



UNITED STATES AIR FORCE

AD-A201 638

OCCUPATIONAL SURVEY REPORT

DTIC
ELECTE
DEC 14 1988
S H D

AEROSPACE PHYSIOLOGY

AFSC 911X0

AFPT 90-911-805

NOVEMBER 1988

88 12 14 015

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

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

DISTRIBUTION FOR
AFSC 911X0 OSR AND SUPPORTING DOCUMENTS

	<u>OSR</u>	<u>ANL</u> <u>EXT</u>	<u>TNG</u> <u>EXT</u>	<u>JOB</u> <u>INV</u>
AFHRL/MODS	2	1m	1m	1
AFHRL/ID	1	1m	1m/1h	1
AFMPC/DPMRPQ1	2			
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
DEFENSE TECHNICAL INFORMATION CENTER	2			
HQ AFISC/DAP	2			
HQ AFLC/MPCA	3		3	
HQ AFSC/MPAT	3		3	
HQ AFSPACECOM/MPTT	2		2	
HQ AFSPACECOM/TTGT	1		1	
HQ AMD/EH	1		1	
HQ ATC/DPAE	1		1	
HQ MAC/DPAT	3		3	
HQ MAC/TTGT	1		1	
HQ PACAF/TTGT	1		1	
HQ PACAF/DPAT	3		3	
HQ SAC/DPAT	3		3	
HQ SAC/TTGT	1		1	
HQ TAC/DPATJ	3		3	
HQ TAC/TTGT	1		1	
HQ USAF/DPPE	1			
HQ USAF/DPAT	3		3	
HQ USAF/TTGT	1		1	
HQ USMC (CODE TPI)	1			
NODAC	1			
USAFSAM/EDSC (BROOKS AFB TX)	5	1	5	5
DET 1, USAFOMC (LACKLAND AFB TX)	1	1	1	1
USAFOMC/OMYXL	10	2m	5	10
9th STRATEGIC HOSP/SGT (BEALE AFB CA 95903)	1		1	
3507 ACS/DPKI	1			

m = microfiche only

h = hard copy only

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE.	iii
SUMMARY OF RESULTS	iv
INTRODUCTION	1
Background.	1
SURVEY METHODOLOGY	1
Survey Administration	2
Survey Sample	3
Data Processing and Analysis.	3
Task Factor Administration.	3
SPECIALTY JOBS	5
Career Ladder Structure	5
Overview.	5
Comparison to Previous Survey	12
Summary	12
CAREER LADDER PROGRESSION.	12
Skill-Level Descriptions.	14
Summary	20
AFR 39-1 SPECIALTY JOB DESCRIPTION ANALYSIS.	20
TRAINING ANALYSIS.	20
First-Enlistment Aerospace Physiology Personnel	22
Specialty Training Standard (STS)	22
Summary	27
JOB SATISFACTION	27
Summary	30
OTHER ANALYSES	30
CONUS/Overseas Differences.	30
MAJCOM Comparison	30
Overlap with AFSC 122X0, Aircrew Life Support	36
Number of flights, dives, and days DNIF	36
IMPLICATIONS	39
APPENDIX A	40
APPENDIX B	40

PREFACE

This report presents the results of an Air Force occupational survey of the Aerospace Physiology (AFSC 911X0) career ladder. Authority for conducting occupational surveys is contained in AFR 35-2. Computer products used in this report are available for use by operations and training officials.

Chief Master Sergeant Anthony O'Flaherty developed the survey instrument, Ms Rebecca Hernandez provided computer programming support, and Ms Raquel A. Soliz provided administrative support. Mr Daniel E. Dreher and Captain Jim McCutcheon, Canadian Forces Exchange Officer, analyzed the data and wrote the final report. Lieutenant Colonel Charles D. Gorman, Chief, Airman Analysis Branch, Occupational Analysis Division, USAF Occupational Measurement Center, reviewed and approved this report for release.

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

RONALD C. BAKER, Colonel, USAF
Commander
USAF Occupational Measurement
Center

JOSEPH S. TARTELL
Chief, Occupational Analysis Division
USAF Occupational Measurement
Center

SUMMARY OF RESULTS

1. Survey Coverage: This report is based on data collected from 397 respondents constituting 77 percent of all assigned AFSC 911X0 personnel. MAJCOMs and DAFSCs are proportionally represented in the sample.
2. Career Ladder Structure: Survey data show there are five technically-oriented jobs and one supervisory and administrative job. Ninety-five percent of all respondents are included in these six jobs.
3. Career Ladder Progression: Members of the career ladder progress typically through the skill levels. Three- and 5-skill level members perform technical jobs, 7-skill level members are first-line supervisors performing a mixture of technical and supervisory tasks, while 9-skill level members are the career ladder managers.
4. Training Considerations: Most of the Specialty Training Standard (STS) is supported by survey data. Percent members performing figures suggest 3-skill level training codes for several STS elements could be changed from a task knowledge to a performance level. Unmatched tasks suggest expansion of some STS paragraphs, as well as inclusion of additional topics.
5. Other Training Issues: Survey data show there is little overlap with Aircrew Life Support (AFSC 122X0) jobs. Also, the number of chamber flights or dives varies somewhat by the particular job AFSC 911X0 airmen have and by particular MAJCOM mission.
6. Job Satisfaction: Satisfaction for members of the jobs is satisfactory. Airmen working with the centrifuge, pressure suits, and research chamber feel their training is not being used as well, which is understandable. Indicators have remained stable for TAFMS groups over the last 8 years.
7. Implications: Survey data suggest some changes in the STS are needed. Functional and school personnel need to consider expanding some paragraphs, adding some new topics, and changing 3-skill level learning codes.



Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

OCCUPATIONAL SURVEY REPORT
AEROSPACE PHYSIOLOGY
(AFSC 911X0)

INTRODUCTION

→ This is a report of an occupational survey of the Aerospace Physiology (AFSC 911X0) career ladder completed by the USAF Occupational Measurement Center in October 1988. This career ladder was last surveyed in 1980. A number of changes have occurred since then, including involvement with High Altitude Airdrop Mission Support (HAAMS) and training aircrews from South American countries. The survey was requested by USAFOMC/OMYXR, Future Requirements, to validate the September 1988 Specialty Training Standard.

Keywords: job analysis; (K-)

Background

AFR 39-1 Specialty Description states that AFSC 911X0 personnel operate and maintain aerospace physiology devices and altitude chambers; instruct and observe on chamber flights; and instruct flying personnel on aircraft pressurization, night vision, emergency first aid, oxygen equipment, and emergency escape. They may also work in hyperbaric chamber operations, assist with physiological research and development, instruct parasail techniques, and function as a high altitude suit technician. AFR 50-27 (Air Force Aerospace Physiology Training Program) requires AFSC 911X0 personnel to rotate through all sections of aerospace physiological training units so they gain experience with hypobaric chamber operations and maintenance, egress and parachute training, oxygen masks and associated equipment, classroom instruction, and various briefings.

Approximately 34 members a year enter the specialty by attending a 4-week, Air Force Systems Command 3ABY91130 course taught at Brooks AFB TX to learn basic physiological principles, altitude chamber operations, chamber crew duties, and how to operate ejection, swing landing, and parasail training devices. Once they have gained experience at their base of assignment, they are sent to the nearest technical training center to complete the Technical Training Instructor course. Until the spring of 1988, graduates assigned to units operating hyperbaric chambers and with 6 months experience returned to Brooks AFB to attend a 10-day Hyperbaric Chamber Enlisted Team Training course. Starting in November 1988, all basic course students will complete the 2-week hyperbaric training as part of their resident training.

SURVEY METHODOLOGY

Data for this survey were collected using USAF Job Inventory AFPT 90-911-805 (August 1987). The Inventory Developer reviewed pertinent career ladder documents, and the previous OSR and job inventory, and then prepared a

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

tentative task list. The task list was validated through personal interviews with a total of 32 subject-matter experts at the technical school and in Physiology Training units at the five bases listed below:

<u>BASE</u>	<u>REASON FOR VISITING BASE</u>
Brooks AFB TX	The Technical School for AFSC 911X0 is here, as well as training and research chambers, and a hypobaric medical treatment facility.
Mather AFB CA	Physiological training for undergraduate navigator trainees is conducted here.
Beale AFB CA	Home of SAC strategic reconnaissance aircraft with their unique requirements.
Sheppard AFB TX	This is a busy Euro-NATO undergraduate Jet Pilot Training base.
Little Rock AFB AR	Home of the High Altitude Airdrop Mission Support (HAAMS) expertise.

The final inventory contains 508 tasks grouped under 14 duty headings and standard background questions asking for DAFSC, organization of assignment, MAJCOM, duty title, TAFMS, and time in career ladder. There are additional questions asking respondents to indicate the number of times per month they serve as a crewmember on chamber dives and hypobaric flights, as well as the number of days they have been on Duty Not Including Flying (DNIF) during the past year. The functional manager will use responses to these questions to determine how AFSC 911X0 personnel are being used in the field.

Survey Administration

From December 1987 through April 1988, Consolidated Base Personnel Offices at operational bases worldwide administered the surveys to AFSC 911X0 personnel selected from a computer-generated mailing list provided by the Air Force Human Resources Laboratory. Respondents were asked to complete the identification and biographical information section first, go through the booklet and mark all tasks they perform in their current job, and then go back and rate each task they marked on a 9-point scale reflecting the relative amount of time spent on each task. Time spent ratings range from 1 (indicating a very small amount of time spent) to 9 (indicating a very large amount of time spent).

The computer calculated the relative percent time spent on all tasks for each respondent by first totalling ratings on all tasks, dividing the rating for each task by this total, and multiplying by 100. The percent time spent ratings from all inventories were then combined and used with percent member performing values to describe various groups in the career ladder.

Survey Sample

Because there are only 515 personnel in the AFSC 911X0 career ladder, all eligible members (those not in PCS, a student, in hospital status, or having less than 6 weeks on the job) received a survey booklet. The final sample included responses from 397 members. As shown in Tables 1 and 2, the MAJCOM and DAFSC representation in the sample is very close to that of the total AFSC 911X0 population.

Data Processing and Analysis

Once the job inventories are received from the field, demographic data, such as name, duty AFSC, and time in career ladder, are manually entered to form one computer file. Responses to task statements and background information, on the other hand, are optically scanned to become another computer file. The two files are merged to form one complete case record for each respondent. Comprehensive Occupational Data Analysis Programs (CODAP), a series of computer programs used to process survey data, then create a job description for each respondent, as well as composite job descriptions for members of various demographic groups. These job descriptions are used for much of the occupational analysis.

Task Factor Administration

Personnel who make decisions about career ladder documents and training programs need task factor data (training emphasis and task difficulty ratings) as well as job descriptions. The survey process provides these data by asking selected E-6 and E-7 supervisors to complete either a training emphasis (TE) or task difficulty (TD) booklet. These booklets are processed separately from the job inventories and TE and TD data are used in several analyses discussed later in this report.

Training Emphasis (TE). Training emphasis is the amount of structured training that first-enlistment personnel need to perform tasks successfully. Structured training is defined as training provided by resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or any other organized training method. Fifty experienced AFSC 91170 supervisors rated the tasks in the inventory on a 10-point TE scale ranging from 0 (no training required) to 9 (much structured training required). Interrater reliability (as assessed through components of variance of standard group means) is .96, indicating high agreement between raters.

TE ratings, when used with percent members performing values and TD, can help validate the need for organized training and provide insight into the 3-skill level training codes needed on individual STS elements.

