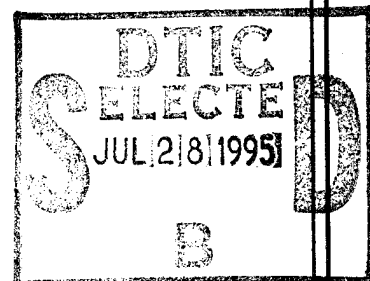
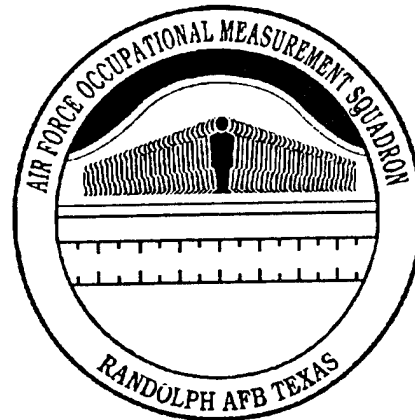




**UNITED STATES
AIR FORCE**



OCCUPATIONAL SURVEY REPORT

SURGICAL SERVICES

AFSC 4N1X1B/C/D

AFPT 90-902-003

MARCH 1995

19950726 016

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

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

DTIC QUALITY INSPECTED 5

DISTRIBUTION FOR AFSC 4N1X1 OSR

	<u>OSR</u>	<u>ANL EXT</u>	<u>TNG EXT</u>	<u>JOB INV</u>
AFOMS/OMDQ	1			
AFOMS/OMYXL	10		5	10
AL/HRMM	2			
AL/HRTE	1		1	
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
✓DEFENSE TECHNICAL INFORMATION CENTER	2			
HQ ACC/DPTTF	3		3	
HQ AETC/DPAEE	3		3	
HQ AETC/SGAT	2		1	
HQ AFMC/DPUE	3		3	
HQ AFMPC/DPMRAD2	1			
HQ AFMPC/DPMYCO3	2			
HQ AFSPACECOM/DPAE	3		3	
HQ AMC/DPAET	1			
HQ PACAF/DPAET	3		3	
HQ USAFE/DPATTJ	3		3	
HQ USMC/STANDARDS BRANCH	1			
NODAC	1			
1 MG/MGHSSO, 45 PINE STREET, LANGLEY AFB VA 23665-2080	1		1 ea	
59 MEWD/PSSC, 2200 BERGQUIST DRIVE, SUITE 1, LACKLAND AFB TX 78236-5300	1		1	
882 TRG/CCT, 939 MISSILE ROAD, SUITE 2, SHEPPARD AFB TX 73611-2245	1		1	
882 TRSS/DSOXB, 939 MISSILE ROAD, SUITE 2, SHEPPARD AFB TX 73611-2260	6	1	6	3

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE	viii
SUMMARY OF RESULTS	x
INTRODUCTION	1
Background	1
SURVEY METHODOLOGY	2
Inventory Development	2
Survey Administration	2
Survey Sample	3
Task Factor Administration	3
SPECIALTY JOBS (Career Ladder Structure)	5
Overview of Specialty Jobs	6
Group Descriptions	7
Comparisons of Specialty Jobs	22
CAREER LADDER PROGRESSION	22
Skill-Level Descriptions	24
AFSC 4N1X1B - Urology	24
AFSC 4N1X1C - Orthopedics	34
AFSC 4N1X1D - Otorhinolaryngology (ENT)	42
Summary	42
ANALYSIS OF AFMAN 36-2108 SPECIALTY DESCRIPTIONS	51
TRAINING ANALYSIS	51
First-Enlistment Personnel	51
TE and TD Data	53
Training Documents	62
Specialty Training Standard (STS)	66
Plan of Instruction (POI)	66
JOB SATISFACTION ANALYSIS	66
IMPLICATIONS	71

on For	
A&I	☒
ged	☐
ation	☐

By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS
(Tables, Figures, Appendices)

	<u>PAGE NUMBER</u>
TABLE 1 MAJCOM REPRESENTATION IN SAMPLE.....	4
TABLE 2 PAYGRADE DISTRIBUTION OF SAMPLE	4
TABLE 3 DISTRIBUTION OF DUTY TIME SPENT BY MEMBERS OF CAREER LADDER (RELATIVE PERCENT OF JOB TIME).....	8-9
TABLE 4 SELECTED BACKGROUND DATA FOR SPECIALTY JOBS	10-11
TABLE 5 JOB SPECIALTY COMPARISONS BETWEEN CURRENT AND 1987 SURVEYS	23
TABLE 6 DISTRIBUTION OF SKILL-LEVEL PERSONNEL ACROSS CAREER LADDER JOBS (PERCENT RESPONDING).....	25
TABLE 7 DISTRIBUTION OF DUTY TIME SPENT BY DAFSC GROUPS (RELATIVE PERCENT OF JOB TIME)	26
TABLE 8 REPRESENTATIVE TASKS PERFORMED BY 3-SKILL LEVEL "SLICK" PERSONNEL	27
TABLE 9 REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL "SLICK" PERSONNEL	28
TABLE 10 REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL "SLICK" PERSONNEL	29
TABLE 11 REPRESENTATIVE TASK DIFFERENCES BETWEEN 5- AND 7-SKILL LEVEL "SLICK" PERSONNEL (PERCENT MEMBERS PERFORMING).....	30
TABLE 12 DISTRIBUTION OF SKILL-LEVEL PERSONNEL ACROSS CAREER LADDER JOBS (PERCENT RESPONDING)	31
TABLE 13 DISTRIBUTION OF DUTY TIME SPENT BY DAFSC GROUPS (RELATIVE PERCENT OF JOB TIME)	32
TABLE 14 REPRESENTATIVE TASKS PERFORMED BY 3-SKILL LEVEL UROLOGY PERSONNEL	33
TABLE 15 REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL UROLOGY PERSONNEL	35
TABLE 16 REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL UROLOGY PERSONNEL	36

TABLE OF CONTENTS (CONTINUED)

(Tables, Figures, Appendices)

	<u>PAGE NUMBER</u>
TABLE 17 REPRESENTATIVE TASK DIFFERENCES BETWEEN 5-SKILL LEVEL AND 7-LEVEL UROLOGY PERSONNEL (PERCENT MEMBERS PERFORMING)	37
TABLE 18 DISTRIBUTION OF SKILL-LEVEL PERSONNEL ACROSS CAREER LADDER JOBS (PERCENT RESPONDING)	38
TABLE 19 DISTRIBUTION OF DUTY TIME SPENT BY DAFSC GROUPS (RELATIVE PERCENT OF JOB TIME)	39
TABLE 20 REPRESENTATIVE TASKS PERFORMED BY 3-SKILL LEVEL ORTHOPEDIC PERSONNEL	40
TABLE 21 REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL ORTHOPEDIC PERSONNEL	41
TABLE 22 REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL ORTHOPEDIC PERSONNEL	43
TABLE 23 REPRESENTATIVE TASK DIFFERENCES BETWEEN 5-SKILL LEVEL AND 7-SKILL LEVEL ORTHOPEDIC PERSONNEL (PERCENT MEMBERS PERFORMING)	44
TABLE 24 DISTRIBUTION OF SKILL-LEVEL PERSONNEL ACROSS CAREER LADDER JOBS (PERCENT RESPONDING)	45
TABLE 25 DISTRIBUTION OF DUTY TIME SPENT BY DAFSC GROUPS (RELATIVE PERCENT OF JOB TIME)	46
TABLE 26 REPRESENTATIVE TASKS PERFORMED BY 3-SKILL LEVEL OTORHINOLARYNGOLOGY (ENT) PERSONNEL	47
TABLE 27 REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL OTORHINOLARYNGOLOGY (ENT) PERSONNEL	48
TABLE 28 REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL OTORHINOLARYNGOLOGY (ENT) PERSONNEL	49
TABLE 29 REPRESENTATIVE TASK DIFFERENCES BETWEEN 5-SKILL LEVEL AND 7-SKILL LEVEL OTORHINOLARYNGOLOGY (ENT) PERSONNEL (PERCENT MEMBERS PERFORMING)	50
TABLE 30 RELATIVE TIME SPENT ON DUTIES BY FIRST-ENLISTMENT PERSONNEL	52

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

	<u>PAGE NUMBER</u>
TABLE 31 REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT "SLICK" PERSONNEL	54
TABLE 32 REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT UROLOGY PERSONNEL	55
TABLE 33 REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT ORTHOPEDIC PERSONNEL	56
TABLE 34 REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT OTORHINOLARYNGOLOGY (ENT) PERSONNEL	57
TABLE 35 EQUIPMENT USED BY MORE THAN 50 PERCENT FIRST-JOB OR FIRST-ENLISTMENT "SLICK" PERSONNEL	58
TABLE 36 EQUIPMENT USED BY MORE THAN 50 PERCENT FIRST-JOB OR FIRST-ENLISTMENT B-SHRED PERSONNEL	59
TABLE 37 EQUIPMENT USED BY MORE THAN 50 PERCENT FIRST-JOB OR FIRST-ENLISTMENT C-SHRED PERSONNEL	60
TABLE 38 EQUIPMENT USED BY MORE THAN 50 PERCENT FIRST-JOB OR FIRST-ENLISTMENT D-SHRED PERSONNEL	61
TABLE 39 TASKS WITH HIGHEST TRAINING EMPHASIS (TE) RATINGS	63
TABLE 40 TASKS WITH HIGHEST TASK DIFFICULTY (TD) RATINGS	64-65
TABLE 41 "SLICK" STS ELEMENTS NOT SUPPORTED BY SURVEY DATA (LESS THAN 20 PERCENT MEMBERS PERFORMING)	67
TABLE 42 UROLOGY STS ELEMENTS NOT SUPPORTED BY SURVEY DATA (LESS THAN 20 PERCENT C-SHRED MEMBERS PERFORMING)	68
TABLE 43 ENT STS ENTRIES NOT SUPPORTED BY SURVEY DATA (LESS THAN 20 PERCENT D-SHRED MEMBERS PERFORMING)	69
TABLE 44 TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE FIRST- ENLISTMENT PERSONNEL BUT NOT MATCHED TO THE STS	70
TABLE 45 COMPARISON OF JOB SATISFACTION DATA FOR AFSC 4N1X1 TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE (PERCENT MEMBERS PERFORMING)	72

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

	<u>PAGE NUMBER</u>
TABLE 46 COMPARISON OF JOB SATISFACTION DATA FOR AFSC 4N1X1 TAFMS GROUPS IN CURRENT AND PREVIOUS STUDY (PERCENT MEMBERS PERFORMING).....	73
TABLE 47 JOB SATISFACTION DATA FOR CLUSTER AND JOBS (PERCENT MEMBERS RESPONDING)	74-75
FIGURE 1 AFSC 4N1X1B/C/D CAREER LADDER JOBS	6
FIGURE 2 JOBS PERFORMED BY AFSC 4N1X1B/C/D FIRST-ENLISTMENT PERSONNEL (N=272)	53
APPENDIX A JOB DESCRIPTIONS	77
APPENDIX B TASK MODULES	79

PREFACE

This report presents the results of an Air Force Occupational Survey of the Surgical Services career ladder, Air Force Specialty Code (AFSC) 4N1X1/B/C/D. Authority for conducting occupational surveys is contained in AFI 36-2623. Computer products upon which this report is based are available for the use of operations and training officials.

The survey instrument was developed by Lieutenant Glenn P. Mayes, Inventory Development Specialist, with computer programming support furnished by Ms. Olga Velez. Ms. Raquel A. Soliz provided administrative support. First Lieutenant Joel A. Jones, Occupational Analyst, analyzed the data and wrote the final report. Editorial review was done by Mr. Dan Dreher and Ms. Sharon Slayton. This report has been reviewed and approved by Major Randall C. Agee, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to AFOMS, Attention: Chief, Occupational Analysis Flight (OMY), 1550 5th Street East, Randolph Air Force Base, Texas 78150-4449 (DSN 487-6623).

RICHARD C. OURAND, JR., Lt Col, USAF
Commander
Air Force Occupational Measurement Sq

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

THIS PAGE INTENTIONALLY LEFT BLANK

SUMMARY OF RESULTS

1. Survey Coverage: Survey results are based on responses from 699 AFSC 4N1X1/B/C/D personnel. This represents approximately 67 percent of the assigned population and 74 percent of eligible members.
2. Specialty Jobs: One cluster and four independent jobs were identified in the sample. The Operating Room/Nursing Care cluster includes the General Surgery, Surgical Suite NCOIC, Surgery and Clinic Urology, Otorhinolaryngology (ENT), and Orthopedic jobs. The independent jobs deal with management and supervision, Central Sterile Supply, and Surgical Logistics functions.
3. Career Ladder Progression: Three-skill level members perform mostly technical tasks in support of operating room, clinic, and Central Sterile Supply (CSS) functions. Five-skill level members are more involved with assisting physicians with surgical and clinical procedures. Seven-skill level members perform a mixture of technical, supervisory, and management tasks, including training and evaluating subordinates, and managing resources.
4. AFMAN 36-2108 Specialty Descriptions: Specialty Descriptions accurately reflect the differences in responsibilities of the skill levels and depict the overall work performed by members of the career ladder.
5. Training Analysis: The Specialty Training Standard is generally supported by survey data. There are, however, a few unsupported entries in paragraphs covering the "slick," Orthopedic, and ENT functions. Unsupported entries should be reviewed by training personnel to determine whether they should be retained in the STS. The Plans of Instruction for both the resident course and the Phase II clinical courses are well supported by survey data.
6. Job Satisfaction Analysis: Job satisfaction for the career ladder is generally good. Overall, members of AFSC 4N1X1/B/C/D are more satisfied with their jobs than are those of the related medical career fields surveyed in 1993. Satisfaction indicators are slightly higher for the present study than the previous survey. Most members performing the various jobs find their work interesting, with the exception of those performing more support functions of the CSS and Logistics jobs.
7. Implications: There are very few differences between the current survey results and those reported in the 1987 report. Preliminary data from this report were used in the 28 February through 11 March 1994 Utilization and Training Workshop (U&TW) to make career field decisions and to develop the AFSC 4N1X1 Career Field Education and Training Plan.

THIS PAGE INTENTIONALLY LEFT BLANK

**OCCUPATIONAL SURVEY REPORT (OSR)
SURGICAL SERVICES CAREER LADDER
(AFSC 4N1X1/B/C/D)**

INTRODUCTION

This is a report of an occupational survey of the Surgical Services career ladder completed by the Air Force Occupational Measurement Squadron. This survey was completed as part of the 5-year cycle of surveying all AFSCs. The findings in this report were used to validate decisions made at the Utilization and Training Workshop (U&TW) held 28 February through 11 March 1994. On 31 October 1993, this AFSC designation was changed to 4N1X1/B/C/D to conform to the new enlisted specialty coding nomenclature. The last survey report pertaining to this career ladder was published in September 1987.

Background

As described in AFMAN 36-2108 *Specialty Descriptions*, dated April 1991, personnel in this career ladder are responsible for assisting professional staff in providing care for surgical patients before, during, and after surgery; preparing and handling drugs and solutions under supervision of a nurse or physician; assembling, wrapping, and sterilizing instrument sets, supplies, and linen packs; selecting equipment, instruments, and supplies required during surgical procedures; and transporting patients to and from the operating room. In specialty clinics, they schedule and prepare patients; assist specialty surgeons during surgical and diagnostic procedures; and perform urology, orthopedic, or otorhinolaryngology functions.

Entry into the career ladder requires completion of the 8-week, 2-day entry-level course J3AQR90232/B/C/D-001 conducted at Sheppard AFB TX followed by Phase II training, offered at one of six major medical centers: Andrews AFB MD, Keesler AFB MS, Kirtland AFB NM, March AFB CA, Scott AFB IL, or Travis AFB CA. A new course for the B-shred Urology specialty is being developed and tentatively will be taught at Ft. Sam Houston TX, where training for the C-shred Orthopedic is conducted. Technical training for D-shred Otorhinolaryngology personnel is conducted at the Naval Hospital, San Diego CA. Entry into the career ladder currently requires a minimum Armed Services Vocational Aptitude Battery (ASVAB) General score of 53.

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) AFPT 90-902-003 dated June 1993. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, tasks from the previous survey instrument, and data from the last OSR. The preliminary task list was refined and validated through personal interviews with 26 subject-matter experts (SMEs), selected to cover a variety of major commands (MAJCOMs) at the following operational bases:

BASE

ORGANIZATION VISITED

Sheppard AFB MS

380 TSS/TSOXB-Tech School

Lackland AFB TX
Wilford Hall Medical Center

WHMC/SGS
WHMC/SGHSC

Wright-Patterson AFB OH

USAF Med Ctr/SGHSS

Eglin AFB FL

Eglin Reg Hosp/SGN

Tyndall AFB FL

325 Med Gp/SGHSS

The resulting JI contained a listing of 483 tasks grouped under 13 duty headings and a background section requesting such information as grade, duty title, functional area, type of medical facility, certifications held, location of clinical phase training, utilization during Desert Shield/Storm, and equipment used/operated. These data will be provided to the Air Force Career Field Manager (AFCFM) and the functional community upon request. Data can be found in data extracts provided to the Technical Training Wing and MAJCOM functional managers.

Survey Administration

From September 1993 through December 1993, Military Personnel Flights (MPF) at operational units worldwide administered the inventory to all AFSC 902X2/B/C/D personnel (currently identified as 4N1X1/B/C/D personnel). Members eligible for this survey consisted of the total assigned 3-, 5-, and 7-skill level personnel who were not in transition for a permanent change of station, retiring during the time the JIs were administered to the field, or in their job less than 6 weeks. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Military Personnel Center (AFMPC).

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

To determine relative time spent for each task checked by a respondent, all ratings were summed, each task rating was divided by the total task ratings, and the result multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Personnel were selected to participate in this survey so as to ensure an accurate representation across MAJCOMs and military paygrade groups. All eligible DAFSC 4N1X1 personnel were mailed survey booklets. Table 1 reflects the MAJCOM distribution of assigned AFSC 4N1X1 personnel as of September 1993. The 699 respondents in the final sample represent 67 percent of the total assigned personnel and 74 percent of the total personnel surveyed. Table 2 reflects the paygrade distribution for these AFSC 4N1X1 personnel. As reflected in these tables, the survey sample is an excellent representation of the career ladder population.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. While most participants in the survey process completed a USAF JI, selected senior DAFSC 4N1X1 personnel were asked to complete booklets rendering judgments on task training emphasis (TE) or task difficulty (TD). The TE and TD booklets were processed separately from the JIs. The information gained from these task factor data is used in various analyses and is a valuable part of the training decision process.

Task Difficulty (TD). Task difficulty is defined as an estimate of how much time the average airman needs to learn to perform a task satisfactorily. Forty-one experienced NCOs rated all of the tasks on a 9-point scale ranging from 1 (easy to learn) to 9 (very difficult to learn). Interrater reliability was excellent, which means there was very strong agreement among raters. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a rating of 6.00 or higher is considered to be difficult to learn.

TABLE 1
MAJCOM REPRESENTATION IN SAMPLE

COMMAND	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
USAFA	2	2
USAFE	6	7
AETC	21	30
PACAF	5	5
AMC	19	16
ACC	33	22
AFMC	12	15
AFSPCM	2	2

Total Assigned as of September 1993:	1,050
Total Eligible for Survey:	948
Total in Sample:	699
Percent of Eligible in Sample:	74%
Percent of Assigned in Sample:	67%

TABLE 2
PAYGRADE DISTRIBUTION OF SAMPLE

PAYGRADE	PERCENT OF ASSIGNED (N=1,050)	PERCENT OF SAMPLE (N=699)
AIRMAN	24	27
E-4	29	27
E-5	24	23
E-6	13	15
E-7	9	8

Training Emphasis (TE). TE is a rating of how important it is for first-enlistment personnel to receive structured training on each task in order to perform it successfully. Structured training is defined as training provided at resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal on-the-job-training (OJT), or any other organized training method. Forty-eight senior NCOs rated tasks using a 10-point scale ranging from 1 (no training required) to 9 (an extremely high amount of training required). There was strong agreement among raters as to which tasks required some form of structured training. In this study, the average TE rating was 2.37, and the standard deviation was 1.86. Tasks with ratings of 4.23 and above are considered to have high TE.

