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**UNITED STATES
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OCCUPATIONAL SURVEY REPORT

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92-14172

MEDICAL SERVICES CAREER LADDER

AFSC 902X0/A/B

AFPT 90-902-916

FEBRUARY 1992

**OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT SQUADRON
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150-5000**

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USAFSAM/DA (BROOKS AFB TX)	6	1	6	2
3700 TCHTW/TTS (SHEPPARD AFB TX)	1		1	

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TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE.	v
SUMMARY OF RESULTS	vi,vii
INTRODUCTION	1
Background	1
SURVEY METHODOLOGY	2
Inventory Development.	2
Survey Administration.	3
Survey Sample.	4
Task Factor Administration	4
Data Processing and Analysis	8
SPECIALTY JOBS (Career Ladder Structure)	8
Structure Overview	8
Descriptions of Career Ladder Jobs	15
Comparison of Specialty Jobs	20
JOB STRUCTURE COMPARISON TO PREVIOUS SURVEY	20
ANALYSIS OF DAFSC GROUPS	22
Skill-Level Descriptions	27
Summary.	27
ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS.	34
TRAINING ANALYSIS.	34
Training Emphasis and Task Difficulty.	35
Analysis of First-Enlistment Personnel	39
REVIEW OF SPECIALTY TRAINING STANDARD.	44
REVIEW OF MEDICAL SERVICES PLANS OF INSTRUCTION.	48
Review of J3AQR90230-002 Plan of Instruction (POI) (Apprentice Medical Services Specialist).	48
Review of J3ABP902X0 Plan of Instruction (POI) (Apprentice Medical Services Specialist Clinical Phase)	53
Review of J5ABA90230A Plan of instruction (POI) (Allergy/ Immunology Specialist).	53
Review of J5ABN90230B Plan of Instruction (POI) (Neurology Specialist)	53
JOB SATISFACTION ANALYSIS.	58
ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS	65
SPECIAL ISSUES	65
ANALYSIS OF WRITE-IN COMMENTS.	66
IMPLICATIONS	67

TABLE OF CONTENTS
(Tables, Figures, Appendices)

	<u>PAGE NUMBER</u>
TABLE 1 - SAMPLE DISTRIBUTION AFSC.	5
TABLE 2 - COMMAND REPRESENTATION OF SURVEY SAMPLE AFSC 902X0/A/B. . .	6
TABLE 3 - PAYGRADE DISTRIBUTION OF SURVEY SAMPLE AFSC 902X0/A/B . . .	7
TABLE 4 - AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY 902X0 CAREER LADDER STRUCTURE GROUPS	11-12
TABLE 5 - SELECTED BACKGROUND DATA FOR CAREER LADDER JOBS	13-14
TABLE 6 - COMPARISON OF MAJOR JOBS BETWEEN SURVEYS.	21
TABLE 7 - DISTRIBUTION OF 902X0/A/B DAFSC MEMBERS ACROSS CAREER LADDER JOBS (NUMBER AND PERCENT RESPONDING).	23
TABLE 8 - AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY 902X0 DAFSC GROUPS	24
TABLE 9 - REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 90230 AND DAFSC 90250 PERSONNEL (PERCENT MEMBERS PERFORMING)	25-26
TABLE 10 - REPRESENTATIVE TASKS PERFORMED BY DAFSC 90230/50 PERSONNEL (N=1,810).	28
TABLE 11 - REPRESENTATIVE TASKS PERFORMED BY DAFSC 90270 PERSONNEL (N=797).	29
TABLE 12 - REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 90230/50 AND DAFSC 90270 PERSONNEL (PERCENT MEMBERS PERFORMING)	30
TABLE 13 - REPRESENTATIVE TASKS PERFORMED BY DAFSC 90299/00 PERSONNEL (N=72)	31
TABLE 14 - REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSCs 90270 AND 90299/00 PERSONNEL (PERCENT MEMBERS PERFORMING)	32-33
TABLE 15 - TASKS RATED HIGHEST IN TRAINING EMPHASIS (TE) FOR 902X0 PERSONNEL (GREATER THAN 1 STANDARD DEVIATION ABOVE THE AVERAGE)	36
TABLE 16 - TASKS RATED HIGHEST IN TASK DIFFICULTY (TD) FOR 902X0 PERSONNEL (GREATER THAN 1 STANDARD DEVIATION ABOVE THE AVERAGE)	37-38
TABLE 17 - REPRESENTATIVE TASKS PERFORMED BY AFSC 902X0 FIRST- ENLISTMENT PERSONNEL (1-48 MONTHS TAFMS)	41
TABLE 18 - EQUIPMENT USED OR OPERATED BY GREATER THAN 30 PERCENT OF AFSC 902X0 FIRST-ENLISTMENT PERSONNEL (1-48 MONTHS TAFMS).	42
TABLE 19 - REPRESENTATIVE TASKS PERFORMED BY 902X0A FIRST-TERM ENLISTMENT PERSONNEL (1-48 MONTHS TAFMS)	43
TABLE 20 - EQUIPMENT USED OR OPERATED BY GREATER THAN 30 PERCENT OF AFSC 902X0A FIRST-ENLISTMENT PERSONNEL (1-48 MONTHS TAFMS).	45
TABLE 21 - REPRESENTATIVE TASKS PERFORMED BY AFSC 902X0B FIRST- ENLISTMENT PERSONNEL (1-48 MONTHS TAFMS)	46
TABLE 22 - EQUIPMENT USED OR OPERATED BY GREATER THAN 30 PERCENT OF AFSC 902X0B FIRST-ENLISTMENT PERSONNEL (1-48 MONTHS TAFMS).	47

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

	<u>PAGE NUMBER</u>
TABLE 23 - EXAMPLES OF AFSC 902X0 STS ELEMENTS NOT SUPPORTED BY OSR DATA (LESS THAN 20 PERCENT MEMBERS PERFORMING)	49
TABLE 24 - EXAMPLES OF TASKS PERFORMED BY 20 PERCENT OR MORE AFSC 902X0 GROUP MEMBERS AND NOT REFERENCED TO THE STS.	50
TABLE 25 - EXAMPLES OF AFSC POI J3AQR90230 ITEMS NOT SUPPORTED BY OSR DATA	51
TABLE 26 - EXAMPLES OF TECHNICAL TASKS WITH GREATER THAN 30 PERCENT MEMBERS PERFORMING AND NOT REFERENCED TO POI J3AQR90230 (PERCENT FIRST ENLISTMENT PERFORMING).	52
TABLE 27 - EXAMPLES OF TECHNICAL TASKS WITH GREATER THAN 30 PERCENT MEMBERS PERFORMING AND NOT REFERENCED TO POI J3ABP90230 (PERCENT FIRST ENLISTMENT PERFORMING).	54
TABLE 28 - EXAMPLES OF AFSC POI J3ABA90230 ITEMS NOT SUPPORTED BY OSR DATA (PERCENT FIRST ENLISTMENT PERFORMING)	55
TABLE 29 - EXAMPLES OF TECHNICAL TASKS WITH GREATER THAN 30 PERCENT MEMBERS PERFORMING AND NOT REFERENCED TO POI J3ABA90230 (PERCENT FIRST ENLISTMENT PERFORMING).	56
TABLE 30 - EXAMPLES OF TECHNICAL TASKS WITH GREATER THAN 30 PERCENT MEMBERS PERFORMING AND NOT REFERENCED TO POI J5ABN90230B	57
TABLE 31 - COMPARISON OF JOB SATISFACTION DATA BY TAFMS AND COMPARATIVE SAMPLE GROUPS (PERCENT MEMBERS RESPONDING)	59
TABLE 32 - COMPARISON OF JOB SATISFACTION DATA BY TAFMS AND COMPARATIVE SAMPLE GROUPS (PERCENT MEMBERS RESPONDING)	60
TABLE 33 - COMPARISON OF JOB SATISFACTION DATA BY TAFMS AND COMPARATIVE SAMPLE GROUPS (PERCENT MEMBERS RESPONDING)	61
TABLE 34 - CURRENT AND PREVIOUS JOB SATISFACTION INDICATORS (PERCENT MEMBERS RESPONDING)	62
TABLE 35 - JOB SATISFACTION DATA BY CAREER LADDER JOBS (PERCENT MEMBERS RESPONDING).	63-64
FIGURE 1 - AFSC 902X0/A/B SPECIALTY JOBS (N=2,794)	9
FIGURE 2 - 902X0/A/B FIRST-TERM DISTRIBUTION ACROSS SPECIALTY JOBS (N=866).	40
APPENDIX A - SELECTED REPRESENTATIVE TASKS PERFORMED BY CAREER LADDER SPECIALTY JOB GROUPS	68

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PREFACE

This report presents the results of an Air Force Occupational Survey of the Medical Services career ladder (AFSC 902X0/A/B). Authority for conducting occupational surveys is contained in AFR 35-2, Occupational Analysis. Computer products upon which this report is based are available for use by operations and training officials.

The survey instrument was developed by Chief Master Sergeant Bob Boerstler, Inventory Development Specialist. Mr Wayne J. Fruge, Computer Programmer, provided computer support for this project. Administrative support was provided by Mrs Raquel A. Soliz. Captain Terri L. Coccia and First Lieutenant Mark L. Holbrook analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Johnny Collins, Chief, Airman Analysis Section, USAF Occupational Measurement Squadron.

A Medical Services Training Requirements Analysis (TRA) was accomplished in conjunction with the Medical Services Occupational Survey Report (OSR). The TRA, published in January 1991, provides a comprehensive data base to support anticipated training decisions for the career ladder. Copies of the OSR and TRA are distributed to Air Staff sections, major commands, and other interested training management personnel. Additional copies are available upon request to the USAF Occupational Measurement Squadron, Attention: Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150-5000.

GARY R. BLUM, Lt Colonel, USAF
Commander
USAF Occupational Measurement
Squadron

JOSEPH S. TARTELL
Chief, Occupational Analysis Branch
USAF Occupational Measurement
Squadron

SUMMARY OF RESULTS

1. Survey Coverage. The Medical Services career ladder was surveyed to obtain current data to validate the expansion and addition of the 8-week clinical phase to the basic 3-level course. Approximately 50 percent of the basic AFSC 902X0 assigned airmen and 100 percent of the A- and B-shred personnel were selected for survey participation. Data were collected from 2,794 respondents, including 2,679 basic 902X0 personnel, 106 A-shred personnel, 8 B-shred incumbents, and 72 DAFSC 90299 or 90200 personnel. The survey sample is representative of the Medical Services career ladder in terms of MAJCOM, paygrade, and TAFMS.

2. Career Ladder Structure. Nine clusters and one independent job type (IJT) are identified in the 902X0 specialty. The basic Medical Services personnel grouped into five clusters and performed jobs dealing with general patient care, ward care, emergency care, and supervision. Specific clusters are also identified for allergy (A-shred), neurology (B-shred), aeromedical evacuation (A prefix), and technical training instructors.

3. Career Ladder Progression. The jobs within the career ladder change gradually as skill-level proficiency is established. The Medical Services specialists and technicians perform a technical job, with the senior members adding supervisory and on-the-job training skills. Career ladder management is performed by the most senior personnel.

4. AFR 39-1 Specialty Descriptions. The descriptions in AFR 39-1 for the 902X0 Medical Services career ladder provide a broad and accurate overview of the tasks and duties performed.

5. Training Analysis. The Specialty Training Standard (STS) and Plans of Instruction (POIs) are generally well supported by OSR data, when measured against standard ATC criteria listed in AFR 8-13, Air Force Specialty Training Standards and Air Force Job Qualification Standards, and ATCR 52-22, Occupational Analysis Program. Medical Services functional and training managers should review the job-related data to ensure that the STS and the POIs reflect accurate and comprehensive training requirements for the Medical Services career ladder.

6. Job Satisfaction. Overall, Medical Services respondents are satisfied with their jobs. Members in each career ladder job responded with similar high overall percentages of satisfaction numbers across four indicators, with "sense of accomplishment from work" being rated the lowest. Job satisfaction is similar or slightly higher between the 902X0 career ladder and a comparative sample of medical personnel surveyed in 1990. In terms of changes in job satisfaction since the last OSR in 1986, a substantial increase in job interest, perceived use of talents, and perceived use of training was found. A slight increase in reenlistment intentions was found for the allergy-shred personnel, and a slight decrease was found for 902X0 personnel overall.

7. Implications. The AFSC 902X0 Medical Services career ladder structure is supported by the jobs identified in this analysis. The usual ATC measurement criteria for basic training support the majority of the current entry-level courses. The AFR 39-1 job descriptions are accurate for all skill levels.

OCCUPATIONAL SURVEY REPORT
MEDICAL SERVICES CAREER LADDERS
(AFSC 902X0/A/B)

INTRODUCTION

This is a report of an occupational survey of personnel in the Medical Services (AFSC 902X0/A/B) career ladder completed by the Occupational Analysis Branch, USAF Occupational Measurement Squadron, in September 1991. The last occupational survey of this career ladder was published in June 1986. The present survey was requested by HQ ATC/SGAT, Randolph AFB TX. The 902X0 career ladder has recently added an 8-week clinical phase that is conducted at the conclusion of the apprentice course. The primary purpose for conducting this survey was to collect data to assist in evaluating this clinical phase of training and for use in updating the training documents.

Background

According to AFR 39-1 Specialty Descriptions for AFSC 902X0 and 90299/CEM, dated 1 Feb 88, Medical Services, 1-skill level, 3-skill level, and 5-skill level members assist professional personnel to plan, provide, and evaluate patient care, including inpatient care, outpatient care, emergency services, and disaster preparedness. They may also perform as an independent duty specialist, perform aeromedical evacuation duties, and participate in Medical Services training activities. They may also assist in caring for and treating allergy patients and neurological patients and administering immunizations.

The 7-skill-level personnel participate in planning, providing, and evaluating patient care. They organize the medical environment and direct support activities in patient care situations, including disasters. They may also perform duty as an independent duty, aeromedical evacuation, allergy and immunization, or neurology technician. The 9-skill-level personnel superintend Medical Services personnel in planning, providing, and evaluating patient care activities and related training programs. They also organize and direct administrative duties.

Independent Duty Medical Technicians (IDMT) provide emergency care and minor medical treatment at small, isolated stations where no medical officer is assigned. They also recommend medical evacuation and perform environmental health inspections.

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Aeromedical Evacuation Technicians (A902X0) enplane and deplane patients, assist with in-flight patient care, and provide emergency care in the event of an aircraft emergency. Their duties also include preparing aircraft for transport of patients and loading/unloading baggage.

Allergy/Immunology Technicians (902X0A) administer, monitor, and document allergy treatment and immunization programs. Duties include conducting basic pulmonary function studies, taking nasal smears, obtaining cultures, and performing tuberculosis and other lung fungus testing.

Neurology Technicians (902X0B) prepare patients for examination, treatment, and diagnostic procedures performed with electroencephalographic (record electrical activities of the brain) and electromyographic (records muscle response due to electrical stimulation) equipment. Equipment operation includes routine user maintenance and care and storage of tracings and reports.

Primary entry into the career ladder from Basic Military Training School (BMTS) is through a resident training course. Personnel selected for training as a Medical Services Specialist (AFSC 902X0), Allergy/Immunology Specialist (AFSC 902X0A), or Neurology Technician (AFSC 902X0B) attend a 14-week, 1 1/2-day Category A course (J3AQR90230) at Sheppard AFB. This course is followed immediately by an 8-week clinical phase of training which is provided at 12 medical facilities located at Andrews, Carswell, Davis Monthan, Eglin, Keesler, Lackland, March, Maxwell, Offutt, Sheppard, Travis, and Wright-Patterson AFBs. Upon completion of the clinical phase, 902X0 personnel proceed to their first base of assignment to begin work as Medical Services Specialists. Allergy/Immunology personnel attend an 8-week course (5ABA90230A) at Walter Reed Army Hospital, Washington DC. Neurology personnel currently receive their AFSC-specific training (course 5ABN90230B) at Bethesda Naval Medical Center in Bethesda MD. Completion of an Aeromedical Evacuation course is also mandatory for personnel assigned to aeromedical evacuation duties (A-prefix personnel).

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-902-916, dated August 1990. A preliminary task list was prepared by the Inventory Developer after carefully reviewing previous task lists, current career ladder publications, training documents, and directives to determine the appropriateness of each task. This tentative task list was refined and validated through personal interviews with 38 subject-matter experts (SMEs) representing 5 operational bases and 1 training base. Field interview locations were determined based on the recommendation of MAJCOM

functional managers and the technical school training manager. This provided maximum coverage of career ladder functions by visiting bases/units based on various duties and responsibilities. Bases visited were:

ORGANIZATION

USAF Clinic
Wilford Hall Medical Center
3790 Medical Services Training
Wing
USAF Regional Hospital
AFSC Regional Hospital
USAF Medical Center

BASE

Randolph AFB TX
Lackland AFB TX
Sheppard AFB TX

Sheppard AFB TX
Eglin AFB FL
Keesler AFB MS

This process resulted in a final job inventory containing a list of 706 tasks grouped under 17 duty titles and a background section asking for such information as type of medical facility assigned, work schedule, hospital beds authorized, method of allergy/immunization training, and emergency medical technician (EMT) status.