Task Difficulty (TD). Task difficulty is defined as an estimate of the length of time the average airman takes to learn how to perform each task listed in the inventory. Forty-five experienced AFSC 91170 supervisors rated the difficulty of the tasks in the inventory on a 9-point scale ranging from 1

TABLE 1
COMMAND DISTRIBUTION OF SAMPLE

COMMAND	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
SAC	31%	29%
ATC	22%	24%
AFSC	16%	16%
TAC	11%	11%
MAC	5%	5%
AFLC	4%	4%
PACAF	4%	3%
USAFE	3%	3%
SPACE	3%	3%
OTHER	1%	2%

TOTAL ASSIGNED = 515
 TOTAL ELIGIBLE = 472
 TOTAL IN FINAL SAMPLE = 397
 PERCENT OF ASSIGNED IN SAMPLE = 77%
 PERCENT OF ELIGIBLE IN SAMPLE = 84%

TABLE 2
DAFSC DISTRIBUTION OF SAMPLE

DAFSC	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
91130	34%	24%
91150	44%	48%
91170	17%	23%
91190	4%	4%
91100	1%	1%

(easy to learn) to 9 (very difficult to learn). Ratings are adjusted so tasks of average difficulty have a value of 5.0. Interrater reliability (as assessed through components of variance of standard group means) is .93, indicating high agreement.

The computer uses the TE and TD ratings for each task in the inventory, percent of first-enlistment respondents performing, and the training decision table found in AFR 52-22 to compute an Automated Training Indicator (ATI) value for each task. This ATI, the TE and TD values, as well as percent of various groups of respondents performing, are the data used to make decisions about training requirements. These data are discussed later in the Training Analysis section of the OSR.

SPECIALTY JOBS (Career Ladder Structure)

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

The basic group CODAP uses for the clustering process is a job, or those individuals who perform many of the same tasks and spend a similar amount of time performing them. When several jobs are similar, they form a cluster. If members of a job perform tasks that are so different they cannot be included in a cluster, they are referred to as being an independent job. These definitions were used to describe the Aerospace Physiology specialty and the variations in jobs within the specialty. In addition, this information was used to evaluate the accuracy and completeness of AFR 39-1 Specialty Descriptions, the Specialty Training Standard, and how career ladder members are being used.

Overview

Survey data show there are five technically-oriented jobs and one supervisory and administrative job that members of this career ladder fulfill (Figure 1). AFR 50-27 (Air Force Aerospace Physiology Training Program) requires AFSC 911X0 personnel to rotate through all sections of aerospace physiological training units so they are experienced in all aspects of the career ladder, including hypobaric chamber operations and maintenance, egress and parachute training, oxygen masks and associated equipment, classroom instruction, and various briefings. Often, Aerospace Physiology personnel

AFSC 911X0 PERSONNEL IN CAREER LADDER JOBS

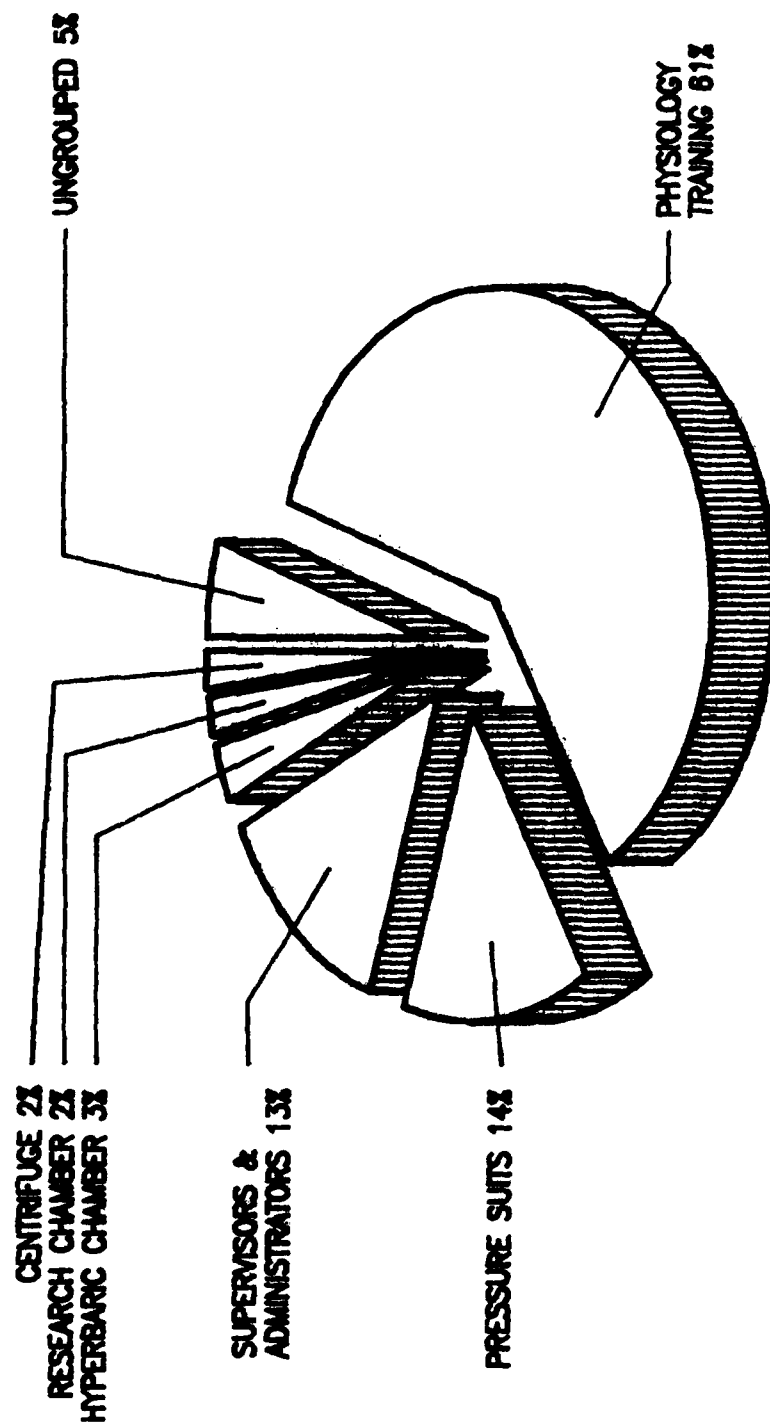


FIGURE 1

perform tasks related to more than one job in a day. For example, they may instruct on the parachute training device in the morning and be part of a chamber flight crew in the afternoon.

The six jobs performed by AFSC 911X0 personnel are listed below. The relative time respondents spend on duties is presented in Table 3, while background information on members working in each job is presented in Table 4. The Stage (STG) number beside the job title is a group reference number assigned by CODAP, and the letter "N" refers to the number of respondents in each job.

- I. AEROSPACE PHYSIOLOGY TRAINING PERSONNEL (STG030, N=243)
- II. PRESSURE SUIT PERSONNEL (STG012, N=55)
- III. SUPERVISORS AND ADMINISTRATORS (STG026, N=50)
- IV. HYPERBARIC CHAMBER PERSONNEL (STG027, N=10)
- V. RESEARCH CHAMBER PERSONNEL (STG032, N=8)
- VI. CENTRIFUGE PERSONNEL (STG009, N=6)

Brief descriptions of each job are presented below and representative tasks performed by respondents in each job are listed in Appendix A.

I. AEROSPACE PHYSIOLOGY TRAINING PERSONNEL (STG030, N=243). This is the core job of the career ladder. Members with this job spend 24 percent of their time conducting aerospace physiology instruction, 16 percent operating or maintaining hypobaric chambers, 13 percent performing administrative functions, and 9 percent each operating and maintaining aerospace physiology equipment, and performing life support functions. Over half the personnel in this job are in their first enlistment and hold the 5-skill level and a majority are in paygrades E-1 to E-4. Physiology Training Personnel perform an average of 93 tasks, and in terms of most time spent, are distinguished by the following tasks:

- serve as inside observer on hypobaric chamber flights
- serve as recorder on hypobaric chamber flights
- serve as chamber operator on hypobaric chamber flights
- serve as crew chief on hypobaric chamber flights
- serve as lock operator on hypobaric chamber flights
- treat reactors for middle ear problems
- make entries on AF Forms 701 (Chamber Flight Record)
- brief on rapid decompression during chamber flights

TABLE 3

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

DUTIES	PHYSIOLOGY TRAINING (N=243)	PRESSURE SUITS (N=55)	SUPERVISORS ADMINISTRATORS (N=50)	HYPERBARIC CHAMBER (N=10)	RESEARCH CHAMBER (N=8)	CENTRIFUGE (N=6)
A ORGANIZING AND PLANNING	3	2	17	8	3	6
B DIRECTING AND CONTROLLING	3	2	15	7	5	5
C INSPECTING AND EVALUATING	2	2	17	6	2	5
D TRAINING	9	4	11	4	*	7
E PERFORMING ADMINISTRATIVE FUNCTIONS	13	6	8	18	15	2
F PERFORMING GENERAL AEROSPACE PHYSIOLOGY FUNCTIONS	7	8	2	6	9	7
G CONDUCTING AEROSPACE PHYSIOLOGY INSTRUCTION	24	5	13	5	5	3
H OPERATING OR MAINTAINING HYPOBARIC CHAMBERS	16	6	4	5	19	5
I PERFORMING HIGH ALTITUDE AIRDROP MISSION SUPPORT (HAAMS) DUTIES	*	*	1	-	-	-
J OPERATING OR MAINTAINING HYPERBARIC CHAMBERS	3	3	2	30	*	-
K PERFORMING LIFE SUPPORT EQUIPMENT FUNCTIONS ON LIFE SUPPORT EQUIPMENT, OTHER THAN PRESSURE SUITS	9	16	2	7	8	7
L PERFORMING PRESSURE SUIT PHYSIOLOGICAL SUPPORT FUNCTIONS	*	44	4	2	*	-
M OPERATING AND MAINTAINING AEROSPACE PHYSIOLOGY EQUIPMENT	9	*	3	*	*	-
N PERFORMING PHYSIOLOGICAL RESEARCH FUNCTIONS	*	*	*	1	32	53

* DENOTES LESS THAN 1 PERCENT

- DENOTES 0 PERCENT

TABLE 4

SELECTED BACKGROUND INFORMATION OF MEMBERS IN CAREER LADDER JOBS
(PERCENT RESPONDING)

	PHYSIOLOGY TRAINING	PRESSURE SUITS	SUPERVISORS ADMINISTRATORS	HYPERBARIC CHAMBER	RESEARCH CHAMBER	CENTRIFUGE
NUMBER IN GROUP	243	55	50	10	8	6
PERCENT OF SAMPLE	61%	14%	13%	3%	2%	2%
PERCENT OVERSEAS	10%	33%	18%	-	-	-
DAFSC DISTRIBUTION						
91130	32%	18%	-	-	13%	-
91150	53%	62%	2%	50%	75%	50%
91170	14%	20%	62%	40%	12%	33%
91190	*	-	22%	10%	-	17%
91100	-	-	14%	-	-	-
PAYGRADE DISTRIBUTION						
E-1 TO E-3	37%	42%	-	10%	13%	-
E-4	36%	31%	-	10%	50%	17%
E-5	18%	20%	6%	40%	25%	33%
E-6	7%	7%	18%	20%	12%	17%
E-7	1%	-	50%	20%	-	33%
E-8	*	-	14%	-	-	-
E-9	*	-	12%	-	-	-
PERCENT FIRST ENLISTMENT	54%	54%	-	20%	13%	17%
PERCENT SUPERVISING	39%	25%	96%	50%	33%	77%
AVERAGE NUMBER OF TASKS PERFORMED	93	77	99	81	53	47

* DENOTES LESS THAN 1 PERCENT

- DENOTES 0 PERCENT

On the basis of survey data, four subgroups exist within the Aerospace Physiology Training job. Members of these subgroups perform the core tasks listed above but differ in the amount of time they spend performing other section-specific tasks within the physiology training unit.