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

SPECIALTY JOBS (Career Ladder Structure)

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

The basic identifying group used in the hierarchical job structuring process is the *Job*. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a *Cluster*. The structure of the career ladder is defined in terms of jobs and clusters of jobs performed and can be used to evaluate the accuracy of career ladder documents (i.e., AFMAN 36-2108 *Specialty Descriptions*, the *Career Field Education and Training Plan* (CFETP), and *Specialty Training Standards* (STSS)) and to gain a better understanding of current utilization patterns.

Overview of Specialty Jobs

Structure analysis identified one cluster and four independent jobs within the survey sample. Based on task similarity and relative time spent, the division of jobs performed by Surgical Services personnel is illustrated in Figure 1, and a listing of those jobs is provided below. The stage (ST) number shown beside each title is a reference to computer-printed information; the number of personnel in each stage (N) is also shown.

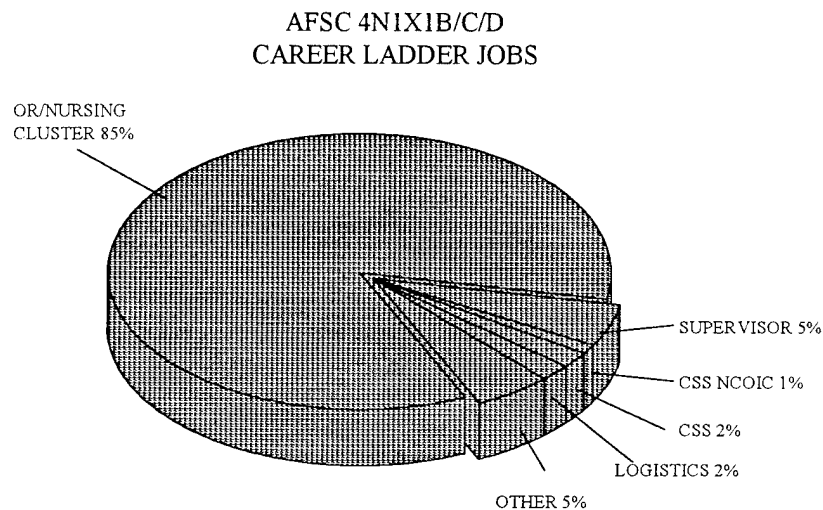


FIGURE 1

- I. OPERATING ROOM/NURSING CARE CLUSTER (STG013, N=595)
 - A. General Surgery Technician (STG079, N=352)
 - B. Surgical Suite NCOIC (STG098, N=77)
 - C. Surgical Suite Urology Technician (STG131, N=18)
 - D. Clinic Urology Technician (STG058, N=6)
 - E. Otorhinolaryngology (ENT) Technician (STG063, N=31)
 - F. Orthopedic Technician (STG061, N=66)
- II. SURGICAL SERVICES MANAGEMENT/SUPERVISION JOB (STG056, N=32)
- III. CENTRAL STERILE SUPPLY NCOIC (STG050, N=7)
- IV. CENTRAL STERILE SUPPLY JOB (STG052, N=14)
- V. SURGICAL LOGISTICS JOB (STG055, N=15)

The respondents forming this structure account for 87 percent of the survey sample. The remaining 13 percent were performing tasks or series of tasks that did not allow them to group with any of the defined jobs. Examples of job titles given by these ungrouped respondents included Operations NCOIC, Instructor Surgical Technician, Superintendent Patient Relations, and Tri-Service Specialist.

Group Descriptions

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

Another way to illustrate the work of the career ladder is to organize tasks into task modules (TMs). The basis we use for grouping tasks into modules is copformance. Copformance is determined by having CODAP evaluate the tasks endorsed by all respondents and calculate the degree to which any one task is performed concurrently with all the other tasks. This copformance measure is then useful in grouping tasks into TMs according to the way they are performed across the career ladder. It is assumed that copformed tasks usually share common knowledges, skills, references, etc. The TM display included in each job description shows the number of tasks in the module, percent time spent on the module, and average number of members in the job performing the tasks in the module. The list of tasks within respective modules is presented in Appendix B.

I. OPERATING ROOM/NURSING CARE CLUSTER (STG013, N=595). Eighty-five percent of the survey sample perform the jobs in this large cluster, which represent the core work of the Surgical Services career ladder. Personnel spend over 75 percent of their time either directly or indirectly supporting Operating Room (OR) staff before, during, or after surgical procedures.

Before surgery, members of this cluster stock the OR with the needed equipment, instruments, supplies, and linens; set up Mayo stands with initial instrument sets; and transport patients to the OR. During surgical procedures, members maintain a continuous count of sponges, needles, and instruments; pass drugs and solutions as requested; prepare and pass other materials needed; handle instruments; and apply dressings to incisions. They may also act as circulating personnel or assist nursing staff by rotating surgical supplies and linens. Following surgery, members assist with final counts of instruments, supplies and linens; clean the operating room; and sterilize equipment and instruments.

TABLE 3

DISTRIBUTION OF DUTY TIME SPENT BY MEMBERS OF CAREER LADDER
(RELATIVE PERCENT OF JOB TIME)

OPERATING ROOM/NURSING CARE CLUSTER								
DUTIES	GENERAL SURGERY TECH (N=352)	SURGICAL SUITE				CLINIC UROLOGY TECH (N=6)	ENT TECH (N=31)	ORTHO PEDIC TECH (N=66)
		SURGICAL SUITE NCOIC (N=77)	UROLOGY TECH (N=18)	UROLOGY TECH (N=18)				
A ORGANIZING AND PLANNING	2	7	5	2	3	7	3	
B DIRECTING AND IMPLEMENTING	1	6	3	1	3	6	3	
C INSPECTING AND EVALUATING	2	5	5	2	3	8	3	
D TRAINING	1	5	2	1	2	5	2	
E PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	4	9	18	18	15	9	15	
F PERFORMING DIAGNOSTIC OR SCREENING FUNCTIONS	4	2	13	20	8	2	8	
G PERFORMING BASIC NURSING DUTIES	3	4	4	9	1	4	1	
H APPLYING OR REMOVING CASTS, SPLINTS, OR TRACTION DEVICES	*	1	8	0	26	1	26	
I ASSISTING IN CLINIC OR OPERATING ROOM PROCEDURES	6	6	11	14	12	6	12	
J PERFORMING STERILE OR NONSTERILE SUPPORT OF CLINIC OR OPERATING ROOM PROCEDURES	55	34	29	26	20	34	20	
K PROCESSING AND MAINTAINING SUPPLIES OR EQUIPMENT	23	16	10	7	5	16	5	
L PERFORMING SURGICAL RESEARCH PROCEDURES	*	*	*	0	0	*	0	
M PERFORMING CONTINGENCY TASKS	2	3	1	1	1	3	1	

* Denotes less than 1 percent

TABLE 3 (CONTINUED)

DISTRIBUTION OF DUTY TIME SPENT BY MEMBERS OF CAREER LADDER
(RELATIVE PERCENT OF JOB TIME)

DUTIES	SURGICAL SERVICES MANAGEMENT/ SUPERVISION JOB (N=32)	CENTRAL STERILE SUPPLY NCOIC (N=7)	CENTRAL STERILE SUPPLY JOB (N=14)	SURGICAL LOGISTICS JOB (N=15)
A ORGANIZING AND PLANNING	16	13	1	11
B DIRECTING AND IMPLEMENTING	14	9	2	7
C INSPECTING AND EVALUATING	20	14	1	17
D TRAINING	8	5	*	3
E PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	14	14	3	53
F PERFORMING DIAGNOSTIC OR SCREENING FUNCTIONS	4	2	1	0
G PERFORMING BASIC NURSING DUTIES	2	*	*	*
H APPLYING OR REMOVING CASTS, SPLINTS, OR TRACTION DEVICES	5	1	*	0
I ASSISTING IN CLINIC OR OPERATING ROOM PROCEDURES	5	1	*	0
J PERFORMING STERILE OR NONSTERILE SUPPORT OF CLINIC OR OPERATING ROOM PROCEDURES	8	6	7	5
K PROCESSING AND MAINTAINING SUPPLIES OR EQUIPMENT	2	34	83	3
L PERFORMING SURGICAL RESEARCH PROCEDURES	*	0	0	0
M PERFORMING CONTINGENCY TASKS	3	*	1	1

* Denotes less than 1 percent

TABLE 4

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

		OPERATING ROOM/NURSING CARE CLUSTER					
		GENERAL SURGERY TECHNICIAN	SURGICAL SUITE NCOIC	SURGICAL SUITE UROLOGY TECHNICIAN	CLINIC UROLOGY TECHNICIAN	ENT TECHNICIAN	ORTHOPEDIC TECHNICIAN
NUMBER IN GROUP		352	77	18	6	31	66
PERCENT OF SAMPLE		50	11	3	*	4	9
<u>PAYGRADE DISTRIBUTION:</u>							
AMN							
E-4		34%	5%	6%	20%	32%	35%
E-5		36%	12%	28%	40%	35%	21%
E-6		20%	34%	38%	20%	26%	23%
E-7		8%	28%	6%	0	3%	15%
		2%	21%	22%	20%	3%	6%
<u>DAFSC DISTRIBUTION:</u>							
4N131		43%	6%	0	0	0	3%
4N131B		0	0	6%	40%	0	0
4N131C		0	1%	0	0	0	35%
4N131D		0	0	0	0	13%	0
4N151		48%	42%	6%	0	6%	0
4N151B		1%	0	32%	40%	0	2%
4N151C		0	0	0	0	0	39%
4N151D		0	0	0	0	65%	0
4N171		7%	40%	6%	0	0	0
4N171B		0	1%	50%	20%	0	0
4N171C		0	1%	0	0	0	21%
4N171D		0	0	0	0	16%	0
PERCENT 1ST ENLISTMENT		52%	11%	18%	40%	41%	39%
PERCENT SUPERVISING		28%	75%	50%	20%	35%	42%
AVERAGE MOS TAFMS		70	146	135	91	77	96
AVERAGE NUMBER OF TASKS PERFORMED		107	187	176	91	140	143

TABLE 4 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	MANAGEMENT/ SUPERVISION JOB	CENTRAL STERILE SUPPLY NCOIC	CENTRAL STERILE SUPPLY JOB	SURGICAL LOGISTICS JOB
NUMBER IN GROUP	32	7	14	15
PERCENT OF SAMPLE	5	1	2	2
<u>PAYGRADE DISTRIBUTION:</u>				
AMN	6%	0	28%	0
E-4	6%	0	50%	7%
E-5	16%	14%	14%	20%
E-6	38%	57%	7%	60%
E-7	34%	29%	0	13%
<u>DAFSC DISTRIBUTION:</u>				
4N131	3%	0	57%	7%
4N131B	0	0	0	0
4N131C	0	0	0	0
4N131D	0	0	0	0
4N151	9%	29%	43%	40%
4N151B	0	0	0	0
4N151C	9%	0	0	0
4N151D	3%	0	0	0
4N171	38%	71%	0	47%
4N171B	9%	0	0	0
4N171C	22%	0	0	7%
4N171D	6%	0	0	0
PERCENT 1ST ENLMENT	6%	0	64%	0
PERCENT SUPERVISING	38%	100%	36%	73%
AVERAGE MOS TAFMS	178	180	61	170
AVERAGE NUMBER OF TASKS PERFORMED	169	96	24	33

A. General Surgery Technician (STG079, N=352). This is the job done by most respondents who have no shred designation ("slicks") in the cluster and represents half the total sample. Members of this job spend more than three-quarters of their duty time supporting OR surgical procedures or processing surgical supplies and equipment. This includes performing the tasks associated with assisting physicians, nurses, and other operating room staff before, during, and after surgery, as noted above. While some of these personnel may rotate between surgery and shifts in Central Sterile Supply, most spend a majority of their time in the OR. As this is the basic job of the career ladder, it is performed by the most recently trained through more senior AFSC 4N1X1 personnel. Survey data show 7-skill level members often have the responsibility of being Supply Custodian or Supply NCOIC for the surgical suite in that they act as the "middle-man" between the OR and Central Sterile Supply. In this role, they track stocks of supplies, order needed supplies and equipment, and ensure a constant flow of sterile instrument sets to the OR.

The following are typical tasks performed by General Surgery Technicians:

- break down sterile fields
- prepare and pass instruments or supplies
 - to operating team members
- assist surgeons in applying sterile drapes
- open sterile supplies, such as muslin-wrapped,
 - paper-wrapped, and peel-packaged sterile supplies
- transfer sterile items to sterile fields
- clean operating room (OR) support areas
- assist sterile team members with donning or
 - removing surgical attire
- pull surgical supplies or instruments

The following TMs reflect the technical nature of the job:

TM	Module Title	No. of Tasks	Percent	Avg Pct Mbrs Perf
			Time Spent Sum	
0014	Sterilizing/preparing surgical instruments	13	11	81
0002	Operating room surgical support	9	7	83
0001	Operating room aseptic support	6	3	68
0003	Operating room anesthesia support	4	1	43
0004	General nursing care	7	1	29

Personnel in this job represent a fairly wide range of experience. They hold the 3- through 7-skill level, but 70 percent are in paygrades E-1 through E-4, and over half are in their first enlistment. Three-quarters of the members who assist in the OR scrub an average of 23 cases a month.

B. Surgical Suite NCOIC (STG098, N=77). This is the supervisory job in the OR. The more senior members with this job perform many of the same technical tasks as those in the General Surgery job, but spend approximately 32 percent of their relative duty time performing supervisory tasks. As supervisors in the surgical suite, they are responsible for training and evaluating subordinates, developing and maintaining schedules, determining work priorities, overseeing maintenance of equipment, implementing safety programs, writing EPRs, and counseling subordinates. A number of these NCOICs reported job titles of Superintendents of Surgical Services and performed administrative tasks associated with running the surgical suite, such as drafting budget requirements, conducting staff meetings, evaluating equipment, and establishing organizational policies. The diversity of the work members of this job perform is reflected by the following typical tasks:

- open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel packaged sterile supplies
- pull surgical supplies or instruments
- arrange sterile instruments and supplies on back tables
- clean operating room (OR) support areas
- plan or schedule work assignments
- determine requirements for space personnel, equipment or supplies
- evaluate personnel for compliance with performance standards
- order medical supplies from USAF supply agencies
- coordinate equipment purchases with medical materiel personnel

The supervisory responsibilities are clearly shown by the following TMs for this job:

TM	Module Title	No. of Tasks	Percent	Avg Pct Mbrs Perf
			Time Spent Sum	
0005	Supervise operating room personnel (NCOIC)	33	13	70
0014	Sterilizing/preparing surgical instruments	13	7	88
0006	Supervise operating room personnel (Superintendent)	29	6	41
0002	Operating room surgical support	9	5	91
0017	Order/purchase surgical supplies	10	4	62
0001	Operating room aseptic support	6	3	90

These are experienced personnel; almost half are in paygrades E-5 and E-6, with a higher percentage of E-7 members than any other job. Forty-three percent hold the 5-skill level, and 49 percent hold the 7-skill level, and members average 146 months TAFMS.

C. Surgical Suite Urology Technician (STG 131, N=18). This is a subspecialty job representing the work done by members with the B-shred. Members divide their time between working in urology clinics and operating rooms. Personnel in the Surgical Suite Urology Technicians job are responsible for many of the same functions as General Surgery Technicians, such as transporting pre- and postoperative patients; setting up operating rooms with appropriate instruments, supplies, and equipment; assisting circulating team members maintain supply counts; and performing basic nursing (monitoring vital signs and administration of IV solutions, etc.).

In addition to performing these basic surgical functions, Urology Technicians assist with uro-radiography procedures, perform diagnostic screening and therapeutic procedures, administer injections and intravesicle medications, and perform micro- and macro-urinalysis. What distinguishes members of this job from the Clinic Urology Technicians is the amount of time spent in the OR versus time spent providing clinical support. Surgical Suite Urology Technicians spend almost twice as much time assisting physicians in surgical and postsurgical procedures than members in the rest of the OR/Nursing Care cluster.

Although the majority of personnel in this job scrub from 1 to 15 surgical cases a month, more than 10 percent assist in over 60 cases per month. The OR burden carried by Surgical Suite Urology Technicians is shown by the following representative tasks:

- instill xylocaine jellies intraurethraly
- assist physician with prostate biopsies
- operate cystoscopy tables
- assist physician with urodynamics
- catheterize patients
- perform macroscopic urinalysis, such as dipsticking
- coordinate intra- or interhospital appointments for
outpatient consultations with other medical facilities
- set techniques for x-ray exposures
- perform uro-radiographic procedures
- perform microscopic urinalysis

These B-shred members are also more experienced than General Surgery Technicians and Urology Clinic personnel, averaging 135 months TAFMS. Most are in paygrades E-3 to E-7, and most hold the 7-skill level.

The specialized nature of this job is shown by the following representative TMs:

TM	Module Title	No. of Tasks	Percent Time Spent Sum	Avg Pct Mbrs Perf
0008	Clinic patient care	28	16	86
0011	Assist with urology procedures	8	5	91
0002	Operating room surgical support	9	4	76
0012	Perform X-ray procedures	8	3	60
0001	Operating room aseptic support	6	3	76

These TMs show members do spend time in the Urology Clinic functions, but are distinguished by the time spent in the operating room. Time spent performing module 0012, and especially performing the tasks of preparing patients and setting up and operating x-ray equipment, are controversial. Currently, Urology technicians are not formally trained to perform these tasks. According to most Air Force hospital operating procedures, only x-ray technicians or other properly trained personnel are authorized to actually operate x-ray equipment. However, because of technician shortages and work load in radiology clinics, x-ray technicians are not always available for urology work and urology technicians have to perform the tasks themselves. A way to get radiographic support for the urology function will have to be found or urology technicians will need to receive some radiology training.

D. Clinic Urology Technician (STG058, N=6). This is the other job B-shred personnel perform. This job involves many of the same tasks performed by members of the Surgical Suite Urology Technicians job. The difference lies in the amount of time spent performing clinical procedures. Members in this job spend 20 percent of their time performing screening and diagnostic procedures in the clinic, 14 percent assist in clinic or OR procedures, and 9 percent perform general nursing duties. However, Clinic Urology Technicians spend less time in the OR than any other members of the OR/Nursing Care cluster. This job is distinguished by the time members spend performing the following tasks:

- assist physicians with cystoscopies
- prepare and drape patients for clinic procedures
- brief patients on clinical or operating room policies
- log procedures into record books or computers
- brief physicians on patient follow-ups
- change solutions during clinic procedures
- arrange sterile instruments and supplies on back tables
- administer medications or immunizations to patients,
under supervision of physician
- assist physicians with transurethral resections

Personnel with this job are in paygrades E-2 to E-7. Three are assigned to Wilford Hall Medical Center, one is at the hospital at Barksdale AFB, and one is in the hospital at Andrews AFB. Two hold the 3-skill level, two the 5-skill level, and one the 7-skill level.

The following are representative TMs for this job:

TM	Module Title	No. of Tasks	Percent Time Spent Sum	Avg Pct Mbrs Perf
0008	Clinic patient care	28	22	56
0011	Assist with urology procedures	8	7	73
0012	Perform X-ray procedures	8	6	50
0002	Operating room surgical support	9	6	62
0020	Assist physician with administering medications	4	4	90
0004	General nursing care	7	3	34

Clinic Urology personnel are also doing x-ray tasks. The modules show time spent in general and urology functions.

E. Otorhinolaryngology (ENT) Technician (STG063, N=31). ENT Technicians hold the D-shred. They perform many of the same routine surgical functions as the "slick" and Urology technicians - setting up the operating room with supplies and equipment; assisting physicians, circulating personnel, nurses and anesthesia personnel during surgical procedures; cleaning the OR; and initial cleaning and sterilization of instrument sets, supplies, and linen packs.

