECT TAIL ROTOR RIGGING ON H-3 HELICOPTERS	100
B25	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	100
I720	INSPECT TRANSMISSION DRIVE SYSTEMS ON H-3 HELICOPTERS	100
I721	INSPECT TRANSMISSIONS ON H-3 HELICOPTERS	100
I717	INSPECT MAIN ROTOR RIGGING ON H-3 HELICOPTERS	100
I714	INSPECT FLIGHT CONTROL SYSTEMS ON H-3 HELICOPTERS	100
B29	DIRECT FLIGHTLINE MAINTENANCE	92
I736	PERFORM IN-PROGRESS INSPECTIONS ON H-3 HELICOPTERS	92
C70	PREPARE APR	92
I718	INSPECT ROTOR SYSTEMS ON H-3 HELICOPTERS	92
B47	SUPERVISE C-SHRED HELICOPTER MECHANICS (AFSC 43150C)	85
E150	UPDATE JOB CONTROL ON ESTIMATED TIME IN COMMISSION (ETIC) OF MAINTENANCE JOBS	85
F262	RESEARCH AIR FORCE TOS OR STANDARD PUBLICATIONS	85
A19	PLAN WORK ASSIGNMENTS	85
I712	INSPECT ENGINES ON H-3 HELICOPTERS	85
F201	OPERATOR TOW VEHICLES	85
U832	TROUBLESHOOT MAIN ROTOR SYSTEMS ON H-3 HELICOPTERS	85
D82	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	85
E115	PREPARE AF FORMS 2413 (SUPPLY CONTROL LOG)	85
I831	TROUBLESHOOT MAIN GEARBOX ASSEMBLIES ON H-3 HELICOPTERS	85
I716	INSPECT HYDRAULIC SYSTEMS ON H-3 HELICOPTERS	85
B45	REVIEW MAN-HOUR REPORTING FORMS	77
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	77
E147	SCHEDULE HELICOPTER MAINTENANCE	77
A16	PLAN MAINTENANCE OR INSPECTIONS OF HELICOPTERS	77
B43	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	77
I829	TROUBLESHOOT LANDING GEAR SYSTEMS ON H-3 HELICOPTERS	77
E112	ORDER PARTS BY VOICE COMMUNICATION	77
I701	ATTACH OR DETACH TOWING DEVICES ON H-3 HELICOPTERS	77
I715	INSPECT FUEL SYSTEMS ON H-3 HELICOPTERS	85

TABLE A13

GROUP ID NUMBER AND TITLE: .GRP059, CH-53/HH-53 FLIGHTLINE MAINTENANCE PERSONNEL
NUMBER IN GROUP: 190 PERCENT OF SAMPLE: 20%
MAJCOM DISTRIBUTION: MAC (68%), AFSC (24%), USAFE (6%)

LOCATION: CONUS (72%), OVERSEAS (28%)
DAFSC DISTRIBUTION: 43130C (12%), 43150C (58%), 43170C (29%)
AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 66
AVERAGE MONTHS IN CAREER FIELD: 53

TYPE AIRCRAFT MAINTAINED: CH-53 (30%) CH-3 (5%)
HH-53 (83%) HH-3 (5%)