The first subgroup is comprised of 68 E-3 and E-4 personnel who spend most of their time performing only the core hypobaric chamber tasks listed above. A second smaller subgroup appear to be recent technical school graduates in OJT and upgrade training, with a rather limited job. They perform some of the core hypobaric chamber tasks plus some basic chamber maintenance tasks. The 83 members of the third subgroup have a more clearly defined chamber maintenance role. In addition to performing the core chamber operations tasks, they are also involved with chamber inspection and maintenance. The final subgroup of 78 respondents are instructors who are distinguished because they spend more time conducting classroom instruction and briefing various aerospace physiology topics.

II. PRESSURE SUIT PERSONNEL (STG012, N=55). There are only three bases with pressure suit support units: Beale AFB, Edwards AFB, and RAF Alconbury. AFSC 911X0 personnel assigned to these bases spend 44 percent of their time on pressure suit physiological support duties and 16 percent performing other life support equipment duties. Over half are in their first enlistment and nearly two-thirds hold the 5-skill level. They perform an average of 77 tasks and are distinguished from members working in the other jobs because they spend more time performing the following tasks:

- assist crewmembers in donning pressure suit assemblies
- assist crewmembers in doffing pressure suit assemblies
- perform preflight or postflight inspections of full pressure suits
- drive pilot transport vans
- perform occupied full pressure suit integration tests
- connect or disconnect crew members to or from aircraft
- operate portable LOX ventilation units

III. SUPERVISORS AND ADMINISTRATORS (STG026, N=50). This job is performed by the more senior members of the career ladder. Thirty-one hold the 7-skill level, 11 hold the 9-skill level, and 7 have the CEM code. While they have a less technical job in the career ladder, they still participate in hypobaric chamber flights. Three-quarters of their time is allocated to 5 duties: 17 percent to organizing and planning, 17 percent to inspecting and evaluating, 15 percent to directing and controlling, 13 percent to conducting aerospace physiology instruction, and 11 percent to training. They perform an average of 99 tasks, including a mixture of both supervisory and hypobaric chamber tasks and are distinguished by the time they spend on the following tasks:

- counsel personnel on personal or military-related problems
- determine work priorities
- write APR
- interpret directives for subordinates
- evaluate compliance with work performance standards
- supervise Aerospace Physiology Specialists (AFSC 91150)
- establish work schedules
- establish performance standards for subordinates

IV. HYPERBARIC CHAMBER PERSONNEL (STG027, N=10). The Air Force has a number of hyperbaric chambers at various stateside and overseas locations. Since hyperbaric functions usually involve patient treatment, more experienced AFSC 911X0 personnel perform this job. Half the members hold the 5-skill level and half hold the 7- and 9-skill levels. They spend 30 percent of their duty time operating or maintaining hyperbaric chambers, 18 percent performing administrative functions, and lesser amounts performing life support equipment functions on other than pressure suits, performing general aerospace physiology functions, and operating hypobaric chambers. They perform an average of 81 tasks and are distinguished by the greater time they spend on the following tasks:

- serve as an inside observer on hyperbaric chamber dives
- serve as crew chief on hyperbaric chamber dives
- serve as chamber operator on hyperbaric chamber dives
- perform daily inspections of hyperbaric chamber assemblies
- clean hyperbaric chambers
- load or unload patients into or from hyperbaric chambers
- serve as lock operator on hyperbaric chamber dives

V. RESEARCH CHAMBER PERSONNEL (STG032, N=8). This is a rather specialized job in the aerospace physiology career ladder, limited to the research chambers at Brooks AFB and Wright-Patterson AFB. Research Chamber Personnel are distinguished by the high proportion of their time (32 percent) spent performing physiological research functions. They also spend 19 percent of their time operating hypobaric chambers and 15 percent performing administrative functions. They perform an average of 53 tasks including the following:

- serve as crew chief on research chamber flights
- serve as chamber operator on hypobaric chamber flights
- serve as crew chief on hypobaric chamber flights
- serve as inside observer on research chamber flights
- serve as inside observer on hypobaric chamber flights
- serve as lock operator on research chamber flights
- operate doppler ultrasound devices
- serve as recorder on research chamber flights

VI. CENTRIFUGE PERSONNEL (STG009, N=6). Six AFSC 911X0 personnel work essentially outside their specialty by supporting centrifuge operations at Brooks AFB and Wright-Patterson AFB. Survey data show they are distinguished because they do not take monthly chamber flights and they are the only ones performing the following tasks:

- connect personal equipment to centrifuges
- disconnect personal equipment from centrifuges
- connect biomedical instrumentation to subjects
- disconnect biomedical instrumentation from subjects
- operate strip chart recorders
- perform pre- and post-run inspections of centrifuges
- set seat configurations in centrifuges

Comparison to Previous Survey

Jobs identified in the present survey were compared to those reported in the 1980 OSR (see Table 5) and were found to be essentially the same. The slight differences between job titles shown in Table 5 may be attributed to CODAP task clustering and changes in job typing policy. Task clustering identifies groups of tasks which are co-performed which, in turn, helps identify the jobs performed in the career ladder. A job typing policy change allows smaller groups of respondents, who perform only a few distinctive tasks, to be included in larger more descriptive groups. The overall result is that jobs reported reflect actual differences between groups in terms of types of tasks performed.

Summary

The analysis of the six jobs performed by AFSC 911X0 personnel accounts for 95 percent of the total sample. The remaining 5 percent either perform such a variety of tasks or have such an unusual emphasis on certain tasks that the CODAP programs could not include them in any groups of meaningful size. The jobs identified above support the current classification structure of the career ladder. While titles are somewhat different than those reported 8 years ago, the jobs and tasks performed have remained stable.

CAREER LADDER PROGRESSION

Analysis of DAFSC groups, together with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed by members of the various skill level groups which in turn may be used to evaluate how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the Speciality Training Standard (STS), reflect what members of the various skill levels are doing.

TABLE 5

COMPARISON OF CAREER LADDER STRUCTURE
FOR CURRENT AND PREVIOUS SURVEY

JOBS IDENTIFIED IN 1988	JOBS IDENTIFIED IN 1980
-----	-----
PHYSIOLOGICAL TRAINING PERSONNEL	AEROSPACE PHYSIOLOGY OPERATIONS AND TRAINING PERSONNEL
	ALTITUDE CHAMBER OPERATIONS SPECIALISTS
SUPERVISORS AND ADMINISTRATORS	AEROSPACE PHYSIOLOGY SUPERVISORS
	ADMINISTRATIVE PERSONNEL
HYPERBARIC CHAMBER PERSONNEL	HYPERBARIC MEDICINE PERSONNEL
PRESSURE SUIT PERSONNEL	LIFE SUPPORT EQUIPMENT PERSONNEL
RESEARCH CHAMBER PERSONNEL	PHYSIOLOGY RESEARCH TECHNICIANS
CENTRIFUGE PERSONNEL	
- NO GROUP IDENTIFIED -	HALO SUPPORT NCOICS

The distribution of skill levels across the specialty jobs is displayed in Table 6, while relative time members of the various DAFSC groups spend on duties is shown in Table 7. These data show that members of most DAFSCs are involved in operating and maintaining hyperbaric chambers, conducting aerospace physiology training, and performing general aerospace physiology functions. Although personnel at all skill levels perform tasks within these duties, there is a definite trend for members with higher skill levels to devote more time to supervisory and administrative tasks and less time on routine maintenance and life support types of tasks. Three- and 5-skill level personnel spend more time on technical duties, 7-skill level members spend more time supervising, and 9-skill level members manage the career ladder.

Skill-Level Descriptions

DAFSC 91130. Personnel with the 3-skill level perform an average of 63 tasks related to the various hypobaric crew positions and chamber maintenance (see Appendix B, Table B1). Because they are inexperienced, their job is rather limited. Data in Table 6 show, while most 3-skill level members work in aerospace physiology training units, some are assigned to pressure suit support units and research chamber sections.

DAFSC 91150. As shown by data in Table 6, 5-skill level members work in nearly all the jobs. Even though they are involved in classroom instruction and work in more specialized jobs, they still perform the core training chamber crew tasks (see Appendix B, Table B2). Tasks that best differentiate between 3- and 5-skill level members are shown in Table 8. The smaller differences in percent performing more basic tasks and larger differences in percentages performing briefing and OJT tasks illustrate that 5-skill level members pick up increased responsibilities as they progress within the career ladder.

DAFSC 91170. Figures in Table 6 show that the role of 7-skill level members is that of first-line supervisor, performing a mixture of technical and supervisory tasks (see Appendix B, Table B3). This role of first-line supervisor is clearly shown by tasks that best differentiate between the skill levels (Table 9). A higher percentage of 7-skill level members perform supervisory tasks and a lower percentage perform technical tasks than 5-skill level members.

DAFSC 91190/00. Three-quarters of the 9-skill level and all the CEM respondents have the supervisor and administrator job. The job description for the combined groups (Appendix B, Table B4) shows, while they are the managers of the career ladder, they are still involved with hypobaric chamber operations to some extent. Their role as administrators and managers is shown by tasks that best differentiate between members of the two groups (see Table 10).

TABLE 6

DISTRIBUTION OF SKILL-LEVEL MEMBERS IN CAREER LADDER JOBS

FUNCTIONS	DAFSC				
	91130 (N=95)	91150 (N=190)	91170 (N=90)	91190 (N=15)	91100 (N=7)
PHYSIOLOGY TRAINING	82%	68%	38%	13%	-
PRESSURE SUIT	11%	18%	12%	-	-
SUPERVISORS AND ADMINISTRATORS	-	*	34%	73%	100%
HYPERBARIC CHAMBERS	-	3%	4%	7%	-
RESEARCH CHAMBERS	1%	3%	1%	-	-
CENTRIFUGE	-	2%	2%	7%	-
NOT GROUPED	6%	6%	9%	-	-

* Denotes less than 1 percent

- Denotes 0 percent

TABLE 7

DISTRIBUTION OF TIME SPENT ON DUTIES BY MEMBERS OF SKILL LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES	91130 (N=95)	91150 (N=190)	91170 (N=90)	91190/00 (N=22)
A ORGANIZING AND PLANNING	*	3	10	17
B DIRECTING AND CONTROLLING	1	3	9	16
C INSPECTING AND EVALUATING	*	2	9	19
D TRAINING	5	7	10	11
E PERFORMING ADMINISTRATIVE FUNCTIONS	14	12	11	8
F PERFORMING GENERAL AEROSPACE PHYSIOLOGY FUNCTIONS	9	8	4	2
G CONDUCTING AEROSPACE PHYSIOLOGY INSTRUCTION	19	20	16	13
H OPERATING OR MAINTAINING HYPOBARIC CHAMBERS	18	13	7	4
I PERFORMING HIGH ALTITUDE AIRDROP MISSION SUPPORT (HAAMS) DUTIES	*	*	1	*
J OPERATING OR MAINTAINING HYPERBARIC CHAMBERS	4	4	3	2
K PERFORMING LIFE SUPPORT EQUIPMENT FUNCTIONS ON LIFE SUPPORT EQUIPMENT, OTHER THAN PRESSURE SUITS	13	9	6	2
L PERFORMING PRESSURE SUIT PHYSIOLOGICAL SUPPORT FUNCTIONS	5	9	6	*
M OPERATING AND MAINTAINING AEROSPACE PHYSIOLOGY EQUIPMENT	10	6	4	3
N PERFORMING PHYSIOLOGICAL RESEARCH FUNCTIONS	*	3	2	1