What distinguishes this job is the time spent performing diagnostic and therapeutic clinic procedures. This includes performing diagnostic hearing evaluations, making ear mold impressions for fitting patients with hearing aids, and performing facial nerve tests. ENT Technicians assist with an average of 16 to 30 surgical cases per month. The job is rather broad as D-shred personnel are responsible for both clinical and OR responsibilities. The ENT Technician job is distinguished by the time members spend performing the following tasks:

- assist physician with myringotomies
- assist physician with septoplasties
- assist surgeons in dressing surgical sites
- remove foreign bodies from ears using
alligator forceps

assist physician in limited functional endoscopic
sinus surgeries
prepare patients for clinic appointments
review SF 513 (Medical Record-Consultation Sheet)

Respondents with this job are somewhat junior personnel as they average 77 months TAFMS, and 14 are in their first enlistment. Most hold the 5-skill level and are in paygrades E-1 to E-4. Twelve of the thirty-one ENT Technicians reported having the NCOIC, Otorhinolaryngology Clinic job title. These personnel perform some supervisory tasks, such as training and evaluating subordinates, planning schedules, and ordering supplies and equipment, along with their OR and clinic duties. The emphasis on ENT functions is shown by the following representative TMs:

TM	Module Title	No. of Tasks	Percent	Avg Pct Mbrs Perf
			Time Spent Sum	
0008	Clinic patient care	28	18	76
0018	ENT clinic patient care	21	9	55
0015	ENT surgical patient care	15	8	70
0017	Order/purchase surgical supplies	10	4	55
0002	Operating room surgical support	9	3	51
0001	Operating room aseptic support	6	2	44

F. Orthopedic Technician (STG061, N=66). Personnel performing the Orthopedic Technician job hold the C-shred. The job involves performing routine surgical tasks similar to those of the General Surgery, Urology, and Otorhinolaryngology (ENT) Technician jobs, such as scheduling and preparing patients; setting up instruments, supplies and equipment; and assisting physicians during surgical/diagnostic procedures. Just as with the other two surgical specialties, Orthopedic Technicians perform a mixture of technical and administrative, logistical, and management tasks. What distinguishes this job is the time spent performing specialized clinical orthopedic functions.

Orthopedic Technicians spend 26 percent of their time applying and removing casts and splints as directed by physicians. They assemble and apply traction devices and instruct patients in the use of crutches, canes, and orthopedic appliances. Twenty percent of their relative duty time is spent in sterile or nonsterile support of OR team members. This job is distinguished by the time members spend performing the following tasks:

- remove splints
- remove casts
- apply short leg plaster or fiberglass casts
- prepare patients for application of casts or splints
- prepare casting or splinting materials
- apply short arm scaphoid plaster or fiberglass casts
- assist physician in treatment of fractures
- prepare patients for clinic examinations
- prepare or distribute daily clinic schedules
- prepare and pass instruments or supplies to operating team members

Approximately one-third hold the 3-skill level, more than a third hold the 5-skill level, and 21 percent hold the 7-skill level. Thirty-nine percent are in their first enlistment. The following representative TMs show members spend more time applying casts, clearly an Orthopedic Technician's job:

TM	Module Title	No. of Tasks	Percent	Avg Pct Mbrs Perf
			Time Spent Sum	
0009	Apply plaster/fiberglass casts	23	23	94
0008	Clinic patient care	28	17	94
0005	Supervise operating room personnel (NCOIC)	33	6	34
0017	Order/purchase surgical supplies	10	3	49
0002	Operating room surgical support	9	2	47
0014	Sterilizing/preparing surgical instruments	13	2	25

II. SURGICAL SERVICES MANAGEMENT SUPERVISION JOB (STG056, N=32). This is essentially a nontechnical job which involves overseeing the operation of surgical suites. Seventy-two percent of duty time involves supervising, training, and evaluating. In contrast to the NCOIC of General Surgery and specialty clinic jobs, this job does not include any involvement with surgery and direct OR support. Nearly 50 percent of respondents in this job reported they do not "scrub" any cases monthly due to time spent performing the following administrative and supervisory tasks:

- determine requirements for space, personnel, equipment,
or supplies
- correct safety hazards
- schedule personnel for leaves, passes, or temporary
duty (TDY)

- conduct staff meetings or briefing
- evaluate budget requirements
- prepare work schedules or duty rosters
- establish work schedules
- plan or schedule work priorities
- write or review EPRs
- evaluate quality of patient care

Three-quarters of the AFSC 4N1X1 personnel with this job hold the 7-skill level and most are in paygrades E-6 and E-7. These are rather senior personnel, averaging 178 months TAFMS. Eighty-one percent report having direct supervisory responsibilities for between 2 and 22 subordinates. The emphasis on supervisory and management responsibilities is clearly shown by the following representative TMs for this job:

TM	Module Title	No. of Tasks	Percent Time Spent Sum	Avg Pct Mbrs Perf
0005	Supervise operating room personnel (NCOIC)	33	27	91
0006	Supervise operating room personnel (Superintendent)	29	18	76
0007	Manage civilian personnel	5	2	67
0017	Order/purchase surgical supplies	10	4	66
0008	Clinic patient care	28	7	45

At the time of this survey, members of the Surgical Services career ladder merged with the Nursing Services career ladder (AFSC 4N0X1) at the E-8 level. The *Superintendent of Surgical Services* job was billeted as an AFSC 4N0X1 position. The individual in this position was responsible for managing the Surgical Services career field. At the career field UT&W held February-March 1994, a tentative decision was made to transfer the management of the career field to the AFSC 4N1X1 community to better serve the needs and desires of its members. In order to do this, SMSgt and CMSgt positions have been proposed. If this plan is implemented, members of the Surgical Services career ladder will have a clearly defined path from airman basic in the OR and specialty clinics up to CMSgt as career field managers.

III. CENTRAL STERILE SUPPLY NCOIC JOB (STG050, N=7). This is another supervisory job in the Surgical Services career ladder. The work is performed in the Central Sterile Supply (CSS) and consists of a mixture of tasks rather independent of those performed in surgical suite and specialty clinics. The work performed includes cleaning, sterilizing, and assembling instrument sets and linen for the OR, as well as overseeing the entire sterile supply operation. In many facilities, personnel in the surgical suite are rotated through the CSS on a set schedule,

while in other facilities, personnel are permanently assigned to the CSS and, if there are manpower shortages, surgical technicians will fill in temporarily. This job is distinguished by the time members spend performing the following tasks:

- supervise Surgical Services Specialists (902X2/B/C/D)
- evaluate personnel for compliance with performance standards
- identify safety hazards
- establish organizational policies, such as operating instructions (OIs) or standing operating procedures (SOPs)
- plan or schedule work assignments

Personnel performing this job are the most senior personnel in the survey, averaging 180 months TAFMS. Four of the seven are in paygrade E-6, two are in paygrade E-7, and one is E-5; two hold the 5-skill level; and five hold the 7-skill level. All seven report having supervisory responsibilities for between two and nine subordinates. The low number of personnel supervised is due to the relatively small number of incumbents required to successfully operate a Central Surgical Supply.

The following representative TMs reflect the supervisory and CSS tasks members with the job perform:

TM	Module Title	No. of Tasks	Percent Time Spent Sum	Avg Pct Mbrs Perf
0005	Supervise operating room personnel (NCOIC)	33	27	61
0014	Sterilizing/preparing surgical instruments	13	21	85
0017	Order/purchase surgical supplies	10	8	66
0006	Supervise operating room personnel (Superintendent)	29	8	22
0001	Operating room aseptic support	6	1	14

IV. CENTRAL STERILE SUPPLY JOB (STG052, N=14). This is the technical job performed by personnel in CSS. Eighty-three percent of duty time involves processing and maintaining supplies or equipment, which includes initial cleaning, chemical and heat sterilization, assembly, and packaging of instrument sets and linen. In this respect, it is one of the main support functions for ORs and clinics. As members may rotate from CSS to the OR, 3 members in this job reported they scrub for 1-15 surgical cases a month, while the remaining 11 reported they did not assist with any surgical cases. Typical tasks performed by members in this job include:

- wrap and label instrument sets for sterilization
- assemble instrument sets
- clean instruments or equipment for storage or reprocessing
- assemble OR equipment or instruments after cleaning
- load or unload sterilizers
- store sterilized or nonsterilized items
- rotate dated supplies
- operate ETO aeration equipment

Rather junior personnel work in CSS; 11 of the 14 are in paygrades E-1 through E-4, they average 61 months TAFMS; and 9 are in their first enlistment. This is the most limited job in the career ladder, as members perform an average of only 24 tasks. The focus of the job is shown by the time members spend performing the following TMs:

TM	Module Title	No. of Tasks	Percent	Avg Pct Mbrs Perf
			Time Spent Sum	
0014	Sterilizing/preparing surgical instruments	13	59	84
0003	Operating room anesthesia support	4	2	11
0001	Operating room aseptic support	6	1	5

V. SURGICAL LOGISTICS JOB (ST055, N=15). Because of the array of instruments and equipment needed for surgical procedures and the amount of supplies consumed, it is necessary to have separate personnel assigned to manage these resources. In large hospitals, this is a full-time assignment, while in smaller facilities it may be an additional duty. Personnel with this job report spending 53 percent of their duty time performing either administrative or materiel procedures. They are responsible for purchasing, maintaining, and managing equipment and supplies used in the operating room. In addition, they maintain records on equipment and supplies in the OR and spend another 38 percent of duty time performing supervisory tasks associated with managing a Surgical Logistics section. Even though members report performing some technical tasks, the Surgical Logistics job is, in reality, another support function. The following are the tasks members perform which distinguish this job from all others in the career ladder:

- order medical supplies using local purchase procedures
- order nonmedical supplies from USAF supply agencies
- research supply catalogs or medical catalog (MEDCAT) supply listing
- coordinate standard medical supply purchases with medical materiel personnel
- order nonmedical supplies using local purchase procedures

- coordinate equipment purchases with medical materiel personnel
- write or review EPRs
- analyze workload requirements
- determine requirements for space, personnel, or supplies
- evaluate budget requirements

Personnel holding this job are rather senior personnel averaging 170 months TAFMS. Six hold the 5-skill level, 7 hold the 7-skill level, and 11 are in paygrades E-6 and E-7. No first-enlistment personnel report performing this job. The nature of the work is clearly represented by the following TMs performed:

TM	Module Title	No. of Tasks	Percent Time Spent Sum	Avg Pct Mbrs Perf
0017	Order/purchase surgical supplies	10	44	91
0005	Supervise operating room personnel (NCOIC)	33	29	36
0006	Supervise operating room personnel (Superintendent)	29	5	10
0007	Manage civilian personnel	5	1	8

Comparisons of Specialty Jobs

Table 5 compares jobs identified in the current study to those in the previous study completed in 1987. Operating room personnel, surgical specialty personnel, central sterile supply, and logistics personnel were identified in both studies, as were the separate roles of surgical and specialty clinic technicians and NCOICs. Operating room personnel in general surgery and those in the specialties were grouped under the Operating Room/Nursing Care cluster in the current study. This grouping highlights similarities in common tasks performed to support surgical teams. The current study also groups supervisory personnel under fewer job titles. The logistics jobs compare very closely.

CAREER LADDER PROGRESSION

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

TABLE 5

JOB SPECIALTY COMPARISONS BETWEEN CURRENT AND 1987 SURVEYS

CURRENT REPORT	1987 REPORT
OPERATING ROOM/NURSING CARE CLUSTER	OPERATING ROOM PERSONNEL
General Surgery Technician	NCOIC, Operating Room
Surgical Suite NCOIC	Operating Room Assistants
Surgical Suite Urology Technician	Junior Operating Room Assistants
Clinic Urology Technician	
Otorhinolaryngology (ENT) Technician	
Orthopedic Technician	
	ENT AND UROLOGY PERSONNEL
	NCOIC, ENT Clinic
	ENT Assistant, NCOIC
	ENT First Enlistment, Assistant NCOIC
	Urology Assistant, Surgical Services
	Urology Operating Room, Medical Center
	Surgical Services
SURGICAL SERVICES MANAGEMENT/ SUPERVISION JOB	NCOIC, SURGICAL SERVICES
	NCOIC, Central Nursing Supply
	NCOIC, Circulating Technicians
	NCOIC, Operating Room, Surgical Services
	NCOIC, Administrative Surgical Services
	ORTHOPEDIC CLINIC PERSONNEL
	CLINIC NCOICs
	SURGICAL ENT PERSONNEL
CENTRAL STERILE SUPPLY NCOIC	STERILE SUPPORT PERSONNEL
CENTRAL STERILE SUPPLY JOB	NCOIC, SUPPLY
SURGICAL LOGISTICS JOB	SUPERVISORY SUPPLY PERSONNEL
	ADMINISTRATIVE SUPPLY PERSONNEL

Skill-Level Descriptions

DAFSC 4N131. There are 190 DAFSC 4N131 ("slick") personnel in the survey sample. Most perform the General Surgery Technician job. Twenty-nine perform the CSS job, 6 the Surgical Suite NCOIC job, and 2 work in the C-shred Orthopedic Technician job (see Table 6). Time spent on duties figures shown in Table 7 reflect the emphasis "slick" members have on general OR and Central Sterile Supply (CSS) responsibilities. Representative tasks performed listed in Table 8 detail specific aspects of the 3-skill level "slick" job.

DAFSC 4N151. Two hundred and fifty 5-skill level "slick" members are included in the survey sample. Sixty-eight percent perform the General Surgery Technician job, and 13 percent have the Surgical Suite NCOIC job. Five-skill level personnel are much like 3-level personnel in that they spend most of their duty time supporting the OR and CSS. What distinguishes 5-skill level members is an increased amount of time performing some administrative and training functions (see Table 7). Representative tasks 5-skill level members perform, shown in Table 9, reflect the technical nature of the work.

DAFSC 4N171. There are 112 "slick" 7-skill level members in the survey sample. While they perform the General Surgery and Surgical Suite NCOIC jobs, a larger number perform management, supervisory, and the logistics jobs. Figures listed in Table 7 reflect the increase in time spent on supervisory and administrative duties, as do the representative tasks listed in Table 10. The tasks that best distinguish between members of the 5- and 7-skill levels are presented in Table 11. A higher percentage of 5-skill level members perform the purely technical aspects of the career ladder, while more 7-skill level members perform the supervisory tasks shown in the bottom half of the table.

AFSC 4N1X1B - Urology

DAFSC 4N131B. There are only four DAFSC 4N131B personnel in the survey sample. Three of the four were clearly identified as performing the two Urology specific jobs, while the fourth performed tasks related more to the Operating Room/Nursing Care cluster (see Table 12). As shown in Table 13, B-shred members holding the 3-skill level spend most of their time performing OR procedures, with less time on diagnostic and CSS functions. Representative tasks are listed in Table 14 and reflect the emphasis on these duties.

TABLE 6
DISTRIBUTION OF SKILL-LEVEL PERSONNEL
ACROSS CAREER LADDER JOBS
(PERCENT RESPONDING)

JOBS	DAFSC 4N131 (N=190)	DAFSC 4N151 (N=250)	DAFSC 4N171 (N=112)
I. OPERATING ROOM/NURSING CARE CLUSTER			
A. General Surgery Technician	79	68	22
B. Surgical Suite NCOIC	3	13	33
C. Surgical Suite Urology Technician	0	3	1
D. Clinic Urology Technician	0	0	0
E. Otorhinolaryngology (ENT) Technician	0	2	0
F. Orthopedic Technician	1	0	0
II. SURGICAL SERVICES MANAGEMENT/SUPERVISION JOB	*	1	11
III. CENTRAL STERILE SUPPLY NCOIC	0	*	4
IV. CENTRAL STERILE SUPPLY JOB	15	2	0
V. SURGICAL LOGISTICS JOB	*	2	6

* Denotes less than 1 percent

TABLE 7
DISTRIBUTION OF DUTY TIME SPENT BY DAFSC GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES	DAFSC 4N131 (N=190)	DAFSC 4N151 (N=250)	DAFSC 4N171 (N=112)
A ORGANIZING AND PLANNING	1	4	11
B DIRECTING AND IMPLEMENTING	*	3	9
C INSPECTING AND EVALUATING	1	3	11
D TRAINING	1	3	5
E PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	3	7	13
F PERFORMING DIAGNOSTIC OR SCREENING FUNCTIONS	1	2	1
G PERFORMING BASIC NURSING DUTIES	4	3	3
H APPLYING OR REMOVING CASTS, SPLINTS, OR TRACTION DEVICES	1	*	*
I ASSISTING IN CLINIC OR OPERATING ROOM PROCEDURES	6	5	3
J PERFORMING STERILE OR NONSTERILE OPERATING ROOM PROCEDURES	55	44	29
K PROCESSING AND MAINTAINING SUPPLIES OR EQUIPMENT		22	13
L PERFORMING SURGICAL RESEARCH PROCEDURES	*	*	*
M PERFORMING CONTINGENCY TASKS	2	2	1

* Less than 1 percent

TABLE 8
REPRESENTATIVE TASKS PERFORMED BY
3-SKILL LEVEL "SLICK" PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=190)
J344 Don or doff sterile gowns or gloves	89
J336 Assist surgeons in applying sterile drapes	89
J338 Break down sterile fields	89
J378 Prepare and pass instruments or supplies to operating team members	88
J394 Stock OR with sterile or nonsterile supplies	88
J343 Dispose of sterile gowns or gloves	88
J385 Pull surgical supplies or instruments	88
J335 Assist sterile team members with donning or removing surgical attire	87
J337 Assist surgeons in dressing surgical sites	87
J328 Adjust Mayo instrument tray stands	87
J396 Transfer patients to and from OR tables	87
J349 Identify drugs or solutions on sterile field	87
K399 Assemble instrument sets	86
J367 Perform hand and arm scrubs	86
J329 Adjust overhead operating lights	86
J365 Pass specimens to circulators	85
J331 Arrange sterile instruments and supplies on back tables	85
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel packed sterile supplies	84
J347 Establish sterile fields in OR	84
J379 Prepare and pass medications to surgeons during operative procedures	84
K434 Remove and dispose of sharps	83
J351 Inspect equipment for cleanliness or operations	83
K438 Store sterilized or nonsterilized items	82
K424 Operate sterilizers	82
J392 Return unused items to storage areas	82
J342 Correct breaks in sterile procedures by members of operating teams	81
J334 Assist professional staff in performing counts of sponges, instruments, needles, or related supplies	81
J345 Don or doff surgical attire, other than sterile gown or gloves	79

TABLE 9
REPRESENTATIVE TASKS PERFORMED BY
5-SKILL LEVEL "SLICK" PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=250)
J351 Inspect equipment for cleanliness or operation	86
J335 Assist sterile team members with donning or removing surgical attire	86
J385 Pull surgical supplies or instruments	86
J329 Adjust overhead operating lights	86
J344 Don or doff sterile gowns or gloves	86
J343 Dispose of sterile gowns or gloves	86
J349 Identify drugs or solutions on sterile field	86
J336 Assist surgeons in applying sterile drapes	85
J347 Establish sterile fields in OR	85
J331 Arrange sterile instruments and supplies on back tables	84
J338 Break down sterile fields	84
J328 Adjust Mayo instrument tray stands	84
J337 Assist surgeons in dressing surgical sites	84
J378 Prepare and pass instruments or supplies to operating team members	84
J367 Perform hand and arm scrubs	84
J396 Transfer patients to and from OR tables	84
J342 Correct breaks in sterile techniques by members of operating teams	84
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	83
J365 Pass specimen to circulators	83
J379 Prepare and pass medications to surgeons during operative procedures	82
K399 Assemble instrument sets	81
J350 Identify drugs or solution prior to transfer to sterile field	81
J394 Stock OR with sterile or nonsterile supplies	81

TABLE 10
REPRESENTATIVE TASKS PERFORMED BY
7-SKILL LEVEL "SLICK" PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=112)
C71 Write or review EPRs	87
C46 Conduct performance feedback worksheet (PFW) evaluation sessions	83
B28 Counsel personnel on personal or military-related matters	78
A16 Plan or schedule work assignments	73
J335 Assist sterile team members with donning or removing surgical attire	72
B 43 Supervise Surgical Service Specialist (AFSC 90252/B/C/D)	71
J341 Consult schedule of operations	71
J385 Pull surgical supplies or instruments	71
J344 Don or doff sterile gowns	71
J329 Adjust overhead operating lights	71
J328 Adjust Mayo instrument tray stands	71
J351 Inspect equipment for cleanliness or operation	71
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	71
J338 Break down sterile fields	71
J342 Correct breaks in sterile techniques by members of operating teams	71
J343 Dispose of sterile gowns or gloves	70
A4 Determine requirements for space, personnel, equipment, or supplies	69
J340 Consult daily assignment sheet	69
A1 Assign personnel to duty positions	69
C56 Evaluate personnel for compliance with performance standards	69
B27 Correct safety hazards	69
J378 Prepare and pass instruments or supplies to operating team members	69
J336 Assist surgeons in applying sterile drapes	69
K424 Operate sterilizers	68