GROUP DIFFERENTIATING TASKS		PERCENT MEMBERS PERFORMING
F180	INSPECT LANDING GEAR SYSTEMS ON H-3 OR H-53 HELICOPTERS	95
F248	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-3 OR H-53 HELICOPTERS	95
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	95
F190	LUBRICATE MAIN ROTOR HEAD ON H-3 OR H-53 HELICOPTERS	95
F220	REMOVE MAIN ROTOR ASSEMBLIES FROM H-3 OR H-53 HELICOPTERS	95
H572	JACK H-3 HELICOPTERS	94
H548	ATTACH OR DETACH TOWING DEVICES ON H-3 HELICOPTERS	94
F269	SERVICE HELICOPTER HYDRAULIC SYSTEMS	94
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	93
H570	INSTALL MAIN ROTOR ASSEMBLIES ON H-53 HELICOPTERS	93
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	93
F155	ADJUST TAIL ROTOR PITCH CONTROL LINKS ON H-3 OR H-53 HELICOPTERS	93
F271	SERVICE HELICOPTER TIRES	92
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	92
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	92
F219	REFUEL HELICOPTERS USING PRESSURE PROCEDURE	91
F187	LUBRICATE AIRFRAME COMPONENTS ON HELICOPTERS	91
H640	REMOVE OR INSTALL MAIN ROTOR DAMPERS ON H-53 HELICOPTERS	91
F200	OPERATE SERVICING AIR COMPRESSORS	91
H265	INSPECT ROTOR SYSTEMS ON H-53 HELICOPTERS	91
H605	QUICK-RIG MAIN ROTOR FLIGHT CONTROLS ON H-53 HELICOPTERS	91
H561	INSPECT FLIGHT CONTROL SYSTEMS ON H-53 HELICOPTERS	90
F225	REMOVE OR INSTALL CHIP DETECTORS	90
H563	INSPECT HYDRAULIC SYSTEMS ON H-53 HELICOPTERS	89
F280	TRACK MAIN ROTOR BLADE USING STROBEX EQUIPMENT	89
F249	REMOVE OR INSTALL MAIN ROTOR PITCH CONTROL RODS ON H-3, H-53, OR H-60 HELICOPTERS	89
F258	REMOVE OR INSTALL TAIL ROTOR DRIVE THOMAS COUPLING ASSEMBLIES ON H-3, H-53, OR H-60 HELICOPTERS	89
F154	ADJUST PRETRACK ON H-3 OR H-53 HELICOPTERS	89
H549	BLEED HYDRAULIC SYSTEMS ON H-53 HELICOPTERS	89

TABLE A14

GROUP ID NUMBER AND TITLE: GRP134, H-53 FLIGHTLINE SPECIALISTS
NUMBER IN GROUP: 170 PERCENT OF CLUSTER: 89%
MAJCOM DISTRIBUTION: MAC (69%), AFSC (22%), USAFE (7%)

LOCATION: CONUS (74%), OVERSEAS (26%)
DAFSC DISTRIBUTION: 43130C (13%), 43150C (59%), 43170C (28%)
AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 64
AVERAGE MONTHS IN CAREER FIELD: 53

TYPE AIRCRAFT MAINTAINED: CH-53 (31%)
HH-53 (86%)

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
H572	JACK H-53 HELICOPTERS	99
H570	INSTALL MAIN ROTOR ASSEMBLIES ON H-53 HELICOPTERS	98
F190	LUBRICATE MAIN ROTOR HEAD ON H-3 OR H-53 HELICOPTERS	98
F180	INSPECT LANDING GEAR SYSTEMS ON H-3 OR H-53 HELICOPTERS	98
H548	ATTACH OR DETACH TOWING DEVICES ON H-53 HELICOPTERS	97
H565	INSPECT ROTOR SYSTEMS ON H-53 HELICOPTERS	97
F248	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-3 OR H-53 HELICOPTERS	97
H640	REMOVE OR INSTALL MAIN ROTOR DAMPERS ON H-53 HELICOPTERS	96
F269	SERVICE HELICOPTER HYDRAULIC SYSTEMS	96
F271	SERVICE HELICOPTER TIRES	96
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	96
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	95
H567	INSPECT TRANSMISSION DRIVE SYSTEMS ON H-53 HELICOPTERS	95
H605	QUICK-RIG MAIN ROTOR FLIGHT CONTROLS ON H-53 HELICOPTERS	95
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	95
H568	INSPECT TRANSMISSIONS ON H-53 HELICOPTERS	95
F187	LUBRICATE AIRFRAME COMPONENTS ON HELICOPTERS	95
F220	REMOVE MAIN ROTOR ASSEMBLIES FROM H-3 OR H-53 HELICOPTERS	95
F200	OPERATE SERVICING AIR COMPRESSORS	95
H579	PERFORM AIRCRAFT POSTFLIGHT INSPECTIONS ON H-53 HELICOPTERS	94
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	94
H670	TIE DOWN BLADES ON H-53 HELICOPTERS	94
H563	INSPECT HYDRAULIC SYSTEMS ON H-53 HELICOPTERS	94
H648	REMOVE OR INSTALL TAIL ROTOR BLADES ON H-53 HELICOPTERS	94
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	94
F219	REFUEL HELICOPTERS USING PRESSURE PROCEDURE	94
H561	INSPECT FLIGHT CONTROL SYSTEMS ON H-53 HELICOPTERS	94
F225	REMOVE OR INSTALL CHIP DETECTORS	94
F258	REMOVE OR INSTALL TAIL ROTOR DRIVE THOMAS COUPLING ASSEMBLIES ON H-3, H-53, OR H-60 HELICOPTERS	94
F155	ADJUST TAIL ROTOR PITCH CONTROL LINKS ON H-3 OR H-53 HELICOPTERS	94