* DENOTES LESS THAN 1 PERCENT

- DENOTES 0 PERCENT

TABLE 8

EXAMPLES OF TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC
91130 AND DAFSC 91150 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	91130 (N=95)	91150 (N=190)	DIFFERENCE
E117 MAKE ENTRIES ON AF FORMS 699 (PHYSIOLOGICAL TRAINING RECORD)	58	39	19
D 96 SCORE TESTS	47	29	18
F156 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH	75	57	18
F153 CLEAN AEROSPACE PHYSIOLOGY TRAINING AIDS AND EQUIPMENT	79	61	18
M401 OPERATE SPATIAL DISORIENTATION TRAINERS	64	47	17
E119 MAKE ENTRIES ON AF FORMS 701 (CHAMBER FLIGHT RECORD)	76	60	16
C 62 WRITE APR	2	35	-33
G176 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS	28	61	-33
G174 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS	32	63	-31
D 69 CONDUCT QJT	13	42	-29
D 90 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	4	32	-28
D 83 EVALUATE CLASSROOM PRESENTATION OF INSTRUCTORS	6	34	-28
G179 BRIEF ON USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS	38	64	-26

TABLE 9

EXAMPLES OF TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC
91150 AND DAFSC 91170 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	91150 (N=190)	91170 (N=90)	DIFFERENCE
F153 CLEAN AEROSPACE PHYSIOLOGY TRAINING AIDS AND EQUIPMENT	62	32	30
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	78	49	29
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	81	55	26
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	77	54	23
A 7 DETERMINE WORK PRIORITIES	34	84	-50
A 11 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	26	76	-50
A 12 ESTABLISH WORK SCHEDULES	25	74	-49
B 26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	30	79	-49
C 63 WRITE AWARDS AND DECORATIONS RECOMMENDATIONS	16	64	-48

TABLE 10

EXAMPLES OF TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC
91170 AND DAFSC 91199/00 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	91170 (N=90)	91199/00 (N=22)	DIFFERENCE
D 90 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	74	36	38
H246 STORE HIGH PRESSURE OXYGEN CYLINDERS	44	13	31
D 89 MAKE ENTRIES ON AF FORMS 1098 (SPECIAL TASK CERTIFICATION AND RECURRING TRAINING)	52	23	29
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	56	27	29
K281 CLEAN STUDENT AND CREWMEMBER FLIGHT HELMETS	32	4	28
L332 ASSIST CREWMEMBERS IN DOFFING PRESSURE SUIT ASSEMBLIES	27	-	27
B 33 INITIATE REQUESTS FOR PERSONNEL REPLACEMENTS	14	82	-68
C 48 EVALUATE INSPECTION REPORT FINDINGS	39	100	-61
B 28 IMPLEMENT COST-REDUCTION PROGRAMS	20	77	-57
A 3 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	32	86	-54
C 45 EVALUATE BUDGET REQUIREMENTS	33	86	-53
A 10 ESTABLISH ORGANIZATIONAL POLICIES	34	86	-52

- Denotes 0 percent

Summary

Aerospace Physiology personnel progress typically through the skill levels. Three- and 5-skill level members perform the more technical tasks, 7-skill level members are first-line supervisors, and the 9-skill level and CEM personnel are the managers of the career ladder.

AFR 39-1 SPECIALTY JOB DESCRIPTION ANALYSIS

The current AFR 39-1 Specialty Descriptions for the AFSC 911X0 career ladder were compared to job descriptions for each job identified and for each DAFSC group. Overall, survey data support the current AFR 39-1 Specialty Descriptions.

TRAINING ANALYSIS

Occupational survey data are a valuable source of information which can be used to evaluate the training documents for the specialty. The three most commonly used types of data are: (1) percent of first-enlistment personnel performing tasks, (2) ratings of how much training emphasis tasks should receive, and (3) ratings of the relative difficulty of tasks. These data were used to review the Specialty Training Standard for the Aerospace Physiology career ladder. The POI for the basic course was not reviewed during this study because it was being revised when this report was written, and nearly all learning objectives require knowledge rather than performance, which precludes matching to performance-oriented tasks in the job inventory.

Secondary factors (TE and TD) may be used in conjunction with percent members performing figures to determine what tasks should be emphasized in entry-level training. Tasks with high TE and TD ratings which are performed by moderate to high percentages of first-enlistment personnel are normally taught in resident courses, while tasks with high TE and TD ratings and low percentages of first-enlistment personnel performing may be more appropriate for QJT. Tasks rated low in TE and TD generally are not included in any formal training unless their inclusion can be justified by percent members performing, command concerns, or criticality. Products in the Training Extract contain several listings of tasks with accompanying TE and TD ratings and percent members performing figures. Training Development Services personnel will find these listings extremely helpful in reviewing training requirements for the 911X0 career ladder.

Table 11 lists tasks with the highest TE ratings, with accompanying first job (1-24 months TAFMS), first enlistment (1-48 month TAFMS), and TD ratings shown. All these tasks deal with some aspect of the basic physiological training function--classroom instruction or chamber operations.

TABLE 11

TASKS WITH HIGHEST TE RATING

TASKS	TNG EMP	PERCENT MEMBERS PERFORMING			TSK DIF
		1-24 TAFMS (N=105)	1-48 TAFMS (N=180)		
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	7.56	75	78		4.82
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	7.56	73	78		4.95
G224 TREAT CHAMBER REACTORS WITH EVOLVED GAS DISORDERS	7.48	83	53		5.85
G220 TREAT CHAMBER REACTORS FOR GASTROINTESTINAL TRACT PROBLEMS	7.38	63	69		4.59
G223 TREAT CHAMBER REACTORS FOR TOOTH PROBLEMS	7.36	56	63		4.88
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	7.26	90	90		5.22
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	7.26	87	87		4.43
H240 SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	7.20	86	86		4.45
E119 MAKE ENTRIES ON AF FORMS 701 (CHAMBER FLIGHT RECORD)	7.12	65	69		3.79
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	7.12	85	85		4.64
H244 SERVE AS LOCK OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	7.12	83	84		4.45
E117 MAKE ENTRIES ON AF FORMS 699 (PHYSIOLOGICAL TRAINING RECORD)	6.62	50	50		3.42
G177 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS	6.56	63	69		4.80
G194 CONDUCT CLASSROOM INSTRUCTION ON USE OF OXYGEN MASKS	6.44	20	37		5.29
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	6.44	72	76		4.01
G179 BRIEF ON USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS	6.42	27	45		4.94
E120 MAKE ENTRIES ON AF FORMS 702 (INDIVIDUAL PHYSIOLOGICAL TRAINING RECORD)	6.40	32	36		3.05
G195 CONDUCT CLASSROOM INSTRUCTION ON USE OF OXYGEN REGULATORS	6.34	20	37		5.29
H226 PERFORM DAILY INSPECTIONS OF HYPOBARIC CHAMBER ASSEMBLIES	6.28	36	38		4.59
E118 MAKE ENTRIES ON AF FORMS 700 (PHYSIOLOGICAL TRAINING MONTHLY REPORT)	6.20	24	28		5.12
E121 MAKE ENTRIES ON AF FORMS 712 (INSTRUCTOR'S FLIGHT/DIVE RECORD)	6.20	32	33		3.17

TE MEAN = 2.10 S.D. = 1.79

TD MEAN = 5.00 S.D. = 1.00

Tasks rated highest in task difficulty are listed in Table 12. Almost half deal with overhauling pressure suits, while most of the rest are performed only by career ladder managers.

The Training Extract contains a listing of the STS, the tasks matched to STS elements, percent first-enlistment personnel performing the tasks, and TE and TD ratings for matched tasks. Copies of the Extract have been forwarded to technical school personnel for their use in reviewing training documents for the career ladder. A summary of that information is presented below.

First-Enlistment Aerospace Physiology Personnel

One hundred and eighty survey respondents indicated they are in their first enlistment. Figure 2 shows 72 percent (130 persons) have the Physiology Training job and 17 percent (30 individuals) work with pressure suits. Smaller numbers work with the hyperbaric and research chambers and centrifuge operations. Representative tasks performed, listed in Table 13, confirm that Physiology Training is the major job of first-enlistment AFSC 911X0 personnel.

Specialty Training Standard (STS)

To aid in the review of STS 911X0, Aerospace Physiology, dated September 1988, training personnel at Brooks AFB matched job inventory tasks to appropriate STS line items. This matching was then used to produce a complete listing of the STS with tasks matched to elements, percent members performing the tasks, and TE and TD ratings for each matched task. The relevance of each matched STS element was then determined using these data and guidelines found in ATCR 52-22.

The STS for this career ladder is rather short, with most individual line items dealing with general knowledge about Aerospace Physiology subjects. Specific performance of chamber maintenance, pressure suits, hyperbaric chamber operations, physiological training devices, and research functions are not included on the STS because these activities are quite specialized, learned by OJT, and are usually performed by small numbers of AFSC 911X0 personnel. In addition, proficiency in some of these activities is documented on Job Qualification Standard Continuations (AF Forms 797) developed by individual units.

Overall, the AFSC 911X0 STS is fairly well supported by survey data. Only two elements are matched to tasks performed by less than 20 percent of first-job, first-enlistment, 5- or 7-skill level members, which suggests they should be deleted from the STS. One deals with protective helmets and the other involves pressure suit principles. These two elements, with matched tasks and performance data, are listed in Table 14.

Functional personnel need to consider removing paragraph 18 - Pressure Suits - from the STS. Pressure suit functions are taught by OJT at the bases involved, personnel working with them receive a Special Experience Identifier (SEI), and proficiency is documented by a Job Qualification Standard (JQS).

TABLE 12

TASKS WITH HIGHEST TD RATING

TASKS	TSK DIF	PERCENT MEMBERS PERFORMING			TNG EMP
		1-24 TAFMS (N=105)	1-48 TAFMS (N=180)		
A 1	8.17	0	1	.08	
C 64	7.74	0	2	.58	
N458	7.60	0	1	.44	
C 63	7.47	0	2	1.24	
L387	7.30	2	3	.88	
L357	7.17	2	2	1.06	
A 9	7.13	1	4	.52	
L342	7.11	11	11	1.40	
L344	7.08	2	2	.66	
L355	7.04	11	11	1.54	
C 60	6.99	0	1	.02	
A 10	6.98	1	2	.22	
D 79	6.95	0	1	.18	
L358	6.94	5	6	1.48	
L389	6.93	0	1	.74	
L392	6.93	0	2	.64	
ASSEMBLIES					
A 14	6.92	0	1	.16	
C 45	6.84	1	3	.30	
L359	6.79	3	4	1.48	
REGULATORS					
C 62	6.78	0	5	2.74	
N485	6.76	0	1	.54	
PERFORM PLUMBING MODIFICATIONS TO SEALED ENVIRONMENTAL CHAMBERS					
L335	6.70	5	6	1.22	
L331	6.70	10	11	1.60	
URINE COLLECTION VALVES					
L346	6.66	4	7	1.46	
L388	6.66	2	4	1.12	
L334	6.62	4	6	.84	
D 80	6.62	5	7	.78	
L356	6.58	3	4	1.28	
PERFORM OVERHAUL INSPECTIONS OF LOW FLIGHT OXYGEN REGULATORS					