TABLE 11

REPRESENTATIVE TASK DIFFERENCES BETWEEN 5- AND 7-SKILL LEVEL "SLICK" PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 4N151 (N=250)	DAFSC 4N171 (N=112)	DIFFERENCE
J370 Perform sterile draping of surgical equipment, such as microscopes or x-ray units	71	45	26
K434 Remove and dispose of sharps	81	59	22
J349 Identify drugs or solutions on sterile field	86	64	22
J379 Prepare and pass medications to surgeons during operative procedures	82	61	21
C71 Write or review EPRs	36	87	-51
C72 Write recommendations for awards or decorations	18	66	-48
C46 Conduct performance feedback worksheet (PFW) evaluation sections sessions	37	83	-46
B37 Initiate personnel action requests, such as upgrade action duty title changes	12	55	-43
B28 Counsel personnel on personal or military-related matters	36	78	-42
C45 Analyze workload requirements	16	55	-39
C56 Evaluate personnel for compliance with performance standards	30	69	-39
A2 Assign sponsors for newly assigned personnel	16	54	-38

TABLE 12

DISTRIBUTION OF SKILL-LEVEL PERSONNEL
ACROSS CAREER LADDER JOBS
(PERCENT RESPONDING)

JOBS	DAFSC 4N131B (N=4)	DAFSC 4N151B (N=12)	DAFSC 4N171B (N=15)
I. OPERATING ROOM/NURSING CARE CLUSTER			
A. General Surgery Technician	0	33	0
B. Surgical Suite NCOIC	0	0	7
C. Surgical Suite Urology Technician	25	50	60
D. Clinic Urology Technician	50	17	7
E. Otorhinolaryngology (ENT) Technician	0	0	0
F. Orthopedic Technician	0	0	0
II. SURGICAL SERVICES MANAGEMENT/SUPERVISION	0	0	20
III. CENTRAL STERILE SUPPLY NCOIC	0	0	0
IV. CENTRAL STERILE SUPPLY JOB	0	0	0
V. SURGICAL LOGISTICS JOB	0	0	0

TABLE 13

DISTRIBUTION OF DUTY TIME SPENT BY DAFSC GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES	DAFSC 4N131B (N=4)	DAFSC 4N151B (N=12)	DAFSC 4N171B (N=15)
A ORGANIZING AND PLANNING	1	3	7
B DIRECTING AND IMPLEMENTING	*	2	7
C INSPECTING AND EVALUATING	3	1	9
D TRAINING	1	1	3
E PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	14	17	20
F PERFORMING DIAGNOSTIC OR SCREENING FUNCTIONS	25	14	13
G PERFORMING BASIC NURSING DUTIES	5	4	4
H APPLYING OR REMOVING CASTS, SPLINTS, OR TRACTION DEVICES	0	2	0
I ASSISTING IN CLINIC OR OPERATING ROOM PROCEDURES	14	12	8
J PERFORMING STERILE OR NONSTERILE OPERATING ROOM PROCEDURES	26	33	21
K PROCESSING AND MAINTAINING SUPPLIES OR EQUIPMENT	11	9	6
L PERFORMING SURGICAL RESEARCH PROCEDURES	0	*	*
M PERFORMING CONTINGENCY TASKS	*	1	1

* Less than 1 percent

TABLE 14
REPRESENTATIVE TASKS PERFORMED BY
3-SKILL LEVEL UROLOGY PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=4)
F157 Develop X-ray films	75
F187 Prepare contrast media	75
I327 Remove skin staples	75
F199 Remove sutures	75
I294 Assist physician with cystoscopies	75
I325 Prepare and drape patients for clinic procedures	75
J330 Apply electrosurgical devices to patients	75
F152 Brief physicians on patient follow-ups	75
J355 Operate cystoscopy tables	75
J338 Break down sterile fields	75
I308 Assist physician with transurethral resections	75
F150 Assist physician in applying dressings or packs	75
G208 Log procedures into record books or computers	75
K408 Clean instruments or equipment for storage or reprocessing	75
J337 Assist surgeons in dressing surgical sites	75
F159 Instill xylocaine jellies intrauretherally	75
G205 Catheterize patients	75
I315 Change solutions during clinic procedures	75
I311 Assist physician with urodynamics	75
J356 Operate electrosurgical devices	75
F155 Collect catheterized urine specimens	75
F149 Answer patient medical inquiries	75
G202 Administer medications or immunizations to patients, under supervision of physicians	75
G215 Take specimens to laboratories	75
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	75

DAFSC 4N151B. There are 12 DAFSC 4N151B personnel in the survey sample. Six perform the Surgical Suite Urology Technician job, four do the General Surgery Technician job, and two do the Clinic Urology Technician job. While they all perform many of the same technical tasks as 3-skill level members and spend similar amounts of time on duties (Table 13), there are some specific differences noted between what 3- and 5-skill level members do. This is seen by comparing representative tasks listed in Tables 14 and 15. Tasks performed by 5-skill level members require more experience.

DAFSC 4N171B. There are 15 DAFSC 4N171B personnel in the survey sample. Nine perform the Surgical Suite Urology job, two the Clinic Urology job, three the Management/Supervision job, and one the Surgical Suite NCOIC job. As shown in Table 13, 7-skill level members spend more time than others on management and supervisory duties. Representative tasks performed by 7-skill level B-shred personnel, listed in Table 16, reflect a mixture of administrative and technical responsibilities. Tasks that best distinguish between 5- and 7-skill level personnel are listed in Table 17. Higher percentages of 5-skill level members perform the technical tasks listed in the top half of the table, while a higher percentage of 7-skill level members perform administrative tasks listed in the bottom half.

AFSC 4N1X1C - Orthopedics

DAFSC 4N131C. There are 24 DAFSC 4N131C respondents. Twenty-three perform the Orthopedic Technician job and 1 performs the Surgical Suite NCOIC job (Table 18). These personnel spend half their duty time applying or removing casts, splints, and traction devices and assisting in Orthopedic OR procedures. They also spend 12 percent of their time assisting in clinics. Three-skill level Orthopedic Technicians spend more duty time performing administrative functions as their 3-skill level "slick" counterparts (Table 19). The emphasis on Orthopedic functions, however, is clearly shown by representative tasks performed listed in Table 20.

DAFSC 4N151C. Thirty DAFSC 4N151C personnel were included in the survey sample. Twenty-six perform the Orthopedic Technician job, 3 the Management/Supervision job and 1 did not group into the jobs identified. Five-skill level Orthopedic Technicians perform many of the same tasks that 3-skill level personnel perform (Table 21) and spend similar amounts of time on duties. Five-skill level members, however, spend slightly more time on administrative duties.

DAFSC 4N171C. There are 24 DAFSC 4N171C personnel in the survey sample. Fourteen perform the Orthopedic Technician job, 7 perform the Management/Supervision job, 1 the Surgical Logistics job, and 2 are included in the OR/Nursing Care cluster. Being more senior, 7-skill level C-shred personnel spend less time performing technical tasks and more time performing administrative and supervisory tasks. This is clearly shown by representative tasks

TABLE 15
REPRESENTATIVE TASKS PERFORMED BY
5-SKILL LEVEL UROLOGY PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=12)
J343 Dispose of sterile gowns or gloves	100
J383 Prepare soaking solutions, such as Cidex	100
J344 Don or doff sterile gowns or gloves	100
J329 Adjust overhead operating lights	100
J338 Break down sterile fields	92
J349 Identify drugs or solutions on sterile field	92
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	92
J355 Operate cystoscopy tables	92
F150 Assist physician in applying dressings or packs	92
J342 Correct breaks in sterile techniques by members of operating teams	92
F159 Instill xylocaine jellies intra uretherally	83
I294 Assist physician with cystoscopies	83
J335 Assist sterile team members with donning or removing surgical attire	83
J311 Assist physician with cystoscopies	83
J336 Assist surgeons in applying sterile drapes	83
I308 Assist physician with prostrate ultrasounds	83
F155 Collect catheterized urine specimens	83
J328 Adjust Mayo instrument tray stands	83
J330 Apply electrosurgical devices to patients	83
J345 Don or doff surgical attire, other than sterile gown or gloves	83
J356 Operate electrosurgical devices	83
F152 Brief physicians on patient follow-ups	83
J337 Assist surgeons in dressing surgical sites	75
I325 Prepare and drape patients for clinic procedures	75
F191 Prepare and drape patients for clinic procedures	75

TABLE 16
REPRESENTATIVE TASKS PERFORMED BY
7-SKILL LEVEL UROLOGY PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=15)
E103 Brief patients on clinical or operating room policies	93
E134 Prepare forms for tissue examinations	93
E125 Order medical supplies using local purchase procedures	93
F152 Brief physicians on patient follow-ups	87
E145 Schedule patient appointments	87
F191 Prepare sterile setups for clinic procedures	87
F149 Answer patient medical inquiries	87
A10 Establish performance standards for subordinates	87
F155 Collect catheterized urine specimens	87
C55 Evaluate new equipment	87
E131 Pick up daily administrative distribution	87
E126 Order nonmedical supplies from USAF supply agencies	87
J330 Apply electrosurgical devices to patients	87
E121 Maintain property custodial action/custodial receipt locator lists (CA/CRLs)	87
E106 Coordinate equipment purchases with medical materiel personnel	87
I315 Change solutions during clinic procedures	87
B27 Correct safety hazards	87
E129 perform periodic inventories of dated medications	87
J383 Prepare soaking solutions, such as Cidex	87
J328 Adjust Mayo instrument tray stands	87
C46 Conduct performance feedback worksheet (PFW) evaluation sessions	87
G208 Log procedures into record books or computers	80
G205 Catheterize patients	80
F159 Instill xylocaine jellies intrauretherally	80
E143 Review SF 513 (Medical Record-Consultation Sheet)	80
F188 Prepare patients for clinic examinations	80

TABLE 17

REPRESENTATIVE TASK DIFFERENCES BETWEEN 5-SKILL LEVEL
AND 7-SKILL LEVEL UROLOGY PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 4N151B (N=12)	DAFSC 4N171B (N=15)	DIFFERENCE
J343 Dispose of sterile gowns or gloves	100	67	33
J342 Correct breaks in sterile techniques by members of operating teams	92	60	32
J363 Operate surgical tables	75	47	28
J349 Identify drugs or solutions on sterile field	92	67	25
J355 Operate cystoscopy tables	92	67	25
I308 Assist physicians with transurethral resections	83	60	23
J364 Operate video equipment	42	20	22
J344 Don or doff sterile gowns or gloves	100	80	20
J329 Adjust overhead operating lights	100	80	20
C45 Analyze workload requirements	0	73	-73
A10 Establish performance standards for subordinates	17	87	-70
E127 Order nonmedical supplies using local purchase procedures	8	73	-65
E138 Research supply catalogs or medical catalogs (MEDCAT) supply listings	17	80	-63
B37 Initiate personnel action requests, such as upgrade actions or duty title changes	0	60	-60
B32 Implement Quality Air Force (QAF) programs or initiatives	0	60	-60
D90 Evaluate personnel for training needs	0	60	-60
B43 Supervise Surgical Service Specialists (AFSC 90252/B/C/D)	8	67	-59
K428 Perform operator preventive maintenance on equipment	8	67	-59

TABLE 18
DISTRIBUTION OF SKILL-LEVEL PERSONNEL
ACROSS CAREER LADDER JOBS
(PERCENT RESPONDING)

JOBS	DAFSC 4N131C (N=24)	DAFSC 4N151C (N=30)	DAFSC 4N171C (N=24)
I. OPERATING ROOM/NURSING CARE CLUSTER			
A. General Surgery Technician	0	0	0
B. Surgical Suite NCOIC	4	0	4
C. Surgical Suite Urology Technician	0	0	0
D. Clinic Urology Technician	0	0	0
E. Otorhinolaryngology (ENT) Technician	0	0	0
F. Orthopedic Technician	96	87	58
II. SURGICAL SERVICES MANAGEMENT/SUPERVISION JOB	0	10	29
III. CENTRAL STERILE SUPPLY NCOIC	0	0	0
IV. CENTRAL STERILE SUPPLY JOB	0	0	0
V. SURGICAL LOGISTICS JOB	0	0	4

TABLE 19
DISTRIBUTION OF DUTY TIME SPENT BY DAFSC GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES	DAFSC 4N131C (N=24)	DAFSC 4N151C (N=30)	DAFSC 4N171C (N=24)
A ORGANIZING AND PLANNING	1	4	9
B DIRECTING AND IMPLEMENTING	2	3	7
C INSPECTING AND EVALUATING	2	3	11
D TRAINING	1	2	4
E PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	14	15	16
F PERFORMING DIAGNOSTIC OR SCREENING FUNCTIONS	8	8	6
G PERFORMING BASIC NURSING DUTIES	1	1	1
H APPLYING OR REMOVING CASTS, SPLINTS, OR TRACTION DEVICES	26	27	16
I ASSISTING IN CLINIC OR OPERATING ROOM PROCEDURES	12	13	8
J PERFORMING STERILE OR NONSTERILE OPERATING ROOM PROCEDURES	24	17	16
K PROCESSING AND MAINTAINING SUPPLIES OR EQUIPMENT	6	4	5
L PERFORMING SURGICAL RESEARCH PROCEDURES	*	*	0
M PERFORMING CONTINGENCY TASKS	2	2	1

* Less than 1 percent

TABLE 20
REPRESENTATIVE TASKS PERFORMED BY
3-SKILL LEVEL ORTHOPEDIC PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=24)
H263 Remove splints	100
H262 Remove casts	100
H259 Prepare patients for application of casts or splints	100
H260 Prepare patients for removal of casts or splints	100
H246 Apply short arm plaster or fiberglass splints	100
H247 Apply short arm scaphoid plaster or fiberglass splints	100
H249 Apply short leg plaster or fiberglass casts	96
H252 Apply standard long arm plaster or fiberglass casts	96
H230 Apply long arm plaster or fiberglass splints	96
H245 Apply short arm navicular plaster or fiberglass casts	96
I327 Remove skin staples	96
I284 Assist physician in treatment of sprains, strains, or contusions	96
H231 Apply long arm scaphoid plaster or fiberglass splints	96
H233 Apply long leg cylinder plaster or fiberglass casts	96
J337 Assist surgeons in dressing surgical sites	96
J336 Assist surgeons in applying sterile drapes	96
E145 Schedule patient appointments	92
H258 Prepare casting or splinting materials	92
H234 Apply long leg plaster or fiberglass casts	92
H229 Apply long arm navicular plaster or fiberglass casts	92
H232 Apply long arm sugar tong plaster or fiberglass splints	92
H253 Apply standard short arm plaster or fiberglass casts	88
F199 Remove sutures	88
F164 Order x-rays	88
H250 Apply short leg plaster or fiberglass splints	88
I319 Instruct patients in use of orthopedic appliances	88
I278 Assist physician in treatment of fractures	88
F150 Assist physician in applying dressings or packs	88
H248 Apply short arm sugar tong plaster or fiberglass splints	88
H227 Apply long arm cylinder plaster or fiberglass splints	88
H235 Apply long leg plaster or fiberglass splints	88
J367 Perform hand and arm scrubs	88
I314 Change dressings	83
J338 Break down sterile fields	83
J344 Don or doff sterile gowns or gloves	83
J345 Don or doff surgical attire, other than sterile gown or gloves	83

TABLE 21
REPRESENTATIVE TASKS PERFORMED BY
5-SKILL LEVEL ORTHOPEDIC PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=30)
H262 Remove casts	100
H263 Remove splints	100
H249 Apply short leg plaster or fiberglass casts	100
H246 Apply short arm plaster or fiberglass splints	100
H250 Apply short leg plaster or fiberglass splints	100
H252 Apply standard long arm plaster or fiberglass	100
H247 Apply short arm scaphoid plaster or fiberglass splints	100
H230 Apply long arm plaster or fiberglass splints	100
H259 Prepare patients for application of casts or splints	97
I327 Remove skin staples	97
H245 Apply short arm navicular plaster or fiberglass casts	97
H232 Apply long arm sugar tong plaster or fiberglass splints	97
H260 Prepare patients for removal of casts or splints	93
H253 Apply standard short arm plaster or fiberglass casts	93
I278 Assist physician in treatment of fractures	93
H258 Prepare casting or splinting materials	93
H234 Apply long leg plaster or fiberglass casts	93
H233 Apply long leg cylinder plaster or fiberglass casts	93
H229 Apply long arm navicular plaster or fiberglass casts	90
F199 Remove sutures	90
I279 Assist physician in treatment of muscle, tendon, or tendon sheath injuries	90
I325 Prepare and drape patients for clinic procedures	90
H248 Apply short arm sugar tong plaster or fiberglass splints	90
H228 Apply long arm hanging plaster or fiberglass casts	87
J344 Don or doff sterile gowns or gloves	87
I284 Assist physician in treatment of sprains, strains, or contusions	87
I314 Change dressings	87
F150 Assist physician in applying dressings or packs	83
H235 Apply long leg plaster or fiberglass splints	83
H227 Apply long arm cylinder plaster or fiberglass casts	80
J354 Open sterile supplies, such muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	80
E145 Schedule patient appointments	80
E143 Review SF 513 (Medical Record-Consultation Sheet)	80
H231 Apply long arm scaphoid plaster or fiberglass splints	80
I288 Assist physician in treatment of wounds	80

performed listed in Table 22 and tasks that best distinguish between 5- and 7-skill level members listed in Table 23. A higher percentage of 5-skill level members perform the purely technical tasks listed in the top of the table, while a higher percentage of 7-skill level members perform the administrative and supervisory tasks listed in the bottom of the table.

AFSC 4N1X1D - Otorhinolaryngology (ENT)

DAFSC 4N131D. There are only 37 D-shred respondents in the sample, 7 of which hold the 3-skill level. Four perform the Otorhinolaryngology (ENT) Technician job and the other three are included in the OR/Nursing Care cluster of jobs (see Taable 24). DAFSC 4N131D personnel spend 41 percent of their duty time performing OR procedures, 14 percent assisting in clinics, and 13 percent performing diagnostic or screening functions (see Table 25). The time spent on these duties is reflected by representative tasks 3-skill level Otorhinolaryngology personnel perform, listed in Table 26. These tasks show these relatively junior personnel set up ORs, pass instruments, and clean up after surgery.

DAFSC 4N151D. As with "slick" and B- and C-shred personnel, 5-skill level Otorhinolaryngology personnel perform many of the same tasks as their 3-skill level counterparts. Twenty of the twenty-three journeyman level D-shred personnel perform the Otorhinolaryngology Technician job, 2 perform the Management/Supervision job, and the other is included in the OR/Nursing cluster. Five-level D-shred personnel spend similar amounts of time on duties as 3-skill level personnel, but like the other 5-skill level members mentioned, they focus a slightly higher amount of time on administrative and supervisory duties. Representative tasks listed in Table 27 show more 5-skill level members are directly involved with assisting surgeons with ENT procedures than 3-skill level members.

DAFSC 4N171D. Five of the seven DAFSC 4N171D personnel in the survey sample perform the Otorhinolaryngology Technician job and two do the Management/Supervision job. As shown in Table 25, 7-skill level members are still involved with OR and clinic activities, but spend far more time in the supervisory and administrative duties. Representative tasks performed, listed in Table 28, show these more senior personnel perform some clinic procedures by themselves, as well as performing administrative functions. The difference between 5- and 7-skill level responsibilities is shown in Table 29. Higher percentages of 5-skill level members perform the tasks listed in the top half of the table, while higher percentages of 7-skill level personnel performing the supervisory and administrative tasks listed in the bottom half.