Survey Administration

From August 1989 through February 1990, Consolidated Base Personnel Office (CBPO) personnel at operational bases worldwide administered the inventory to 50 percent of the 902X0 (slick) personnel, along with all eligible A and B shred and 90299/00 personnel. Members eligible for the survey consisted of the total assigned population, excluding the following: (1) hospitalized personnel, (2) members in transition for a permanent change of station, (3) members retiring during the time inventories were administered, and (4) members in the job less than 6 weeks. Participants were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Armstrong Laboratory, Human Resources Directorate (AL/HRD).

Each individual who filled out an inventory booklet completed an identification and biographical information section and then checked each task performed in their current job. Next, members rated these tasks on a 9-point scale showing relative time spent on each task as compared to all other tasks checked. Ratings ranged from 1 (very small amount of time spent) to 9 (very large amount of time spent).

To determine relative percent time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of time spent on the job. The rating for each task is divided by the sum of all the ratings, then multiplied by 100 to provide a relative percentage of time for each task. This procedure provides the basis for comparing tasks in terms of both percent members performing and average relative percent time spent.

Survey Sample

Table 1 displays the sample distribution by AFSC. Table 2 displays the MAJCOM distribution of survey respondents corresponding with the percent of assigned personnel as of July 1989. As shown in Table 2, a greater percentage of 902X0 members are assigned to ATC than to the other MAJCOMs, although a large percentage are also found in MAC, SAC, and TAC. In addition, Table 3 displays survey respondents across paygrade groups. Approximately 61 percent of sampled 902X0 personnel hold the paygrade of E-4 or E-5. As illustrated in these tables, the survey sample is comprehensive and well representative of the career ladder population.

Task Factor Administration

Selected senior personnel completed a second booklet in addition to the job inventory booklet. This second booklet is used to gather information for either training emphasis (TE) or task difficulty (TD). The TE and TD booklets are processed separately from the job inventories and provide task factor information which is used in a number of different analyses discussed in more detail in the following section of this report.

Task Difficulty (TD). TD is defined as the length of time an average airman needs to learn a task. Given this definition, 51 senior technicians rated the difficulty of each inventory task on a 9-point scale (from extremely low to extremely high). A statistical measurement of rating agreement, known as the interrater reliability, indicated acceptable agreement among raters as to the relative difficulty of the tasks. TD ratings were adjusted so tasks of average difficulty would have ratings of 5.00. The result is a rank ordering of all inventory tasks by degree of difficulty.

Training Emphasis (TE). TE is a rating of which tasks require structured training for first-term personnel. Experienced technicians (primarily 7-skill levels) were asked to rate tasks on a 10-point scale (from no training emphasis to extremely high training emphasis). Ratings were independently collected from 55 NCOs. Their interrater reliability was again found to be acceptable. The average TE rating for the career ladder is 3.00, with a standard deviation of 1.69. These data also provide essentially a rank ordering of tasks, whereby those with the highest ratings are perceived as most important for structured training.

TE ratings provide objective information which should be used along with TD and percent members performing data when making training decisions. Percent members performing data provide information on how many personnel perform each task; TE and TD ratings provide insights on which tasks need training. Using these factors, along with appropriate training documents and directives, career ladder managers can tailor training programs to accurately reflect the needs of the user by more effectively determining when, where, and how to train first-enlistment AFSC 902X0 personnel.

TABLE 1
SAMPLE DISTRIBUTION
AFSC

	<u>902X0</u>	<u>902X0A</u>	<u>902X0B</u>	<u>90299</u>	<u>90200</u>
TOTAL ASSIGNED*	7,677	196	29	120	54
TOTAL NUMBER SURVEYED	3,339**	178	24	94	46
TOTAL IN SAMPLE	2,679	106	8	58	14
PERCENT OF ASSIGNED	35%	54%	28%	49%	26%
PERCENT OF SURVEYED	80%	60%	33%	97%	30%

* Assigned strength as of July 1989

** Random selection to represent half of basic AFSC 902X0 personnel

TABLE 2
COMMAND REPRESENTATION OF SURVEY SAMPLE
AFSC 902X0/A/B

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT OF SAMPLE</u>
AFLC	5	5
AFSC	4	4
AFSPACECOM	1	1
ATC	19	22
MAC	16	15
PACAF	8	8
SAC	18	18
TAC	13	13
USAFA	1	1
USAFE	12	12
OTHER	3	1

Total Assigned* - 8,087
Total Surveyed** - 3,523
Total in Final Sample** - 2,794
Percent of Assigned in Sample - 35%
Percent of Surveyed in Sample - 79%

* Assigned strength as of July 1989

** Excludes those in PCS, retirement, discharge, or hospital status; those with less than 6 weeks on the job; and those holding a 3-skill-level DAFSC

TABLE 3
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE
AFSC 902X0/A/B

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT OF SAMPLE</u>
AIRMAN	25	21
E-4	36	35
E-5	22	25
E-6	9	9
E-7	5	5
E-8	1	2
E-9	4	3

* Assigned strength as of July 1989

NOTE: Columns may not add to 100 percent due to rounding

Data Processing and Analysis

Once job inventories are returned from the survey incumbents, task responses and background information are optically scanned and entered into a UNISYS 11000 mainframe computer. The data are then analyzed using the Comprehensive Occupational Data Analysis Program (CODAP).

CODAP produces composite job descriptions for respondents based on their ratings of specific inventory tasks. These job descriptions provide information on percent members performing each task, the relative average percent time spent performing tasks, and the cumulative percent time spent by all members performing tasks in the inventory. In addition to the job descriptions based upon inventory task data, the program produces summaries that show how members of each group responded to each background item. Background items aid in identifying characteristics of the group, such as DAFSCs represented, time in career ladder, total active federal military service (TAFMS), experience in various functional areas, equipment operated, and job satisfaction levels.

SPECIALTY JOBS (Career Ladder Structure)

A key aspect of the USAF Occupational Analysis Program is to examine the job structure of a career ladder. Based on incumbent responses to survey questions, the tasks performed by career ladder personnel are examined and jobs are identified based on the similarity of tasks and the relative time spent performing the tasks. The resulting job structure is then compared to official career ladder documents. This information can be used to examine the accuracy and completeness of career ladder documents (AFR 39-1 Specialty Descriptions and Specialty Training Standards) and to gain an understanding of current utilization patterns.

For this report, the career ladder structure is described in terms of clusters and independent job types. The JOB TYPE is the basic unit of job analysis. It represents a specific group of individuals performing basically the same tasks and spending similar amounts of time on those tasks. When job type members perform tasks in common with other groups, they merge to form a larger unit of related jobs termed a CLUSTER. Specialized job types, too dissimilar to fit within a cluster, are labeled INDEPENDENT JOB TYPES (IJT).

Structure Overview

The specialty job structure of the Medical Services Specialist career ladder was determined by performing a job type analysis of the survey data provided by the 2,794 survey respondents. The jobs performed by these airmen separated into nine clusters and one independent job type, as shown in Figure 1.

**AFSC 902X0/A/B SPECIALTY JOBS
(N= 2,794)**

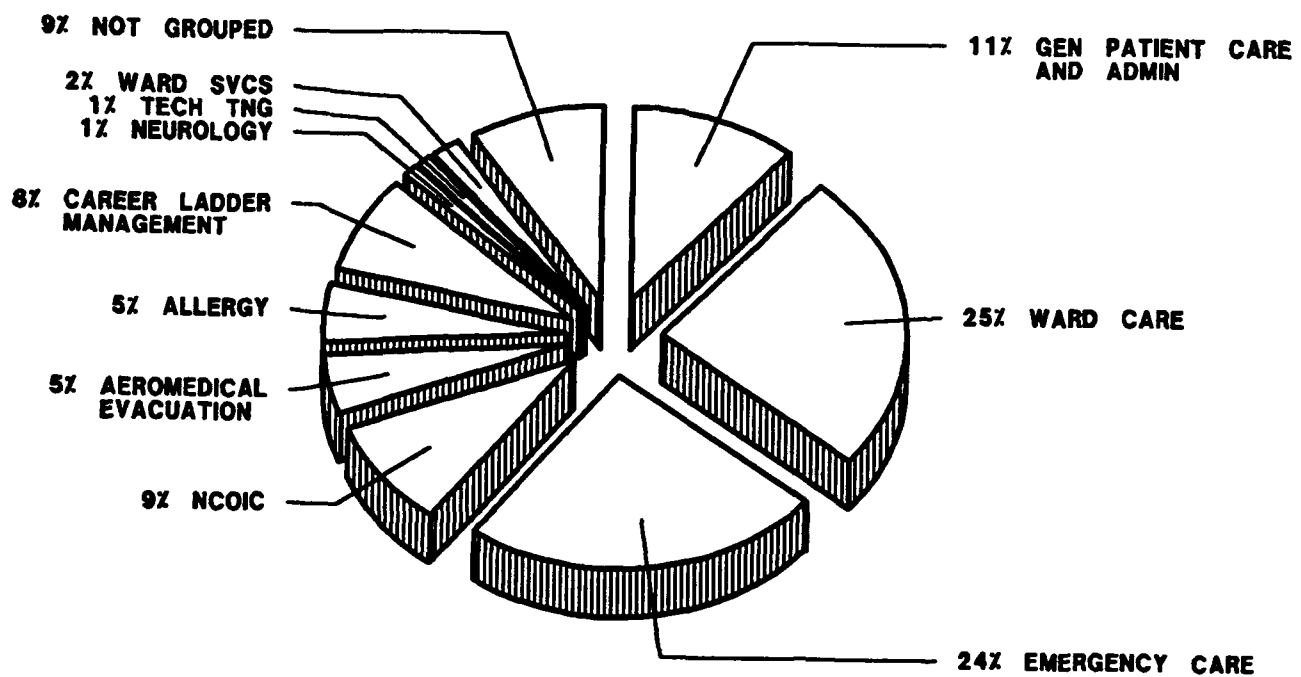


Figure 1

The nine clusters and one independent job type are listed below. The stage (STG) number beside each title is a computer-generated reference number. The letter "N" refers to the number of personnel in each group.

- I. GENERAL PATIENT CARE AND ADMINISTRATION CLUSTER (STG107, N=308)
 - A. Pediatrics
 - B. Family Practice
 - C. OB/GYN
 - D. Primary Care
- II. WARD CARE CLUSTER (STG262, N=690)
- III. WARD SERVICES IJT (STG56, N=56)
- IV. EMERGENCY CARE CLUSTER (STG159, N=684)
 - A. Independent Duty Technician (IDT)
 - B. Out Patient Care
 - C. NCOIC ER
 - D. Neurological Testing
- V. NCOIC CLUSTER (STG123, N=247)
- VI. CAREER LADDER MANAGEMENT CLUSTER (STG78, N=214)
 - A. Field Emergency
 - B. Ward Care Supervisors
 - C. Training
 - D. Staff Development/Plans Personnel
- VII. AEROMEDICAL EVACUATION CLUSTER (STG63, N=139)
 - A. Crash and Rescue
 - B. Staging MAC
- VIII. ALLERGY CLUSTER (STG33, N=143)
- IX. NEUROLOGY CLUSTER (STG279, N=20)
- X. TECHNICAL TRAINING CLUSTER (STG194, N=35)

Ninety-one percent of the survey respondents are represented in the above job groups. The remaining 9 percent performed tasks that did not group with any of the defined jobs. Brief descriptions of each cluster and the independent job type are presented below. In addition, Table 4 presents the average time spent performing the various duties across jobs. Table 5 provides selected background information across these jobs, while Appendix A lists common tasks performed by incumbents in these groups.

TABLE 4

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY 902X0
CAREER LADDER STRUCTURE GROUPS

DUTIES	GEN PATIENT CARE & ADMIN CLUSTER (STG107)	WARD CARE CLUSTER (STG262)	WARD SVCS IJT (STG56)	EMERGENCY CARE CLUSTER (STG159)	NCOIC CLUSTER (STG123)
A. ORGANIZING AND PLANNING	5	2	2	3	9
B. DIRECTING AND IMPLEMENTING	4	2	1	3	10
C. INSPECTING AND EVALUATING	3	1	1	3	11
D. TRAINING	2	1	1	2	9
E. PERFORMING GENERAL MEDICAL SERVICES AND ADMINISTRATIVE ACTIVITIES	43	16	13	22	18
F. PERFORMING PATIENT CARE ACTIVITIES	28	58	56	41	33
G. ASSISTING HEALTH CARE PROVIDERS WITH DIAGNOSTIC PROCEDURES	4	5	6	3	3
H. PERFORMING OUTPATIENT CLINICAL CARE	7	2	1	12	1
I. PERFORMING WARD SERVICES	0	10	16	0	5
J. PERFORMING FIELD EMERGENCY TREATMENT FUNCTIONS	1	1	0	4	0
K. PROVIDING MEDICAL CRASH AND RESCUE COVERAGE	0	0	0	3	0
L. PERFORMING IMMUNIZATION AND ALLERGY PREPARATION ACTIVITIES	2	0	1	3	0
M. PERFORMING ALLERGY TESTS AND PROCEDURES	0	0	0	1	0
N. PREPARING ALLERGY TESTS AND PROCEDURES	0	0	0	0	0
O. PERFORMING NEUROLOGICAL TESTS AND PROCEDURES	1	0	0	0	0
P. PERFORMING INDEPENDENT DUTY TECHNICIAN (IDT) ACTIVITIES	1	1	1	2	0
Q. PERFORMING AEROMEDICAL EVACUATION ACTIVITIES	0	0	0	0	0

NOTE: Columns may not add to 100 percent due to rounding

TABLE 4 (CONTINUED)

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY 902X0
CAREER LADDER STRUCTURE GROUPS

DUTIES	CAREER LADDER MGT CLUSTER (SIG78)	AEROMEDICAL EVAC CLUSTER (SIG63)	ALLERGY CLUSTER (SIG33)	NEUROLOGY CLUSTER (SIG279)	TECHNICAL TRNG CLUSTER (SIG194)
A. ORGANIZING AND PLANNING	18	5	6	8	6
B. DIRECTING AND IMPLEMENTING	10	4	5	6	6
C. INSPECTING AND EVALUATING	14	4	4	6	4
D. TRAINING	46	5	4	4	78
E. PERFORMING GENERAL MEDICAL SERVICES AND ADMINISTRATIVE ACTIVITIES	7	13	22	22	4
F. PERFORMING PATIENT CARE ACTIVITIES	2	27	9	6	1
G. ASSISTING HEALTH CARE PROVIDERS WITH DIAGNOSTIC PROCEDURES	0	1	0	1	0
H. PERFORMING OUTPATIENT CLINICAL CARE	0	2	0	0	0
I. PERFORMING WARD SERVICES	2	2	31	0	0
J. PERFORMING FIELD EMERGENCY TREATMENT FUNCTIONS	0	1	0	0	0
K. PROVIDING MEDICAL CRASH AND RESCUE COVERAGE	0	6	0	0	0
L. PERFORMING IMMUNIZATION AND ALLERGY PREPARATION ACTIVITIES	0	0	31	1	0
M. PERFORMING ALLERGY TESTS AND PROCEDURES	0	0	11	0	0
N. PREPARING ALLERGY TESTS AND PROCEDURES	0	0	5	0	0
O. PERFORMING NEUROLOGICAL TESTS AND PROCEDURES	0	0	0	46	0
P. PERFORMING INDEPENDENT DUTY TECHNICIAN (IDT) ACTIVITIES	0	0	0	0	0
Q. PERFORMING AEROMEDICAL EVACUATION ACTIVITIES	0	30	0	0	0

NOTE: Columns may not add to 100 percent due to rounding

TABLE 5
SELECTED BACKGROUND DATA FOR CAREER LADDER JOBS

DUTIES	GEN PATIENT CARE & ADMIN CLUSTER (STG107)	WARD CARE CLUSTER (STG262)	WARD SVCS IJT (STG56)	EMERGENCY CARE CLUSTER (STG159)	NCOIC CLUSTER (STG123)
NUMBER IN GROUP	308	690	56	684	247
AVERAGE PAYGRADE	E-4	E-4	E-4	E-4	E-5
AVERAGE NUMBER OF TASKS PERFORMED	78	114	41	175	163
DAFSC DISTRIBUTION (PERCENT)					
90230	7%	28%	45%	3%	2%
90250	66%	64%	43%	69%	30%
90230A	0%	0%	0%	0%	0%
90250A	0%	0%	0%	1%	0%
90250B	0%	0%	0%	0%	0%
90270	27%	8%	11%	27%	66%
90299	0%	0%	2%	0%	1%
90200	0%	0%	0%	0%	0%
AVERAGE MONTHS IN CAREER FIELD	79	44	45	78	129
AVERAGE MONTHS IN SERVICE	82	51	56	83	140
PERCENT IN FIRST ENLISTMENT	30%	62%	66%	29%	6%
PERCENT SUPERVISING	39%	23%	18%	41%	89%

NOTE: Columns may not add to 100 percent due to rounding

TABLE 5 (CONTINUED)
SELECTED BACKGROUND DATA FOR CAREER LADDER JOBS

DUTIES	CAREER LADDER MGT CLUSTER (SIG78)	AEROMEDICAL EVAC CLUSTER (SIG63)	ALLERGY CLUSTER (SIG33)	NEUROLOGY CLUSTER (SIG279)	TECHNICAL TRNG CLUSTER (SIG194)
NUMBER IN GROUP	214	139	143	20	35
AVERAGE PAYGRADE	7	5	4	5	5
AVERAGE NUMBER OF TASKS	82	94	110	93	16
DAFSC DISTRIBUTION (PERCENT)					
90230	0%	5%	0%	0%	0%
90250	16%	63%	8%	0%	54%
90230A	0%	0%	8%	0%	0%
90250A	0%	1%	57%	0%	3%
90250B	0%	0%	0%	35%	0%
90270	58%	26%	27%	60%	43%
90299	19%	4%	0%	0%	0%
90200	6%	0%	0%	5%	0%
AVERAGE MONTHS IN CAREER FIELD	173	92	72	95	110
AVERAGE MONTHS IN SERVICE	189	98	84	125	118
PERCENT IN FIRST ENLISTMENT	1%	20%	39%	15%	3%
PERCENT SUPERVISING	65%	39%	30%	45%	3%