FIRST ENLISTMENT AFSC 911X0
IN CAREER LADDER JOBS

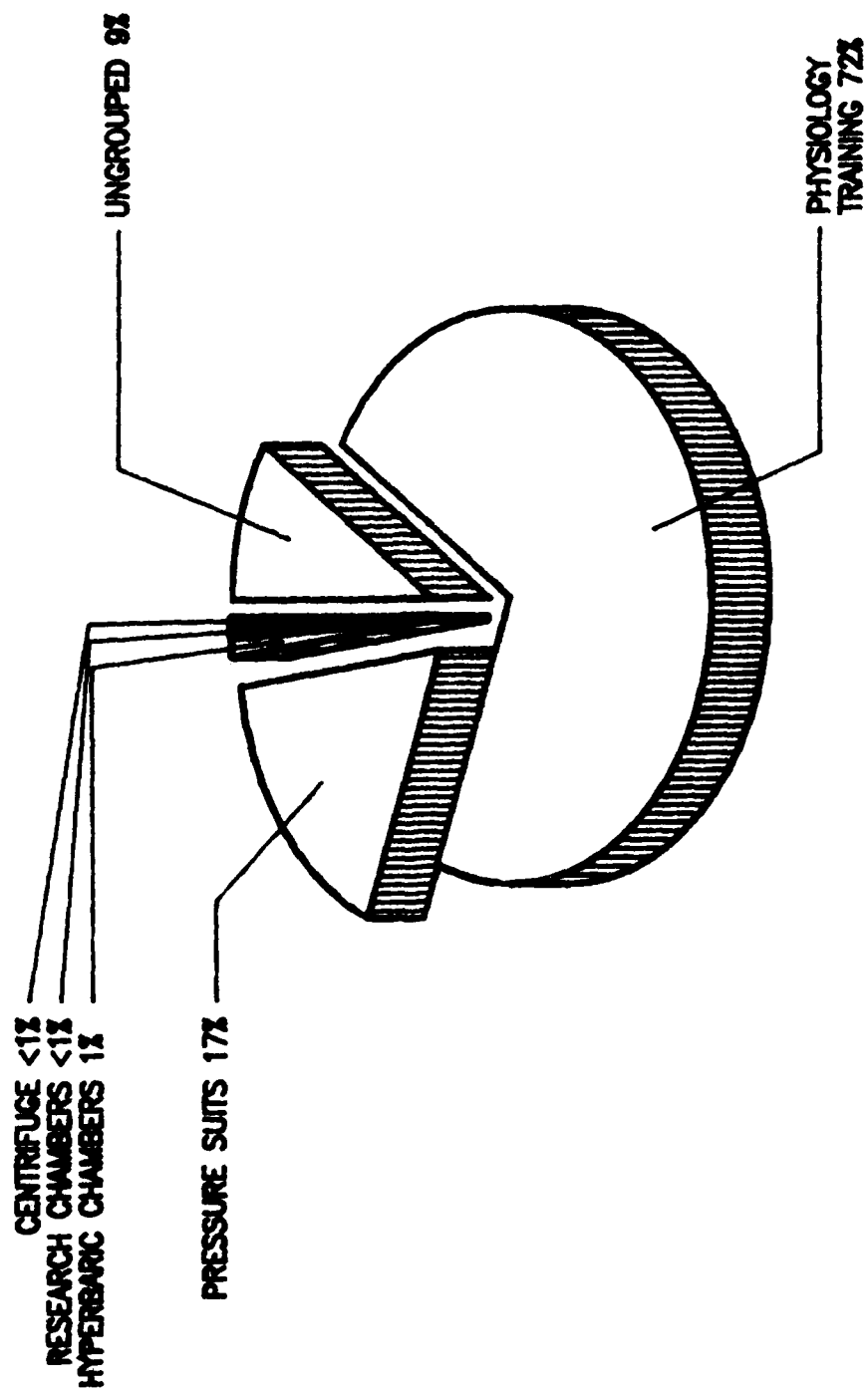


FIGURE 2

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
AFSC 911X0 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=180)
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	90
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	87
H240 SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	86
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	85
H244 SERVE AS LOCK OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	84
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	78
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	78
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	76
F153 CLEAN AEROSPACE PHYSIOLOGY TRAINING AIDS AND EQUIPMENT	73
E119 MAKE ENTRIES ON AF FORMS 701 (CHAMBER FLIGHT RECORD)	69
G177 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS	69
G220 TREAT CHAMBER REACTORS FOR GASTROINTESTINAL TRACT PROBLEMS	69
H246 STORE HIGH PRESSURE OXYGEN CYLINDERS	66
G223 TREAT CHAMBER REACTORS FOR TOOTH PROBLEMS	63
G180 BRIEF ON USE OF SPATIAL DISORIENTATION TRAINERS (VERTIGON)	61
K312 RECHARGE PORTABLE OXYGEN ASSEMBLIES	57
M401 OPERATE SPATIAL DISORIENTATION TRAINERS	56
F155 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES	56
G224 TREAT CHAMBER REACTORS WITH EVOLVED GAS DISORDERS	53
F157 DRIVE GOVERNMENT VEHICLES, OTHER THAN PILOT TRANSPORT VANS	52
E117 MAKE ENTRIES ON AF FORMS 699 (PHYSIOLOGICAL TRAINING RECORD)	50
K290 FIT STUDENT AND PATIENT OXYGEN MASKS	47
K288 FIT STUDENT AND CREWMEMBER FLIGHT HELMETS	47
G179 BRIEF ON USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS	45
D 95 SCHEDULE STUDENTS FOR AEROSPACE PHYSIOLOGY TRAINING CLASSES	43

TABLE 14

UNSUPPORTED AFSC 911X0 STS ELEMENTS

STS ELEMENT AND MATCHED TASKS	PERCENT MEMBERS PERFORMING				
	TNG EMP	1-48 TAFMS (N=180)	91150 (N=190)	91170 (N=90)	TSK DIFF
15B(2). PROTECTIVE HELMETS					
K316 REMOVE OR REPLACE STUDENT AND CREWMEMBER FLIGHT HELMET COMPONENTS, OTHER THAN INTERCOMMUNICATIONS SYSTEMS	3.50	19	18	16	4.26
18B. PRESSURE SUITS OPERATING PRINCIPLES					
G186 CONDUCT CLASSROOM INSTRUCTION ON PRESSURE SUIT PRINCIPLES	1.60	1	3	9	6.27

TE MEAN = 2.10 S.D. = 1.79

TD MEAN = 5.00 S.D. = 1.00

-Denotes 0 percent

While most STS elements are supported, there are a number of tasks, performed by fairly high percentages of TAFMS and DAFSC group members, not matched to any STS elements. A sample of these unmatched tasks is presented in Table 15. Several deal with inspecting and performing maintenance on hypobaric chambers. STS paragraph 11, Training Equipment Maintenance, could be expanded to include these types of tasks. STS paragraph 13, Hyperbaric Chamber Operations, could also be expanded as there are several tasks dealing with hyperbaric chamber operations performed by more than 20 percent of first-job, first-enlistment, 5- or 7-skill level members. In addition, hyperbaric chamber training will be part on the revised POI for the basic course. And finally, percentages of respondents performing parachute training and egress tasks suggest these tasks should be included in the STS. Functional and school personnel need to review all unmatched tasks to determine if they belong in the STS.

The final step of the STS analysis was to review the 3-skill level training codes assigned to the supported elements. Following guidelines stated in AFR 8-13 and ATCR 55-22, performance training codes for supported elements are appropriate if matched tasks are performed by 30 percent or more of first-enlistment airmen. Elements matched to tasks performed by less than 30 percent are normally dashed (-), unless there is good justification for them to be taught to a performance level.

Nearly all technical elements of the STS are supported and have a task knowledge code assigned. Since they are matched to tasks performed by more than 30 percent of members of the criterion groups, the task performance codes assigned are appropriate. Functional and school personnel need to review the codes assigned to all STS elements to determine if some topics might be taught to the performance level rather than task knowledge level.

Summary

Nearly all technical STS elements are supported by survey data. Since more than 30 percent members of criterion groups perform matched tasks, 3-skill level training codes assigned to most technical element need to be changed from a knowledge to a performance level. There are also a number of unmatched tasks which suggest topics that would be appropriate for the STS.

JOB SATISFACTION

Respondents were asked to indicate how interested they are in their jobs, if they feel their talents and training are being used, and if they intend to reenlist. Satisfaction indicators for TAFMS groups in the present study were compared to those of members in related AFSCs surveyed in 1987. As shown in Table 16, indicators are quite similar for Aerospace Physiology personnel and

TABLE 15

SAMPLE OF TASKS NOT MATCHED TO AFSC 911X0 STS

TASKS	PERCENT MEMBERS PERFORMING				TSK DIFF
	TNG EMP	1-48 TAFMS (N=180)	91150 (N=190)	91170 (N=90)	
H226 PERFORM DAILY INSPECTIONS OF HYPOBARIC CHAMBER ASSEMBLIES	6.28	38	39	27	4.59
H227 PERFORM GENERAL MAINTENANCE ON HYPOBARIC CHAMBERS	6.10	37	38	28	5.16
H246 STORE HIGH PRESSURE OXYGEN CYLINDERS	5.86	66	64	44	3.87
H231 PERFORM PERIODIC INSPECTIONS OF HYPOBARIC CHAMBER ASSEMBLIES	5.58	29	33	24	5.18
H236 REMOVE OR REPLACE HYPOBARIC CHAMBER OXYGEN PLUMBING, SUCH AS TUBING OR FITTINGS	5.38	19	25	21	5.69
H232 PERFORM SPECIAL INSPECTIONS OF HYPOBARIC CHAMBER ASSEMBLIES	5.34	27	28	23	5.34
J269 SERVE AS CHAMBER OPERATOR ON HYPERBARIC CHAMBER DIVES	3.00	31	28	34	5.43
J271 SERVE AS INSIDE OBSERVER ON HYPERBARIC CHAMBER DIVES	3.00	29	29	39	5.44
J273 SERVE AS RECORDER ON HYPERBARIC CHAMBER DIVES	2.98	28	28	34	5.32
J274 SERVE AS TIMEKEEPER ON HYPERBARIC CHAMBER DIVES	2.98	28	28	33	5.66
J270 SERVE AS CREW CHIEF ON HYPERBARIC CHAMBER DIVES	2.92	29	27	32	5.27
J272 SERVE AS LOCK OPERATOR ON HYPERBARIC CHAMBER DIVES	2.90	29	27	34	5.00
M393 DEMONSTRATE PARACHUTE LANDING FALLS (PLF) DURING PARASAIL TOW-DOWNS	2.86	27	20	14	4.91
M394 DEMONSTRATE PLF DURING PARASAIL RELEASES	2.72	28	20	12	5.22
M397 OPERATE AIR EGRESS PROCEDURAL TRAINERS	2.62	25	20	16	4.39
M398 OPERATE GROUND EGRESS PROCEDURAL TRAINERS	2.58	26	20	14	3.79

TE MEAN = 2.10 S.D. = 1.79

TD MEAN = 5.00 S.D. = 1.00

TABLE 16

JOBS SATISFACTION INDICATORS OF TAFMS GROUPS IN CURRENT STUDY
AND COMPARATIVE SAMPLE
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	911X0 (N=180)	COMP SAMPLE (N=618)	911X0 (N=88)	COMP SAMPLE (N=181)	911X0 (N=129)	COMP SAMPLE (N=375)
EXPRESSED JOB INTEREST:						
INTERESTING	84	86	88	78	82	76
SO-SO	10	9	7	14	10	15
DULL	6	4	3	5	6	7
PERCEIVED USE OF TALENTS:						
FAIRLY WELL TO GOOD	85	87	84	84	82	81
LITTLE OR NOT AT ALL	14	12	16	16	18	18
PERCEIVED USE OF TRAINING:						
FAIRLY WELL TO GOOD	89	90	83	83	78	82
LITTLE OR NOT AT ALL	11	9	17	16	22	18
REENLISTMENT INTENTIONS:						
WILL REENLIST	59	60	82	67	73	70
WILL NOT REENLIST	40	38	18	31	8	9
WILL RETIRE	*	*	-	-	19	19

NOTE: RELATED AFSCS SURVEYED IN 1987: 902X2 (SURGICAL SERVICES)
912X5/A (OPTOMETRY)
919X0 (ORTHOTIC)

* Denotes less than 1 percent

- Denotes 0 percent

airmen in the other medical career ladders surveyed in 1987. More second-enlistment and career AFSC 911X0 airmen find their jobs interesting than their counterparts in the comparative AFSCs. Reenlistment intentions, however, are quite similar for airmen in the current survey and medical AFSCs surveyed in 1987.