TABLE A15

GROUP ID NUMBER AND TITLE: GRP136, H-53 LINE CHIEFS
NUMBER IN GROUP: 5 PERCENT OF CLUSTER: 3%
MAJCOM DISTRIBUTION: MAC (80%), AFSC (20%)

LOCATION: CONUS (60%), OVERSEAS (40%)
DAFSC DISTRIBUTION: 43170C (100%)
AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 161
AVERAGE MONTHS IN CAREER FIELD: 77

TYPE AIRCRAFT MAINTAINED: CH-53 (40%)
HH-53 (80%)

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
B29	DIRECT FLIGHTLINE MAINTENANCE	100
A5	DETERMINE WORK PRIORITIES	100
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	100
B47	SUPERVISE C-SHRED HELICOPTER MECHANICS (AFSC 43150C)	100
A3	COORDINATE WORK WITH RELATED MAINTENANCE ACTIVITIES	100
H678	TROUBLESHOOT FLIGHT CONTROL SYSTEMS ON H-53 HELICOPTERS	100
F201	OPERATE TOW VEHICLES	100
B46	SUPERVISE C-SHRED APPRENTICE HELICOPTER MECHANICS (AFSC 43130C)	100
F280	TRACK MAIN ROTOR BLADE USING STROBEX EQUIPMENT	100
H564	INSPECT MAIN ROTOR RIGGING ON H-53 HELICOPTERS	100
H640	REMOVE OR INSTALL MAIN ROTOR DAMPERS ON H-53 HELICOPTERS	100
H661	RIG MAIN ROTOR FLIGHT CONTROLS ON H-53 HELICOPTERS	100
H662	RIG TAIL ROTOR FLIGHT CONTROLS ON H-53 HELICOPTERS	100
F219	REFUEL HELICOPTERS USING PRESSURE PROCEDURE	100
F248	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-3 OR H-53 HELICOPTERS	100
H605	QUICK-RIG MAIN ROTOR FLIGHT CONTROLS ON H-53 HELICOPTERS	100
F203	PERFORM FREEDOM-OF-MOVEMENT OR INTERFERENCE CHECKS OF HELICOPTER FLIGHT CONTROL SYSTEMS	100
H566	INSPECT TAIL ROTOR RIGGING ON H-53 HELICOPTERS	100
H570	INSTALL MAIN ROTOR ASSEMBLIES ON H-53 HELICOPTERS	100
H571	INSTALL TAIL ROTOR ASSEMBLIES ON H-53 HELICOPTERS	100
E122	PREPARE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
H563	INSPECT HYDRAULIC SYSTEMS ON H-53 HELICOPTERS	100
F220	REMOVE MAIN ROTOR ASSEMBLIES FROM H-3 OR H-53 HELICOPTERS	100
H548	ATTACH OR DETACH TOWING DEVICES ON H-53 HELICOPTERS	100
H545	ALIGN TRANSMISSION DRIVE SYSTEMS ON H-53 HELICOPTERS	100
E150	UPDATE JOB CONTROL ON ESTIMATED TIME IN COMMISSION (ETIC) OF MAINTENANCE JOBS	80
H686	TROUBLESHOOT MAIN ROTOR SYSTEMS ON H-53 HELICOPTERS	80
H690	TROUBLESHOOT TAIL ROTOR DRIVE SHAFT ASSEMBLIES ON H-53 HELICOPTERS	80
H691	TROUBLESHOOT TAIL ROTOR SYSTEMS ON H-53 HELICOPTERS	80
C70	PREPARE APR	80
F210	POSITION OR SPOT NONPOWERED AIRCRAFT SUPPORT EQUIPMENT	80