NOTE: Columns may not add to 100 percent due to rounding

Descriptions of Career Ladder Jobs

I. GENERAL PATIENT CARE AND ADMINISTRATION CLUSTER (STG107, N=308).

This group performs primarily outpatient functions. Forty-three percent of their time is spent on general medical services and administrative functions, which include scheduling appointments, screening patients, answering patient telephone inquiries, and maintaining medical records. They also perform a technical job that includes obtaining and recording blood pressures, temperatures, and body weights. Twenty-eight percent of their time is spent on patient care activities. Sixty-six percent of these cluster members hold the 5-skill-level, with 27 percent holding a 7-skill-level DAFSC. This group consists of four variations: Pediatrics, Family Practice, OB/GYN, and Primary Care. Forty-nine percent of these members are nationally certified Emergency Medical Technicians (EMT). The members of this group are usually assigned to either a USAF Hospital or Medical Center. They perform an average of 78 tasks, which typically include:

- maintain treatment room supplies
- schedule patient appointments
- initiate or annotate SF Forms 550 (Urinalysis)
- answer patient telephone inquiries
- label specimens

II. WARD CARE CLUSTER (STG262, N=690). The members of this cluster perform in patient care, which usually takes place in various wards of USAF Hospitals or Medical Centers. Their job consists of basic patient care (58 percent of their time) that includes feeding and bathing patients, taking vital signs, and administering intravenous infusions. Sixty-four percent of these members hold a 5-skill-level DAFSC, with 28 percent at the 3-skill level. This is the largest group in the sample, and they have the least amount of time in the career field. Sixty-two percent are in their first enlistment. Twenty-nine percent of these members are EMT nationally certified. The Ward Care personnel are usually assigned to a USAF Hospital (46 percent) or a USAF Medical Center (35 percent). Of the average 114 tasks performed by these incumbents, typical tasks include:

- serve nourishment to patients
- admit or orient patients to wards
- administer and monitor intravenous infusions
- move or transport patients
- accompany patients to appointments or procedures
- bathe patients
- turn patients manually
- insert urinary catheters
- take orthostatic vital signs

Within this cluster, there was one variation. This was a group of 68 people who spent 95 percent of their time keyboarding medical forms.

III. WARD SERVICES IJT (STG56, N=56). Members in this group distinguish themselves from the Ward Care cluster in that in addition to basic patient care activities, their duties are more concentrated on ward services, such as cleaning delivery rooms and ward utility areas, and feeding infants. Compared to all survey respondents, members in this independent job report the highest percentage of time spent performing these Ward Services duties (16 percent), and 56 percent of their time is spent performing patient care activities. Eighty-eight percent of this group hold the 3- or 5-skill level. There are also more first-enlistment personnel in this job (66 percent) than any other identified job. Twenty-three percent of these members are nationally certified EMTs. The most common assignment for Ward Services personnel is a USAF Hospital (52 percent), USAF Medical Center (29 percent), or a USAF Regional Hospital (20 percent). Basically, the functional area of work is either Obstetrics (57 percent) or the Medical Ward (11 percent), with lesser percentage assigned to Inpatient Care, Gynecology, Pediatrics, or Surgery. Typical tasks are:

- feed infants
- initiate or annotate SF Forms 511 (Medical Record-Vital Signs Record)
- perform baby post delivery care or procedures
- perform post partum care
- clean delivery rooms
- clean ward utility areas
- serve nourishment to patients

IV. EMERGENCY CARE CLUSTER (STG159, N=684). Members of this group spend their time performing basic patient care activities (41 percent) and general medical services (22 percent) in emergency care facilities. This group of medical personnel performs 175 tasks, the largest number among the groups. Members hold the 5-skill level (69 percent) or 7-skill level (27 percent), which is typical for the 902X0 AFSC. They spend 12 percent of their time on out patient clinical care. Four job variations were found within this cluster. Independent Duty Technicians (N=3) are highly trained to perform their duties in remote locations far from more developed medical facilities. Some of their tasks include conducting sick call, consulting or coordinating treatment with a military physician, filling prescriptions, and suturing lacerations. The Out Patient Care (N=34) variation centers its skills around emergency room activities, along with the NCOIC ER (N=121) variation. A fourth small variation focuses on the area of neurological tests (N=12). Typical tasks include:

- take throat cultures
- suture lacerations
- instruct patients in crutch-walking techniques
- apply sterile dressings
- administer ear irrigations
- apply arm slings
- apply splints

Overall, 81 percent of the members of this cluster are nationally certified EMTs. These members are normally assigned to a USAF Hospital or Clinic in the functional area of the Emergency Room (63 percent).

V. NCOIC CLUSTER (STG123, N=247). Members in this second largest cluster accomplish the second greatest number (163) of tasks and have the second highest months in the career field (129). Most of the NCOICs spend 33 percent of their time on patient care activities and a large amount of time on the supervisory tasks of organizing, planning, directing, implementing, inspecting, evaluating, and training. The average grade is E-5, and they supervise an average of six people. They are assigned to USAF Hospitals (45 percent), USAF Medical Centers (30 percent), Regional Hospitals (13 percent), or USAF Clinics (11 percent). Forty-five percent are EMT nationally certified. Common tasks include:

- establish equipment or supply levels
- counsel personnel on personal or military-related matters
- establish work priorities
- plan or schedule assignments
- participate in staff meetings, other than conducting
- write EPRs
- conduct OJT

VI. AEROMEDICAL EVACUATION CLUSTER (STG063, N=139). Cluster members are distinguished from the total sample based on their basic mission of aeromedical evacuation. They spend most of their time on tasks necessary for airlifting patients. Thirty percent of their time is spent performing aeromedical evacuation activities. No other cluster performs this function. They average 94 tasks in all and spend an additional 27 percent of their time on the more common cluster task of performing patient care activities. These members are typically assigned to an Aeromedical Evacuation Squadron (68 percent), USAF Medical Center (17 percent), or a station other than a medical treatment facility (9 percent). Variations within this group include Crash and Rescue (N=11) and Staging-MAC personnel (N=96). The Crash and Rescue personnel's tasks are concentrated on special tasks to include drawing diagrams of accident or crash sites and stocking and driving field ambulances. The Staging-MAC personnel are responsible for assisting in such tasks as making up litters, moving or transferring patients, and arranging for special diets to accompany air evacuation patients. The remainder of this group (N=96) are personnel who have the A-prefix and are flight qualified. Eighty-six percent of the A-prefix group are assigned to an Aeromedical Evacuation Squadron. Only five of these members are in their first enlistment. Thirty-one percent are EMT nationally certified, and 34 percent are trained and certified, but not as EMT. Typical tasks for cluster members include:

- perform anti-hijack searches of patients, passengers, and baggage
- enplane or deplane patients
- prepare, maintain, and operate medical equipment or supplies for air evacuation
- direct vehicle movement around aircraft
- maintain flightline security
- initiate or annotate DD Forms 600 (Patient's Baggage Tag)
- initiate or annotate DD Forms 602 (Patient's Evacuation Tag)
- enplane or deplane baggage

VII. ALLERGY CLUSTER (STG033, N=143). This group of 143 respondents performs specialized tasks involving immunization and allergy preparation activities. Other characteristic tasks include preparing and performing allergy tests and procedures. Although 92 percent of these members are in the functional area of Allergy/Immunology, they are also assigned to the Emergency Room, the flight surgeon's office, Family Practice, Pediatrics, or Primary care. Fifty percent are located at a USAF Hospital and 18 percent at USAF Medical Centers. Most members received their A-shred training at the Walter Reed Army Medical Hospital (62 percent), while some (18 percent) received training at a USAF Regional Medical Facility, and the remainder (13 percent) had OJT. Thirty-one percent of the Allergy cluster are nationally certified EMTs; 70 percent are trained but not certified, and 31 percent are not EMT trained at all. They perform an average of 110 tasks which typically include:

- perform mobility processing functions
- dispose of needles or syringes
- counsel patients regarding routine immunization procedures or effects
- administer subcutaneous injections
- interpret and record results of tuberculin skin tests
- administer intramuscular injections
- counsel patients regarding allergy injection programs
- prepare medications or vaccines for injections

VIII. CAREER LADDER MANAGEMENT (STG078, N=214). Seventy-seven percent of the members in this most senior cluster hold the 9-skill level. Career ladder managers average 173 months TICF and 189 months TAFMS, with an average pay-grade of E-7. On an average, members supervise eight people. Forty-six percent of their time is spent performing general medical services and administrative functions. Sixty-five percent spend more time than any other group on the supervisory tasks of planning, directing, implementing, inspecting, evaluating, and training. Variations include Field Emergency personnel (N=15), Ward Care Supervisors (N=14), Training personnel (N=37) and Staff Development/ Plans Personnel (N=20). Forty-six percent are nationally certified EMTs; 8 percent are not trained, and 33 percent are trained and certified, but not as EMTs. They perform an average of 82 tasks which include:

- participate in staff meetings, other than conducting
- counsel personnel on personal or military-related matters
- conduct self inspections
- establish work priorities files
- conduct staff meetings
- initiate actions to correct substandard performance of personnel
- establish performance standards for subordinates
- orient newly assigned medical personnel

IX. NEUROLOGY CLUSTER (STG279, N=20). This small group of 20 medical personnel performs a specialized job. Sixty percent hold a 7-skill level, and 35 percent hold a 5-skill level with a B-suffix. Performing neurological tests and procedures is their main duty, accounting for 46 percent of their time. Normally, these personnel are in the functional area of Neurology (65 percent), but 6 percent are in medical readiness, and 5 percent are in standard evaluation. Typical tasks include:

- perform EEGs using hyperventilation activation
- apply paste electrodes for EEG
- perform EEGs using photic stimulation activation
- perform EEGs using monopolar/referential montages
- perform EEGs using bipolar montages
- prepare electrode sites for application of electrodes
- measure patient's head and mark electrode sites (using 10-20 system) for EEGs
- adjust neurological equipment during recordings
- detect and eliminate artifacts

Thirty-five percent of the Neurology personnel are nationally certified EMTs, and 20 percent are trained but not certified. Thirty-five percent are not trained as EMTs.

X. TECHNICAL TRAINING CLUSTER (STG194, N=35). This group of 35 respondents spends 78 percent of its time on training, with the rest devoted almost totally to supervisory tasks. Only 3 percent of them actually do any supervising. Almost all of them hold either the 5- or 7-skill level. Sixty percent of the trainers are nationally certified EMTs; 17 percent are trained and certified, but not EMT. The average member of the group is not assigned to a medical treatment facility, but to the technical training school at Sheppard AFB. These medical personnel perform the least number of tasks, averaging 16. Representative tasks include:

- conduct formal classroom training
- administer tests
- counsel students or trainees on training progress
- evaluate progress of trainees

- conduct formal classroom training
- maintain training records
- maintain training equipment
- construct or develop training materials
- revise lesson plans

Comparison of Specialty Jobs

Analysis of the AFSC 902X0 career ladder structure identified nine clusters and one independent job type. Seven of the clusters represent the technical responsibilities of the career ladder. The remaining clusters represent managerial and training responsibilities.

The clusters that represent the technical portion of the career ladder reflect the unshredded portion of the AFSC, as well as the shreds specified in AFR 39-1. Specific clusters were identified for allergy (A-shred) and neurology (B-shred). In addition, the members performing aeromedical evacuation (A-prefix) also grouped to form a cluster. The unshredded Medical Services personnel grouped into six clusters. These clusters basically denote a division among members performing patient care, ward, and emergency duties. A group of personnel performing in independent duty positions were identified within the Emergency Care cluster.

While the job structure is based on tasks performed and time spent on those tasks, background data can provide useful additional information. For example, the largest percentage of first-term personnel is found within the Ward Care cluster (STG 262). A higher percentage of female personnel (63 percent) work within the General Patient Care and Administration cluster than any other job group. As expected, the most senior personnel appear within the Career Ladder Management cluster.

JOB STRUCTURE COMPARISON TO PREVIOUS SURVEY

The results of the specialty job analysis were compared to the June 1986 Medical Services career ladder occupational survey report (Report Number: AFPT 90-902-737). Sample size for the 1986 survey was larger--3,308 compared to 2,794 for the 1990 survey.

Table 6 lists the major jobs identified in the 1990 survey and their equivalent jobs from the 1986 OSR. A review of the jobs performed by the current sample indicates most of the 1990 job groups can be matched to similar jobs performed by the Medical Services personnel in the job groups identified in the 1986 report. Overall, 9 of the 10 current jobs have an equivalent counterpart in the previous study. The only job not specifically identified in the previous study was that of the NCOICs, though they existed within the other jobs. Most of the NCOICs possessed their 7-level and were responsible for various technical as well as supervisory duties.

TABLE 6
COMPARISON OF MAJOR JOBS BETWEEN SURVEYS

<u>CURRENT SURVEY (N=2,794)</u>	<u>1986 SURVEY (N=3,308)</u>
WARD SERVICES IJT WARD CARE CLUSTER	WARD CARE CLUSTER
GENERAL PATIENT CARE & ADMINISTRATION CLUSTER	OUTPATIENT CARE PERSONNEL CLUSTER
EMERGENCY CARE CLUSTER	EMERGENCY ROOM (ER) PERSONNEL CLUSTER
NCOIC CLUSTER	NOT IDENTIFIED
AEROMEDICAL EVACUATION CLUSTER	AEROMEDICAL STAGING-MAC INDEPENDENT JOB TYPE AEROMEDICAL EVACUATION CLUSTER
ALLERGY CLUSTER	ALLERGY PERSONNEL CLUSTER
CAREER LADDER MANAGEMENT CLUSTER	CAREER LADDER MANAGERS CLUSTER
NEUROLOGY CLUSTER	NEUROLOGY PERSONNEL CLUSTER
TECHNICAL TRAINING CLUSTER	TRAINING PERSONNEL CLUSTER

Generally, the 902X0 career ladder has remained relatively unchanged in terms of basic technical job types and personnel makeup.

ANALYSIS OF DAFSC GROUPS

In addition to the analysis of the career ladder structure, an examination of the jobs and tasks performed at each skill level is helpful in understanding the Medical Services specialty. The DAFSC analysis compares the skill levels to identify differences in task performance. This information may then be used to determine whether personnel are utilized in the manner specified by the AFR 39-1 Specialty Description and may serve as a basis for considering changes to current utilization policies and training programs.

Table 7 of this report displays the distribution of DAFSC group members across career ladder jobs. As this table indicates, the 1,810 members of the 3- and 5-skill-level groups cover the spectrum of career ladder jobs, with 74 percent found in either the General Patient Care and Administration, Ward Care, or the Emergency Care clusters. Only 3 percent are part of the Career Ladder Management cluster. The largest portion of 7-skill-level members are found in the Emergency Care cluster (23 percent), with 20 percent and 16 percent of the members in supervisory jobs of NCOIC and Career Ladder Management clusters, respectively. The Technical Training Instructors include members from both the 3-, 5-, and 7-skill-levels.

Table 8 shows the average percent time spent on duties across all skill level groups. The 3- and 5-skill-level members spend twice as much of their time performing patient care activities compared to the 7-skill level group. In contrast, 7-skill-level DAFSC members concentrate more on supervisory duties (A thru D).

Comparison of the duty and task performance between DAFSCs 90230 and 90250 indicates that, even though they are similar jobs, some differences are apparent. These differences are shown in Table 9. It is apparent from the data that more 3-skill-level personnel are doing basic skills to include making beds, bathing and feeding patients, and cleaning ward utility areas than are their 5-skill-level counterparts. On the other hand, more 5-skill-level personnel are responsible for difficult tasks, such as performing triage and administering local anesthetics.

For purposes of this study, a combination of the 90230 and 90250 personnel will be used and discussed as a representative group for comparison with the 7-skill-level group. Also, the 9-and CEM-skill levels, which are very similar, will be discussed as a group. Further discussion of these data is contained below.