Satisfaction indicators for TAFMS groups in the present study were also compared to figures reported in the 1980 OSR (Table 17). Overall, job satisfaction has remained quite stable over the last 8 years.

And finally, satisfaction indicators for members of the six jobs are shown in Table 18. Most members in each of the jobs find their work interesting; however, low percentages of AFSC 911X0 airmen working with the centrifuge, pressure suits, and research chambers feel their training is being used. This latter condition is understandable, as entry-level training prepares AFSC 91130 airmen to work primarily in physiology training sections, not in the small specialty jobs. Note that even though members of these three jobs do not feel their training is used, they do feel their talents are used.

Summary

Job satisfaction indicators for members of most jobs are satisfactory. Airmen working with the centrifuge, pressure suits, and research chambers feel their training is not being used, which is understandable. Overall indicators are similar to those reported for other medical AFSCs surveyed last year, and have remained stable over the last 8 years.

OTHER ANALYSES

CONUS/Overseas Differences

Survey data show there are some differences in what AFSC 91150 airmen assigned overseas do as compared to their stateside counterparts. As shown by the job descriptions for the two groups (Tables 19 and 20) and the tasks which best differentiate between the groups (Table 21), the overseas group is more involved with pressure suit and aircraft functions while stateside members are more involved with hypobaric chamber operations. The implication for training is minimal, however, considering there are 27 AFSC 91150 airmen assigned overseas compared to 156 stationed CONUS.

MAJCOM Comparison

Tasks performed by personnel in the nine major commands (MAJCOM) with the largest AFSC 911X0 populations were compared to determine if job content varies as a function of MAJCOM assignment. Although a number of hypobaric chamber operation tasks are common to all MAJCOMs, a few variations were noted. SAC personnel differ from airmen in the other MAJCOMs in that they

TABLE 17

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 911X0
TAFMS GROUPS IN CURRENT AND PREVIOUS STUDY
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1988	1980	1988	1980	1988	1980
	(N=180)	(N=130)	(N=88)	(N=58)	(N=129)	(N=145)
EXPRESSED JOB INTEREST:						
INTERESTING	84	70	89	72	82	86
SO-SO	10	18	7	19	10	8
DULL	6	12	3	9	6	5
PERCEIVED USE OF TALENTS:						
FAIRLY WELL TO GOOD	81	66	84	83	82	88
LITTLE OR NOT AT ALL	19	33	16	17	18	12
PERCEIVED USE OF TRAINING:						
FAIRLY WELL TO GOOD	85	80	83	88	78	85
LITTLE OR NOT AT ALL	14	20	17	12	22	15
REENLISTMENT INTENTIONS:						
WILL REENLIST	59	39	82	69	73	59
WILL NOT REENLIST	40	24	18	17	8	14
WILL RETIRE	*	35	-	14	19	26

- Denotes 0 percent

* Denotes less than 1 percent

TABLE 18

COMPARISON OF JOB SATISFACTION INDICATORS FOR MEMBERS OF CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)

	PHYSIOLOGY TRAINING (N=243)	PRESSURE SUITS (N=55)	SUPERVISORS ADMINISTRATORS (N=50)	HYPERBARIC CHAMBER (N=10)	RESEARCH CHAMBER (N=8)	CENTRIFUGE (N=6)
EXPRESSED JOB INTEREST:						
INTERESTING	87	80	80	90	88	100
SO-SO	9	7	10	-	-	-
DULL	4	2	10	10	12	-
PERCEIVED USE OF TALENTS:						
FAIRLY WELL TO GOOD	87	67	80	100	62	83
LITTLE OR NOT AT ALL	13	33	20	-	37	17
PERCEIVED USE OF TRAINING:						
FAIRLY WELL TO GOOD	94	47	73	100	37	50
LITTLE OR NOT AT ALL	6	53	24	-	62	50
REENLISTMENT INTENTIONS:						
WILL REENLIST	69	73	66	80	62	50
WILL NOT REENLIST	30	24	2	20	25	17
WILL RETIRE	1	3	32	-	-	33

- DENOTES 0 PERCENT

TABLE 19

REPRESENTATIVE TASKS PERFORMED BY AFSC 91150 PERSONNEL
ASSIGNED TO CONUS BASES

TASKS	PERCENT MEMBERS PERFORMING (N=156)
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	90
H240 SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	85
H244 SERVE AS LOCK OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	85
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	85
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	83
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	83
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	83
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	78
G220 TREAT CHAMBER REACTORS FOR GASTROINTESTINAL TRACT PROBLEMS	75
G177 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS	74
G179 BRIEF ON USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS	
G223 TREAT CHAMBER REACTORS FOR TOOTH PROBLEMS	69
G179 DURING HYPOBARIC CHAMBER FLIGHTS	67
F155 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES	66
G174 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS	65
G176 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS	63
H246 STORE HIGH PRESSURE OXYGEN CYLINDERS	63
H243 SERVE AS LECTURER OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	63
F153 CLEAN AEROSPACE PHYSIOLOGY TRAINING AIDS AND EQUIPMENT	62
E119 MAKE ENTRIES ON AF FORMS 701 (CHAMBER FLIGHT RECORD)	60
G175 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO HYPOBARIC CHAMBER FLIGHTS	60
G180 BRIEF ON USE OF SPATIAL DISORIENTATION TRAINERS	
G180 (VERTIGON)	59
G215 INSTRUCT PROCEDURES FOR TREATING HYPERVENTILATION	58
G216 INSTRUCT PROCEDURES FOR TREATING HYPOXIA	57
K312 RECHARGE PORTABLE OXYGEN ASSEMBLIES	56
G224 TREAT CHAMBER REACTORS WITH EVOLVED GAS DISORDERS	56

TABLE 20

REPRESENTATIVE TASKS PERFORMED BY AFSC 91150 PERSONNEL
ASSIGNED TO OVERSEAS BASES

TASKS	PERCENT MEMBERS PERFORMING (N=27)
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	74
F158 INSPECT OXYGEN EQUIPMENT ITEMS IN AIRCRAFT FOR OPERATIONAL CONDITION	67
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	67
F155 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES	67
E119 MAKE ENTRIES ON AF FORMS 701 (CHAMBER FLIGHT RECORD)	63
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	63
H240 SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	59
L339 DRIVE PILOT TRANSPORT VANS	59
L332 ASSIST CREWMEMBERS IN DOFFING PRESSURE SUIT ASSEMBLIES	59
L353 PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS	59
F153 CLEAN AEROSPACE PHYSIOLOGY TRAINING AIDS AND EQUIPMENT	59
F157 DRIVE GOVERNMENT VEHICLES, OTHER THAN PILOT TRANSPORT VANS	59
H246 STORE HIGH PRESSURE OXYGEN CYLINDERS	59
K296 LOAD OR UNLOAD LIFE SUPPORT EQUIPMENT, SUCH AS SURVIVAL KITS OR PARACHUTES, FROM AIRCRAFT	56
L333 ASSIST CREWMEMBERS IN DONNING PRESSURE SUIT ASSEMBLIES	56
L351 OPERATE PORTABLE LOX VENTILATION UNITS	56
L371 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF LOW FLIGHT OXYGEN REGULATORS	56
L340 FILL PORTABLE LIQUID OXYGEN (LOX) VENTILATION UNITS	56
K281 CLEAN STUDENT AND CREWMEMBER FLIGHT HELMETS	56
H244 SERVE AS LOCK OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	56
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	56
L370 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF FULL PRESSURE SUITS	52
L374 PERFORM PREFLIGHT PHYSICAL EXAMINATIONS	52
L373 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF PORTABLE LOX VENTILATION UNITS	52
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	52
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	52
L337 CONNECT OR DISCONNECT CREW MEMBERS TO OR FROM AIRCRAFT SYSTEMS	48

TABLE 21

EXAMPLES OF TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC
AFSC 91150 PERSONNEL STATIONED CONUS AND OVERSEAS
(PERCENT MEMBERS PERFORMING)

TASKS	CONUS (N=156)	OVERSEAS (N=27)	DIFFERENCE
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	83	52	31
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	83	52	31
G220 TREAT CHAMBER REACTORS FOR GASTROINTESTINAL TRACT	75	44	31
G177 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS	74	44	30
H244 SERVE AS LOCK OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	85	56	29
L371 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF LOW FLIGHT OXYGEN REGULATORS	8	56	-48
L353 PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS	12	59	-47
F158 INSPECT OXYGEN EQUIPMENT ITEMS IN AIRCRAFT FOR OPERATIONAL CONDITION	20	67	-47
L332 ASSIST CREWMEMBERS IN DOFFING PRESSURE SUIT ASSEMBLIES	13	59	-46
L373 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF PORTABLE LOX VENTILATION UNITS	6	52	-46

spend the largest percentage of their duty time performing tasks related to pressure suits and life support equipment. AFSC 911X0 airmen assigned to ATC spend more duty time than members of other MAJCOMs operating and maintaining aerospace physiology equipment, such as parasail, swing landing, and egress trainers.

In summary, there are some minor variations in the jobs performed by personnel in the MAJCOM groups. These variations reflect slight differences in the missions of the various MAJCOMs. Even with the exceptions noted above, most AFSC 911X0 personnel perform a job that is very similar, primarily that of preparing individuals for hypobaric chamber flights and operating the chambers.

Overlap with AFSC 122X0, Aircrew Life Support

Functional managers expressed a concern that AFSC 911X0 personnel working with pressure suits are doing the same job as AFSC 122X0, Aircrew Life Support, personnel working with pressure suits. The job description for AFSC 911X0 Pressure Suit Personnel was compared to both the 1988 AFR 39-1 Specialty Description for AFSC 122X0 personnel and 1984 OSR job description for AFSC 122X0 personnel working in the Pressure Suit and Physiological Support Section. These comparisons show there are only nine AFSC 122X0 personnel working with pressure suits and that they do more actual maintenance, overhauling, and repairing the suits. There are 55 AFSC 911X0 personnel identified as working with the suits and they are more involved with assisting crewmembers with the suits. This relationship is shown by figures presented in Table 22. Unless there has been an increase in the number of AFSC 122X0 personnel working with pressure suits in the last 4 years, the concern of sizeable overlap between the two specialties is not supported.

Number of flights, dives, and days DNIF

Functional personnel are also interested in knowing the number of hypobaric flights and hyperbaric dives Aerospace Physiology personnel indicate they take, as well as the number of days they are on Duty Not Including Flying status. Table 23 shows how members of the various jobs, TAFMS groups, and MAJCOM groupings responded to the background questions dealing with these issues. As expected, Physiological Training and Research Chamber Personnel take the most flights, while Hyperbaric Chamber Personnel make the most dives. There are some slight differences in the number of flights and dives members of the various MAJCOMs take, which appear to reflect differences in MAJCOM missions. Functional personnel are directed to Table 23 for answers to particular questions on how AFSC 911X0 personnel are being used.