TABLE A16

GROUP ID NUMBER AND TITLE: GRP034, H-3/H-53 GROUND SUPPORT AND SERVICING PERSONNEL
NUMBER IN GROUP: 14 PERCENT OF SAMPLE: 1%
MAJCOM DISTRIBUTION: MAC (79%), AFSC (21%)

LOCATION: CONUS (86%), OVERSEAS (14%)
DAFSC DISTRIBUTION: 43130C (93%), 43150C (7%)
AVERAGE GRADE: E-2 AVERAGE MONTHS IN SERVICE: 9
AVERAGE MONTHS IN CAREER FIELD: 6

TYPE AIRCRAFT SUPPORTED: CH-3 (21%) CH-53 (29%)
HH-3 (29%) HH-53 (50%)

	GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	100
F219	REFUEL HELICOPTERS USING PRESSURE PROCEDURE	100
F271	SERVICE HELICOPTER TIRES	79
L1064	INSPECT TOOLS OR TOOL KITS	71
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	71
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	71
F269	SERVICE HELICOPTER HYDRAULIC SYSTEMS	71
L1062	CLEAN HANDTOOLS OR SPECIAL EQUIPMENT	71
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENTS)	71
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	71
F278	TAKE JOINT OIL ANALYSIS PROGRAM (JOAP) SAMPLES FROM HELICOPTERS	71
L1065	INVENTORY EQUIPMENT, TOOLS, TOOL KITS, OR SUPPLIES	64
F180	INSPECT LANDING GEAR SYSTEMS ON H3 OR H-53 HELICOPTERS	64
F183	INSPECT VISIBLE TURBINE BLADES	64
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	64
F248	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-3 OR H-53 HELICOPTERS	64
H548	ATTACH OR DETACH TOWING DEVICES ON H-53 HELICOPTER	57
H579	PERFORM AIRCRAFT POSTFLIGHT INSPECTIONS ON H-53 HELICOPTERS	57
H565	INSPECT ROTOR SYSTEMS ON H-53 HELICOPTERS	57
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	57
H577	PERFORM AIRCRAFT MAINTENANCE PREFLIGHT INSPECTIONS ON H-53 HELICOPTERS	57
H573	LAUNCH H-53 HELICOPTERS	50
F175	IDENTIFY PRESENCE OF CORROSION ON HELICOPTERS	50
F190	LUBRICATE MAIN ROTOR HEAD ON H-3 OR H-53 HELICOPTERS	50
E131	PREPARE AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	50
F210	POSITION OR SPOT NONPOWERED AIRCRAFT SUPPORT EQUIPMENT	43
F200	OPERATE SERVICING AIR COMPRESSORS	43
H667	SERVICE MAIN ROTOR ASSEMBLIES ON H-53 HELICOPTERS	43
F211	POSITION OR SPOT POWERED AIRCRAFT SUPPORT EQUIPMENT	43

TABLE A17

GROUP ID NUMBER AND TITLE: GRP128, H-53 GROUND SUPPORT SPECIALISTS
NUMBER IN GROUP: 6 PERCENT OF CLUSTER: 43%
MAJCOM DISTRIBUTION: MAC (83%), AFSC (17%)

LOCATION: CONUS (100%)
DAFSC DISTRIBUTION: 43130C (100%)
AVERAGE GRADE: E-2 AVERAGE MONTHS IN SERVICE: 8
AVERAGE MONTHS IN CAREER FIELD: 5

TYPE AIRCRAFT SUPPORTED: HH-53 (83%)
CH-53 (33%)

	GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
L1064	INSPECT TOOLS OR TOOL KITS	100
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	100
F168	CONNECT OR DISCONNECT EXTERNAL ELECTRICAL POWER TO HELICOPTERS	100
H548	ATTACH OR DETACH TOWING DEVICES ON H-53 HELICOPTERS	100
H565	INSPECT ROTOR SYSTEMS ON H-53 HELICOPTERS	100
L1062	CLEAN HANDTOOLS OR SPECIAL EQUIPMENT	100
F219	REFUEL HELICOPTERS USING PRESSURE PROCEDURE	100
H577	PERFORM AIRCRAFT MAINTENANCE PREFLIGHT INSPECTIONS ON H-53 HELICOPTERS	
H579	PERFORM AIRCRAFT POSTFLIGHT INSPECTIONS ON H-53 HELICOPTERS	100
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	100
F248	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-3 OR H-53 HELICOPTERS	100
F269	SERVICE HELICOPTER HYDRAULIC SYSTEMS	83
L1065	INVENTORY EQUIPMENT, TOOLS, TOOL KITS, OR SUPPLIES	83
F271	SERVICE HELICOPTER TIRES	83
H667	SERVICE MAIN ROTOR ASSEMBLIES ON H-53 HELICOPTERS	83
F278	TAKE JOINT OIL ANALYSIS PROGRAM (JOAP) SAMPLES FROM HELICOPTERS	83
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	67
F262	RESEARCH AIR FORCE TOS OR STANDARD PUBLICATIONS	67
H670	TIE DOWN BLADES ON H-53 HELICOPTERS	67
F200	OPERATE SERVICING AIR COMPRESSORS	67
H570	INSTALL MAIN ROTOR ASSEMBLIES ON H-53 HELICOPTERS	67
F220	REMOVE MAIN ROTOR ASSEMBLIES FROM H-3 OR H-53 HELICOPTERS	67
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	67
F175	IDENTIFY PRESENCE OF CORROSION ON HELICOPTERS	67
H573	LAUNCH H-53 HELICOPTERS	67
E122	PREPARE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	67
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	67
H640	REMOVE OR INSTALL MAIN ROTOR DAMPERS ON H-53 HELICOPTERS	67
H607	RECOVER H-53 HELICOPTERS	67

TABLE A18

GROUP ID NUMBER AND TITLE: GRP151, H-3 GROUND SUPPORT SPECIALISTS
NUMBER IN GROUP: 5 PERCENT OF CLUSTER: 36%
MAJCOM DISTRIBUTION: MAC (100%)

LOCATION: CONUS (100%)
DAFSC DISTRIBUTION: 43130C (100%)
AVERAGE GRADE: E-2 AVERAGE MONTHS IN SERVICE: 6
AVERAGE MONTHS IN CAREER FIELD: 3

TYPE AIRCRAFT SUPPORTED: HH-3 (80%)
CH-3 (60%)

	GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
I701	ATTACH OR DETACH TOWING DEVICES ON H-3 HELICOPTERS	100
F219	REFUEL HELICOPTERS USING PRESSURE PROCEDURE	100
I726	LAUNCH H-3 HELICOPTERS	100
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
I818	TIE DOWN BLADES ON H-3 HELICOPTERS	100
F165	CLEAN HELICOPTER SURFACES OR COMPARTMENTS	100
F268	SERVICE HELICOPTER ENGINE OIL SYSTEMS	100
F190	LUBRICATE MAIN ROTOR HEAD ON H-3 OR H-53 HELICOPTERS	100
F183	INSPECT VISIBLE TURBINE BLADES	100
I760	RECOVER H-3 HELICOPTERS	100
L1065	INVENTORY EQUIPMENT, TOOLS, TOOL KITS, OR SUPPLIES	80
L1064	INSPECT TOOLS OR TOOL KITS	80
I735	PERFORM AIRCRAFT THRUFLIGHT INSPECTIONS ON H-3 HELICOPTERS	80
F180	INSPECT LANDING GEAR SYSTEMS ON H-3 OR H-53 HELICOPTERS	80
F195	OPERATE HELICOPTER INTERPHONE SYSTEMS	80
F222	REMOVE OR INSTALL AIRFRAME ACCESS PANELS, HATCHES, OR COWLING ON HELICOPTERS	80
F271	SERVICE HELICOPTER TIRES	80
L1062	CLEAN HANDTOOLS OR SPECIAL EQUIPMENT	80
I712	INSPECT ENGINES ON H-3 HELICOPTERS	80
F278	TAKE JOINT OIL ANALYSIS PROGRAM (JOAP) SAMPLES FROM HELICOPTERS	80
F187	LUBRICATE AIRFRAME COMPONENTS ON HELICOPTERS	80
F189	LUBRICATE LANDING GEAR COMPONENTS ON H-3 OR H-53 HELICOPTERS	80
F218	REFUEL HELICOPTERS USING GRAVITY PROCEDURE	60
F210	POSITION OR SPOT NONPOWERED AIRCRAFT SUPPORT EQUIPMENT	60
I774	REMOVE OR INSTALL ENGINE ACCESS PANELS OR COWLING ON H-3 HELICOPTERS	60
I771	REMOVE OR INSTALL DOORS ON H-3 HELICOPTERS	60
I728	MOOR H-3 HELICOPTERS	60
I710	INSPECT BATTERIES ON H-3 HELICOPTERS	60
F236	REMOVE OR INSTALL HELICOPTER WINDSHIELDS OR NONJETTISONABLE WINDOWS	60
I740	PERFORM OPERATIONAL CHECKS OF CARGO SLING EQUIPMENT INSTALLED ON H-3 HELICOPTERS	60
I725	JACK H-3 HELICOPTERS	60