TABLE 7

DISTRIBUTION OF 902X0/A/B DAFSC GROUP MEMBERS ACROSS CAREER LADDER JOBS
(NUMBER AND PERCENT RESPONDING)

CAREER LADDER JOBS	DAFSC 90230/50 (N=1,810)		DAFSC 90230A/50A (N=106)		DAFSC 90270 (N=797)		DAFSC 90299/00 (N=72)	
	NBR	PCT	NBR	PCT	NBR	PCT	NBR	PCT
I. GENERAL PATIENT CARE AND ADMINISTRATION CLUSTER (STG107, N=308)	225	12%	0	0%	83	10%	0	0%
II. WARD CARE CLUSTER (STG262, N=690)	635	35%	0	0%	55	7%	0	0%
III. WARD SERVICES IJT (STG56, N=5)	49	3%	0	0%	6	1%	1	1%
IV. EMERGENCY CARE CLUSTER (STG054, N=7)	492	27%	7	7%	185	23%	0	0%
V. NCOIC CLUSTER (STG123, N=47)	79	4%	0	0%	163	20%	2	3%
VI. CAREER LADDER MANAGEMENT CLUSTER (STG78, N=214)	47	3%	0	0%	124	16%	54	75%
VII. AEROMEDICAL EVACUATION CLUSTER (STG63, N=139)	95	5%	1	1%	36	5%	6	8%
VIII. ALLERGY CLUSTER (STG33, N=143)	11	1%	93	88%	39	5%	8	11%
IX. NEUROLOGY CLUSTER (STG279, N=20)	0	0%	0	0%	12	1%	1	1%
X. TECHNICAL TRAINING CLUSTER (STG194, N=35)	19	1%	1	1%	15	2%	0	0%
NOT GROUPED	158	9%	4	3%	79	10%	0	0%
TOTAL	1,810	100%	106	100%	797	100%	72	99%

* Less than 1 percent

NOTE: Columns may not add exactly to 100 percent due to rounding

TABLE 8

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY 902X0 DAFSC GROUPS

DUTIES	TOTAL SAMPLE (N=2,679)	DAFSC 90230/50 (N=1,810)	DAFSC 90270 (N=797)	DAFSC 90299 (N=58)	DAFSC 90200 (N=14)
A ORGANIZING AND PLANNING	6	4	11	25	28
B DIRECTING AND IMPLEMENTING	5	3	9	21	23
C INSPECTING AND EVALUATING	5	2	9	21	24
D TRAINING	5	3	9	8	10
E PERFORMING GENERAL MEDICAL SERVICES AND ADMINISTRATIVE ACTIVITIES	20	22	20	10	5
F PERFORMING PATIENT CARE ACTIVITIES	37	41	24	7	2
G ASSISTING HEALTH CARE PROVIDERS WITH DIAGNOSTIC PROCEDURES	3	4	2	*	*
H PERFORMING OUTPATIENT CLINICAL CARE	5	6	4	1	*
I PERFORMING WARD SERVICES	4	4	2	*	1
J PERFORMING FIELD EMERGENCY TREATMENT FUNCTIONS	2	1	2	1	*
K PROVIDING MEDICAL CRASH AND AIR RESCUE COVERAGE	1	1	1	1	*
L PERFORMING IMMUNIZATION AND ALLERGY PREPARATION ACTIVITIES	2	3	3	1	*
M PERFORMING ALLERGY TESTS AND PROCEDURES	1	1	1	*	*
N PREPARING ALLERGY EXTRACTS OR KITS	*	*	*	*	*
O PERFORMING NEUROLOGICAL TESTS AND PROCEDURES	*	*	1	*	7
P PERFORMING INDEPENDENT DUTY TECHNICIAN (IDT) ACTIVITIES	1	1	1	*	*
Q PERFORMING AEROMEDICAL EVACUATION ACTIVITIES	2	2	1	3	*

* Less than 1 percent

NOTE: Columns may not add to 100 percent due to rounding

TABLE 9

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 90230 AND DAFSC 90250 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 90230 (N=285)	DAFSC 90250 (N=1,525)	DIFFERENCE
I458 Make beds	79	38	40
I452 Admit and orient patients to wards	70	36	34
I463 Serve nourishment to patients	70	36	34
E194 Initiate or annotate SF Forms 511 (Medical Record - Vital Signs Record)			
I453 Bathe patients	69	36	33
I455 Clean ward utility areas	62	30	32
E187 Initiate or annotate DD Forms 792 (Twenty-Four Patient Intake and Output Worksheet)	64	32	32
F323 Measure and record intake and output	60	29	31
I459 Orient visitors to wards	75	46	30
F304 Give skin care	59	30	29
F302 Feed patients	60	32	27
F339 Perform oral hygiene on patients	52	29	23
I461 Prepare and administer sitz baths	48	25	23
F259 Administer bedpans or urinals	44	22	22
F303 Give back rubs	82	61	21
F360 Prepare heat application equipment	45	25	20
F301 Feed infants	48	28	20
	42	22	20

TABLE 9 (CONTINUED)

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 90230 AND DAFSC 90250 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 90230 (N=285)	DAFSC 90250 (N=1,525)	DIFFERENCE
F267 Administer oral medications	15	36	-21
H439 Inventory drugs	10	31	-21
J471 Perform or practice controlling hemorrhages	18	40	-21
H426 Administer initial care at accident scenes	10	31	-21
H444 Prepare patients and treatment areas for minor surgery	14	36	-22
F260 Administer ear irrigations	26	48	-22
H446 Remove sutures	18	40	-22
E159 Initiate DD Forms 1150 (Request for Issue or Turn-In)	22	44	-22
D113 Conduct QJT	12	35	-23
J476 Treat patients for shock	12	35	-23
J475 Perform triage	8	31	-23
F354 Prepare ear irrigations	19	42	-23
J466 Apply cravatte bandages	14	37	-23
H449 Suture lacerations	8	31	-23
F310 Identify and initiate emergency treatment for syncope	11	34	-23
E219 Initiate or annotate SF Forms 600 (Health Record - Chronological Record of Medical Care)	14	38	-24
H427 Administer local anesthetics	9	33	-24
H442 Perform fluorescein eye stains	6	30	-24

Skill-Level Descriptions

DAFSC 90230/50. As a combined group, these personnel perform an average of 112 tasks. Of the 1,810 people in this group (65 percent of the survey sample), 635 (35 percent) are members of the Ward Care cluster. There are 492 members in the Emergency Care cluster. Table 8 displays the duties where the 90230/50 members spend most of their time. These duties are primarily technical in nature. Most of these members spend time on tasks such as take and record temperatures, pulse rates, respiratory rates, blood pressures, and body weights. A list of representative tasks can be found at Table 10.

DAFSC 90270. The group of 797 7-skill-level personnel (29 percent of the 902X0 survey sample) performs an average of 129 tasks. These airmen supervise an average of six people and spend 38 percent of their time on supervisory and managerial tasks (duties A through D). While many of the 7-skill-level personnel are members of the Career Ladder Management and NCOIC clusters, nearly 58 percent of these highly skilled airmen are also present in the more technically oriented jobs (see Table 7). Examples of tasks performed by this group include: participate in staff meetings, write EPRs, counsel personnel on personal or military-related matters, and determine work priorities, along with technical tasks such as take and record pulse rates, temperatures, and respiratory rates. A more complete listing of characteristic tasks for these incumbents can be found in Table 11.

Tasks which best distinguish 7-skill-level personnel from their junior counterparts are presented in Table 12. Examples of tasks with the greatest difference in members performing include administer bedpans or urinals, turn patients manually, and test urine for sugar and acetone. Tasks performed by more senior level NCOs include establish performance standards for subordinates, draft budget requirements, and plan work assignments. As expected, the key difference lies in an addition of supervisory functions for 7-skill-level airmen.

DAFSC 90290/00. Technical duties no longer occupy these 72 senior managers' time. In fact, as Table 8 shows, most time at these skill levels is involved in management and administration. Senior career ladder personnel jobs fell basically within the Career Ladder Management cluster, the Allergy cluster, and the Aeromedical Evacuation cluster. For a representative task list, see Table 13.

The largest differences between 90270 and 90299/00 personnel show that 7-skill-level personnel are spending a major portion of their time performing technical tasks compared to the 99/00-skill-level personnel. A detailed list of the differences can be found at Table 14.

Summary

Career ladder progression within the 902X0 career ladder is typical of most ladders. The 3- and 5-skill-level personnel spend the majority of their job time performing basic technical tasks. Individuals possessing a 7-skill level still concentrate their efforts on technical tasks, but begin to include

TABLE 10
 REPRESENTATIVE TASKS PERFORMED BY DAFSC 90230/50 PERSONNEL
 (N=1,810)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
F400 Take and record temperatures	90
F398 Take and record pulse rate	88
F399 Take and record respiratory rate	87
F394 Take and record blood pressures	83
F396 Take and record body weight and height measurements	74
F401 Take orthostatic vital signs	72
E229 Label specimens	72
F258 Administer and monitor intravenous infusions	70
F331 Move or transport patients	70
A17 Participate in staff meetings, other than conducting	69
F321 Maintain sterile fields	68
F268 Administer oxygen therapy	66
F366 Prepare oxygen equipment	68
F257 Accompany patients to appointments or procedures	65
F296 Change dressings of patients	64
F259 Administer bedpans or urinals	64
F316 Inspect and restock emergency carts	61
F297 Clean patient care areas	60
E148 Brief patients regarding medical facility policies	59
F285 Apply tape or nonelastic bandages	59
E147 Answer patient telephone inquiries	58
H441 Maintain treatment room supplies	57
E210 Initiate or annotate SF Forms 550 (Urinalysis)	57

TABLE 11
 REPRESENTATIVE TASKS PERFORMED BY DAFSC 90270 PERSONNEL
 (N=797)

TASKS	MEMBERS PERFORMING
A17 Participate in staff meetings, other than conducting	79
F398 Take and record pulse rate	78
F400 Take and record temperatures	77
F399 Take and record respiratory rate	75
C105 Write EPRs	72
F394 Take and record blood pressures	71
B63 Orient newly assigned medical personnel	71
B38 Counsel personnel on personal	70
A15 Establish work priorities	68
E242 Order supplies	67
A12 Establish equipment or supply levels	65
A25 Plan or schedule work assignments	64
D113 Conduct QJT	63
C80 Conduct self-inspections	62
F396 Take and record body weight and height measurements	59
E147 Answer patient inquiries	58
B72 Supervise Medical Service Specialists (AFSC 90250)	58
E146 Annotate patient treatment records	58
C100 Inspect personnel for compliance with military standards	58
D125 Maintain training records	57
E229 Label specimens	57
F401 Take orthostatic vital signs	56
E148 Brief patients regarding medical facility policies	55
A14 Establish performance standards for subordinates	55
B58 Initiate actions to correct substandard performance of personnel	55

TABLE 12

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 90230/50 AND DAFSC 90270 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 90230/50 (N=1,810)	DAFSC 90270 (N=797)	DIFFERENCE
F259 Administer bedpans or urinals	64	39	25
F404 Turn patients manually	51	27	24
G423 Test urine for sugar and acetone	55	33	22
I458 Make beds	45	22	22
E194 Initiate or annotate SF Forms 511 (Medical Record - Vital Signs Record)	41	20	22
F323 Measure and record intake and output	50	29	21
I452 Admit and orient patients to wards	41	20	21
I463 Serve nourishment to patients	41	21	21

A15 Establish work priorities	31	68	-38
B58 Initiate actions to correct substandard performance of personnel	17	55	-38
A3 Conduct staff meetings	11	49	-38
B72 Supervise Medical Services Specialists (AFSC 90250)	20	58	-38
A14 Establish performance standards for subordinates	16	55	-38
A9 Draft budget requirements	7	45	-38
A25 Plan or schedule work assignments	23	64	-41
C80 Conduct self-inspections	21	62	-41
C100 Inspect personnel for compliance with military standards	17	58	-41
A33 Schedule leaves or passes	12	53	-41
C107 Write recommendations for special awards or decorations	8	51	-43
B38 Counsel personnel on personal or military-related matters	22	70	-48
C105 Write EPRs	19	72	-53

TABLE 13
REPRESENTATIVE TASKS PERFORMED BY
DAFSC 90299/00 PERSONNEL
(N=72)

TASKS	PERCENT MEMBERS PERFORMING
A17 Participate in staff meetings, other than conducting	92
B46 Draft or revise job descriptions	83
B38 Counsel personnel on personal or military-related matters	81
A3 Conduct staff meetings	76
A5 Determine personnel requirements	75
C100 Inspect personnel for compliance with military standards	74
B60 Interpret policies or directives for subordinates	74
A1 Assign personnel to duty positions	74
C80 Conduct self-inspections	74
B58 Initiate actions to correct substandard performance of personnel	72
A15 Establish work priorities	72
A14 Establish performance standards for subordinates	72
A11 Draft recommendations for changes to governing directives, standards, or local operating procedures	72
C87 Evaluate job descriptions	72
C107 Write recommendations for special awards or decorations	69
A2 Assign sponsors for newly assigned personnel	69
A4 Coordinate medical activities with specialty clinics	68
A34 Schedule personnel for school or special temporary duty (TDY) assignments	65
B59 Initiate requests for personnel replacements	64
A13 Establish organization policies	63
A24 Plan or prepare briefings	61
B62 Maintain status boards or charts	60
C91 Evaluate quality of patient care	60
C89 Evaluate personnel for promotion, demotion, or reclassification	60
A6 Develop or revise organization of section	60
B47 Draft recommendations for changes in equipment or personnel requirements	60
A23 Plan or develop status boards or charts	60

TABLE 14

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSCs 90270 AND 90299/00 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 90270 (N=797)	DAFSC 90299/00 (N=72)	DIFFERENCE
F400 Take and record temperatures	77	25	52
F398 Take and record pulse rate	77	26	51
F399 Take and record respiratory rate	75	25	50
E229 Label specimens	57	8	49
F401 Take orthostatic vital signs	55	6	49
E242 Order supplies	66	19	47
F394 Take and record blood pressures	71	25	46
E210 Initiate or annotate SF Forms 550	49	4	44
E206 Initiate or annotate SF Forms 546 (Chemistry I)	48	4	44
E209 Initiate or annotate SF Forms 549 (Hematology)	48	4	44
F396 Take and record body weight and height measurements	59	15	43
E234 Maintain medical equipment	54	11	43
F268 Administer oxygen therapy	53	10	43
E217 Initiate or annotate SF Forms 557 (Miscellaneous)	46	3	43
E213 Initiate or annotate SF Forms 553 (Microbiology I)	47	4	42
H441 Maintain treatment room supplies	48	5	42

TABLE 14 (CONTINUED)

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSCs 90270 AND 90299/00 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 90270 (N=797)	DAFSC 90299/00 (N=72)	DIFFERENCE
C89 Evaluate personnel for promotion, demotion, or reclassification	38	60	-22
A24 Plan or prepare briefings on temporary duty (TDY) assignments	38	61	-23
A6 Develop or revise organization of section	35	60	-25
A3 Conduct staff meetings	48	76	-28
A1 Assign personnel to duty positions	41	74	-29
B62 Maintain status boards or charts	30	60	-30
C87 Evaluate job descriptions	42	72	-30
B47 Draft recommendations for changes in equipment or personnel requirements	28	60	-32
A11 Draft recommendations for changes to governing directives, standards, or local operating procedures	39	72	-33
A5 Determine personnel requirements	41	75	-34
A34 Schedule personnel for school or special temporary duty (TDY) assignments	31	65	-34
A13 Establish organization policies	24	63	-39
B46 Draft or revise job descriptions	43	83	-40
B59 Initiate requests for personnel replacements	22	64	-42
A2 Assign sponsors for newly assigned personnel	25	69	-44

supervisory and managerial functions. No substantial decrease in time spent performing technical tasks is found, only an increase in the number of tasks. The 9-skill-level and CEM-code personnel perform very few technical tasks and spend most of their time in supervisory or specialty (neurology, allergy, aeromedical) roles.

ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

The results of the skill level and job structure analysis were compared with the AFR 39-1 Specialty Descriptions, dated 30 April 1991, for the Medical Services Specialist. AFR 39-1 describes, in broad terms, the tasks and duties performed by members of the various skill-level groups of a career ladder. Overall, the AFR 39-1 descriptions for AFSC 902X0 personnel accurately reflect actual personnel utilization in the field. The descriptions depict the technical aspects of the job, as well as the major jobs identified in the work structure analysis.

TRAINING ANALYSIS

Occupational survey data provide one of several sources of information which can be used to make training programs more relevant and meaningful to students. The three most commonly used types of occupational survey information are: (1) the percent of first-enlistment (1-48 months TAFMS) or first-job (1-24 months TAFMS) personnel performing tasks covered in the job inventory, (2) ratings of relative difficulty of tasks, and (3) the ratings of relative emphasis which should be placed on tasks for first-enlistment training. These data can be used in examining training documents, such as the Specialty Training Standard (STS) and the Plan of Instruction (POI).

To aid in the examination of the 902X0 specialty training documents, personnel from Sheppard AFB assisted in matching job inventory tasks to appropriate sections of the STS and the two basic POIs. The match for the Allergy course POI was accomplished by training personnel at the Walter Reed Army Hospital. The POI match for the Neurology course was completed with the help of the Bethesda Naval Hospital electroencephalography instructors. With these matchings, comparisons of survey data to the training documents were accomplished. A complete computer listing displaying percent members performing tasks, training emphasis, and task difficulty ratings for each task, along with STS and POI matchings, has been forwarded to the technical school for use in detailed reviews of training documents. The AFSC 902X0 Training Requirements Analysis (TRA) was completed in January 1991 and is available for the technical school to assist in the review of the training documents.

While reviewing this section of the report, note that tasks performed by moderate to high percentages of personnel (30 percent or more) in the first-enlistment group may justify resident technical training. TE and TD ratings, based on the opinions of experienced career ladder personnel, are secondary factors that may assist training developers in deciding which tasks should be emphasized for entry-level training. Those tasks receiving high task factor ratings, but performed by low percentages of first-enlistment personnel, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best left out of training for new personnel. Training decisions are not only weighed against these factors, but should be influenced by many other considerations including command concerns, safety standards, and criticality of the tasks.