TABLE 22

TASKS PERFORMED BY BOTH AFSC 911X0 AND 122X0 PERSONNEL
WORKING WITH PRESSURE SUITS

	PERCENT 911X0 MEMBERS PERFORMING (N=55)	PERCENT 122X0 MEMBERS PERFORMING (N=9)
-----	-----	-----
ASSIST CREWMEMBERS IN DONNING PRESSURE SUIT ASSEMBLIES	91	56
ASSIST CREWMEMBERS IN DOFFING PRESSURE SUIT ASSEMBLIES	91	67
PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF FULL PRESSURE SUITS	89	100
DRIVE PILOT TRANSPORT VANS	89	67
PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS	87	67
CONNECT OR DISCONNECT CREW MEMBERS TO OR FROM AIRCRAFT	84	67
OPERATE PORTABLE LOX VENTILATION UNITS	84	56
FILL PORTABLE LIQUID OXYGEN (LOX) VENTILATION UNITS	82	56
REMOVE OR REPLACE FULL PRESSURE SUIT COMPONENTS	76	100
CLEAN PRESSURE SUITS	73	89
ISOLATE FULL PRESSURE SUIT MALFUNCTIONS	71	67
PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF LOW FLIGHT OXYGEN REGULATORS	65	67
PERFORM PREFLIGHT PHYSICAL EXAMINATIONS	65	67
PREPARE PRESSURE SUIT ASSEMBLIES FOR SHIPMENT	65	100
SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	64	56
DISASSEMBLE PRESSURE SUIT HARDWARE, SUCH AS NECK RINGS OR URINE COLLECTION VALVES	60	100
ASSEMBLE PRESSURE SUIT HARDWARE, SUCH AS NECK RINGS OR URINE COLLECTION VALVES	60	100

TABLE 23

HOW MEMBERS OF VARIOUS GROUPS RESPONDED TO BACKGROUND QUESTIONS

GROUP	BACKGROUND QUESTIONS		
	AVERAGE NUMBER OF FLIGHTS PER MONTH	AVERAGE NUMBER OF DIVES PER MONTH	AVERAGE NUMBER OF DAYS DNIF THIS YEAR
PHYSIOLOGICAL TRAINING (N=243)	11	1	26
PRESSURE SUITS (N=55)	2	-	18
SUPERVISORS AND ADMINISTRATORS (N=50)	5	1	24
HYPERBARIC CHAMBER (N=10)	1	12	9
RESEARCH CHAMBER (N=8)	16	-	21
CENTRIFUGE (N=6)	1	-	126
1-24 MONTHS TAFMS (N=105)	9	1	25
1-48 MONTHS TAFMS (N=180)	9	1	25
49-96 MONTHS TAFMS (N=88)	10	1	26
97+ MONTHS TAFMS (N=129)	5	1	27
91150 CONUS (N=156)	9	1	28
91150 OVERSEAS (N=27)	6	1	33
ALL IN SAC (N=115)	6	2	26
ALL IN ATC (N=97)	8	-	30
ALL IN AFSC (N=66)	8	2	28
ALL IN TAC (N=43)	9	-	20
ALL IN MAC (N=21)	13	-	28
ALL IN AFLC (N=16)	11	6	22
ALL IN USAFE (N=12)	9	-	19
ALL IN PACAF (N=12)	8	2	16
ALL IN SPACE (N=12)	19	4	21
1-48 IN SAC (N=56)	8	2	28
1-48 IN ATC (N=56)	9	-	29
1-48 IN TAC (N=20)	10	-	17
1-48 IN AFSC (N=18)	9	1	22
1-48 IN USAFE (N=8)	9	-	19
1-48 IN SPACE (N=7)	20	3	27

IMPLICATIONS

This survey was requested to validate the September 1988 Specialty Training Standard (STS). Overall, analysis indicates the STS is well supported by survey data.

Specifically, there are only two STS elements matched to tasks performed by fewer than 20 percent of criterion group members. There are a number of tasks not matched to any STS elements that should be reviewed as they suggest some STS paragraphs can be expanded and other appropriately added to include these tasks. Most 3-skill level proficiency codes need to be changed from a knowledge to a skill performance level because more than 30 percent of first-enlistment respondents are performing matched tasks.

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY
MEMBERS OF CAREER LADDER JOBS

TABLE A1

GROUP ID NUMBER AND TITLE: STG030, PHYSIOLOGY TRAINING PERSONNEL
 NUMBER IN GROUP: 243 PERCENT OF TOTAL SAMPLE: 61%

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

	PERCENT MEMBERS PERFORMING
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	98
H240 SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	97
H244 SERVE AS LOCK OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	97
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	96
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	96
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	95
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	93
G177 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS	91
G220 TREAT CHAMBER REACTORS FOR GASTROINTESTINAL TRACT PROBLEMS	89
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	85
G223 TREAT CHAMBER REACTORS FOR TOOTH PROBLEMS	82
G180 BRIEF ON USE OF SPATIAL DISORIENTATION TRAINERS (VERTIGON)	80
E119 MAKE ENTRIES ON AF FORMS 701 (CHAMBER FLIGHT RECORD)	78
G179 BRIEF ON USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS	77
H246 STORE HIGH PRESSURE OXYGEN CYLINDERS	75
F153 CLEAN AEROSPACE PHYSIOLOGY TRAINING AIDS AND EQUIPMENT	74
H243 SERVE AS LECTURER OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	73
G174 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS	72
G175 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO HYPOBARIC CHAMBER FLIGHTS	72
G215 INSTRUCT PROCEDURES FOR TREATING HYPERVENTILATION	72
G224 TREAT CHAMBER REACTORS WITH EVOLVED GAS DISORDERS	71
G216 INSTRUCT PROCEDURES FOR TREATING HYPOXIA	71
G176 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS	71
M401 OPERATE SPATIAL DISORIENTATION TRAINERS	68
G194 CONDUCT CLASSROOM INSTRUCTION ON USE OF OXYGEN MASKS	64
D 95 SCHEDULE STUDENTS FOR AEROSPACE PHYSIOLOGY TRAINING CLASSES	57
E117 MAKE ENTRIES ON AF FORMS 699 (PHYSIOLOGICAL TRAINING RECORD)	56

TABLE A2

GROUP ID NUMBER AND TITLE:
NUMBER IN GROUP: 55

STG012, PRESSURE SUIT PERSONNEL
PERCENT OF TOTAL SAMPLE: 14%

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

	PERCENT MEMBERS PERFORMING
L333 ASSIST CREWMEMBERS IN DONNING PRESSURE SUIT ASSEMBLIES	91
L332 ASSIST CREWMEMBERS IN DOFFING PRESSURE SUIT ASSEMBLIES	91
L370 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF FULL PRESSURE SUITS	89
L339 DRIVE PILOT TRANSPORT VANS	89
L353 PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS	87
L337 CONNECT OR DISCONNECT CREW MEMBERS TO OR FROM AIRCRAFT	84
L351 OPERATE PORTABLE LOX VENTILATION UNITS	84
L340 FILL PORTABLE LIQUID OXYGEN (LOX) VENTILATION UNITS	82
K296 LOAD OR UNLOAD LIFE SUPPORT EQUIPMENT, SUCH AS SURVIVAL KITS OR PARACHUTES, FROM AIRCRAFT	78
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	78
L379 REMOVE OR REPLACE FULL PRESSURE SUIT COMPONENTS	76
L336 CLEAN PRESSURE SUITS	73
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	73
K307 PERFORM PREFLIGHT AND POSTFLIGHT INSPECTIONS OF PARACHUTES	73
F158 INSPECT OXYGEN EQUIPMENT ITEMS IN AIRCRAFT FOR OPERATIONAL CONDITION	73
L342 ISOLATE FULL PRESSURE SUIT MALFUNCTIONS	71
K308 PERFORM PREFLIGHT AND POSTFLIGHT INSPECTIONS OF SURVIVAL KIT ASSEMBLIES	71
L371 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF LOW FLIGHT OXYGEN REGULATORS	65
L374 PERFORM PREFLIGHT PHYSICAL EXAMINATIONS	65
L377 PREPARE PRESSURE SUIT ASSEMBLIES FOR SHIPMENT	65
H240 SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	64
L338 DISASSEMBLE PRESSURE SUIT HARDWARE, SUCH AS NECK RINGS OR URINE COLLECTION VALVES	60
L331 ASSEMBLE PRESSURE SUIT HARDWARE, SUCH AS NECK RINGS OR URINE COLLECTION VALVES	60

TABLE A3

GROUP ID NUMBER AND TITLE: STG026, SUPERVISORS AND ADMINISTRATORS
 NUMBER IN GROUP: 50 PERCENT OF TOTAL SAMPLE: 14%

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

	PERCENT MEMBERS PERFORMING
B 26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	98
A 7 DETERMINE WORK PRIORITIES	94
C 62 WRITE APR	94
A 12 ESTABLISH WORK SCHEDULES	94
A 11 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	94
A 20 UPDATE LOCAL OPERATING INSTRUCTIONS	92
B 34 INTERPRET DIRECTIVES FOR SUBORDINATES	90
C 46 EVALUATE COMPLIANCE WITH WORK PERFORMANCE STANDARDS	90
A 8 DEVELOP WORK METHODS	90
C 63 WRITE AWARDS AND DECORATIONS RECOMMENDATIONS	88
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	88
A 17 PLAN WORK ASSIGNMENTS	86
C 58 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	86
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	84
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	84
A 2 ASSIGN PERSONNEL TO DUTY POSITIONS	82
G223 TREAT CHAMBER REACTORS FOR TOOTH PROBLEMS	82
B 36 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)	80
A 19 SCHEDULE TDY, LEAVES, OR PASSES	80
C 44 ANALYZE WORKLOAD REQUIREMENTS	80
C 47 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	78
G220 TREAT CHAMBER REACTORS FOR GASTROINTESTINAL TRACT PROBLEMS	78
G224 TREAT CHAMBER REACTORS WITH EVOLVED GAS DISORDERS	78
B 22 CONDUCT STAFF MEETINGS	76
G179 BRIEF ON USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS	74
G177 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS	74

TABLE A4

GROUP ID NUMBER AND TITLE: STG027, HYPERBARIC CHAMBER PERSONNEL
 NUMBER IN GROUP: 10 PERCENT OF TOTAL SAMPLE: 3%

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

	PERCENT MEMBERS PERFORMING
J271 SERVE AS INSIDE OBSERVER ON HYPERBARIC CHAMBER DIVES	100
J270 SERVE AS CREW CHIEF ON HYPERBARIC CHAMBER DIVES	100
J269 SERVE AS CHAMBER OPERATOR ON HYPERBARIC CHAMBER DIVES	100
J261 PERFORM DAILY INSPECTIONS OF HYPERBARIC CHAMBER ASSEMBLIES	100
J258 CLEAN HYPERBARIC CHAMBERS	100
J260 LOAD OR UNLOAD PATIENTS INTO OR FROM HYPERBARIC CHAMBERS	90
J272 SERVE AS LOCK OPERATOR ON HYPERBARIC CHAMBER DIVES	90
J268 REMOVE OR REPLACE OXYGEN EQUIPMENT ITEMS IN HYPERBARIC CHAMBERS	90
J264 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF HYPERBARIC CHAMBER ASSEMBLIES	90
J273 SERVE AS RECORDER ON HYPERBARIC CHAMBER DIVES	80
J274 SERVE AS TIMEKEEPER ON HYPERBARIC CHAMBER DIVES	80
J262 PERFORM GENERAL MAINTENANCE ON HYPERBARIC CHAMBER ASSEMBLIES	80
J265 PERFORM SPECIAL OR 180-DAY INSPECTIONS OF HYPERBARIC CHAMBER ASSEMBLIES	80
E110 MAKE ENTRIES ON AF FORMS 1354 (HYPERBARIC CHAMBER OPERATION RECORD)	70
A 12 ESTABLISH WORK SCHEDULES	70
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	60
J275 TAKE PERIODIC SAMPLES OF AIR IN COMPRESSED AIR FLASKS	60
E132 MAKE ENTRIES ON AFTO FORMS 95 (SIGNIFICANT HISTORICAL DATA)	60
K310 PERFORM 30-DAY INSPECTIONS OF OXYGEN MASKS	60
J267 REMOVE OR REPLACE HYPERBARIC CHAMBER INTERCOM SYSTEM COMPONENTS	60
G197 CONDUCT HYPERBARIC CHAMBER TEAM TRAINING	50
E127 MAKE ENTRIES ON AFTO FORMS 244 (INDUSTRIAL/ SUPPORT EQUIPMENT RECORD)	50
E104 MAINTAIN RECORDS ON STATUS OR INSPECTION OF EQUIPMENT	50
B 36 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)	50