Summary

At the time of the survey, personnel progressed typically through the career field. Three-skill level personnel performed technical tasks while gaining training and experience through OJT and upgrade training. Five-skill level personnel performed many of the same functions, but were

TABLE 22
REPRESENTATIVE TASKS PERFORMED BY
7-SKILL LEVEL ORTHOPEDIC PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=24)
A4 Determine requirements for space, personnel, equipment, or supplies	92
H263 Remove splints	88
H262 Remove casts	88
F149 Answer patient medical inquiries	88
I327 Remove skin staples	88
B27 Correct safety hazards	88
H249 Apply short leg plaster or fiberglass casts	83
H260 Prepare patients for removal of casts or splints	83
H253 Apply standard short arm plaster or fiberglass casts	83
C71 Write or review EPRs	83
H246 Apply short arm plaster or fiberglass splints	83
A16 Plan or schedule work assignments	83
H252 Apply standard long arm plaster or fiberglass casts	83
E131 Pick up daily administrative distribution	83
H247 Apply short arm scaphoid plaster or fiberglass splints	83
C46 Conduct performance feedback worksheet (PFW) evaluation sessions	83
H245 Apply short arm navicular plaster or fiberglass splints	83
H234 Apply long leg plaster or fiberglass casts	83
I288 Assist physician in treatment of wounds	83
H232 Apply long arm sugar tong plaster or fiberglass splints	83
H233 Apply long leg cylinder plaster or fiberglass casts	83
C56 Evaluate personnel for compliance with performance standards	79
E145 Schedule patient appointments	79
F164 Order X-rays	79
H258 Prepare casting or splinting materials	79
I278 Assist physician in treatment of fractures	79
H259 Prepare patients for application of casts or splints	79
H250 Apply short leg plaster or fiberglass splints	79
E125 Order medical supplies using local purchase procedures	79
I284 Assist physician in treatment of sprains, strains, or contusions	79
A13 Establish work schedules	79
F150 Assist physician in applying dressings or packs	79
I279 Assist physician in treatment of muscle, tendon, or tendon sheath injuries	79

TABLE 23

REPRESENTATIVE TASK DIFFERENCES BETWEEN 5-SKILL LEVEL
AND 7-SKILL LEVEL ORTHOPEDIC PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 4N151C (N=30)	DAFSC 4N171C (N=24)	DIFF
H257	Construct molds for braces	43	13	31
I313	Assist with application of supportive corrective devices, such as braces	77	46	31
M459	Assemble surgical tents	33	4	29
I266	Assist physician in excision and closure of skin lesions	37	8	28
I326	Remove drains	60	33	27
J350	Identify drugs or solutions prior to transfer to sterile field	60	33	27
H219	Apply balanced suspension with skin traction devices	60	33	27
H255	Apply upper limb suspension tractions	50	25	25
J374	Position or transport patients on orthopedic beds	67	42	25
J344	Don or doff sterile gowns or gloves	90	67	23
I325	Prepare and drape patients for clinic procedures	90	67	23
C72	Write recommendations for awards or decorations	20	75	-55
C71	Write or review EPRs	33	83	-50
A2	Assign sponsors for newly assigned personnel	23	71	-8
C46	Conduct performance feedback worksheet (PFW) evaluation sessions	37	83	-6
C56	Evaluate personnel for compliance with performance standards	33	79	-6
A4	Determine requirements for space, personnel, equipment, or supplies	47	92	-5
A3	Conduct staff meetings or briefings	37	75	-38
C49	Evaluate budget requirements	33	71	-38
A20	Prepare work schedules or duty rosters	50	71	-38

TABLE 24

DISTRIBUTION OF SKILL-LEVEL PERSONNEL
ACROSS CAREER LADDER JOBS
(PERCENT RESPONDING)

JOBS	DAFSC 4N131D (N=7)	DAFSC 4N151D (N=23)	DAFSC 4N171D (N=7)
I. OPERATING ROOM/NURSING CARE CLUSTER			
A. GENERAL SURGERY TECHNICIAN	0	0	0
B. SURGICAL SUITE NCOIC	0	0	0
C. SURGICAL SUITE UROLOGY TECHNICIAN	0	0	0
D. CLINIC UROLOGY TECHNICIAN	0	0	0
E. OTORHINOLARYNGOLOGY (ENT) TECHNICIAN	57	87	71
F. ORTHOPEDIC TECHNICIAN	0	0	0
II. SURGICAL SERVICES MANAGEMENT/ SUPERVISION JOB	0	4	29
III. CENTRAL STERILE SUPPLY NCOIC	0	0	0
IV. CENTRAL STERILE SUPPLY JOB	0	0	0
V. SURGICAL LOGISTICS JOB	0	0	0

TABLE 25

DISTRIBUTION OF DUTY TIME SPENT BY DAFSC GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES	DAFSC 4N131D N=7	DAFSC 4N151D N=23	DAFSC 4N171D N=7
A ORGANIZING AND PLANNING	1	3	7
B DIRECTING AND IMPLEMENTING	*	1	6
C INSPECTING AND EVALUATING	1	2	6
D TRAINING	0	*	4
E PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	15	18	19
F PERFORMING DIAGNOSTIC OR SCREENING FUNCTIONS	13	16	14
G PERFORMING BASIC NURSING DUTIES	3	2	2
H APPLYING OR REMOVING CASTS, SPLINTS, OR TRACTION DEVICES	2	1	1
I ASSISTING IN CLINIC OR OPERATING ROOM PROCEDURES	13	16	12
J PERFORMING STERILE OR NONSTERILE OPERATING ROOM PROCEDURES	40	29	20
K PROCESSING AND MAINTAINING SUPPLIES OR EQUIPMENT	11	9	7
L PERFORMING SURGICAL RESEARCH PROCEDURES	0	*	0
M PERFORMING CONTINGENCY TASKS	*	*	1

* Less than 1 percent

TABLE 26

REPRESENTATIVE TASKS PERFORMED BY 3-SKILL LEVEL
OTORHINOLARYNGOLOGY (ENT) PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=7)
E145	Schedule patient appointments	100
J378	Prepare and pass instruments or supplies to operating team members	100
I267	Assist physician in functional nasal reconstructions	100
J343	Dispose of sterile gowns or gloves	100
J338	Break down sterile fields	100
J331	Arrange sterile instruments and supplies on back tables	100
J336	Assist surgeons in applying sterile drapes	100
I305	Assist physician with septoplasties	86
F191	Prepare sterile setups for clinic procedures	86
I298	Assist physician with myringotomies	86
J351	Inspect equipment for cleanliness or operation	86
K434	Remove and dispose of sharps	86
J349	Identify drugs or solutions on sterile field	86
J379	Prepare and pass medications to surgeons during operative procedures	86
J335	Assist sterile team members with donning or removing surgical attire	86
J354	Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	86
G215	Take specimens to laboratories	86
J397	Transfer sterile items to sterile fields	86
J337	Assist surgeons in dressing surgical sites	86
J385	Pull surgical supplies or instruments	86
J350	Identify drugs or solutions prior to transfer to sterile field	86
J344	Don or doff sterile gowns or gloves	86
J328	Adjust Mayo instrument tray stands	86
J329	Adjust overhead operating lights	86
K429	Perform preliminary cleaning of soiled instruments prior to return to central supply	71
K406	Clean clinic examining and treatment rooms	71
J365	Pass specimens to circulators	71
J367	Perform hand and arm scrubs	71
J339	Clean operating room (OR) support areas	71
J381	Prepare disinfecting solutions for inanimate objects	71
I269	Assist physician in limited functional endoscopic sinus surgeries	71

TABLE 27

REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL
OTORHINOLARYNGOLOGY (ENT) PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=23)
J338	Break down sterile fields	100
J336	Assist surgeons in applying sterile drapes	100
E145	Schedule patient appointments	96
I307	Assist physician with tonsillectomy and adenoidectomy (T&A) procedures	96
I305	Assist physician with septoplasties	96
J328	Adjust Mayo instrument stands	96
J331	Arrange sterile instruments and supplies on back tables	96
I269	Assist physician in limited functional endoscopic sinus surgeries	96
J344	Don or doff sterile gowns or gloves	96
I298	Assist physician in limited functional endoscopic sinus surgeries	91
F195	Remove foreign bodies from ears using alligator forceps	91
J337	Assist surgeons in dressing surgical sites	91
J329	Adjust overhead operating lights	91
J343	Dispose of sterile gowns or gloves	91
J349	Identify drugs or solutions on sterile field	91
J347	Establish sterile fields in OR	91
E146	Schedule patients for surgery	87
K434	Remove and dispose of sharps	87
F150	Assist physician in applying dressings or packs	87
F199	Remove sutures	87
I267	Assist physician in functional nasal reconstructions	87
J335	Assist sterile team members with donning or removing surgical attire	87
J379	Prepare and pass medications to surgeons during operative procedures	87
J367	Perform hand and arm scrubs	87
I300	Assist physician with otoplasties	87
J342	Correct breaks in sterile techniques by members of operating teams	87

TABLE 28

REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL
OTORHINOLARYNGOLOGY (ENT) PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=7)
E143 Review SF 513 (Medical Record-Consultation Sheet)	100
F197 Remove foreign bodies from ears using suction method	100
F195 Remove foreign bodies from ears using alligator forceps	100
F198 Remove foreign bodies from ears using wire loops	100
F168 Perform basic tympanometry	100
F177 Perform routine ear examinations with otoscope	100
F196 Remove foreign bodies from ears using curettage method	100
E145 Schedule patient appointments	100
E131 Pick up daily administrative distribution	100
K434 Remove and dispose of sharps	100
E114 Instruct patients in filling out forms, such as patient histories or consent forms	100
J397 Transfer sterile items to sterile fields	100
F150 Assist physician in applying dressings or packs	100
F199 Remove sutures	100
E129 Perform periodic inventories or dated medications	100
A20 Prepare work schedules or duty rosters	100
J378 Prepare and pass instruments or supplies to operating team members	100
J338 Break down sterile fields	100
J384 Prepare specimens for laboratory or pathology examinations	100
J328 Adjust Mayo instrument tray stands	100
J329 Adjust overhead operating lights	100
E106 Coordinate equipment purchases with medical materiel personnel	100
A9 Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)	100
E144 Review Using Activity Issue/Turn In Lists	100
J343 Dispose of sterile gowns or gloves	100
E130 Perform periodic inventories of equipment or supplies	100
E125 Order medical supplies using local purchase procedures	100
E128 Order pharmacy supplies	100
F154 Clean mastoid cavities	100
F165 Perform air-conduction hearing tests	100

TABLE 29

REPRESENTATIVE TASK DIFFERENCES BETWEEN 5-SKILL LEVEL
AND 7-SKILL LEVEL OTORHINOLARYNGOLOGY (ENT) PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 4N151D (N=23)	DAFSC 4N171D (N=7)	DIFF
I305	Assist physician with septoplasties	96	71	24
I307	Assist physician with tonsillectomy and adenoidectomy (T&A)	96	71	24
I269	Assist physician in limited functional endoscopic sinus surgeries	96	71	24
I278	Assist physician in treatment of fractures	52	29	24
J370	Perform sterile draping of surgical equipment, such as microscopes or x-ray units	78	57	21
A9	Establish organizational policies, such as operating instructions (OIs), or standard operating procedures (SOPs)	30	100	-70
A8	Draft budget requirements	17	86	-69
B39	Interpret policies, directives, or procedures for subordinates	17	86	-69
B37	Initiate personnel action requests, such as upgrade actions or duty title changes	17	86	-69
B29	Direct maintenance of administrative files	9	71	-62
F166	Perform audiometric maskings	39	100	-61
F165	Perform air-conduction hearing tests	39	100	-61
A16	Plan or schedule work assignments	26	86	-60
A1	Assign personnel to duty positions	26	86	-60

more directly involved with patient care and surgical procedures. Seven-skill level members were less involved with direct patient care than 3- and 5-skill level members, but assumed more supervisory and administrative duties.

Some changes to the career ladder were discussed at the U&TW held 28 February through 11 March 1994 and at subsequent meetings of career field managers. These include: (1) requiring at least 6 months experience before starting upgrade training to the 5-skill level; (2) training all AFSC 4N1X1 personnel as basic surgical technicians ("slicks") and allowing lateral crosstraining into the shredout specialties only after 36 months TAFMS, promotion to senior airman, and reenlistment; and (3) separating the AFSC 4N1X1 ladder from the AFSC 4N0X1 ladder by adding SMSgt and CMSgt to the 4N1X1 ladder and eliminating the merger of the two ladders at the E-8 level. This would make enlisted manager positions available to all AFSC 4N1X1 personnel (including shreds) and allow for more equity across the career ladder, allow for greater flexibility in assignments, and create more chances for advancement.

ANALYSIS OF AFMAN 36-2108 SPECIALTY DESCRIPTIONS

Survey data were compared to the AFMAN 36-2108 *Specialty Descriptions* for Surgical Service Specialists and Technicians dated 30 April 1991. *Specialty Descriptions* reflect the work performed by 3-, 5-, and 7-skill level members of the career ladder and the shreds. Survey data show 3- and 5-skill level members perform the technical aspects of the specialty, while 7-skill level members have more administrative and supervisory responsibilities.

TRAINING ANALYSIS

Occupational survey data were used at the 1994 U&TW to develop the CFETP and review the STS and basic skill course Plans of Instruction for the Surgical Services career ladder. The most useful data under the new Year of Training initiatives are percent first-enlistment personnel performing tasks, with accompanying TE and TD ratings and ATI. When these data are reflected on the STS and POI, they can highlight areas of the training documents requiring review by training personnel.

First-Enlistment Personnel

Two-hundred seventy-two respondents indicated they were in their first enlistment (1-48 months TAFMS). Of those, 226 were "slick," six had the B-shred, 24 the C-shred, and 16 the D-shred. They perform many of the career ladder jobs identified (Figure 2). Time spent on duties for first-enlistment members is shown in Table 30, and representative tasks first-enlistment "slick"

TABLE 30
RELATIVE TIME SPENT ON DUTIES BY
FIRST-ENLISTMENT PERSONNEL

DUTIES	PERCENT TIME SPENT			
	4N1X1 (N=226)	4N1X1B (N=6)	4N1X1C (N=24)	4N1X1D (N=16)
A ORGANIZING AND PLANNING	*	0	*	1
B DIRECTING AND IMPLEMENTING	*	0	1	*
C INSPECTING AND EVALUATING	*	0	1	*
D TRAINING	*	0	*	*
E PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	3	12	13	19
F PERFORMING DIAGNOSTIC OR SCREENING ACTIVITIES	2	18	9	17
G PERFORMING BASIC NURSING ACTIVITIES	4	8	1	3
H APPLYING OR REMOVING CASTS, SPLINTS, OR TRACTION DEVICES	*	0	29	2
I ASSISTING IN CLINIC OR OPERATING ROOM ACTIVITIES	6	15	13	14
J PERFORMING STERILE OR NONSTERILE SUPPORT OF CLINIC OR OPERATING ROOM ACTIVITIES	55	36	24	31
K PROCESSING OR MAINTAINING SUPPLIES OR EQUIPMENT	25	9	7	10
L PERFORMING SURGICAL RESEARCH ACTIVITIES	*	0	*	0
M PERFORMING CONTINGENCY ACTIVITIES	2	*	*	*

* Denotes less than 1 percent

and shred members perform are listed in Tables 31-34. Most deal with OR functions and assisting physicians with various procedures. Equipment items used by more than 50 percent of first-enlistment "slick" and shred members are shown in Tables 35-38. Most items used by members of the shred deal with the particular specialty.

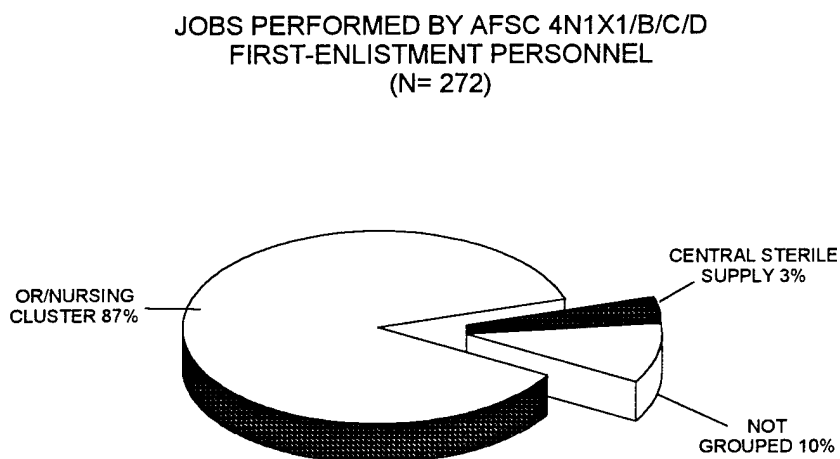


FIGURE 2

TE and TD Data

TE and TD data are secondary factors that can assist technical school personnel in deciding which tasks should be emphasized in entry-level training. These ratings, based on the judgments of senior career ladder NCOs working in the field, are collected to provide training personnel with a rank ordering of tasks considered important for formal training, along with a measure of the difficulty of the tasks. When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors and performed by moderate to high percentages of respondents should be taught in resident training. Tasks with high task factor ratings, but performed by low percentages of respondents, may be more appropriate for OJT. Tasks with low task factor ratings may be best omitted from training for first-enlistment personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

TABLE 31
REPRESENTATIVE TASKS PERFORMED
BY FIRST-ENLISTMENT "SLICK" PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=226)
J338 Break down sterile fields	90
J336 Assist surgeons in applying sterile drapes	90
J344 Don or doff sterile gowns or gloves	89
J378 Prepare and pass instruments or supplies to operating team members	89
J343 Dispose of sterile gowns or gloves	89
J335 Assist sterile team members with donning or removing surgical attire	88
J349 Identify drugs or solutions on sterile field	88
J396 Transfer patients to and from OR tables	88
J385 Pull surgical supplies or instruments	88
J328 Adjust Mayo instrument tray stands	88
J394 Stock OR with sterile or nonsterile supplies	88
J337 Assist surgeons in dressing surgical sites	88
J367 Perform hand and arm scrubs	87
K399 Assemble instrument sets	86
J350 Identify drugs or solutions prior to transfer to sterile field	86
J365 Pass specimens to circulators	86
J331 Arrange sterile instruments and supplies on back tables	85
J329 Adjust overhead operating lights	85
J347 Establish sterile fields in OR	85
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	84
J379 Prepare and pass medications to surgeons during operative procedures	84
J351 Inspect equipment for cleanliness or operation	84
J334 Assist professional staff in performing counts of sponges, instruments, needles, or related supplies	83
K434 Remove and dispose of sharps	83
J346 Establish patient identity	83
J342 Correct breaks in sterile techniques by members of operating teams	83
J397 Transfer sterile items to sterile fields	82
K400 Assemble OR equipment or instruments after cleaning	82
K424 Operate sterilizers	82
K438 Store sterilized or nonsterilized items	81
J339 Clean operating room (OR) support areas	81

TABLE 32

REPRESENTATIVE TASKS PERFORMED
BY FIRST-ENLISTMENT UROLOGY PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=6)
I325	Prepare and drape patients for clinic procedures	100
F150	Assist physician in applying dressings or packs	100
J344	Don or doff sterile gowns or gloves	100
J347	Establish sterile fields in OR	100
J343	Dispose of sterile gowns or gloves	100
J345	Don or doff surgical attire, other than sterile gown or gloves	100
F149	Answer patient medical inquiries	100
J371	Perform surgical skin cleansings	100
J329	Adjust overhead operating lights	100
F152	Brief physicians on patient follow-ups	100
J342	Correct breaks in sterile techniques by members of operating teams	100
J338	Break down sterile fields	83
I294	Assist physicians with cystoscopies	83
J335	Assist sterile team members with donning or removing surgical attire	83
J349	Identify drugs or solutions on sterile field	83
I315	Change solutions during clinic procedures	83
F159	Instill xylocaine jellies intrauretherally	83
E103	Brief patients on clinical or operating room policies	83
G205	Catheterize patients	83
I302	Assist physician with prostrate biopsies	83
I311	Assist physician with urodynamics	83
J354	Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	83
J331	Arrange sterile instruments and supplies on back tables	83
F191	Prepare sterile setups for clinic procedures	83
I308	Assist physician with transurethral resections	83
J330	Apply electrosurgical devices to patients	83
J377	Position sterile tables or related equipment, such as monitors, microscopes, or lasers	83
F189	Prepare patients for x-rays	83
J356	Operate electrosurgical devices	83