Training Emphasis and Task Difficulty

Training Emphasis (TE) and Task Difficulty (TD) ratings are secondary factors that can assist technical school personnel in deciding which tasks should be emphasized in entry-level training. These ratings, based on the judgments of senior career ladder NCOs working at operational units in the field, are collected to provide training personnel with a rank-ordering of those tasks considered important for first-term airman training (TE) (see Table 15 for the top rated tasks), along with a measure of the difficulty of those tasks (TD) (see the highest rated tasks presented in Table 16). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors, accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-term personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To help in this determination, an Automated Training Indicator (ATI) is computed for each task in the inventory. ATI combines first-enlistment percent members performing, TE, and TD data to compute training decisions based on the criteria found in ATCR 52-22, Atch 1. The computed ATI ranges from 1 to 18, with an 18 being the highest level of training indicated. An ATI of 8 or less leads to a training decision of OJT only. To illustrate how the ATI is computed, if a task has received high TE and TD ratings, and also has a high percentage of first-term members performing, then a high rating is assigned to the task. With a high ATI rating, strong recommendations can be made to emphasize training the task in a resident training course.

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

TABLE 15

TASKS RATED HIGHEST IN TRAINING EMPHASIS (TE) FOR 902X0 PERSONNEL
(GREATER THAN 1 STANDARD DEVIATION ABOVE THE AVERAGE)

TASKS	TNG EMPH*	PERCENT MEMBERS PERFORMING			TASK DIFF**
		1ST JOB (N=349)	1ST ENL (N=872)		
F335 Perform cardiopulmonary resuscitation (CPR)	8.80	39	49		5.70
F308 Identify and initiate emergency treatment for anaphylaxis	7.39	18	27		6.21
F258 Administer and monitor intravenous infusions	6.86	70	73		5.23
F307 Identify and care for respiratory distress	6.82	44	51		5.68
F268 Administer oxygen therapy	6.78	61	68		4.54
F400 Take and record temperatures	6.73	94	94		2.49
F394 Take and record blood pressures	6.63	87	86		3.13
F321 Maintain sterile fields	6.63	68	72		4.63
F398 Take and record pulse rate	6.55	93	92		2.85
F366 Prepare oxygen equipment	6.55	69	69		4.29
H428 Apply sterile dressings	6.53	52	58		4.45
F399 Take and record respiratory rate	6.51	89	90		2.80
F401 Take orthostatic vital signs	6.43	71	75		3.45
F296 Change dressings of patients	6.39	66	67		4.42
F294 Attach cardiac monitoring leads to patients	6.37	55	55		3.74
F347 Perform venipuncture for blood sampling	6.33	42	49		5.29
F284 Apply suction to patients	6.31	52	61		5.03
F323 Measure and record intake and output	6.27	73	60		4.34
F316 Inspect and restock emergency carts	6.18	57	63		4.47
F315 Insert urinary catheters	6.14	64	61		5.43
F331 Move or transport patients	6.10	74	75		4.50
F396 Take and record body weight and height and measurements	5.59	79	78		2.74

* Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

** Average Task Difficulty = 5.00 with SD of 1.00

TABLE 16

TASKS RATED HIGHEST IN TASK DIFFICULTY (TD) FOR 902X0 PERSONNEL
(GREATER THAN 1 STANDARD DEVIATION ABOVE THE AVERAGE)

TASKS	TASK DIFF*	PERCENT MEMBERS PERFORMING			TNG EMPH**
		1ST ENL (N=872)	90250 (N=1,525)	90270 (N=797)	
P656 Perform emergency cricothyroidotomies	7.51	1	1	3	2.04
F311 Identify cardiac arrhythmias	7.31	27	33	31	5.43
B77 Write technical papers for publication	7.27	2	2	3	.37
A20 Plan medical disaster control procedures	7.08	4	5	14	1.67
D118 Develop career development course (CDC) materials	7.06	1	3	4	1.39
P660 Perform ligation of vessels	7.04	0	0	2	1.59
O606 Perform technical analyses of neurodiagnostic procedures	7.00	1	0	1	.65
P625 Coordinate movement of air transportable clinics (ATC) or air transportable hospitals (ATH)	6.98	1	1	1	1.53
A6 Develop or revise organization of section	6.94	7	12	35	1.47
M545 Mix extracts for allergy testing	6.93	0	1	3	1.24
F312 Identify signs and symptoms of renal failure	6.92	16	17	13	4.67
H426 Administer initial care at accident scenes	6.88	24	31	29	6.67
D130 Prepare workbooks or study guides	6.85	2	5	11	.90
A9 Draft budget requirements	6.85	3	8	45	2.27
P626 Coordinate movement of squadron medical elements (SME) or medical air staging facilities (MASF)	6.84	1	0	1	1.43

* Average Task Difficulty = 5.00 with SD of 1.00

** Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

TABLE 16 (CONTINUED)

TASKS RATED HIGHEST IN TASK DIFFICULTY (TD) FOR 902X0 PERSONNEL
(GREATER THAN 1 STANDARD DEVIATION ABOVE THE AVERAGE)

TASKS	TASK DIFF*	PERCENT MEMBERS PERFORMING			TNG EMPH**
		1ST ENL (N=872)	90250 (N=1,525)	90270 (N=797)	
A27 Plan physical layout of medical service facilities	6.79	3	4	10	1.08
J474 Perform or practice extrication procedures	6.77	24	30	28	5.78
A8 Develop self-inspection programs	6.77	6	11	37	1.94
J475 Perform triage	6.74	24	31	32	5.63
C108 Write staff studies, surveys, or special reports, other than training reports	6.73	3	6	17	1.41
P675 Treat emergency dental problems	6.71	1	1	4	1.90
A11 Draft recommendations for changes to governing directives, standards, or local operating procedures	6.69	5	10	39	1.57
P669 Prescribe treatments	6.68	1	1	5	2.27
D129 Prepare course curricula, plan of instruction (POI), or specialty training standards (STS)	6.67	2	5	14	1.06
P653 Perform blood analyses	6.66	1	1	3	1.76
O605 Perform sleep activation EEGs	6.63	1	0	1	.67
F292 Assist with deliveries of babies	6.63	22	17	12	5.80
C83 Evaluate budget requirements	6.60	3	7	38	1.86

* Average Task Difficulty = 5.00 with SD of 1.00

** Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

Analysis of First-Enlistment Personnel

First-enlistment personnel are the target group for the initial resident training course. OSR data provide information which can be used by training personnel to develop or evaluate training programs. For example, percent members performing task data are available for first job (1-24 months TAFMS) and first-enlistment (1-48 months TAFMS) groups. Background data provide such information as areas where they work and equipment used. Data from the career ladder structure analysis show the types of jobs being performed by newly assigned airmen. TE and TD ratings provide a consensus of opinion from experienced raters in what they consider important for training and how difficult the tasks are to learn.

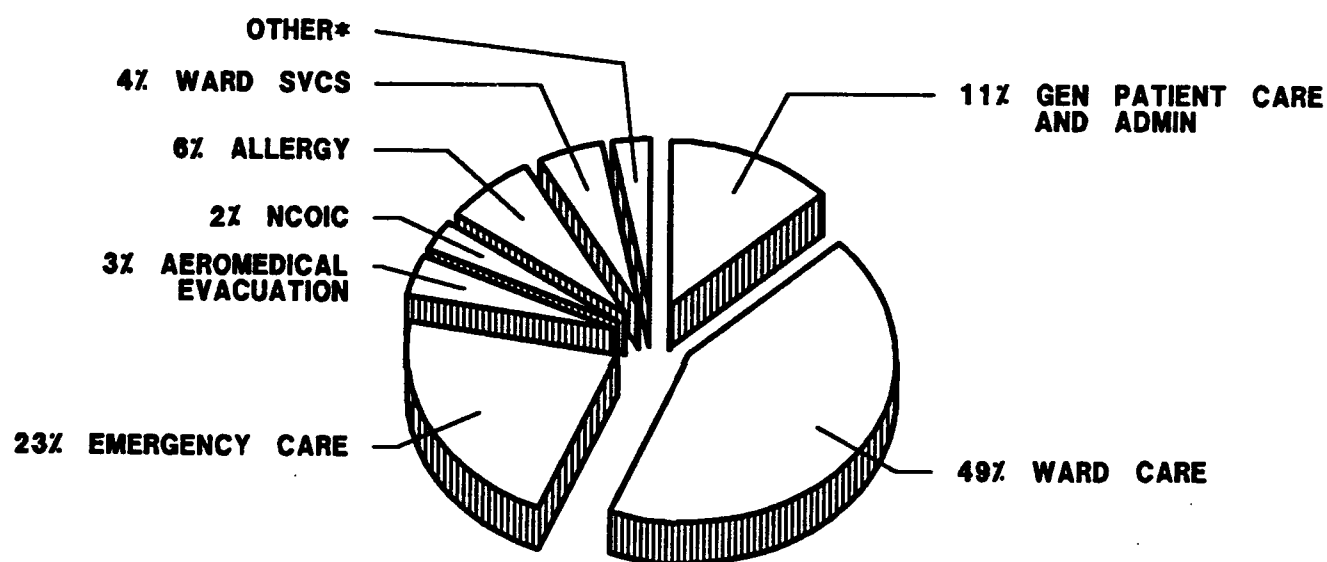
These data are especially important for this AFSC, as first-enlistment personnel comprise half of the Medical Services career ladder. The following discussions describe the responsibilities and background information on AFSC 902X0 first-enlistment groups.

AFSC 902X0. In this study, there are 872 airmen in their first enlistment, representing 33 percent of all 902X0 personnel in the sample. These airmen are qualified at either the 3- or 5-skill level. Figure 2 reflects the distribution of these first-enlistment airmen across specialty jobs. As indicated, 53 percent of these first-enlistment members work in two major jobs: Ward Care and Ward Services. Twenty-three percent work in Emergency Care.

Table 17 presents a list of representative tasks performed by 902X0 first-termers. Most tasks pertain primarily to patient care activities. These personnel are assigned to USAF Hospitals (47 percent), USAF Medical Centers (24 percent), USAF Regional Hospitals (15 percent), or USAF Clinics (11 percent). Within the hospital setting, their duty functions vary. For example, they may be assigned to the Emergency Room (17 percent), Obstetrics (15 percent), Medical Ward (16 percent), Surgical Ward (10 percent), or Inpatient Care (6 percent). A list of equipment used by 1-48 month TAFMS personnel is given in Table 18. Examples of equipment used include airways, catheters, electric thermometers, gurneys, nebulizers, and needles. A full computer listing of all equipment items and the associated percent members using is supplied in the Training Extracts and should be used by training specialists to determine which types of equipment should be emphasized for first-term training.

AFSC 902X0A. Allergy/Immunization personnel have 60 first-enlistment personnel represented in this survey sample. These airmen perform an average of 92 tasks, many of which are basically the same as those performed by 902X0 personnel. Examples of tasks performed are listed in Table 19. Their average TAFMS is slightly higher (31 months) than that of the 902X0 personnel. Eleven of these personnel hold DAFSC 90230A and 49 hold a DAFSC of 90250A. This group is mainly working in the functional area of Allergy/Immunology (92

**902X0/A/B FIRST-TERM DISTRIBUTION
ACROSS SPECIALTY JOBS
(N= 866)**



* Less than 1 percent:
Career Ladder Mgt,
Neurology, and Tech
Tng

Figure 2

TABLE 17
 REPRESENTATIVE TASKS PERFORMED BY AFSC 902X0
 FIRST-ENLISTMENT PERSONNEL
 (1-48 MONTHS TAFMS)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=872)</u>
F400 Take and record temperatures	94
F398 Take and record pulse rate	92
F399 Take and record respiratory rate	90
F394 Take and record blood pressures	86
F396 Take and record body weight and height measurements	78
E229 Label specimens	75
F401 Take orthostatic vital signs	75
F331 Move or transport patients	75
F258 Administer and monitor intravenous infusions	73
F259 Administer bedpans or urinals	73
F321 Maintain sterile fields	73
F257 Accompany patients to appointments or procedures	72
F366 Prepare oxygen equipment	69
F268 Administer oxygen therapy	68
F296 Change dressings of patients	67
F297 Clean patient care areas	65
F285 Apply tape or nonelastic bandages	64

TABLE 18

EQUIPMENT USED OR OPERATED BY GREATER THAN
30 PERCENT OF AFSC 902X0 FIRST-ENLISTMENT PERSONNEL
(1-48 MONTHS TAFMS)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING (N=872)</u>
Accuchecks	42
Airways	53
Bag-Valve-Masks	65
Ambulances, Field	31
Ambulances, other than Field	38
Back Boards	52
Blood Pressure Cuffs, other than electronic	92
Catheters	80
Cold Packs	74
Copy Machines	52
Crash Rescue Equipment Kits	36
Defibrillators	55
Dopplers	49
Ear Lavage Syringes	34
Electric Thermometers	87
Electrocardiographic Machines	71
Electronic Blood Pressure Cuffs	65
Fetal Monitors	31
Gurneys	70
Heating Pads	60
Humidifiers	49
Infusion Pumps	70
Laryngoscopes	47
Litters	62
Medical Anti-Shock Trouser (MAST)	30
Monitoring Devices	51
Nebulizers	66
Needles	88

TABLE 19
 REPRESENTATIVE TASKS PERFORMED BY 902X0A
 FIRST-TERM ENLISTMENT PERSONNEL
 (1-48 MONTHS TAFMS)

TASKS	PERCENT MEMBERS PERFORMING (N=60)
F400 Take and record temperatures	89
F398 Take and record pulse rate	87
F399 Take and record respiratory rate	86
F394 Take and record blood pressures	82
F396 Take and record body weight and height measurements	73
F401 Take orthostatic vital signs	72
E229 Label specimens	71
A17 Participate in staff meetings, other than conducting	70
F258 Administer and monitor intravenous infusions	69
F321 Maintain sterile fields	68
F331 Move or transport patients	68
F268 Administer oxygen therapy	67
F366 Prepare oxygen equipment	66
F296 Change dressings of patients	63
F257 Accompany patients to appointments or procedures	63
F316 Inspect and restock emergency carts	62
H441 Maintain treatment room supplies	61
F259 Administer bedpans or urinals	61
E148 Brief patients regarding medical facility policies	60
F285 Apply tape or nonelastic bandages	60
E210 Initiate or annotate SF Forms 550 (Urinalysis)	59
F297 Clean patient care areas	59
E147 Answer patient telephone inquiries	59

percent), and the remainder are in either the emergency room, general medicine, gynecology, obstetrics, or the surgical ward. Most (60 percent) are assigned to USAF Hospitals or USAF Medical Centers (15 percent). The remainder are at USAF Regional Hospitals or USAF Clinics. These personnel work on various equipment, which are listed in Table 20.

AFSC 902X0B. The three first-enlistment incumbents identified within the B-shred perform a very specialized job that includes an average of 76 tasks, such as perform EEGs using monopolar/referential montages, apply paste electrodes for EEG, etc. Examples of tasks performed are listed in Table 21. They average 34 months TAFMS and are assigned to either the neurology or the electroencephalogram section. All of these personnel are assigned to USAF Medical Centers. Examples of equipment used by these personnel are listed in Table 22.

REVIEW OF SPECIALTY TRAINING STANDARD

The STS is intended to provide comprehensive coverage of tasks performed by career ladder personnel. To assess the effectiveness of the AFSC 902X0 STS, Medical Services Specialist and Technician Specialty, dated December 1989, STS sections were compared to survey data. The 902X0 STS covers the entire Medical Services specialty, with specific sections included for each shred. Paragraphs 1 through 11 cover the skills and knowledge of all 902X0 personnel, while paragraph 14 covers the duties of the Allergy/Immunology Specialists and Technicians. Paragraph 15 covers the Neurology Specialist and Technician. Paragraphs 12 and 13 cover Aeromedical type duties and Independent Medical Duty, respectively. STS items with performance elements were also reviewed in terms of training emphasis, task difficulty, and percent members performing information. Task knowledge and performance elements of the STS were compared against the standard set forth in AFR 8-13 (dated 1 August 1986) and AFR 8-13/ATC Supplement 1 (dated 2 March 1987), Attachment 1, paragraph A1-3c(4) (i.e., include tasks performed or knowledge required by 20 percent or more of the personnel in a skill level (criterion group) of the AFS).

The traditional method of reviewing an STS is to compare inventory tasks matched against a particular STS item to first-job (1-24 months TAFMS), first-enlistment, and 5- and 7-skill-level data. If the STS item has matched tasks performed by 20 percent or more of one of these criteria groups, survey data are said to support inclusion of the STS item. Personnel with Aero-medical Evacuation, Allergy/Immunology, and Neurology experience, as well as basic AFSC 902X0 personnel, assisted in matching inventory tasks to appropriate sections of the STS.

Computer products were then generated for each shred, the basic AFSC, and for the A-prefix, Aeromedical Evacuation, personnel. A copy of the products for each functional area is included in the Training Extracts. Information in the printouts includes TE, TD, and percent members performing for first job, first-enlistment, 5- and 7-skill-level groups as appropriate. Tasks not matched to any elements of the STS are listed at the end of the STS display.