TABLE A5

GROUP ID NUMBER AND TITLE:
NUMBER IN GROUP: 8

STG032, RESEARCH CHAMBER PERSONNEL
PERCENT OF TOTAL SAMPLE: 2%

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

	PERCENT MEMBERS PERFORMING
N498 SERVE AS CREW CHIEF ON RESEARCH CHAMBER FLIGHTS	100
H240 SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	100
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	100
N499 SERVE AS INSIDE OBSERVER ON RESEARCH CHAMBER FLIGHTS	100
N497 SERVE AS CHAMBER OPERATOR ON RESEARCH CHAMBER FLIGHTS	88
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	88
F155 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES	88
N500 SERVE AS LOCK OPERATOR ON RESEARCH CHAMBER FLIGHTS	88
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	75
N461 OPERATE DOPPLER ULTRASOUND DEVICES	75
N501 SERVE AS OUTSIDE OBSERVER ON RESEARCH CHAMBER FLIGHTS	75
N503 SERVE AS RECORDER ON RESEARCH CHAMBER FLIGHTS	75
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	75
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	75
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	75
H246 STORE HIGH PRESSURE OXYGEN CYLINDERS	75
F159 INVENTORY EQUIPMENT, TOOLS, AND SUPPLIES	63
H227 PERFORM GENERAL MAINTENANCE ON HYPOBARIC CHAMBERS	63
E102 MAINTAIN RECORDS ON CHAMBER RESEARCH SUBJECTS	50
N492 RECORD EXPERIMENTAL DATA	50
N474 PERFORM DAILY INSPECTIONS OF HUMAN EXPERIMENTAL HYPOBARIC OR HYPERBARIC CHAMBERS	50
E149 REVIEW RESEARCH SUBJECT RECORDS FOR COMPLIANCE WITH HUMAN USE COMMITTEE DIRECTIVES	38

TABLE A6

GROUP ID NUMBER AND TITLE:
NUMBER IN GROUP: 6

STG009, CENTRIFUGE PERSONNEL
PERCENT OF TOTAL SAMPLE: 2%

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

	PERCENT MEMBERS PERFORMING
N450 CONNECT PERSONAL EQUIPMENT TO CENTRIFUGES	100
N453 DISCONNECT PERSONAL EQUIPMENT FROM CENTRIFUGES	100
N452 DISCONNECT BIOMEDICAL INSTRUMENTATION FROM SUBJECTS	100
N449 CONNECT BIOMEDICAL INSTRUMENTATION TO SUBJECTS	83
N466 OPERATE STRIP CHART RECORDERS	83
N486 PERFORM PRE- AND POST-RUN INSPECTIONS OF CENTRIFUGES	83
N504 SET SEAT CONFIGURATIONS IN CENTRIFUGES	83
N456 INSTALL GAS SYSTEMS ON CENTRIFUGE ACCORDING TO G PROFILE	83
N473 PERFORM DAILY INSPECTIONS OF CENTRIFUGES	67
N506 SIZE AND FIT RESEARCH SUBJECTS WITH OXYGEN EQUIPMENT	67
N454 FIT CREWMEMBERS WITH IN-FLIGHT MONITORING EQUIPMENT	67
N470 PERFORM AS CENTRAL OBSERVER ON CENTRIFUGES	67
N505 SIZE AND FIT ANTI-G PROTECTIVE EQUIPMENT	67
A 20 UPDATE LOCAL OPERATING INSTRUCTIONS	67
K320 STORE OXYGEN EQUIPMENT	67
K315 REMOVE OR REPLACE OXYGEN MASK COMPONENTS	67
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	50
B 36 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)	50
N471 PERFORM AS CENTRIFUGE CREW CHIEF	50
K277 ASSEMBLE LIFE SUPPORT EQUIPMENT, SUCH AS OXYGEN MASKS OR HELMETS	50
N472 PERFORM AS CENTRIFUGE OPERATOR	50
N460 OPERATE COMPUTER SYSTEMS FOR CENTRIFUGES	50

APPENDIX B

REPRESENTATIVE TASKS PERFORMED BY MEMBERS
OF DAFSC GROUPS

TABLE B1

REPRESENTATIVE TASKS PERFORMED BY DAFSC 91130 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=95)
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	94
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	94
H240 SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	92
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	91
H244 SERVE AS LOCK OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	89
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	86
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	84
F153 CLEAN AEROSPACE PHYSIOLOGY TRAINING AIDS AND EQUIPMENT	79
E119 MAKE ENTRIES ON AF FORMS 701 (CHAMBER FLIGHT RECORD)	76
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	76
F156 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH	75
G220 TREAT CHAMBER REACTORS FOR GASTROINTESTINAL TRACT PROBLEMS	75
G177 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS	74
E117 MAKE ENTRIES ON AF FORMS 699 (PHYSIOLOGICAL TRAINING RECORD)	74
H246 STORE HIGH PRESSURE OXYGEN CYLINDERS	68
G180 BRIEF ON USE OF SPATIAL DISORIENTATION TRAINERS (VERTIGON)	68
G223 TREAT CHAMBER REACTORS FOR TOOTH PROBLEMS	66
M401 OPERATE SPATIAL DISORIENTATION TRAINERS	64
K312 RECHARGE PORTABLE OXYGEN ASSEMBLIES	62
K290 FIT STUDENT AND PATIENT OXYGEN MASKS	54
D 95 SCHEDULE STUDENTS FOR AEROSPACE PHYSIOLOGY TRAINING CLASSES	52
K288 FIT STUDENT AND CREWMEMBER FLIGHT HELMETS	48
D 96 SCORE TESTS	47
K285 FIT CREWMEMBER OXYGEN MASKS	47

TABLE B2

REPRESENTATIVE TASKS PERFORMED BY DAFSC 91150 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=190)
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	88
H245 SERVE AS RECORDER ON HYPOBARIC CHAMBER FLIGHTS	82
H240 SERVE AS CHAMBER OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	82
H244 SERVE AS LOCK OPERATOR ON HYPOBARIC CHAMBER FLIGHTS	80
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	79
H241 SERVE AS CREW CHIEF ON HYPOBARIC CHAMBER FLIGHTS	78
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	78
G220 TREAT CHAMBER REACTORS FOR GASTROINTESTINAL TRACT PROBLEMS	71
H225 CONNECT AND DISCONNECT HIGH PRESSURE OXYGEN CYLINDERS	77
G177 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS	71
F155 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES	66
G179 BRIEF ON USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS	64
H246 STORE HIGH PRESSURE OXYGEN CYLINDERS	64
G174 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS	63
H243 SERVE AS LECTURER OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	63
F153 CLEAN AEROSPACE PHYSIOLOGY TRAINING AIDS AND EQUIPMENT	62
G176 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS	61
E119 MAKE ENTRIES ON AF FORMS 701 (CHAMBER FLIGHT RECORD)	60
G175 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO HYPOBARIC CHAMBER FLIGHTS	58
G215 INSTRUCT PROCEDURES FOR TREATING HYPERVENTILATION	56
G180 BRIEF ON USE OF SPATIAL DISORIENTATION TRAINERS (VERTIGON)	56
G216 INSTRUCT PROCEDURES FOR TREATING HYPOXIA	55
G192 CONDUCT CLASSROOM INSTRUCTION ON TYPES OF OXYGEN STORAGE SYSTEMS	49

TABLE B3

REPRESENTATIVE TASKS PERFORMED BY DAFSC 91170 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=90)
C 62 WRITE APR	86
A 7 DETERMINE WORK PRIORITIES	84
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	83
B 36 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)	81
B 26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	79
G221 TREAT CHAMBER REACTORS FOR MIDDLE EAR PROBLEMS	77
A 11 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	76
A 20 UPDATE LOCAL OPERATING INSTRUCTIONS	76
A 12 ESTABLISH WORK SCHEDULES	74
G222 TREAT CHAMBER REACTORS FOR SINUS PROBLEMS	74
D 90 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	74
A 8 DEVELOP WORK METHODS	71
G179 BRIEF ON USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS	71
H243 SERVE AS LECTURER OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	70
G223 TREAT CHAMBER REACTORS FOR TOOTH PROBLEMS	70
G177 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS	69
G224 TREAT CHAMBER REACTORS WITH EVOLVED GAS DISORDERS	69
B 35 ORIENT NEWLY ASSIGNED PERSONNEL	69
G176 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS	69
B 34 INTERPRET DIRECTIVES FOR SUBORDINATES	68
G175 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES	68
G220 TREAT CHAMBER REACTORS FOR GASTROINTESTINAL TRACT PROBLEMS	68
G174 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS	67
A 17 PLAN WORK ASSIGNMENTS	66
F155 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES	66
C 63 WRITE AWARDS AND DECORATIONS RECOMMENDATIONS	64

TABLE B4

REPRESENTATIVE TASKS PERFORMED BY DAFSC 91190/00 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=22)
B 26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY- RELATED PROBLEMS	100
C 48 EVALUATE INSPECTION REPORT FINDINGS	100
C 63 WRITE AWARDS AND DECORATIONS RECOMMENDATIONS	100
A 11 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	95
A 7 DETERMINE WORK PRIORITIES	95
A 2 ASSIGN PERSONNEL TO DUTY POSITIONS	95
C 62 WRITE APR	91
A 8 DEVELOP WORK METHODS	91
B 22 CONDUCT STAFF MEETINGS	86
C 45 EVALUATE BUDGET REQUIREMENTS	86
A 19 SCHEDULE TDY, LEAVES, OR PASSES	86
C 58 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	86
A 9 DRAFT BUDGET REQUIREMENTS	86
A 10 ESTABLISH ORGANIZATIONAL POLICIES	86
C 46 EVALUATE COMPLIANCE WITH WORK PERFORMANCE STANDARDS	86
A 20 UPDATE LOCAL OPERATING INSTRUCTIONS	86
C 56 EVALUATE WORK SCHEDULES	86
A 12 ESTABLISH WORK SCHEDULES	86
C 64 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	82
B 38 SUPERVISE AEROSPACE PHYSIOLOGY SUPERVISORS (AFSC 91170)	82
B 34 INTERPRET DIRECTIVES FOR SUBORDINATES	82
C 47 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	82
H242 SERVE AS INSIDE OBSERVER ON HYPOBARIC CHAMBER FLIGHTS	82
B 35 ORIENT NEWLY ASSIGNED PERSONNEL	82
B 32 INITIATE PERSONNEL ACTION REQUESTS, SUCH AS AF FORMS 2095 (ASSIGNMENT/PERSONNEL ACTION)	77
A 13 PLAN BRIEFINGS	82