TABLE 33
REPRESENTATIVE TASKS PERFORMED
BY FIRST-ENLISTMENT ORTHOPEDIC
PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=24)
H263 Remove splints	100
H262 Remove casts	100
H260 Prepare patients for removal of casts or splints	100
H246 Apply short arm plaster or fiberglass splints	100
H247 Apply short arm scaphoid plaster or fiberglass splints	100
H249 Apply short leg plaster or fiberglass casts	96
H259 Prepare patients for application of casts or splints	96
H252 Apply standard long arm plaster or fiberglass casts	96
I327 Remove skin staples	96
F199 Remove sutures	96
I284 Assist physician in treatment of sprains, strains, or contusions	96
I278 Assist physician in treatment of fractures	92
H250 Apply short leg plaster or fiberglass splints	92
H230 Apply long arm plaster or fiberglass splints	92
I314 Change dressings	92
H245 Apply short arm navicular plaster or fiberglass casts	92
H233 Apply long leg cylinder plaster or fiberglass casts	92
H232 Apply long arm sugar tong plaster or fiberglass splints	92
H253 Apply standard short arm plaster or fiberglass casts	88
H258 Prepare casting or splinting materials	88
H231 Apply long arm scaphoid plaster or fiberglass splints	88
H234 Apply long leg plaster or fiberglass casts	88
J336 Assist surgeons in applying sterile drapes	88
H227 Apply long arm cylinder plaster or fiberglass casts	83
E145 Schedule patient appointments	83
F150 Assist physician in applying dressings or packs	83
I319 Instruct patients in use of orthopedic appliances	83
H229 Apply long arm navicular plaster or fiberglass casts	83
H248 Apply short arm sugar tong plaster or fiberglass splints	83
J344 Don or doff sterile gowns or gloves	83
H235 Apply long leg plaster or fiberglass splints	83
I288 Assist physician in treatment of wounds	83
J337 Assist surgeons in dressing surgical sites	83
J367 Perform hand and arm scrubs	79

TABLE 34
REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
OTORHINOLARYNGOLOGY (ENT) PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=16)
E145 Schedule patient appointments	100
I305 Assist physician with septoplasties	100
J338 Break down sterile fields	100
J336 Assist surgeons in applying sterile drapes	100
E146 Schedule patients for surgery	94
J331 Arrange sterile instrument and supplies on back tables	94
J378 Prepare and pass instruments or supplies to operating team members	94
J343 Dispose of sterile gowns or gloves	94
I269 Assist physician in limited functional endoscopic sinus surgeries	94
J328 Adjust Mayo instrument tray stands	94
J344 Don or doff sterile gowns or gloves	94
J329 Adjust overhead operating lights	94
I298 Assist physician with myringotomies	88
I267 Assist physician in functional nasal reconstructions	88
K434 Remove and dispose of sharps	88
I307 Assist physician with tonsillectomy and adenoidectomy (T&A) procedures	88
F150 Assist physician in applying dressings or packs	88
J337 Assist surgeons in dressing surgical sites	88
J349 Identify drugs or solutions on sterile field	88
J384 Prepare specimens for laboratory or pathology examinations	81
F199 Remove sutures	81
K406 Clean clinic examining and treatment rooms	81
E114 Instruct patients in filling out forms, such as patient histories or consent forms	81
J335 Assist sterile team members with donning or removing surgical attire	81
F153 Chaperone during examinations	81
J367 Perform hand and arm scrubs	81
J397 Transfer sterile items to sterile fields	81
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	81
J379 Prepare and pass medications to surgeons during operative procedures	81

TABLE 35

EQUIPMENT USED BY MORE THAN 50 PERCENT
FIRST-JOB OR FIRST-ENLISTMENT "SLICK" PERSONNEL

EQUIPMENT	1ST JOB (N=699)	1ST ENL (N=112)
Operating Room Tables and Attachments	87	92
Sterilizers, Steam	86	88
Patient Rollers	83	85
Lead Vests	78	75
High Speed Pressure Instrument Sterilizers (Flash)	77	81
Laprosopes and Accessories	76	83
Suction Units, Portable	76	78
Fiber Optic Light Sources	71	78
Sterilizers, Washer	71	78
Electrosurgical Units	70	74
Ultrasonic Instrument Cleaners	70	72
Hand Tables	69	73
Sterilizers, Prevacuum High Temperature	68	73
Surgical Drills, Electric	68	70
Solution Warming Cabinets	67	75
Specialized Retractors	66	70
Suction Units, Stationary	66	69
Arthroscopes and Attachments	65	69
Sterilizers, Gravity Displacement	63	68
Sigmoidoscopes and Accessories	62	69
Surgical Drills, Gas Powered	62	65
Orthopedic Fracture Fixation Instruments and Accessories	60	64
Cast Carts	59	63
Surgical Microscopes, Portable	58	68
Surgical Saws, Gas Powered	56	60
Endoscopes, Flexible Fiber Optic	56	59
Tourniquet Devices, Electric	55	58
Blood Pressure Monitoring Equipment	54	65
Surgical Drills, Portable	54	56
Tourniquet Devices, Pneumatic	53	60
Surgical Saws, Electric	53	59
Orthopedic Fracture Tables and Accessories	51	55
Heat Sealers	48	56
Pulse Oxymeters	47	63
Colonoscopes and Accessories	46	52
Defibrillators	45	56
Sterilizers, Ethylene Oxide Aeration	44	52
Dermatomes, Powered	43	52

TABLE 36

EQUIPMENT USED BY MORE THAN 50 PERCENT
FIRST-JOB OR FIRST-ENLISTMENT B-SHRED PERSONNEL

EQUIPMENT	1ST JOB (N=3)	1ST ENL (N=6)
Lead Vests	100	67
Patient rollers	100	100
Suction Units, Portable	100	83
Cystoscopes and Accessories	67	83
Cystoscopy Tables, Stationary	67	67
Electrosurgical Units	67	83
High Speed Pressure Instrument Sterilizers (Flash)	67	67
Lithotripters, Hydraulic	67	67
Lithotripters, Ultrasonic	67	67
Nephroscopes and Accessories	67	67
Resectoscopes and Accessories	67	83
Solution Warming Cabinets	67	83
Suction Units, Stationary	67	67
Uretero-Renoscopes and Accessories	67	50
Urodynamics Laboratories	67	67
X-Ray Developers	67	67
X-Ray Fluoroscopy Units, Stationary	67	67
X-Ray Machines, Stationary	67	67
Blood Pressure Monitoring Equipment	33	50
Centrifuges	33	50
Cystoscopy Tables, Portable	33	67
Diagnostic Ultrasound Units	33	67
Endoscopes, Flexible Fiber Optic	33	50
Endoscopes, Rigid	33	50
Fiber Optic Light Sources	33	67
Percutaneous Nephrostomy Sets	33	50
Pulse Oxymeters	33	50
Table Microscopes	33	50

TABLE 37

EQUIPMENT USED BY MORE THAN 50 PERCENT
FIRST-JOB OR FIRST-ENLISTMENT C-SHRED PERSONNEL

EQUIPMENT	1ST JOB (N=19)	1ST ENL (N=24)
Cast Carts	100	100
Cast Saws	100	100
Orthopedic Fracture Fixation Instruments and Accessories	89	83
Orthopedic Fracture Tables and Accessories	84	79
Arthroscopes and Accessories	74	71
Fiber Optic Light Sources	63	50
Lead Vests	63	54
Surgical Drills, Electric	63	54
Blood Pressure Monitoring Equipment	58	50
Suction Units, Portable	58	45
Hand Tables	53	46
Patient Rollers	53	42
Specialized Retractors	53	46
Surgical Saws, Electric	53	46
X-Ray Machines, Portable	53	42
Traction Devices	47	50

TABLE 38

EQUIPMENT USED BY MORE THAN 50 PERCENT
FIRST-JOB OR FIRST-ENLISTMENT D-SHRED PERSONNEL

EQUIPMENT	1ST JOB (N=8)	1ST ENL (N=16)
Endoscopes, Flexible Fiber Optic	88	81
Fiber Optic Light Sources	88	75
Endoscopes, Rigid	75	75
Electrosurgical Units	63	50
Nerve Stimulators (Hilger)	63	69
Pulse Oxymeters	63	63
Blood Pressure Monitoring Equipment	50	50
Bronchoscope and Accessories	50	44
Surgical Drills, Electric	50	44
Surgical Microscopes, Portable	50	63
Tympanometers	50	56

To assist technical school personnel, the Air Force Occupational Measurement Squadron developed a computer program that incorporates TE and TD ratings and percentage of first-enlistment personnel performing each task to produce an Automated Training Indicator (ATI) for each task. These indicators correspond to training decisions defined in the Training Decision Logic Table found in Attachment 1, AETCR 52-22, and allow course personnel to quickly focus their attention on those tasks that are most likely to qualify for entry-level course consideration.

Tasks having the highest TE ratings are listed in Table 39, with accompanying first-job and first-enlistment members performing data. While these tasks are performed by high percentages of first-job and first-enlistment members, they have relatively low TD ratings and are primarily related to common operating room or clinic functions.

Tasks with the highest TD ratings are listed in Table 40, with accompanying first-job, first-enlistment, 5- and 7-skill level members performing figures. These tasks deal primarily with surgical specialty tests and procedures, have very low TE, and for the most part are performed by very low percentages of respondents, suggesting they should be reserved for more experienced personnel than those in their first-enlistment.

Various lists of tasks, accompanied by TE and TD ratings, and where appropriate, ATI information, are contained in the TRAINING EXTRACT package and should be reviewed in detail by technical school personnel.

Training Documents

To assist specifically in evaluation of the Specialty Training Standard (STS) and the Plan of Instruction (POI), tasks were matched to appropriate sections and subsections of the STS and the POI for Course **J3AQR90232-001** dated March 1992. Listings of the STS and POI were produced displaying the percent members performing, TE and TD ratings for each matched task, and ATI. Criteria set forth in AETCR 52-22, Attachment 1, were used to review the relevance of each STS entry and POI learning objective. Any STS entry with matched tasks performed by more than 20 percent of first-job, first-enlistment, or 5- or 7-skill level members is considered to be supported by survey data and should be retained in the document. Any POI learning objective with tasks matched performed by more than 30 percent of first-job or first-enlistment members is considered supported. The criteria were used to review the STS and POIs for the Surgical Services career ladder.

NOTE: The Percent Members Performing data on tasks in Tables 39 and 40 are for the total Surgical Services career ladder. Data for specialty tasks may be slightly higher for members within each shred. Task factor data, however, are representative of the total career ladder.

TABLE 39
TASKS WITH HIGHEST TRAINING EMPHASIS (TE) RATINGS

TASKS		TNG EMP	PERCENT MEMBERS PERFORMING		TASK DIFF
			1ST JOB	1ST ENL	
J367	Perform hand and arm scrubs	7.10	90	87	3.85
J349	Identify drugs or solutions on sterile field	7.04	91	88	4.25
J397	Transfer sterile items to sterile fields	7.02	83	82	4.44
J378	Prepare and pass instruments or supplies to operating team members	6.96	92	89	5.15
J350	Identify drugs or solutions prior to transfer to sterile field	6.92	89	86	4.07
J331	Arrange sterile instruments and supplies on back tables	6.83	87	85	4.77
J336	Assist surgeons in applying sterile drapes	6.79	91	90	4.11
J356	Operate electrosurgical devices	6.75	76	68	4.33
J379	Prepare and pass medications to surgeons during operative procedures	6.75	85	84	4.87
J347	Establish sterile fields in OR	6.73	89	85	4.35
J337	Assist surgeons in dressing surgical sites	6.69	89	88	4.04
J354	Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packed sterile supplies	6.67	86	84	4.27
J396	Transfer patients to and from OR tables	6.58	92	88	4.13
J335	Assist sterile team members with donning or removing surgical attire	6.58	91	88	3.84
J376	Position patients on operating tables	6.52	81	76	4.73
J342	Correct breaks in sterile techniques by members of operating teams	6.46	90	83	4.58
J334	Assist professional staff in performing counts of sponges, instruments, needles, or related supplies	6.46	85	83	4.42
K436	Review expiration dates on sterile instruments, supplies, or drugs	6.42	79	78	3.32
K434	Remove and dispose of sharps	6.35	82	83	3.55
J344	Don or doff sterile gowns or gloves	6.35	90	89	3.75
J351	Inspect equipment for cleanliness or operation	6.33	89	84	4.09
J343	Dispose of sterile gowns or gloves	6.21	91	90	3.61
J338	Break down sterile fields	6.21	91	90	3.61
J370	Perform sterile draping of surgical equipment, such as microscopes or x-ray units	6.21	80	77	4.82
K415	Dispose of biocontaminated items	6.19	68	66	3.86
J363	Operate surgical tables	6.12	76	69	4.38
K416	Dispose of blood or blood by-products	6.06	59	59	3.82
J371	Perform surgical skin cleanings	6.02	70	62	4.82
J330	Apply electrosurgical devices to patients	6.02	78	76	3.60
J346	Establish patient identity	5.98	83	83	3.26
K429	Perform preliminary cleaning of soiled instruments prior to return to central supply	5.90	80	75	3.81

TE MEAN = 2.37 S.D. = 1.86 (HIGH TE = 4.23)
TD MEAN = 5.00 S.D. = 1.00

TABLE 40

TASKS WITH HIGHEST TASK DIFFICULTY (TD) RATINGS

TASKS	TASK DIFF	PERCENT MEMBERS PERFORMING						TNG EMP
		1ST		5-		7-		
		JOB	ENL	LVL	LVL	LVL	LVL	
L444	7.29	1	1	1	1	1		.29
L445	7.27	0	0	1	1	1		.29
J357	7.21	5	4	2	4	4		.94
H237	7.07	0	1	3	1	1		.71
L443	7.07	0	0	1	1	1		.38
D100	7.06	1	1	2	1	1		.25
C73	6.97	1	2	10	3	3		.21
F171	6.95	0	1	2	1	1		.60
F167	6.94	0	1	2	2	2		.65
L451	6.91	0	0	1	1	1		.27
F170	6.90	0	1	3	1	1		.44
H224	6.89	0	1	1	1	1		.79
L448	6.88	11	1	3	1	1		.27
H244	6.87	0	1	1	1	1		.73
L446	6.81	0	0	1	1	1		.29
L447	6.80	0	0	1	1	1		.38
L449	6.80	1	1	1	1	1		.40
F173	6.80	0	0	1	1	1		.60
D101	6.79	2	2	4	2	2		.35
D 83	6.72	3	3	5	4	4		.19
A9	6.67	6	5	25	5	5		1.04

TD MEAN = 5.00

S.D. = 1.00

TE MEAN = 2.37

S.D. = 1.86 (High TE = 4.23)

TABLE 40 (CONTINUED)

TASKS WITH HIGHEST TASK DIFFICULTY (TD) RATINGS

TASKS	TASK DIFF	PERCENT MEMBERS PERFORMING						TNG EMP
		1ST		5- LVL		7- LVL		
		JOB	ENL					
L450	6.66	2	1	1	2			.40
C72	6.61	1	1	24	3			.75
A11	6.61	2	3	8	3			.48
F176	6.59	0	0	2	1			.90
H251	6.57	1	2	6	2			1.04
C70	6.55	1	1	7	1			.56
F185	6.52	0	1	2	1			.83
F179	6.52	0	1	1	1			.60
A8	6.50	4	4	24	5			.92
C49	6.49	2	2	23	4			.65
H226	6.48	1	2	9	3			1.21
H220	6.48	1	2	86	2			1.15

TD MEAN = 5.00

S.D. = 1.00

TE MEAN = 2.37

S.D. = 1.86 (High TE = 4.23)

Specialty Training Standard (STS)

The Surgical Services STS, dated April 1994, was reviewed using survey data. Paragraphs 1 through 8 and 17 cover the general topics of career ladder progression, medical readiness, surgical services management, training, safety, professional and patient relationships, logistics, publications, and anatomy and physiology; these sections were not reviewed. Paragraphs 9 through 19 deal with OR procedures and general nursing care and were reviewed using data from the entire career ladder. The Urology, Orthopedic, and ENT specialty areas are included in paragraphs 20 through 22 and were reviewed using percent members of the respective specialties.

Using the criterion of 20 percent of first-job, first-enlistment, 5- or 7-skill level members performing matched tasks, there were two entries unsupported by "slick" personnel data dealing with using lasers and pediatric surgery (see Table 41). There were three unsupported entries in the Orthopedic section of the STS covering assisting with the treatment of three conditions (see Table 42). Two entries in the ENT portion of the STS were unsupported by D-shred data. They deal with administering the ice water caloric and the Stengers tests (see Table 43). School personnel should review these unsupported entries to determine if they should remain in the STS.

Tasks not matched to any entry of the STS are listed at the end of the STS printout, and a sample is presented in Table 44. These were reviewed to determine if they dealt with a particular function or job. No particular trend was noted. Training personnel and SMEs should review the unreferenced tasks to determine if they suggest a topic that should be included in the STS.

Plan of Instruction (POI)

Inventory tasks were also matched to the J3AQ4N131 POI, dated 9 April 1993. A computer product was generated displaying learning objective and percent first-job (1-24 months TAFMS) and first-enlistment (1-48 months TAFMS) personnel performing matched tasks, and TE and TD ratings. These data were used to review the POI following the guidance of Attachment 1, ATCR 52-22, dated 17 February 1989. Learning objectives with matched tasks performed by 30 percent or more members are considered to be supported. Those not supported should be reviewed to determine if they are justified for retention in the basic course. Using these criteria, all learning objectives in both the resident and Phase II courses meet the requirements and are considered to be supported by survey data.

JOB SATISFACTION ANALYSIS

Respondents were asked to indicate how interested they were in their job, if they felt their talents and training were being used, if they were satisfied with the sense of accomplishment from their jobs, and what their reenlistment intentions were. Satisfaction indicators for TAFMS groups

TABLE 41

"SLICK" STS ELEMENTS NOT SUPPORTED BY SURVEY DATA
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

STS ENTRIES	TNG EMP	IST ENL (N=226)	DAFSC 4N151 (N=250)	DAFSC 4N171 (N=112)	TASK DIFF
5d (10) . Lasers					
J358 Operate laser equipment	2.15	15	13	13	6.35
18. SURGICAL SPECIALTIES					
18a (12). Pediatric surgery					
I275 Assist physician in treatment of congenital anomalies	2.06	7	8	7	5.47

(High TE >= 4.23)

TE MEAN = 2.37 S.D. = 1.86

TD MEAN = 5.00 S.D. = 1.00

TABLE 42

UROLOGY STS ELEMENTS NOT SUPPORTED BY SURVEY DATA
(LESS THAN 20 PERCENT C-SHRED MEMBERS PERFORMING)

STS ENTRIES	TNG		IST		DAFSC		TASK	
	EMP		ENL		4N151C		4N171C	
			(N=24)		(N=30)		(N=24)	
21d (1) (e) Poliomyelitis								
1282 Assist physician in treatment of poliomyelitis	1.02		0		10		0	5.56
21d (1) (g) 4. Nervous system								
1274 Assist physician in treatment of central nervous system injuries	1.71		0		10		8	5.94
21d (2) (a). Arthrodesis								
1309 Assist physician with treatments requiring arthrodesis	1.31		8		10		8	5.65

TE MEAN = 2.37 S.D. = 1.86 (High TE >= 4.23)

TD MEAN = 5.00 S.D. = 1.00

TABLE 43

ENT STS ENTRIES NOT SUPPORTED BY SURVEY DATA
(LESS THAN 20 PERCENT D-SHRED MEMBERS PERFORMING)

STS ENTRIES	TNG	1ST	DAFSC	DAFSC	TASK
	EMP	ENL (N=16)	4N151D (N=23)	4N171D (N=7)	
22d (2) Calorics					
F173	.60	13	17	14	6.80
22l (5). Stengers					
F183	.71	19	9	14	6.18

TE MEAN = 2.37 S.D. = 1.86 (High TE >= 4.23)

TD MEAN = 5.00 S.D. = 1.00

TABLE 44

TECHNICAL TASKS PERFORMED BY 20 PERCENT
OR MORE FIRST-ENLISTMENT PERSONNEL
BUT NOT MATCHED TO THE STS

TASKS	PERCENT MEMBERS PERFORMING
J344 Don or doff sterile gowns or gloves	89
J345 Don or doff surgical attire, other than sterile gown or gloves	78
J394 Stock OR with sterile or nonsterile supplies	78
J346 Establish patient identity	77
J370 Perform draping of surgical equipment, such as microscopes or x-ray units	74
J330 Apply electrosurgical devices to patients	73
K400 Assemble OR equipment or instruments after cleaning	72
J383 Prepare soaking solutions, such as Cidex	72
K416 Dispose of blood and blood by-products	54
K432 Prepare disinfecting solutions for skin	40
I290 Assist physician with biopsies of skin or mucosal lesions	37
J361 Operate patient monitoring equipment	33
I325 Prepare and drape patient for clinic procedures	32
K405 Change tubing or face masks on anesthesia machines	27
I294 Assist physician with cystoscopies	24
F151 Assist physician with noninvasive physical examinations	21

in the present study were compared to those reported by respondents in other medical career ladders surveyed in 1993, to those reported in the last OSR, and across the Operating Room/Nursing Care cluster and the four independent jobs identified in the Job Structure Analysis.