TABLE 20

EQUIPMENT USED OR OPERATED BY GREATER
THAN 30 PERCENT OF AFSC 902X0A
FIRST-ENLISTMENT PERSONNEL
(1-48 MONTHS TAFMS)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING (N=60)</u>
Airways	58
Bag-Valve-Masks	57
Ambulances, Field	38
Ambulances, other than Field	42
Blood Pressure Cuffs, other than electronic	82
Cold Packs	35
Copy Machines	58
Electric Thermometers	33
Gurneys	32
Nebulizers	35
Needles	97

TABLE 21
 REPRESENTATIVE TASKS PERFORMED BY AFSC 902X0B
 FIRST-ENLISTMENT PERSONNEL
 (1-48 MONTHS TAFMS)

TASKS	PERCENT MEMBERS PERFORMING (N=3)
0589 Measure patient's head and mark electrode sites (using 10-20 system) for EEGs	100
0597 Perform EEGs using hyperventilation activation	100
0598 Perform EEGs using monopolar/referential montage	100
0581 Brief patients on examination procedures	100
0599 Brief EEGs using photic stimulation activation	100
0596 Perform EEGs using bipolar montages	100
0587 Inspect impedance of electrodes	100
0579 Apply paste electrodes for EEG	100
0584 Detect and eliminate artifacts	100
0605 Perform sleep activation EEGs	100
0594 Perform bedside EEGs	100
0595 Perform EEGs using average reference recording techniques	100
0572 Adjust neurological equipment during recordings	100
0590 Measure patient's head and mark electrode	100
0607 Prepare electrode sites for application of electrodes	100
A19 Plan facility safety or security programs	100
B51 Implement safety or security programs	100
E228 Instruct patients in filling out patient history forms	100
E238 Maintain or file laboratory records or reports	100
E256 Schedule patient appointments	100
F398 Take and record pulse rate	100
0574 Annotate electroencephalogram (EEG) with artifact information	100

TABLE 22

EQUIPMENT USED OR OPERATED BY GREATER
THAN 30 PERCENT OF AFSC 902X0B
FIRST-ENLISTMENT PERSONNEL
(1-48 MONTHS TAFMS)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING (N=3)</u>
Blood Pressure Cuffs, other than electronic	67
Copy Machines	67
Dopplers	33
Electric Thermometers	67
Electroencephalograph Machines	100
Evoked Potential Machines	100
Gurneys	33
Impedance Meters	67
Monitoring Devices	33
Needles	67

The majority of the STS elements for the career ladder are supported at some level by survey data. Elements with matched tasks reflecting low performance are given in Table 23. The areas not supported by survey data should be reviewed by training personnel to determine their current relevancy.

An additional area of analysis involves examining tasks not matched to any STS element. Unreferenced tasks performed by at least 20 percent of a group in the career ladder should be considered for inclusion in the STS. Additionally, tasks with high TE or TD ratings should also be examined for possible inclusion. Examples of unreferenced Medical Services tasks are shown in Table 24. A full list can be found at the end of the STS PRTMOD printout found in the Training Extract. Subject-matter experts should examine all unreferenced tasks to determine if any should be added to the STS.

REVIEW OF MEDICAL SERVICES PLANS OF INSTRUCTION

Review of J3AQR90230-002 Plan of Instruction (POI) (Apprentice Medical Services Specialist)

Based on assistance from technical school subject-matter experts in matching job inventory tasks to POI J3AQR90230-002, dated 6 Dec 90, occupational survey data were matched to related training objectives. A similar method to that of the STS analysis was employed to review the POI. Information furnished for consideration includes percent members performing for first-job (1-24 months TAFMS) and first-enlistment (1-48 months TAFMS), as well as training emphasis (TE) and task difficulty (TD) ratings for individual tasks.

POI blocks, units of instruction, and criterion objectives were compared against the standards set forth in Attachment 1, ATCR 52-22, dated 17 February 1989 (i.e., at least 30 percent or more of the criterion first-enlistment group should be performing tasks trained, along with sufficiently high TE and TD ratings on those tasks). Per this guidance, tasks trained in the course which do not meet these criteria should be considered for elimination from the formal course, if not justified on some other acceptable basis.

Review of the tasks matched to the POI using the standard ATCR 52-22 criteria reveals that only four POI units of instruction or criterion objectives are not supported by OSR data. Examples of these unsupported units or objectives are presented in Table 25.

As with the STS, another part of the POI analysis involves examining tasks not matched to any POI objectives. There were 36 tasks not referenced to the Apprentice Medical Services Specialist POI. These are tasks performed by high percentages of first-termers in the 902X0 career ladder and which have high TE ratings. An example of these tasks can be found in Table 26. The Training Extract lists these unreferenced tasks at the end of the POI computer run. Basing training decisions on this product suggests considering these unreferenced tasks for possible inclusion to the POI.

TABLE 23

EXAMPLES OF AFSC 902X0 STS ELEMENTS NOT SUPPORTED BY OSR DATA
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

STS ELEMENT/ REPRESENTATIVE TASKS	MEMBERS PERFORMING				TASK DIFF*	TNG EMPH**
	1ST ENL (N=872)	DAFSC 90250 (N=1,525)	DAFSC 90270 (N=797)			
3. MEDICAL READINESS						
3c. Accident reporting	A	B				
E247 Prepare operational hazard reports			3	4	8	4.97 2.12
8. FUNDAMENTALS OF NURSING CARE						
8d(3). Perform sterilization procedures	1b	B				
H449 Sterilize instruments			7	9	8	4.54 3.14
8e(7). Assist with central venous	1a	B				
F371 Set up equipment for arterial line insertion and moinitoring			11	10	7	4.16 5.86
F374 Set up equipment for cardiorespiratory monitoring			16 9	19 9	17 6	4.55 5.05 3.76 5.83
F376 Set up equipment for central venous						
8i(6). Perform finger sticks for blood	2b	B				
G415 Collect phenylketonuria (PKU) specimen			6	5	3	3.69 4.46
9. PATIENT WITH SPECIAL NEEDS						
9d(6). Set up skeletal traction	1b	B				
F382 Set up equipment for skeletal tractions			6	6	4	3.78 5.21

* Average Task Difficulty = 5.00 with SD of 1.00

** Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

TABLE 24

EXAMPLES OF TASKS PERFORMED BY 20 PERCENT OR MORE AFSC 902X0
GROUP MEMBERS AND NOT REFERENCED TO THE STS

TASKS	PERCENT MEMBERS PERFORMING			TNG EMPH*	TASK DIFF**
	1ST ENL (N=872)	DAFSC 90250 (N=1,525)	DAFSC 90270 (N=797)		
F316 Inspect and restock emergency carts	63	62	52	6.18	4.47
H441 Maintain treatment room supplies	57	61	48	4.90	4.29
E155 Inform supervisors regarding status of equipment, supplies, or training of personnel	38	42	48	3.78	4.22
I464 Set up humidifiers or vaporizers	34	24	11	4.51	3.26
E154 Don or doff chemical warfare ensemble	36	44	48	5.76	4.53
F395 Take and record body measurements, such as body girth and abdominal girth	39	34	24	5.22	3.36
F320 Maintain emergency drug trays	25	32	35	5.04	4.63
H429 Assemble or maintain emergency care kits	28	35	33	5.61	4.91
J472 Perform or practice decontamination of personnel and equipment	23	26	23	4.98	5.78
F397 Take and record cardiac output readings	23	21	14	3.76	5.59

* Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

** Average Task Difficulty = 5.00 with SD of 1.00

TABLE 25

EXAMPLES OF AFSC POI J3AQR90230 ITEMS NOT SUPPORTED BY OSR DATA

TASKS	MEMBERS PERFORMING				TASK DIFF*	TNG EMPH**	ATI
	1ST ENL (N=872)	1ST JOB (N=349)					
0097 VI 4d. Given the necessary supplies and equipment, perform selected immobilization procedures for head, neck, and back injuries on a simulated patient. Two instructor assists per procedure are allowed.							
J474 Perform or practice extrication procedures	23	10		6.77	5.78	11	

0098 VI 6b. Without reference, identify selected basic facts and principles about emergency childbirth with at least 70 percent accuracy.							
F292 Assist with deliveries of babies	20	18		6.63	5.80	11	
J473 Perform or practice emergency childbirth	23	12		6.40	5.51	11	

* Average Task Difficulty = 5.00 with SD of 1.00

** Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

TABLE 26

EXAMPLES OF TECHNICAL TASKS WITH GREATER THAN 30 PERCENT MEMBERS
PERFORMING AND NOT REFERENCED TO POI J3AQR90230
(PERCENT FIRST ENLISTMENT PERFORMING)

<u>TASKS</u>	1-48 MOS TAFMS (N=872)	TNG EMPH*	TASK DIFF**
F257 Accompany patients to appointments or procedures	69	3.47	2.94
F316 Inspect and restock emergency carts	61	6.18	4.47
E148 Brief patients regarding medical facility policies	59	4.84	4.36
H441 Maintain treatment room supplies	55	4.90	4.29
I452 Admit and orient patients to wards	51	5.22	3.97
E209 Initiate or annotate SF Forms 549 (Hematology)	51	4.08	3.20
E214 Initiate or annotate SF Forms 554 (Microbiology II)	47	4.08	2.99
F340 Perform patient education for self-care	39	4.12	4.56
F327 Monitor blood transfusions	36	5.71	5.77
H437 Drive ambulances, other than field or AMBUS	36	6.10	5.02
E154 Don or doff chemical warfare ensemble	35	5.76	4.53
F309 Identify and initiate emergency treatment for medication reactions	33	7.25	6.34
G414 Collect fetal heart tones	33	4.94	4.47
F308 Identify and initiate emergency treatment for anaphylaxis	30	7.39	6.21

* Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

** Average Task Difficulty = 5.00 with SD of 1.00

Review of J3ABP902X0 Plan of Instruction (POI)
(Apprentice Medical Services Specialist Clinical Phase)

The J3ABP902X0 POI, dated 27 Aug 90, was also matched to the OSR data by training personnel at Sheppard AFB. Analysis of this POI was performed as described above, and a computer product was generated displaying the results of the process. Information furnished included percent members performing for first job (1-24 months TAFMS) and for first-enlistment (1-48 months TAFMS) personnel, as well as TE and TD ratings from senior AFSC 902X0 personnel.

Analysis found 100 percent support for the units that contained matched OSR data. This means the instruction provided in the newly added clinical phase of training is being used in the field. The units of information taught in this course are actually being performed by 30 percent or more of the 902X0 first-enlistment personnel.

Once again, several tasks were not referenced to this POI, yet were being performed in the field by at least 30 percent of first-enlistment personnel (see Table 27). These data should be closely reviewed by subject-matter experts to see if any should be added to the POI during the next revision.

Review of J5ABA90230A Plan of Instruction (POI)
(Allergy/Immunology Specialist)

The J5ABA90230A POI, dated 1988, is for the Allergy/Immunology Specialist 8-week course taught at the Walter Reed Army Hospital. Once again, this POI was matched with corresponding OSR data with the help of the course instructors. Overall, the course is teaching material that is directly applicable to the job of 902X0A personnel. The results show that the course had only 6 unsupported paragraphs (less than 30 percent A-shred first-enlistment performing) out of 28 matched elements. Table 28 lists examples of these unsupported elements. Several relevant tasks (duties concerning immunization and allergy preparation activities and tests) were not referenced to this POI, and some of these are listed in Table 29.

Review of J5ABN90230B Plan of Instruction (POI)
(Neurology Specialist)

The J5ABN90230B POI, dated 20 Oct 1989, was also matched to the OSR data with the assistance of Bethesda Naval Hospital instructors. This is a 26-week course given at Bethesda. The POI was totally supported by survey data, in accordance with standard regulations. Only four tasks in the duty of Neurology were not referenced in this POI. These are listed in Table 30.

TABLE 27

EXAMPLES OF TECHNICAL TASKS WITH GREATER THAN 30 PERCENT MEMBERS
PERFORMING AND NOT REFERENCED TO POI J3ABP90230
(PERCENT FIRST ENLISTMENT PERFORMING)

TASKS	1-48 MONTHS TAFMS (N=872)	TRAINING EMPHASIS*	TASK DIFFERENCE**
F316 Inspect and restock emergency carts	61	6.18	4.47
E147 Answer patient telephone inquiries	59	5.16	4.75
F315 Insert urinary catheters	58	6.14	5.43
E206 Initiate or annotate SF Forms 546 (Chemistry I)	50	4.16	3.12
F387 Set up hand-held nebulizer breathing equipment	47	5.24	4.48
L514 Dispose of needles and syringes	47	4.37	3.12
F281 Apply heat treatments	46	5.29	4.20
F402 Take patient history	43	5.55	4.22
F264 Administer inhalation medications	43	5.55	5.05
E234 Maintain medical equipment	41	4.90	5.19
E242 Order supplies	40	5.22	4.93
E155 Inform supervisors regarding status of equipment, supplies, or training of personnel	38	3.78	4.22
F360 Prepare heat application equipment	37	4.90	3.93
F283 Apply splints	36	5.88	4.98
F287 Assist in the administration of blood transfusions	36	6.04	5.87
E154 Don or doff chemical warfare ensemble	35	5.76	4.53
I461 Prepare and administer stiz baths	33	5.37	3.21

* Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

** Average Task Difficulty = 5.00 with SD of 1.00

TABLE 28

EXAMPLES OF AFSC POI J3ABA90230 ITEMS NOT SUPPORTED BY OSR DATA
(PERCENT FIRST ENLISTMENT PERFORMING)

TASKS	1ST ENL A (N=60)	TASK DIFF*	TNG EMPH**	ATI
0170 V 11a. Explain and demonstrate the application of nasal and sputum specimens with emphasis on the presence and quantitation of eosinophils.				
M541 Interpret and record results of nasal smear tests for eosinophiles	25	6.16	.96	2
M542 Interpret and record results of nasopharyngeal tests for eosinophiles	8	6.16	.96	2
M543 Interpret and record results of oropharyngeal tests for eosinophiles	7	6.12	.96	2
0226 VIII 5a. Perform sterile procedures under a laminar flow hood, and describe and perform decontamination and sterility checks on these hoods.				
N561 Compound allergy extracts using laminar flow hood	23	6.29	.96	2
0229 VIII 6a. Perform pollen collection using the Roto-Rod collection system and perform a pollen count identifying and calculating air densities of various pollens				
M534 Conduct area field visits to identify specific allergens	10	6.07	.90	2
M539 Interpret and record results of atmospheric pollen surveys	3	5.88	1.14	2
M547 Perform atmospheric pollen surveys using durham gravity slide samplers	2	6.08	.88	2

* Average Task Difficulty = 5.00 with SD of 1.00

** Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

TABLE 29

EXAMPLES OF TECHNICAL TASKS WITH GREATER THAN 30 PERCENT MEMBERS PERFORMING
AND NOT REFERENCED TO POI J3ABA90230
(PERCENT FIRST ENLISTMENT PERFORMING)

TASKS	1-48 MONTHS TAFMS (N=60)	TRAINING EMPHASIS*	TASK DIFFERENCE**
L511 Counsel patients regarding allergy injection programs	88	1.82	5.36
L525 Prepare medications or vaccines for injections	88	3.71	4.85
L510 Consult with physicians regarding allergy medication of patients	87	2.14	4.75
L513 Determine specific dosage for allergy patients	85	1.65	6.06
E224 Initiate SF Forms 559 (Medical Record - Allergen Extract Prescription - New and Refill)	72	1.08	4.63
E242 Order supplies	70	5.22	4.93
E256 Schedule patient appointments	70	3.49	4.15
E219 Initiate or annotate SF Forms 600 (Health Record - Chronological Record of Medical Care)	60	4.47	3.63
E148 Brief patients regarding medical facility policies	52	4.84	4.36
F309 Identify and initiate emergency treatment for medication reactions	47	7.25	6.34
E155 Inform supervisors regarding status of equipment, supplies, or training of personnel	42	3.78	4.22
F307 Identify and care for respiratory distress	37	6.82	5.68
F387 Set up hand held nebulizer breathing equipment	35	5.24	4.48
E234 Maintain medical equipment	33	4.90	5.19

* Average Training Emphasis = 3.00 with SD of 1.68 (High = 4.68)

** Average Task Difficulty = 5.00 with SD of 1.00

TABLE 30

EXAMPLES OF TECHNICAL TASKS WITH GREATER THAN 30 PERCENT MEMBERS
PERFORMING AND NOT REFERENCED TO POI J5ABN90230B

TASKS	<u>PERCENT PERFORMING</u>		TNG EMPH*	TASK DIFF**
	1-48 MONTHS TAFMS (N=3)	STG279 (N=20)		
O604 Perform NCVs using electrode polarity	100	50	.65	6.45
O580 Assist with electromyograph (EMG)	100	70	1.22	5.64
O574 Annotate electroencephalogram (EEG) with artifact information	100	100	1.02	6.59
O600 Perform EEGs using triangulation montages	67	65	.78	6.27
F397 Take and record cardiac output readings	67	60	6.55	5.59
F398 Take and record pulse rate	67	60	6.55	6.55
F362 Prepare items for sterilization	33	35	4.90	4.27
F297 Clean patient care areas	33	30	5.14	3.44
F331 Move or transport patients	33	25	6.10	6.10
F400 Take and record temperatures	33	45	6.73	6.73

NOTE: STG276 = Total Neurology Job Group (N=20)

* Average Training Emphasis = 2.98 with SD of 2.13 (high = 5.11)

** Average Task Difficulty = 5.00 with SD of 1.00

JOB SATISFACTION ANALYSIS

Comparisons of group perceptions of their jobs provide career ladder managers with a means toward understanding some of the factors affecting job performance of today's airmen. These perceptions are gathered from incumbents' responses to five job satisfaction questions covering job interest, perceived utilization of talents, perceived utilization of training, sense of accomplishment, and reenlistment intentions. The responses of the current survey sample are then analyzed by making several comparisons: (1) among TAFMS groups of a comparative sample of personnel from other medical specialists surveyed in 1990 (AFSCs 904X0, 908X0, 913X1, 915X0); (2) between current and previous survey TAFMS groups; and (3) across specialty job groups identified in the SPECIALTY JOBS section of this report.