TABLE A19

GROUP ID NUMBER AND TITLE: GRP113, UH-60A FLIGHTLINE MAINTENANCE SPECIALISTS
NUMBER IN GROUP: 20 PERCENT OF SAMPLE: 2%
MAJCOM DISTRIBUTION: MAC (100%)

LOCATION: CONUS (100%)
DAFSC DISTRIBUTION: 43130C (40%), 43150C (30%), 43170C (25%)
AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 51
AVERAGE MONTHS IN CAREER FIELD: 46

TYPE AIRCRAFT MAINTAINED: UH-60A

GROUP	DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
J870	LAUNCH H-60 HELICOPTERS	100
J909	RECOVER H-60 HELICOPTERS	100
J953	REMOVE OR INSTALL MAIN ROTOR BLADES ON H-60 HELICOPTERS	100
J916	REMOVE OR INSTALL BATTERIES ON H-60 HELICOPTERS	100
J972	REMOVE OR INSTALL STABILATORS ON H-60 HELICOPTERS	100
E133	PREPARE AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION, ENG DATA. CALENDAR ITEM INSP AND DELAYED DISCREP DOCUMENT)	100
J870	INSPECT ROTOR SYSTEMS ON H-60 HELICOPTERS	100
J864	INSPECT FLIGHT CONTROL SYSTEMS ON H-60 HELICOPTERS	100
J911	REMOVE MAIN ROTOR ASSEMBLIES FROM H-60 HELICOPTERS	100
J868	INSPECT LANDING GEAR SYSTEMS ON H-60 HELICOPTERS	100
J875	INSTALL MAIN ROTOR ASSEMBLIES ON H-60 HELICOPTERS	100
J867	INSPECT HYDRAULIC SYSTEMS ON H-60 HELICOPTERS	100
J993	TIE DOWN BLADES ON H-60 HELICOPTERS	100
J863	INSPECT FIRE EXTINGUISHER SYSTEMS INSTALLED ON H-60 HELICOPTERS	100
J926	REMOVE OR INSTALL ELECTRIC RESCUE HOISTING EQUIPMENT ON H-60 HELICOPTERS	95
J955	REMOVE OR INSTALL MAIN ROTOR DAMPERS ON H-60 HELICOPTERS	95
J848	ATTACH OR DETACH TOW BARS ON H-60 HELICOPTERS	95
J860	INSPECT ELASTROMERIC BEARING ASSEMBLIES ON H-60 HELICOPTERS	95
E125	PREPARE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	95
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	95
E132	PREPARE AFTO FORMS 781J (AEROSPACE VEHICLE-ENGINE FLIGHT)	95
J872	INSPECT TRANSMISSION DRIVE SYSTEMS ON H-60 HELICOPTERS	95
J862	INSPECT ENGINES ON H-60 HELICOPTERS	95
K876	INSTALL TAIL ROTOR ASSEMBLIES ON H-60 HELICOPTERS	95
J878	JACK H-60 HELICOPTERS	95
E131	PREPARE AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	90
J952	REMOVE OR INSTALL MAIN MODULE ON H-60 HELICOPTERS	90
J855	DRAIN OR FLUSH TRANSMISSION OIL SYSTEMS ON H-60 HELICOPTERS	90
J873	INSPECT TRANSMISSIONS ON H-60 HELICOPTERS	90
J985	REMOVE TAIL ROTOR ASSEMBLIES FROM H-60 HELICOPTERS	90
J958	REMOVE OR INSTALL MAIN ROTOR SWASHPLATES ON H-60 HELICOPTERS	90
J888	PERFORM AIRCRAFT SPECIAL INSPECTIONS ON H-60 HELICOPTERS	90