Table 45 shows the comparison of current job satisfaction indicators for AFSC 4N1X1/B/C/D personnel to those of the AFSC 4J0X2 (Physical Therapy) and 4P0X1 (Pharmacy) career ladder surveyed in 1993. Overall, members of AFSC 4N1X1/B/C/D are more satisfied with their jobs than are those of the related medical career fields. Members in the current study feel their talents and training are being used as well or better than members in the comparative sample. Members in the Surgical Services career field seem satisfied with their job, their sense of accomplishment is high, and about the same number plan to reenlist as do members of the other medical career ladders.

As shown in Table 46, job satisfaction indicators for the current survey are slightly higher than those of the previous study published in 1987. In the current survey, expressed job interest and perceived use of talents and training are slightly higher. Sense of accomplishment data were not available for the last report. Reenlistment intentions have remained about the same.

Table 47 shows reported job satisfaction by the specialty jobs. Overall, members of the Surgical Services career field are satisfied with their work. Personnel performing the Clinic Urology job, however, do not find their job interesting, but feel their talents and training are well used. The seven respondents performing the CSS NCOIC job and the 15 performing the Logistics job feel their training is not well used. This may be because these are support functions removed from actual patient care. Personnel performing the CSS and CSS NCOIC jobs have the lowest sense of accomplishment in the career ladder. Overall, reenlistment intentions are fair, while a higher percentage of the more senior personnel in supervisory positions plan to retire.

IMPLICATIONS

The work of the career ladder is described by a cluster of five surgical suite jobs (the Operating Room/Nursing Care cluster, which includes the General Surgery, Urology, Orthopedic, and Otorhinolaryngology (ENT) specialties), and the four support jobs (Surgical Services Management, Central Sterile Supply (CSS), CSS NCOIC, and Surgical Logistics).

Personnel in this career field progress typically through the career field. Three-skill level members perform mostly technical tasks, such as setting up ORs and passing instruments. Five-skill level personnel are more directly involved with assisting with surgical procedures, while 7-skill level members are involved with supervision and administrative duties.

TABLE 45

COMPARISON OF JOB SATISFACTION DATA FOR AFSC 4N1X1
TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE
(PERCENT MEMBERS PERFORMING)

	1-48 MOS TAFMS			49-96 MOS TAFMS			97+ MOS TAFMS		
	1993			1993			1993		
	AFSC 4N1X1 (N=272)	COMP SAMPLE (N=341)		AFSC 4N1X1 (N=113)	COMP SAMPLE (N=231)		AFSC 4N1X1 (N=314)	COMP SAMPLE (N=387)	
<u>EXPRESSED JOB INTEREST:</u>									
INTERESTING	90	78		88	81		88	82	
SO-SO	9	12		9	14		7	11	
DULL	1	9		3	5		5	7	
<u>TALENTS USED:</u>									
FAIRLY WELL TO PERFECTLY	94	83		89	83		89	83	
LITTLE OR NOT AT ALL	6	17		10	10		11	11	
<u>TRAINING USED:</u>									
FAIRLY WELL TO PERFECTLY	93	89		90	90		89	89	
LITTLE OR NOT AT ALL	7	11		10	10		11	11	
<u>SENSE OF ACCOMPLISHMENT:</u>									
SATISFIED	82	72		82	72		79	74	
NEUTRAL	11	9		5	12		8	9	
DISSATISFIED	7	18		11	16		13	17	
<u>REENLISTMENT INTENTIONS:</u>									
WILL REENLIST	51	52		66	67		71	78	
WILL NOT REENLIST	49	48		34	32		7	8	
WILL RETIRE	0	0		0	*		22	14	

* Indicates less than 1 percent

TABLE 46

COMPARISON OF JOB SATISFACTION DATA FOR AFSC 4N1X1
TAFMS GROUPS IN CURRENT AND PREVIOUS STUDY
(PERCENT MEMBERS PERFORMING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1994 (N=272)	1987 (N=475)	1994 (N=113)	1987 (N=100)	1994 (N=314)	1987 (N=194)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	90	88	88	79	88	77
SO-SO	9	7	9	13	8	15
DULL	1	3	3	5	5	7
<u>TALENTS USED:</u>						
FAIRLY WELL TO PERFECTLY	94	89	89	88	89	83
LITTLE OR NOT AT ALL	6	10	11	12	11	17
<u>TRAINING USED:</u>						
FAIRLY WELL TO PERFECTLY	93	93	90	83	89	86
LITTLE OR NOT AT ALL	7	6	10	16	11	13
<u>SENSE OF ACCOMPLISHMENT:</u>						
SATISFIED	82	-	72	-	79	-
NEUTRAL	11	-	12	-	8	-
DISSATISFIED	7	-	16	-	13	-
<u>REENLISTMENT INTENTIONS:</u>						
WILL REENLIST	51	59	66	66	71	74
WILL NOT REENLIST	49	38	33	33	7	8
WILL RETIRE	0	*	*	*	22	17

- No data available

* Indicates less than 1 percent

TABLE 47

JOBS SATISFACTION DATA FOR CLUSTER AND JOBS
(PERCENT MEMBERS RESPONDING)

	O.R./NURSING CARE CLUSTER (N=595)	GENERAL SURGERY TECH (N=352)	SURGICAL SUITE NCOIC (N=177)	SURGICAL SUITE UROLOGY (N=18)	CLINIC UROLOGY TECH (N=5)
<u>EXPRESSED JOB INTEREST:</u>					
INTERESTING	90	91	92	94	40
SO-SO	7	6	5	6	60
DULL	3	2	3	0	0
<u>TALENTS USED:</u>					
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	92 8	93 7	88 12	100 0	100 0
<u>TRAINING USED:</u>					
FAIRLY WELL TO PERFECTLY LITTLE TO NOT AT ALL	93 7	94 6	95 5	100 0	80 20
<u>SENSE OF ACCOMPLISHMENT:</u>					
SATISFIED	82	82	84	83	100
NEUTRAL	9	9	7	11	0
DISSATISFIED	9	9	9	6	0
<u>REENLISTMENT INTENTIONS:</u>					
WILL REENLIST	64	64	67	72	60
WILL NOT REENLIST	28	33	10	11	20
WILL RETIRE	8	3	23	17	20

TABLE 47 (CONTINUED)

JOB SATISFACTION DATA FOR CLUSTER AND JOBS
(PERCENT MEMBERS RESPONDING)

	ENT TECH (N=31)	ORTHOPEDIC TECH (N=66)	MGMTN SUPV JOB (N=32)	CSS NCOIC (N=7)	CSS JOB (N=14)	SURGICAL LOGISTICS JOB (N=15)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	81	89	94	71	71	80
SO-SO	13	8	3	15	22	13
DULL	6	3	3	14	7	7
<u>TALENTS USED:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	83 17	95 5	91 9	71 29	93 7	87 13
<u>TRAINING USED:</u>						
FAIRLY WELL TO PERFECTLY LITTLE TO NOT AT ALL	77 23	92 8	81 19	71 29	93 7	67 33
<u>SENSE OF ACCOMPLISHMENT:</u>						
SATISFIED	72	89	78	43	64	87
NEUTRAL	11	3	3	28	21	0
DISSATISFIED	17	8	19	29	14	13
<u>REENLISTMENT INTENTIONS:</u>						
WILL REENLIST	68	59	44	57	50	67
WILL NOT REENLIST	29	30	15	14	43	7
WILL RETIRE	3	11	41	29	7	20

The STS is mostly supported by OSR data. There are unsupported items in the general surgery section and in each of the surgical specialties, except for paragraph 20, dealing with Urology functions. The POI for the resident course and the Phase II clinical course are well supported by survey data. Technical School personnel should review the STS and the unsupported items to determine if they merit removal from the 3-level training course. The development of an advanced Urology training course could also benefit from a review of survey data on the Urology specialty.

Job satisfaction for the career ladder is generally positive. Most members performing the specialty jobs and in the TAFMS groups find their work interesting, except for those performing more support functions of CSS and Logistics.

Survey data were made available at the 28 February through 11 March 1994 U&TW where the CFETP for the career ladder was developed and the STS and POIs for the career ladder were reviewed. Survey data were used to validate decisions made at this meeting.

APPENDIX A
JOB DESCRIPTIONS

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE A1
GENERAL SURGERY TECHNICIAN
(STG079)

TASKS	PERCENT MEMBERS PERFORMING
J338 Break down sterile fields	99
J336 Assist surgeons in applying sterile drapes	99
J343 Dispose of sterile gowns and gloves	99
J344 Don or doff sterile gowns or gloves	99
J378 Prepare and pass instruments or supplies to operating team members	98
J335 Assist sterile team members with donning or removing surgical attire	98
J337 Assist surgeons in dressing surgical sites	98
J385 Pull surgical supplies or instruments	97
J349 Identify drugs or solutions on sterile field	97
J328 Adjust Mayo instrument tray stands	97
J329 Adjust overhead operating lights	97
J396 Transfer patients to and from OR tables	97
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	96
J367 Perform hand and arm scrub	96
J347 Establish sterile fields in OR	96
J365 Pass specimens to circulators	96
J351 Inspect equipment for cleanliness or operation	96
J331 Arrange sterile instruments and supplies on back tables	95
J394 Stock OR with sterile or nonsterile supplies	94
J350 Identify drugs or solutions prior to transfer to sterile field	94
J334 Assist professional staff in performing counts of sponges, instruments, drugs, needles, or related supplies	93
J379 Prepare and pass medications to surgeons during operative procedures	93
J346 Establish patient identity	93
J397 Transfer sterile items to sterile fields	92
K434 Remove and dispose of sharps	92
J345 Don or doff surgical attire, other than sterile gown or gloves	89
K399 Assemble instrument sets	89
K400 Assemble OR equipment or instruments after cleaning	89
K424 Operate sterilizers	88
K438 Store sterilized or nonsterilized items	88
J339 Clean operating room (OR) support areas	88
J390 Retrieve equipment or supplies for surgery	87
J362 Operate skin stapling devices	87
J330 Apply electrosurgical devices to patients	87

TABLE A2
SURGICAL SUITE NCOIC
(STG098)

TASKS	PERCENT MEMBERS PERFORMING
J344 Don or doff sterile gowns or gloves	100
J343 Dispose of sterile gowns or gloves	100
J350 Identify drugs or solutions prior to transfer to sterile field	100
J351 Inspect equipment for cleanliness or operation	99
J367 Perform hand and arm scrub	99
J385 Pull surgical supplies or instruments	99
J352 Inventory surgical instruments or equipment, other than field supplies or field equipment	99
J347 Establish sterile fields in OR	99
J349 Identify drugs or solutions on sterile field	99
J341 Consult schedule of operations	97
J331 Arrange sterile instruments and supplies on back tables	97
J338 Break down sterile fields	97
J335 Assist sterile team members with donning or removing surgical attire	97
J336 Assist surgeons in applying sterile drapes	97
J337 Assist surgeons in dressing surgical sites	97
J329 Adjust overhead operating lights	97
J342 Correct breaks in sterile techniques by members of operating teams	97
J328 Adjust Mayo instrument tray stands	97
J339 Clean operating room (OR) support areas	97
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	96
J345 Don or doff surgical attire, other than sterile gown or gloves	96
J334 Assist professional staff in performing counts of sponges, instruments, needles, or related supplies	96
J330 Apply electrosurgical devices to patients	96
J365 Pass specimens to circulators	96
J346 Establish patient identity	96
J379 Prepare and pass medications to surgeons during operative procedures	96
K424 Operate sterilizers	94
J364 Operate video equipment	94
K437 Rotate dated supplies	92
K438 Store sterilized or nonsterilized items	92
J397 Transfer sterile items to sterile fields	91
K436 Review expiration dates on sterile instruments, supplies, or drugs	91
J390 Retrieve equipment or supplies for surgery	91

TABLE A3
SURGICAL SUITE
UROLOGY TECHNICIAN
(STG131)

TASKS	PERCENT MEMBERS PERFORMING
F159 Instill xylocaine jellies intrauretherally	100
F149 Answer patient medical inquiries	100
I302 Assist physician with prostate biopsies	100
J344 Don or doff sterile gowns or gloves	100
I325 Prepare and drape patients for clinic procedures	100
F150 Assist physician in applying dressings or packs	100
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	100
F191 Prepare sterile setups for clinic procedures	100
J383 Prepare soaking solutions, such as Cidex	100
J328 Adjust Mayo instrument tray stands	100
F152 Brief physicians on patient follow-ups	100
F188 Prepare patients for clinic examinations	94
F186 Perform urodynamic tests, such as cystometrograms or urine flow	94
G215 Take specimens to laboratories	94
E145 Schedule patient appointments	94
E143 Review SF 513 (Medical Record-Consultation Sheet)	94
J338 Break down sterile fields	94
I303 Assist physician with prostate ultrasounds	94
J355 Operate cystoscopy tables	94
J347 Establish sterile fields in OR	94
E146 Schedule patients for surgery	94
J335 Assist sterile team members with donning or removing surgical attire	94
J343 Dispose of sterile gowns or gloves	94
I311 Assist physician with urodynamics	94
J349 Identify drugs or solutions on sterile field	94
J337 Assist surgeons in dressing surgical sites	94
G205 Catheterize patients	94
J378 Prepare and pass instruments or supplies to operating team members	94
K438 Store sterilized or nonsterilized items	94
E142 Review patient health records prior to appointments	89
J331 Arrange sterile instruments and supplies on back tables	89
J345 Don or doff surgical attire, other than sterile gown or gloves	89
J367 Perform hand and arm scrubs	89
J365 Pass specimens to circulators	89

TABLE A4
CLINIC UROLOGY TECHNICIAN
(STG058)

TASKS	PERCENT MEMBERS PERFORMING
I294 Assist physician with cystoscopies	100
I325 Prepare and drape patients for clinic procedures	100
E103 Brief patients on clinical or operating room policies	100
J355 Operate cystoscopy tables	100
F159 Instill xylocaine jellies intrauretherally	100
G208 Log procedures into record books or computers	100
J330 Apply electrosurgical devices to patients	100
G205 Catheterize patients	100
F152 Brief physicians on patient follow-ups	100
F149 Answer patient medical inquiries	100
I302 Assist physician with prostate biopsies	100
F150 Assist physician in applying dressings or packs	100
I315 Change solutions during clinic procedures	100
J338 Break down sterile fields	100
I308 Assist physician with transurethral resections	100
J331 Arrange sterile instruments and supplies on back tables	100
J356 Operate electrosurgical devices	100
I318 Inject medications, at direction of physician	100
J344 Don or doff sterile gowns or gloves	100
J329 Adjust overhead operating lights	100
F191 Prepare sterile setups for clinic procedures	80
F148 Administer topical local anesthetics	80
G206 Counsel patients	80
G215 Take specimens to laboratories	80
I311 Assist physician with urodynamics	80
G202 Administer medications or immunizations to patients, under supervision of physician	80
E105 Collect statistical data, other than daily patient counts or patient audit trails	80
J377 Position sterile tables or related equipment, such as monitors, microscopes, or lasers	80
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel packaged sterile supplies	80
J371 Perform surgical skin cleansings	80
F155 Collect catheterized urine specimens	80
G210 Perform basic patient care in medical emergencies	80
J335 Assist sterile team members with donning or removing surgical attire	80

TABLE A5

OTORHINOLARYNGOLOGY (ENT)
TECHNICIAN
(STG063)

TASKS	PERCENT MEMBERS PERFORMING
E145 Schedule patient appointments	100
J338 Break down sterile fields	100
J336 Assist surgeons in applying sterile drapes	97
J328 Adjust Mayo instrument tray stands	97
J349 Identify drugs or solutions on sterile field	97
F150 Assist physician in applying dressings or packs	97
I298 Assist physician with myringotomies	94
I305 Assist physician with septoplasties	94
J331 Arrange sterile instruments and supplies on back tables	94
J337 Assist surgeons in dressing surgical sites	94
J344 Don or doff sterile gowns or gloves	94
J343 Dispose of sterile gowns or gloves	94
J329 Adjust overhead operating lights	94
E143 Review SF 513 (Medical Record-Consultation Sheet)	90
I307 Assist physician with tonsillectomy and adenoidectomy (T&A) procedures	90
J367 Perform hand and arm scrubs	90
I269 Assist physician in limited functional endoscopic sinus surgeries	90
J347 Establish sterile fields in OR	90
J354 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	90
J379 Prepare and pass medications to surgeons during operative procedures	90
F199 Remove sutures	90
E146 Schedule patients for surgery	90
J335 Assist sterile team members with donning or removing surgical attire	87
E129 Perform periodic inventories of dated medications	87
I267 Assist physician in functional nasal reconstructions	87
J378 Prepare and pass instruments or supplies to operating team members	87
J365 Pass specimens to circulators	87
F197 Remove foreign bodies from ears using suction method	84
F191 Prepare sterile setups for clinic procedures	84
J334 Assist professional staff in performing counts of sponges, instruments, needles, or related supplies	84
F177 Perform routine ear examinations with otoscope	84
J350 Identify drugs or solutions prior to transfer to sterile field	84
I266 Assist physician in excision and closure of skin lesions	84

TABLE A6
ORTHOPEDIC TECHNICIAN
(STG061)

TASKS	PERCENT MEMBERS PERFORMING
H263 Remove splints	100
H262 Remove casts	100
H249 Apply short leg plaster or fiberglass cast	100
H259 Prepare patients for application of casts or splints	100
H246 Apply short arm plaster or fiberglass splints	100
H247 Apply short arm scaphoid plaster or fiberglass splints	100
H245 Apply standard long arm plaster or fiberglass casts	98
H260 Prepare patients for removal of casts or splints	97
H252 Apply standard long arm plaster or fiberglass casts	97
H230 Apply long arm plaster or fiberglass splints	97
I327 Remove skin staples	97
H233 Apply long leg cylinder plaster or fiberglass casts	97
H258 Prepare casting or splinting materials	95
H253 Apply standard short arm plaster or fiberglass casts	94
H234 Apply long leg plaster or fiberglass casts	94
H232 Apply long arm sugar tong plaster or fiberglass splints	94
F199 Remove sutures	92
H250 Apply short leg plaster or fiberglass splints	92
I284 Assist physician in treatment of sprains, strains, or contusions	92
H229 Apply long arm navicular plaster or fiberglass casts	92
I278 Assist physician in treatment of fractures	91
F150 Assist physician in applying dressings or packs	91
I314 Change dressings	89
I319 Instruct patients in use of orthopedic appliances	89
H248 Apply short arm sugar tong plaster or fiberglass splints	89
I288 Assist physician in treatment of wounds	88
H235 Apply long leg plaster or fiberglass splints	88
J337 Assist surgeons in dressing surgical sites	88
J336 Assist surgeons in applying sterile drapes	88
H231 Apply long arm scaphoid plaster or fiberglass splints	86
E145 Schedule patient appointments	85
J344 Don or doff sterile gowns or gloves	85
F164 Order x-rays	85

TABLE A7
SURGICAL SERVICES
MANAGEMENT/SUPERVISION JOB
(STG056)