First-enlistment (1-48 months TAFMS), second-enlistment (49-96 months TAFMS), and career (97+ months TAFMS) group data are listed in Tables 31, 32, and 33 respectively, and are compared to comparative sample groups from other Medical AFSCs surveyed during the previous calendar year. These data give a relative measure of how the job satisfaction of AFSC 902X0 personnel compares with that of other similar Air Force specialties. Generally, enlistment groups of the DAFSC 902X0 sample indicate similar levels of job satisfaction to those of the comparative sample. However, most Medical Services respondent groups indicated lower intentions of reenlisting.

An indication of changes in job satisfaction perceptions over time is provided in Table 34, where group data for 1990 AFSC 902X0 survey respondents are compared to data from respondents in the 1986 occupational survey report. Generally, perceptions of job satisfaction, including job interest, have increased since the last OSR.

Table 35 presents job satisfaction data for the major jobs (clusters and independent job types) identified in the career ladder structure for AFSC 902X0. An examination of these data can reveal the influences performing certain jobs may have on overall job satisfaction. Job satisfaction indicators for the specialty job groups suggest members across the career ladder are generally content. Nine of the ten jobs responded with high levels of satisfaction. Over 73 percent of each of the career ladder jobs rated their job as "interesting." Only Ward Services personnel were basically dissatisfied, with 37 percent of them describing their jobs as "so-so" or "dull." Similarly, over 77 percent of each of the major career ladder jobs also indicated a high perceived use of training, excluding the General Patient Care and Administration job which had 31 percent reporting that their training was not well utilized. As a whole, members in the General Patient Care and Administration cluster reflect slightly lower levels of satisfaction when compared to the other jobs. Members of this job expressed less utilization of their talents and training, as well as dissatisfied feelings toward accomplishments achieved from their work (36 percent reported "neutral" or "dissatisfied"). On the other hand, the members in the other major specialty jobs display high levels of overall satisfaction, with greater than 60 percent responding positively across all indicators. The reenlistment intentions for

TABLE 31
COMPARISON OF JOB SATISFACTION DATA BY TAFMS AND
COMPARATIVE SAMPLE GROUPS
(PERCENT MEMBERS RESPONDING)

	FIRST ENLISTMENT (1-48 MOS TAFMS)			
	902X0 (N=872)	902X0A (N=60)	902X0B (N=3)	COMP SAMPLE (N=6,338)
<u>EXPRESSED JOB INTEREST:</u>				
Interesting	77	76	67	70
So-So	14	13	0	17
Dull	9	10	33	13
<u>PERCEIVED USE OF TALENTS:</u>				
Fairly Well to Perfectly	79	78	66	77
Little or Not at All	21	22	33	23
<u>PERCEIVED USE OF TRAINING:</u>				
Fairly Well to Perfectly	84	82	100	85
Little or Not at All	16	18	0	14
<u>SENSE OF ACCOMPLISHMENT FROM WORK:</u>				
Satisfied	74	63	100	70
Neutral	11	18	0	14
Dissatisfied	15	18	0	16
<u>REENLISTMENT INTENTIONS:</u>				
Yes, or Probably Yes	55	56	33	60
No, or Probably No	44	44	67	43
Plan to Retire	*	0	0	*

NOTE: Comparative Sample of Medical AFSCs surveyed in 1990. Includes AFSCs 904X0, 908X0, 913X1 and 915X0

NOTE: Columns may not add to 100 percent due to nonresponse and rounding

* Denotes less than 1 percent responding

TABLE 32
COMPARISON OF JOB SATISFACTION DATA BY TAFMS AND
COMPARATIVE SAMPLE GROUPS
(PERCENT MEMBERS RESPONDING)

	SECOND ENLISTMENT (49-96 MOS TAFMS)			
	902X0 (N=845)	902X0A (N=33)	902X0B (N=4)	COMP SAMPLE (N=4,557)
<u>EXPRESSED JOB INTEREST:</u>				
Interesting	77	70	100	71
So-So	14	21	0	18
Dull	9	9	0	11
<u>PERCEIVED USE OF TALENTS:</u>				
Fairly Well to Perfectly	79	72	100	76
Little or Not at All	21	27	0	24
<u>PERCEIVED USE OF TRAINING:</u>				
Fairly Well to Perfectly	78	76	100	82
Little or Not at All	22	24	0	18
<u>SENSE OF ACCOMPLISHMENT FROM WORK:</u>				
Satisfied	72	67	75	66
Neutral	10	21	25	12
Dissatisfied	18	12	0	21
<u>REENLISTMENT INTENTIONS:</u>				
Yes, or Probably Yes	64	75	50	67
No, or Probably No	36	24	50	32
Plan to Retire	*	0	0	*

NOTE: Comparative Sample of Medical AFSCs surveyed in 1990. Includes AFSCs 904X0, 908X0, 913X1 and 915X0

NOTE: Columns may not add to 100 percent due to nonresponse and rounding

* Denotes less than 1 percent responding

TABLE 33
COMPARISON OF JOB SATISFACTION DATA BY TAFMS
AND COMPARATIVE SAMPLE GROUPS
(PERCENT MEMBERS RESPONDING)

	CAREER (97+ MOS TAFMS)			
	902X0 (N=954)	902X0A (N=12)	902X0B (N=1)	COMP SAMPLE (N=6,830)
<u>EXPRESSED JOB INTEREST:</u>				
Interesting	78	67	0	75
So-So	14	33	100	12
Dull	8	0	0	6
<u>PERCEIVED USE OF TALENTS:</u>				
Fairly Well to Perfectly	82	92	100	86
Little or Not at All	18	8	0	14
<u>PERCEIVED USE OF TRAINING:</u>				
Fairly Well to Perfectly	77	92	100	84
Little or Not at All	23	8	0	15
<u>SENSE OF ACCOMPLISHMENT:</u>				
<u>FROM WORK:</u>				
Satisfied	72	67	100	76
Neutral	10	0	0	8
Dissatisfied	19	33	0	16
<u>REENLISTMENT INTENTIONS:</u>				
Yes, or Probably Yes	71	75	100	73
No, or Probably No	10	25	0	7
Plan to Retire	19	0	0	20

NOTE: Comparative Sample of Medical AFSCs surveyed in 1990. Includes AFSCs 904X0, 908X0, 913X1 and 915X0.

NOTE: Columns may not add to 100 percent due to nonresponse and rounding

* Denotes less than 1 percent responding

TABLE 34
CURRENT AND PREVIOUS JOB SATISFACTION INDICATORS
(PERCENT MEMBERS RESPONDING)

	<u>902X0</u>		<u>902X0A</u>	
	<u>1990</u> <u>(N=2,679)</u>	<u>1986</u> <u>(N=2,217)</u>	<u>1990</u> <u>(N=106)</u>	<u>1986</u> <u>(N=140)</u>
<u>EXPRESSED JOB INTEREST:</u>				
Interesting	76	77	74	71
So-So	15	14	18	14
Dull	9	6	8	14
<u>PERCEIVED USE OF TALENTS:</u>				
Fairly Well to Perfectly	80	77	78	71
Little or Not at All	20	22	22	28
<u>PERCEIVED USE OF TRAINING:</u>				
Fairly Well to Perfectly	79	79	81	85
Little or Not at All	21	20	19	14
<u>REENLISTMENT INTENTIONS:</u>				
Yes, or Probably Yes	66	67	64	70
No, or Probably No	29	28	35	27
Plan to retire	7	6	0	1

NOTE: Columns may not add to 100 percent due to nonresponse and rounding

TABLE 35

JOB SATISFACTION DATA BY CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)

	GEN PATIENT CARE & ADMIN CLUSTER (STG107)	WARD CARE CLUSTER (STG262)	WARD SVCS IJT (STG56)	EMERGENCY CARE CLUSTER (STG159)	NCOIC CLUSTER (STG123)
<u>EXPRESSED JOB INTEREST:</u>					
Interesting	73	76	63	76	81
So-So	18	15	23	15	13
Dull	9	9	14	9	6
<u>PERCEIVED USE OF TALENTS:</u>					
Fairly Well to Perfectly	69	82	84	80	85
Little or Not at All	31	18	16	20	15
<u>PERCEIVED USE OF TRAINING:</u>					
Fairly Well to Perfectly	69	88	84	78	82
Little or Not at All	31	12	16	21	18
<u>SENSE OF ACCOMPLISHMENT FROM WORK:</u>					
Satisfied	64	75	75	71	79
Neutral	17	9	11	10	6
Dissatisfied	19	15	14	19	14
<u>REENLISTMENT INTENTIONS:</u>					
Yes, or Probably Yes	61	57	55	69	72
No, or Probably No	33	41	34	28	13
Plan to Retire	6	2	9	2	15

NOTE: Columns may not add to 100 percent due to nonresponse and rounding

TABLE 35 (CONTINUED)

JOB SATISFACTION DATA BY CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)

	CAREER LADDER MGT CLUSTER (SIG78)	AEROMEDICAL EVAC CLUSTER (SIG63)	ALLERGY CLUSTER (SIG33)	NEUROLOGY CLUSTER (SIG279)	TECHNICAL TRNG CLUSTER (SIG194)
<u>EXPRESSED JOB INTEREST:</u>					
Interesting	86	80	75	80	86
So-So	10	10	15	10	6
Dull	4	4	10	10	9
<u>PERCEIVED USE OF TALENTS:</u>					
Fairly Well to Perfectly	89	79	80	85	85
Little or Not at All	18	22	20	10	23
<u>PERCEIVED USE OF TRAINING:</u>					
Fairly Well to Perfectly	89	79	81	90	77
Little or Not at All	18	22	20	10	23
<u>SENSE OF ACCOMPLISHMENT FROM WORK:</u>					
Satisfied	78	81	69	80	74
Neutral	10	9	14	15	11
Dissatisfied	12	10	17	5	14
<u>REENLISTMENT INTENTIONS:</u>					
Yes, or Probably Yes	64	74	64	35	77
No, or Probably No	9	22	30	45	11
Plan to Retire	27	4	6	20	11

NOTE: Columns may not add to 100 percent due to nonresponse and rounding

the Neurology cluster is low, with only 35 percent of these personnel planning on reenlisting. The remainder of the job groups reports a 55 percent (or higher) reenlistment intention rate.

ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS

Comparisons were made between the tasks performed and the background data for DAFSC 90250 personnel assigned to the continental United States (N=1,158) versus those assigned overseas (N=367). In terms of the tasks and duties performed by the two groups, only minor differences were noted. As for the background items, it was noted that a greater number of personnel overseas use the various items of equipment. This may be due to the greater diversity in the job scope. It was also found that 85 percent of the CONUS personnel work in medical facilities with beds, whereas only 61 percent of the overseas personnel do. A larger percentage of overseas personnel work in USAF Clinics. Also, a greater percentage of overseas personnel (59 percent) are certified as emergency medical technicians (EMT), as compared to CONUS personnel (51 percent).

A review of the average number of tasks performed by these two groups indicates that overseas personnel tend to perform slightly more tasks (125 tasks) than their CONUS counterparts (113 tasks). Data also indicate that although the TAFMS for the two groups is very close, overseas personnel have a slightly longer average time in career field (61 months) than CONUS personnel (58 months). Job satisfaction indicators show CONUS personnel to be more satisfied with a sense of accomplishment from work, with the feeling that both their training and talents are more greatly utilized, than do the OVERSEAS personnel.

SPECIAL ISSUES

During the survey process, information can be gathered to address items of concern to career ladder training managers. AFSC 902X0 Functional Managers and the Air Staff were particularly interested in looking at the current EMT status of the 902X0 personnel due to a mandate from DOD for all emergency technicians in levels I, II, and III, to be certified. Data indicate that 354 (41 percent) first-enlistment personnel are nationally certified, and 23 (3 percent), are state certified. A number of first-enlistment personnel, 260 (30 percent), have not been trained as EMTs, and 204 (23 percent) have been trained, but are not certified as EMTs. Only 2 percent of the personnel are trained and certified, but were not current as EMTs at the time this survey was conducted.

Other issues included the amount of time 902X0 personnel are spending keyboarding information (906X0 duties) as part of their job. Data indicate that 74 percent of 902X0 first-enlistment personnel are not required to keyboard. Eighteen percent keyboard less than 2 hours per day, while 5 percent are keyboarding between 2 and 5 hours per day.

Another special issue was to determine how the 902X0A received Allergy/Immunology training. Data indicate that 92 percent of first-enlistment 902X0As received this training at the Walter Reed Army Medical Center, and 5 percent received it through on-the-job training methods. Of the remaining 902X0 personnel who do not currently possess the 902X0A AFSC, but have been trained in Allergy/Immunology, 5 percent received training at a USAF Regional Medical Facility, and 15 percent were trained on-the-job.

ANALYSIS OF WRITE-IN COMMENTS

When filling out the job inventory booklets, respondents were encouraged to write in any comments related to their job. In this survey, a reasonably large number of comments were received. The comments cover job dissatisfaction, duties and assignments not found in the inventory, and training. Remarks related to dissatisfaction were primarily related to the inability to match training with job tasks. Some members felt that they were not given the opportunity to use their training in their current jobs. Some felt that a civilian certification would solve a lot of problems with morale, career progression incentive, working with civilians at VA hospitals, and with training standardization. Representative comments are presented below.

"If the AF is interested in keeping their 902X0's, they need to certify or progress to achievement of certification upon retirement...this would reduce retiree's unemployment and make 902X0 skills competitive."

"...the 902s are getting far more training than they received a few years ago, and the current CDCs given to 902s for the award of the 5-level seem far and away above what seems necessary...on a ward or clinic. There should be...at least an LPN licensure at the completion of technical training that would also be accepted in the civilian community."

"I find that many 902s lack basic knowledge of starting I.V.s, inserting airways, and monitoring cardiac monitors. I suggest that 902X0s receive this training in tech school (and) EMT-intermediate certification for all 902X0s. This will ensure all 902X0s are properly trained EMTs in addition they will have more advanced skills. By implementing this in tech school the Air Force will establish a uniform for all AF hospitals to follow."

"AF techs have to learn not only military applications to their jobs, but Veterans Administration rules also...we have to report to two institutions with their own ideas on health care. The nurses here are all civilian and the majority are union-so once again the techs get dumped on."

"The major problem with our career field is that currently once you become a 7-level you lose the 'B' suffix. I feel this...will take the most knowledgeable and experienced people out of field leaving nobody to train those individuals right out of school...I feel many people prefer to not reenlist than to go back to being a regular 902."

IMPLICATIONS

The primary purpose of this OSR is to assist in the updating of training requirements and technical training in the Medical Services career ladder. An 8-week clinical phase of training has been added to the 14 1/2 week basic course. Survey data indicate that the course content of the additional instruction is well utilized throughout the career ladder.

Analysis of the 902X0 career ladder structure identified nine clusters and one independent job type. These groupings remained consistent with jobs found in the previous OSR, with the exception of the NCOIC cluster. Overall, the utilization of career ladder personnel is accurately reflected in the AFR 39-1 Specialty Descriptions.

Analysis of career ladder documents indicates the STS and POIs have support when applying the guidelines outlined in ATCR 52-22. Training personnel and subject-matter experts should review these documents to determine possible areas for deletion or inclusion.

Job satisfaction responses were similar or slightly higher than those of a comparative sample of other medical AFSCs, and satisfaction has increased in the Medical Services career ladder since the previous 1986 survey. Indicators across career ladder specialty jobs exhibited satisfaction among all groups, with the Ward Services IJT having the lowest level of job interest and the General Patient Care and Administration job group perceiving the least use of their talents. Reenlistment intentions are slightly lower for the Medical Services personnel than for the comparative sample of medical personnel.

The findings of this OSR come directly from survey data collected from Medical Services specialists worldwide. These data are readily available to training and utilization personnel, functional managers, and any other interested parties having a need for such information. Much of the data are compiled into extracts which are excellent tools in the decision-making process. These data extracts should be used whenever a training or utilization decision is made.