TABLE A20

GROUP ID NUMBER AND TITLE: GRP091, TOOL CRIB SPECIALISTS
NUMBER IN GROUP: 6 PERCENT OF SAMPLE: 1%
MAJCOM DISTRIBUTION: MAC (67%), AFSC (17%), USAFE (16%)

LOCATION: CONUS (33%), OVERSEAS (67%)
DAFSC DISTRIBUTION: 43150C (83%), 43170C (17%)
AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 89
AVERAGE MONTHS IN CAREER FIELD: 77

TYPE AIRCRAFT SUPPORTED: CH-3 (50%)
HH-3 (33%)
CH-53 (33%)
HH-53 (50%)

GROUP DIFFERENTIATING TASKS		PERCENT MEMBERS PERFORMING
L1065	INVENTORY EQUIPMENT, TOOLS, TOOL KITS, OR SUPPLIES	100
L1064	INSPECT TOOLS OR TOOL KITS	100
L1062	CLEAN HANDTOOLS OR SPECIAL EQUIPMENT	100
11066	ISSUE EQUIPMENT, TOOLS, TOOL KITS, OR SUPPLIES	83
L1080	RECEIVE TURN-IN OF EQUIPMENT, TOOLS, TOOL KITS, OR SUPPLIES	67
E122	PREPARE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	50
L1082	SCHEDULE PERIODIC CALIBRATION OF SPECIAL HANDTOOLS OR EQUIPMENT	33
E109	MAINTAIN SUPPLY RECORDS	33
E114	PREPARE AF FORMS 2005 (ISSUE/TURN-IN REQUEST)	33
E98	COMPLETE STATUS TAGS FOR CONDITION OF PROPERTY	33
E112	ORDER PARTS BY VOICE COMMUNICATION	33
C70	PREPARE APR	33
J935	REMOVE OR INSTALL EXTERNAL ENGINE ACTUATING SYSTEM IGV COMPONENTS ON H-60 HELICOPTERS	17
L1063	CLEAN NONPOWERED AIRCRAFT SUPPORT EQUIPMENT	17
L1077	PERFORM PERIODIC MAINTENANCE INSPECTIONS ON NONPOWERED AIRCRAFT SUPPORT EQUIPMENT	17
E137	PREPARE DD FORMS 1348-1 (DOD SINGLE LINE ITEM RELEASE/ RECEIPT DOCUMENT)	17
L1079	PERFORM PRE-USE INSPECTIONS ON SPECIALIZED SUPPORT EQUIPMENT	17
B36	IMPLEMENT OR FOLLOW-UP ON CORROSION CONTROL PROGRAMS	17
A5	DETERMINE WORK PRIORITIES	17
L1069	MAINTAIN GROUND HANDLING WHEELS	17
E104	MAINTAIN DAILY STATUS REPORTS	17
E139	PREPARE REQUESTS FOR AUTHORIZATION OF MATERIEL	17
L1076	PERFORM OPERATOR MAINTENANCE ON TRANSPORTATION VEHICLES	17
E111	MAINTAIN WORK RECORDS OR WORK ORDER FILED	17
E121	PREPARE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	17
B34	DIRECT UTILIZATION OF EQUIPMENT	17
E100	DRAFT CORRESPONDENCE OR REPORTS	17
E115	PREPARE AF FORMS 2413 (SUPPLY CONTROL LOG)	17
E140	PREPARE REQUESTS FOR SPECIAL ORDERS	17

END

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