TASKS	PERCENT MEMBERS PERFORMING
A4 Determine requirements for space, personnel, equipment, or supplies	100
A21 Schedule personnel for leaves, passes, or temporary duty (TDY)	100
B27 Correct safety hazards	100
A3 Conduct staff meetings or briefings	97
A20 Prepare work schedules or duty rosters	97
A13 Establish work schedules	97
B28 Counsel personnel on personal or military-related matters	97
C49 Evaluate budget requirements	94
C45 Analyze workload requirements	94
A17 Plan or schedule work priorities	94
C62 Evaluate work schedules	94
C46 Conduct performance feedback worksheet (PFW) evaluation sessions	94
A16 Plan or schedule work assignments	94
C55 Evaluate new equipment	94
A10 Establish performance standards for subordinates	94
A1 Assign personnel to duty positions	94
C71 Write or review EPRs	91
A9 Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)	91
A22 Write job or position descriptions	91
A2 Assign sponsors for newly assigned personnel	91
C56 Evaluate personnel for compliance with performance standards	88
C52 Evaluate housekeeping contractor performance	88
C54 Evaluate job descriptions	88
C57 Evaluate procedures for maintenance of property items	88
C72 Write recommendations for awards or decorations	84
C63 Identify safety hazards	84
A15 Plan or prepare briefings	84
A7 Develop self-inspection checklists	84
B24 Brief subordinates on medical ethics	84
B35 Implement self-inspection programs	81
B40 Supervise Apprentice Surgical Service Specialists (AFSC 902X2/B/C/D)	81
B32 Implement Quality Air Force (QAF) programs or initiatives	81
C59 Evaluate safety programs	81

TABLE A8
CENTRAL STERILE
SUPPLY NCOIC
(STG050)

TASKS	PERCENT MEMBERS PERFORMING
K399 Assemble instrument sets	100
K439 Wrap and label instrument sets for sterilization	100
K400 Assemble OR equipment or instruments after cleaning	100
C56 Evaluate personnel for compliance with performance standards	100
A10 Establish performance standards for subordinates	100
K409 Clean sterilizers	100
E125 Order medical supplies using local purchase procedures	100
E123 Order linen supplies	100
K419 Load or unload sterilizers	86
K424 Operate sterilizers	86
K421 Monitor sterilizer effectiveness using biological indicators	86
B43 Supervise Surgical Service Specialists (AFSC 90252/B/C/D)	86
K423 Operate ETO aeration equipment	86
K417 Fold linens for sterilization	86
K413 Deliver or pick up supplies to or from using units	86
E124 Order medical supplies from USAF supply agencies	86
C71 Write or review EPRs	86
A9 Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)	86
K438 Store sterilized or nonsterilized items	86
K412 Damp dust horizontal surfaces or storage areas with germicides	86
K418 Inspect microscopic or endoscopic surgical instruments	71
C63 Identify safety hazards	71
K422 Monitor sterilizer effectiveness using chemical indicators	71
B40 Supervise Apprentice Surgical Services Specialists (AFSC 90232/B/C/D)	71
K408 Clean instruments or equipment for storage or reprocessing	71
A16 Plan or schedule work assignments	71
C45 Analyze workload requirements	71
A12 Establish work methods, work controls, or inspection procedures	71
A17 Plan or schedule work priorities	71
A3 Conduct staff meetings or briefings	71
C55 Evaluate new equipment	71
D94 Maintain training record, charts, graphs, or files	71

TABLE A9
CENTRAL STERILE
SUPPLY JOB
(STG052)

TASKS	PERCENT MEMBERS PERFORMING
K439 Wrap and label instrument sets for sterilization	100
K399 Assemble instrument sets	100
K408 Clean instruments or equipment for storage or reprocessing	93
K400 Assemble OR equipment or instruments after cleaning	93
K424 Operate sterilizers	93
K438 Store sterilized or nonsterilized items	93
K437 Rotate dated supplies	93
K419 Load or unload sterilizers	86
K409 Clean sterilizers	86
K421 Monitor sterilizer effectiveness using biological indicators	79
K422 Monitor sterilizer effectiveness using chemical indicators	79
K423 Operate ETO aeration equipment	71
K401 Change agent tanks on ethylene oxide (ETO) sterilizers	71
K417 Fold linens for sterilization	57
K436 Review expiration dates on sterile instruments, supplies, or drugs	57
K414 Disassemble equipment or instruments in preparation for manual or mechanical cleaning	50
J385 Pull surgical supplies or instruments	50
K430 Perform routine chemical disinfection of surgical instruments or supplies	50
K407 Clean ETO aeration equipment	43
K402 Change compressed medical gas tanks, other than agent tanks	43
K412 Damp dust horizontal surfaces or storage areas with germicides	43
K434 Remove and dispose of sharps	43
E123 Order linen supplies	43
K418 Inspect microscopic or endoscopic surgical instruments	36

TABLE A10
SURGICAL LOGISTICS JOB
(STG055)

TASKS	PERCENT MEMBERS PERFORMING
E125 Order medical supplies using local purchase procedures	100
E126 Order nonmedical supplies from USAF supply agencies	100
E138 Research supply catalogs or medical catalog (MEDCAT) supply listings	100
E108 Coordinate standard medical supply purchases with medical materiel personnel	87
E124 Order medical supplies from USAF supply agencies	87
E137 Research data from vendors for equipment purchases or standard medical supply purchases	87
E144 Review using Activity Issue/Turn In lists	87
E136 Prepare shopping guides	87
E106 Coordinate equipment purchases medical materiel personnel	87
C46 Conduct performance feedback worksheet evaluation sessions	87
C49 Evaluate budget requirements	60
C56 Evaluate personnel for compliance with performance standards	53
E121 Maintain property custodial action/custodial receipt	53
E141 Review and sign CA/CRLs	47
B40 Supervise Apprentice Surgical Service Specialists (AFSC 90232/B/C/D)	40
A8 Draft budget requirements	40
C45 Analyze workload requirements	33
E147 Write correspondence, such as letters, point papers, or staff summary sheets	33
J394 Stock OR with sterile or nonsterile supplies	27

APPENDIX B
TASK MODULES

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE B1

0001	OPERATING ROOM ASEPTIC SUPPORT
J379	Perform preoperative shaves
J371	Perform surgical skin cleansings
J380	Prepare cleaning solutions
J381	Prepare disinfecting solutions for inanimate object
J384	Prepare specimens for laboratory or pathology examinations
K433	Prepare formalin containers for surgical specimens
0002	OPERATING ROOM SURGICAL SUPPORT
J330	Apply electrosurgical devices to patients
J353	Maintain body position of patients during administration of spinal or regional anesthesia
J356	Operate electrosurgical devices
J362	Operate skin stapling devices
J363	Operate surgical tables
J364	Operate video equipment
J370	Perform sterile draping of surgical equipment, such as microscopes or x-ray units
J376	Position patients on operating tables
J377	Position sterile tables or related equipment, such as monitors, microscopes, or lasers
0003	OPERATING ROOM ANESTHESIA SUPPORT
K402	Change compressed medical gas tanks, other than agent tanks on ETO sterilizers
K403	Change rebreathing bags on anesthesia machines
K405	Change tubing or face masks on anesthesia machines
K435	Replace disposable tubing or face masks on anesthesia machines
0004	GENERAL NURSING CARE
G203	Assist anesthetists in maintaining airway for patients
G204	Assist in administration of oxygen
G209	Monitor intravenous (IV) solutions flows
G210	Perform basic patient care in medical emergencies
G211	Perform postanesthesia care of patients in recovery rooms, under supervision of professional staff
G212	Start IV solutions, under supervision of professional staff
G213	Take and record vital signs of patients

0005 SUPERVISE OPERATING ROOM PERSONNEL (NCOIC)

- A1 Assign personnel to duty positions
- A2 Assign sponsors for newly assigned personnel
- A3 Conduct staff meetings or briefings
- A4 Determine requirements for space, personnel, equipment, or supplies
- A8 Draft budget requirements
- A9 Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)
- A10 Establish performance standards for subordinates
- A12 Establish work methods, work controls, or inspections procedures
- A13 Establish work schedules
- A15 Plan or prepare briefings
- A16 Plan or schedule work assignments
- A17 Plan or schedule work priorities
- A20 Prepare work schedules or duty rosters
- A21 Schedule personnel for leaves, passes, or temporary duty (TDY)
- A22 Write job position descriptions
- B24 Brief subordinates on medical ethics
- B26 Conduct staff meetings
- B27 Correct safety hazards
- B28 Counsel personnel on personal or military-related matters
- B37 Initiate personnel action requests, such as upgrade actions or duty title changes
- B39 Interpret policies, directives, or procedures for subordinates
- B40 Supervise Apprentice Surgical Service Specialists (AFSC 90232/B/C/D)
- B43 Supervise Surgical Service Specialists (AFSC 90252/B/C/D)
- C45 Analyze workload requirements
- C46 Conduct performance feedback worksheet (PFW) evaluation sessions
- C49 Evaluate budget requirements
- C55 Evaluate new equipment
- C56 Evaluate personnel for compliance with performance standards
- C62 Evaluate work schedules
- C63 Identify safety hazards
- C65 Initiate reports of unsatisfactory equipment, supplies, or contractor performance
- C71 Write or review EPRs
- C72 Write recommendations for awards or decorations

0006 SUPERVISE OPERATING ROOM PERSONNEL (SUPERINTENDENT)

- A7 Develop self-inspection checklists
- A14 Evaluate layouts of facilities
- A18 Plan safety programs
- A19 Plan security programs
- B29 Direct maintenance of administrative files
- B30 Draft recommendations for policy changes on utilization of personnel or equipment
- B31 Implement cost-reduction programs, such as fraud, waste, and abuse

0006	SUPERVISE OPERATING ROOM PERSONNEL (SUPERINTENDENT) (CONT)
------	--

- B32 Implement Quality Air Force (QAF) programs or initiatives
- B33 Implement safety programs
- B34 Implement security programs
- B35 Implement self-inspection programs
- B36 Implement suggestion programs
- B38 Initiate requests for personnel replacements or manning assistance
- B44 Supervise Surgical Service Technicians (AFSC 90272/B/C/D)
- C47 Evaluate accidents or incident reports
- C48 Evaluate administrative forms, files, or procedures
- C51 Evaluate completed special projects, such as self-help projects
- C52 Evaluate housekeeping contractor performance
- C53 Evaluate inspections reports or procedures
- C54 Evaluate job descriptions
- C57 Evaluate procedures for maintenance of property items
- C58 Evaluate quality of patient care
- C59 Evaluate safety programs
- C60 Evaluate security programs
- C61 Evaluate suggestions
- C64 Indorse enlisted performance reports (EPRs)
- C67 Investigate accidents or incidents
- C69 Select individuals for specialized training
- C73 Write staff studies, surveys, or special reports, other than training reports

0007	MANAGE CIVILIAN PERSONNEL
------	---------------------------

- A5 Develop civilian performance appraisal plans
- B23 Annotate timesheets for civilian employees
- B25 Conduct hiring interviews
- B41 Supervise civilian personnel
- C70 Write civilian performance ratings or supervisory appraisals

0008	CLINIC PATIENT CARE
------	---------------------

- E103 Brief patients on clinical or operating room policies
- E114 Instruct patients in filling out forms, such as patient histories or consent forms
- E119 Maintain daily patient logs
- E122 Obtain patient health records
- E128 Order pharmacy supplies
- E129 Perform periodic inventories of dated medications
- E131 Pick up daily administrative distribution
- E134 Prepare forms for tissue examinations
- E135 Prepare or distribute daily clinic schedules
- E139 Return patient health records
- E140 Return x-rays to radiology

0008 CLINIC PATIENT CARE (CONT)

- E142 Review patient health records prior to appointments
- E143 Review SF 153 (Medical Record - Consultation Sheet)
- E145 Schedule patient appointments
- E146 Schedule patients for surgery
- F149 Answer patient medical inquiries
- F151 Assist physician in noninvasive physical examinations
- F152 Brief physicians on patient followups
- F153 Chaperone during examinations
- F188 Prepare patients for clinic examinations
- F191 Prepare sterile setups for clinic procedures
- F199 Remove sutures
- G208 Log procedures into record books or computers
- I314 Change dressings
- I324 Prepare accessory equipment, such as lamps, for clinics
- I325 Prepare and drape patients for clinic procedures
- I327 Remove skin staples
- K406 Clean clinic examining and treatment rooms

0009 APPLY PLASTER/FIBERGLASS CASTS

- H227 Apply long arm cylinder plaster or fiberglass casts
- H228 Apply long arm hanging plaster or fiberglass casts
- H229 Apply long arm navicular plaster or fiberglass casts
- H230 Apply long arm plaster or fiberglass splints
- H231 Apply long arm scaphoid plaster or fiberglass splints
- H232 Apply long arm sugar tong plaster or fiberglass splints
- H233 Apply long leg cylinder plaster or fiberglass casts
- H234 Apply long leg plaster or fiberglass casts
- H235 Apply long leg plaster or fiberglass splints
- H245 Apply short arm navicular plaster or fiberglass casts
- H246 Apply short arm plaster or fiberglass casts
- H247 Apply short arm scaphoid plaster or fiberglass splints
- H248 Apply short arm sugar tong plaster or fiberglass splints
- H249 Apply short leg plaster or fiberglass casts
- H250 Apply short leg plaster or fiberglass splints
- H252 Apply standard long arm plaster or fiberglass casts
- H253 Apply standard short arm plaster or fiberglass casts
- H259 Prepare patients for application of casts or splints
- H260 Prepare patients for removal of casts or splints
- H262 Remove casts
- H263 Remove splints
- I284 Assist physician in treatment of sprains, strains, or contusions
- I319 Instruct patients in use of orthopedic appliances

0010 APPLY TRACTION DEVICES

- H218 Apply balanced suspension with skeletal traction devices
- H219 Apply balanced suspension with skin traction devices
- H220 Apply body jacket plaster or fiberglass casts
- H221 Apply Bryant's traction
- H222 Apply Buck's tractions
- H223 Apply cervical halter traction devices
- H224 Apply cervical skeleton traction devices
- H225 Apply Dunlop tractions
- H226 Apply hip section spica plaster or fiberglass casts
- H236 Apply lower limb suspension tractions
- H237 Apply Minerva jacket plaster or fiberglass casts
- H239 Apply pelvic traction devices
- H240 Apply right angle skeletal tractions devices
- H241 Apply right angle skin traction devices
- H242 Apply Russel's skin traction devices
- H243 Apply Russel's split traction devices
- H244 Apply scoliosis corrective plaster or fiberglass casts
- H251 Apply shoulder spica plaster or fiberglass casts
- H254 Apply Thomas leg splint and Pearson attachment traction devices
- H255 Apply upper limb suspension tractions
- H256 Apply Velpeau plaster or fiberglass casts
- H261 Prepare patients for traction applications

0011 ASSIST WITH UROLOGY PROCEDURES

- F155 Collect catheterized urine specimens
- F156 Collect clean catch urine specimens
- F159 Instill xylocaine jellies intrauretherally
- I302 Assist physician with prostrate biopsies
- I303 Assist physician with prostrate ultrasounds
- I308 Assist physician with transurethral resections
- I310 Assist physician with ureterscopies
- I311 Assist physician with urodynamics

0012 PERFORM X-RAY PROCEDURES

- E116 Label x-ray films
- F157 Develop x-ray films
- F158 Inject contrast media intrauretherally
- F160 Maintain scheduled drug logbooks
- F163 Operate flouroscopy units
- F186 Perform urodynamic tests, such as cystometrograms or urine flow
- F200 Set techniques for x-ray exposure
- F201 Shoot kidney-ureter-bladder (KUB) x-rays

0013	PERFORM MACRO/MICROSCOPIC URINALYSIS
F175	Perform posturography tests
I320	Perform macroscopic urinalysis, such as dipsticking
I321	Perform microscopic urinalysis
I322	Perform uroradiographic procedures
0014	STERILIZING/PREPARING SURGICAL INSTRUMENTS
K399	Assemble instrument sets
K400	Assemble OR equipment or instruments after cleaning
K408	Clean instruments or equipment for storage or reprocessing
K409	Clean sterilizers
K412	Damp dust horizontal surfaces or storage areas with germicides
K419	Load or unload sterilizers
K421	Monitor sterilizer effectiveness using biological indicators
K422	Monitor sterilizer effectiveness using chemical indicators
K424	Operate sterilizers
K436	Review expiration dates on sterilized instruments, supplies, or drugs
K437	Rotate dated supplies
K438	Store sterilized or nonsterilized items
K439	Wrap and label instrument sets for sterilization
0015	ENT SURGICAL PATIENT CARE
I265	Assist physician in brow lifts
I267	Assist physician in functional nasal reconstruction
I268	Assist physician in limited dermabrasions
I269	Assist physician limited functional endoscopic sinus surgeries
I270	Assist physician in limited skin flap reconstructions
I291	Assist physician with blepharoplasties
I292	Assist physician with Caldwell-Luc procedures
I295	Assist physician with fat tympanoplasties
I296	Assist physician with limited exploratory tympanotomies
I297	Assist physician with local tympanoplasties
I298	Assist physician with myringotomies
I300	Assist physician with otoplasties
I305	Assist physician with septoplasties
I307	Assist physician with tonsillectomy and adenoidectomy (T&A) procedures
I312	Assist physician with uvulopalatopharyngoplasties

0016	CONTINGENCY DUTIES
------	--------------------

M458	Assemble or disassemble OR equipment, instruments, or supplies for air transportable hospitals (AHs)
M459	Assemble surgical tents
M460	Assemble tents, other than surgical tents
M465	Don or doff chemical warfare personal protective clothing
M466	Identify chemical warfare agents
M467	Inventory OR field supplies or field equipment
M468	Load or unload patients on patient transportation vehicles
M469	Maintain sanitary field environment
M472	Operate field autoclaves
M473	Pack or unpack OR field supplies or field equipment
M474	Palletize supplies or equipment for transportation
M475	Participate in chemical warfare confidence exercises
M476	Perform communications security (COMSEC) or operational security (OPSEC) during contingency exercises or operations
M477	Perform decontamination procedures for chemical warfare
M478	Perform immediate medical casualty care
M479	Perform inpatient surgical care under field conditions
M480	Perform outpatient surgical care under field conditions
M481	perform triage
M483	Transfer litter patients

0017	ORDER/PURCHASE SURGICAL SUPPLIES
------	----------------------------------

E106	Coordinate equipment purchases with medical materiel personnel
E108	Coordinate standard medical supply purchases with medical materiel personnel
E124	Order medical supplies form USAF supply agencies
E125	Order medical supplies using local purchase procedures
E126	Order nonmedical supplies form USAF supply agencies
E127	Order nonmedical supplies using local purchase procedures
E136	Prepare shopping guides
E137	Research data from vendors for equipment purchases or standard medical supply purchases
E138	Research supply catalogs or medical catalogs (MEDCAT) supply listings
E144	Review Using Activity Issue/Turn In Lists

0018	ENT CLINIC PATIENT CARE
------	-------------------------

F154	Clean mastoid cavities
F161	Make ear mold impressions
F165	Perform air-conduction hearing tests
F166	Perform audiometric maskings
F167	Perform auditory brain stem response tests
F168	Perform basic tympanometry tests
F169	Perform bone-conduction hearing tests

0018	ENT CLINIC PATIENT CARE (CONT)
F172	Perform Hilger nerve stimulations
F176	Perform reflex decay tests
F177	Perform routine ear examinations with otoscopes
F180	Perform speech discrimination tests
F181	Perform speech reception threshold (SRT) tests
F182	Perform stapedial reflex tests
F184	Perform throat cultures
F185	Perform tone decay hearing tests
F194	Remove foreign bodies from ears by irrigation method
F195	Remove foreign bodies from ears using alligator forceps
F196	Remove foreign bodies from ears using curettage method
F197	Remove foreign bodies from ears using suction method
F198	Remove foreign bodies from ears using wire loops
I280	Assist physician in treatment of otosclerosis
0019	ENT DIAGNOSTIC SCREENING
F170	Perform Hallpike positional tests
F171	Perform hearing aid evaluations
F173	Perform ice water caloric tests
F178	Perform Schirmer's Tear test
F179	Perform small increment sensitivity tests
F183	Perform Stenger tests
F192	Produce visual media for medical treatment or research
0020	ASSIST PHYSICIAN WITH ADMINISTERING MEDICATIONS
F148	Administer topical local anesthetics
G202	Administer medications or immunizations to patients, under supervision of physician
I315	Change solutions during clinic procedures
I318	Inject medications, at direction of physician