APPENDIX A
SELECTED REPRESENTATIVE TASKS PERFORMED BY
CAREER LADDER SPECIALTY JOB GROUPS

TABLE I
GENERAL PATIENT CARE & ADMINISTRATION CLUSTER
(STG107)

GROUP SIZE: 308
PERCENT OF SAMPLE: 11%
PREDOMINATE PAYGRADE: E-4

AVERAGE TAFMS: 82 MONTHS
AVERAGE TICF: 79 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

<u>TYPICAL TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
F400 Take and record temperatures	91
E256 Schedule patient appointments	91
F394 Take and record blood pressures	86
E147 Answer patient telephone inquiries	84
F398 Take and record pulse rate	83
E229 Label specimens	82
F396 Take and record body weight and height measurements	80
E210 Initiate or annotate SF Forms 550 (Urinalysis)	79
H441 Maintain treatment room supplies	79
E219 Initiate or annotate SF Forms 600 (Health Record - Chronological Record of Medical Care)	75
E213 Initiate or annotate SF Forms 553 (Microbiology I)	75
E209 Initiate or annotate SF Forms 549 (Hematology)	75
A17 Participate in staff meetings, other than conducting	75
E217 Initiate or annotate SF Forms 557 (Miscellaneous)	74
F399 Take and record respiratory rate	73
E146 Annotate patient treatment records	72
E206 Initiate or annotate SF Forms 546 (Chemistry I)	72

EQUIPMENT USED: BLOOD PRESSURE CUFFS, OTHER THAN ELECTRONIC
COPY MACHINES
CATHETERS
EAR LAVAGE SYRINGES
ELECTRIC THERMOMETERS
ELECTROCARDIOGRAPHIC MACHINES
ELECTRONIC BLOOD PRESSURE CUFFS
GURNEYS
LITTERS
NEEDLES
DOPPLERS

TABLE II

WARD CARE CLUSTER
(STG262)

GROUP SIZE: 690
 PERCENT OF SAMPLE: 25%
 PREDOMINATE PAYGRADE: E-4

AVERAGE TAFMS: 51 MONTHS
 AVERAGE TICF: 44 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

<u>TYPICAL TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
F399 Take and record respiratory rate	99
F400 Take and record temperatures	99
F398 Take and record pulse rate	98
F323 Measure and record intake and output	97
F259 Administer bedpans or urinals	96
I458 Make beds	96
F394 Take and record blood pressures	93
I463 Serve nourishment to patients	92
I452 Admit and orient patients to wards	90
F396 Take and record body weight and height measurements	90
F258 Administer and monitor intravenous infusions	89
F331 Move or transport patients	89
F257 Accompany patients to appointments or procedures	86
F404 Turn patients manually	85
I455 Clean ward utility areas	85
F366 Prepare oxygen equipment	85
F401 Take orthostatic vital signs	85
I453 Bathe patients	84
E229 Label specimens	83
E194 Initiate or annotate SF Forms 511 (Medical Record - Vital Signs Record)	83
F315 Insert urinary catheters	82
F321 Maintain sterile fields	82
F386 Set up equipment for urinary catheterization	81

TABLE II (CONTINUED)

EQUIPMENT USED: ACCUCHECKS
AIRWAYS
BAG-VALVE-MASKS
AQUA K-THERMIA BLANKETS
BACK BOARDS
BLOOD PRESSURE CUFFS, OTHER THAN ELECTRONIC
CATHETERS
COLD PACKS
COPY MACHINES
DEFIBRILLATORS
DOPPLERS
ELECTRIC THERMOMETERS
ELECTROCARDIOGRAPHIC MACHINES
ELECTRONIC BLOOD PRESSURE CUFFS
GURNEYS
HEATING PADS
HUMIDIFIERS
INFUSION PUMPS
LARYNGOSCOPES
LITTERS
MONITORING DEVICES
NEBULIZERS
NEEDLES

TABLE III
WARD SERVICES IJT
(STG56)

GROUP SIZE: 56
PERCENT OF SAMPLE: 2%
PREDOMINATE PAYGRADE: E-4

AVERAGE TAFMS: 56 MONTHS
AVERAGE TICF: 45 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

<u>TYPICAL TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
F399 Take and record respiratory rate	91
F400 Take and record temperatures	89
F398 Take and record pulse rate	89
I458 Make beds	86
F394 Take and record blood pressures	79
I463 Serve nourishment to patients	70
F323 Measure and record intake and output	70
I452 Admit and orient patients to wards	68
F396 Take and record body weight and height measurements	68
F259 Administer bedpans or urinals	64
F301 Feed infants	61
E194 Initiate or annotate SF Forms 511 (Medical Record - Vital Signs Record)	55
F334 Perform baby postdelivery care or procedures	52
F343 Perform postpartum care	50
I454 Clean delivery rooms	50
F321 Maintain sterile fields	50
I459 Orient visitors to wards	50
E229 Label specimens	50
F300 Dispose of contaminated material	48
G414 Collect fetal heart tones	46
F258 Administer and monitor intravenous infusions	46
I455 Clean ward utility areas	45
E170 Initiate or annotate AF Forms 3067 (Intravenous Record)	45

TABLE III (CONTINUED)

EQUIPMENT USED: ACCUCHECKS
AIRWAYS
BAG-VALVE-MASKS
BLOOD PRESSURE CUFFS, OTHER THAN ELECTRONIC
CATHETERS
COLD PACKS
DEFIBRILLATORS
DOPPLERS
ELECTRIC THERMOMETERS
ELECTRONIC BLOOD PRESSURE CUFFS
FETAL MONITORS
GURNEYS
HEATING PADS
HUMIDIFIERS
INFANT TRANSPORT ISOLLETES
INFUSION PUMPS
LARYNGOSCOPES
MONITORING DEVICES
NEEDLES

TABLE IV
EMERGENCY CARE CLUSTER
(STG159)

GROUP SIZE: 684
PERCENT OF SAMPLE: 24%
PREDOMINATE PAYGRADE: E-4

AVERAGE TAFMS: 83 MONTHS
AVERAGE YICF: 78 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TYPICAL TASKS	PERCENT MEMBERS PERFORMING
F400 Take and record temperatures	99
F399 Take and record respiratory rate	99
F398 Take and record pulse rate	96
H428 Apply sterile dressings	95
F260 Administer ear irrigations	95
F276 Apply arm slings	94
F401 Take orthostatic vital signs	94
F283 Apply splints	94
H450 Take throat cultures	93
H441 Maintain treatment room supplies	92
F262 Administer eye irrigations	91
F258 Administer and monitor intravenous infusions	91
F354 Prepare ear irrigations	91
F321 Maintain sterile fields	90
F268 Administer oxygen therapy	90
H449 Suture lacerations	89
H446 Remove sutures	89
F274 Administer wound irrigations	89
F280 Apply elastic bandages	88
J466 Apply cravatte bandages	88
F366 Prepare oxygen equipment	88
F394 Take and record blood pressures	88
F264 Administer inhalation medications	88
F318 Instruct patients in crutch-walking techniques	87
F358 Prepare eye irrigations	87

TABLE IV (CONTINUED)

EQUIPMENT USED: AIRWAYS
BAG-VALVE-MASKS
AMBULANCES, FIELD
AMBULANCES, OTHER THAN FIELD
BACK BOARDS
BLOOD PRESSURE CUFFS, OTHER THAN ELECTRONIC
BODY BAGS
CAST CUTTERS
CATHETERS
COLD PACKS
COPY MACHINES
CRASH RESCUE KITS
DEFIBRILLATORS
DOPPLERS
EAR LAVAGE SYRINGES
ELECTRIC THERMOMETERS
ELECTROCARDIOGRAPHIC MACHINES
ELECTRONIC BLOOD PRESSURE CUFFS
GURNEYS
HUMIDIFIERS
INFUSION PUMPS
KENDRICK EXTRICATION DEVICES
LARYNGOSCOPES
LITTERS
MEDICAL ANTI-SHOCK TROUSER (MAST)
MONITORING DEVICES
NEBULIZERS
NEEDLES

TABLE V

NCOIC CLUSTER
(STG123)

GROUP SIZE: 247
 PERCENT OF SAMPLE: 9%
 PREDOMINATE PAYGRADE: E-5

AVERAGE TAFMS: 140 MONTHS
 AVERAGE TICF: 129 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

<u>TYPICAL TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
F400 Take and record temperatures	96
F399 Take and record respiratory rate	94
F398 Take and record pulse rate	92
A12 Establish equipment or supply levels	91
B38 Counsel personnel on personal or military-related matters	89
A15 Establish work priorities	89
A25 Plan or schedule work assignments	89
F394 Take and record blood pressures	87
A17 Participate in staff meetings, other than conducting	87
C105 Write EPRs	87
B63 Orient newly assigned medical personnel	85
E242 Order supplies	84
E229 Label specimens	84
C100 Inspect personnel for compliance with military standards	84
D113 Conduct QJT	83
F396 Take and record body weight and height measurements	82
A33 Schedule leaves or passes	82
B58 Initiate actions to correct substandard performance of personnel	82
A14 Establish performance standards for subordinates	80
E148 Brief patients regarding medical facility policies	79

TABLE V (CONTINUED)

EQUIPMENT USED: AIRWAYS
BAG-VALVE-MASKS
BLOOD PRESSURE CUFFS, OTHER THAN ELECTRONIC
CATHETERS
COLD PACKS
COPY MACHINES
DEFIBRILLATORS
DOPPLERS
ELECTRIC THERMOMETERS
ELECTROCARDIOGRAPHIC MACHINES
ELECTRONIC BLOOD PRESSURE CUFFS
GURNEYS
HEATING PADS
HUMIDIFIERS
INFUSION PUMPS
LARYNGOSCOPES
LITTERS
MONITORING DEVICES
NEBULIZERS
NEEDLES

TABLE VI
CAREER LADDER MANAGEMENT CLUSTER
(STG78)

GROUP SIZE: 214
PERCENT OF SAMPLE: 8%
PREDOMINATE PAYGRADE: E-7

AVERAGE TAFMS: 189 MONTHS
AVERAGE TICF: 173 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TYPICAL TASKS	PERCENT MEMBERS PERFORMING
A17 Participate in staff meetings, other than conducting	88
B38 Counsel personnel on personal or military-related matters	83
C80 Conduct self-inspections	79
A15 Establish work priorities	76
A3 Conduct staff meetings	76
B58 Initiate actions to correct substandard performance of personnel	75
A14 Establish performance standards for subordinates	74
B63 Orient newly assigned medical personnel	73
C100 Inspect personnel for compliance with military standards	72
A5 Determine personnel requirements	69
B46 Draft or revise job descriptions	68
B60 Interpret policies or directives for subordinates	65
A1 Assign personnel to duty positions	64
C105 Write EPRs	64
C107 Write recommendations for special awards or decorations	64
A4 Coordinate medical activities with specialty clinics or other sections	63
A11 Draft recommendations for changes to governing directives, standards, or local operating procedures	63
A25 Plan or schedule work assignments	62

TABLE VI (CONTINUED)

EQUIPMENT USED: AIRWAYS
BAG-VALVE-MASKS
AMBULANCES, OTHER THAN FIELD
BACK BOARDS
BLOOD PRESSURE CUFFS
CATHETERS
COPY MACHINES
DEFIBRILLATORS
ELECTRIC THERMOMETERS
ELECTROCARDIOGRAPHIC MACHINES
GURNEYS
LITTERS
NEEDLES

TABLE VII
AEROMEDICAL EVACUATION CLUSTER
(STG63)

GROUP SIZE: 139
PERCENT OF SAMPLE: 5%
PREDOMINATE PAYGRADE: E-5

AVERAGE TAFMS: 98 MONTHS
AVERAGE TICF: 92 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

<u>TYPICAL TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
Q697 Perform antihijack searches of patients, passengers, and baggage	96
Q684 Enplane or deplane patients	94
F398 Take and record pulse rate	93
F400 Take and record temperatures	92
F399 Take and record respiratory rate	90
E183 Initiate or annotate DD Forms 600 (Patient's Baggage Tag)	90
E185 Initiate or annotate DD Forms 602 (Patient Evacuation Tag)	89
Q683 Enplane or deplane baggage	85
F394 Take and record blood pressures	84
Q676 Annotate patient airlift tags	84
Q703 Prepare, maintain, and operate medical equipment or supplies for air evacuation	83
Q682 Direct vehicle movement around aircraft	81
Q691 Initiate and annotate Military Airlift Command (MAC) aeromedical evacuation forms	81
Q694 Maintain flightline security	79
F259 Administer bedpans or urinals	79
F331 Move or transport patients	76
Q689 Identify primary characteristics of aeromedical evacuation aircraft	76
Q688 Identify patient symptoms arising from physiological changes due to flight	76

TABLE VII (CONTINUED)

EQUIPMENT USED: AIRWAYS
BAG-VALVE-MASKS
BACK BOARDS
CATHETERS
COLD PACKS
COPY MACHINES
DEFIBRILLATORS
DOPPLERS
ELECTRIC THERMOMETERS
GURNEYS
HUMIDIFIERS
INFANT TRANSPORT ISOLLETES
INFUSION PUMPS
LARYNGOSCOPES
LITTERS
MONITORING DEVICES
NEBULIZERS
NEEDLES

TABLE VIII
ALLERGY CLUSTER
(STG33)

GROUP SIZE: 143
PERCENT OF SAMPLE: 5%
PREDOMINATE PAYGRADE: E-4

AVERAGE TAFMS: 84 MONTHS
AVERAGE TICF: 72 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TYPICAL TASKS	PERCENT MEMBERS PERFORMING
L524 Perform mobility processing functions	99
L514 Dispose of needles or syringes	97
L512 Counsel patients regarding routine immunization procedures or effects	97
L505 Administer subcutaneous injections	97
L521 Interpret and record results of tuberculin skin tests	97
L501 Administer intramuscular injections	96
L511 Counsel patients regarding allergy injection programs	96
L525 Prepare medications or vaccines for injections	95
L506 Administer tuberculin skin tests	95
L509 Compare Individual Public Health Service Form 731 with immunization card decks or printouts	95
L508 Annotate or update immunization roster printouts	95
M527 Administer allergy extracts	95
L510 Consult with physicians regarding allergy medication of patients	94
L502 Administer oral vaccines	94
L500 Administer intradermal injections	93
L515 Inspect biological refrigerators for temperature and utilization	93
L513 Determine specific dosage for allergy patients	93
E240 Maintain patient allergy record files	90
M535 Identify and initiate emergency treatment for systemic reactions	90

EQUIPMENT USED: AIRWAYS
AUTO-JET INJECTORS
AMBULANCES, FIELD
AMBULANCES, OTHER THAN FIELD
BAG-VALVE-MASKS
BLOOD PRESSURE CUFFS, OTHER THAN ELECTRONIC
COLD PACKS
COPY MACHINES
ELECTRIC THERMOMETERS
GURNEYS
LITTERS
NEBULIZERS
NEEDLES

TABLE IX
NEUROLOGY CLUSTER
(STG279)

GROUP SIZE: 20
PERCENT OF SAMPLE: 1%
PREDOMINATE PAYGRADE: E-5

AVERAGE TAFMS: 125 MONTHS
AVERAGE TICF: 95 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TYPICAL TASKS	PERCENT MEMBERS PERFORMING
0597 Perform EEGs using hyperventilation activation	100
0579 Apply paste electrodes for EEG	100
0599 Perform EEGs using photic stimulation activation	100
0598 Perform EEGs using monopolar/referential montages	100
0596 Perform EEGs using bipolar montages	100
0607 Prepare electrode sites for application of electrodes	100
0589 Measure patient's head and mark electrode sites (using 10-20 system) for EEGs	100
0572 Adjust neurological equipment during recordings	100
0584 Detect and eliminate artifacts	100
0574 Annotate electroencephalogram (EEG) with artifact information	100
0587 Inspect impedance of electrodes	100
0594 Perform bedside EEGs	100
0605 Perform sleep activation EEGs	95
0595 Perform EEGs using average reference recording techniques	95
0581 Brief patients on examination procedures	95
0583 Design and implement montages to enhance or localize EEG abnormalities	95
0603 Perform minor and routine maintenance on neurological equipment	95
0582 Calibrate electrodiagnostic equipment	95
0601 Perform electrocerebral silence EEGs	95
0585 Document physiological artifacts	90

EQUIPMENT USED: BLOOD PRESSURE CUFFS, OTHER THAN ELECTRONIC
COPY MACHINES
ELECTROENCEPHALOGRAPH MACHINES
EVOKED POTENTIAL MACHINES
IMPEDENCE METERS
LITTERS
NEEDLES

TABLE X
TECHNICAL TRAINING CLUSTER
(STG194)

GROUP SIZE: 35
PERCENT OF SAMPLE: 1%
PREDOMINATE PAYGRADE: E-5

AVERAGE TAFMS: 118 MONTHS
AVERAGE TICF: 110 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TYPICAL TASKS	PERCENT MEMBERS PERFORMING
D111 Conduct formal classroom training	97
D109 Administer tests	97
D116 Counsel students or trainees on training progress	83
D121 Evaluate progress of trainees	80
D125 Maintain training records	66
D122 Evaluate test	60
D124 Maintain training equipment	60
D115 Construct or develop training materials	57
D133 Revise lesson plans	54
D130 Prepare workbooks or study guides	43
D131 Procure training aids, space, or equipment	40
A17 Participate in staff meetings, other than conducting	40
D126 Participate in training workshops or conferences, other than conducting	37
D120 Evaluate effectiveness of training programs	34
D123 Instruct trainers	31
C100 Inspect personnel for compliance with military standards	31
D129 Prepare course curricula, plan of instruction (POI), or specialty training standards (STS)	29
B38 Counsel personnel on personal or military-related matters	26
E156 Initiate AF Forms 1297 (Temporary Issue Receipt)	23

TABLE X (CONTINUED)

EQUIPMENT USED: AIRWAYS
BAG-VALVE-MASKS
AUDIOVISUAL EQUIPMENT
BACK BOARDS
BLOOD PRESSURE CUFFS, OTHER THAN ELECTRONIC
CAST CUTTERS
CATHETERS
COLD PACKS
COPY MACHINES
DEFIBRILLATORS
EAR LAVAGE SYRINGES
ELECTRIC THERMOMETERS
ELECTROCARDIOGRAPHIC MACHINES
GURNEYS
HEATING PADS
HUMIDIFIERS
INFUSION PUMPS
KENDRICK EXTRICATION DEVICES
LARYNGOSCOPES
LITTERS
NEEDLES