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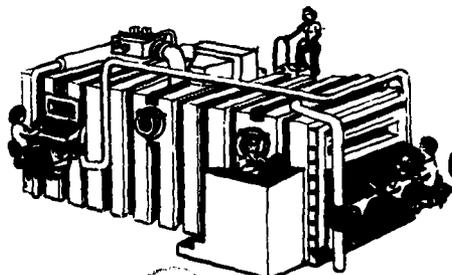


UNITED STATES AIR FORCE

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# OCCUPATIONAL SURVEY REPORT



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6 AEROSPACE PHYSIOLOGY CAREER LADDER

AFSC 911X0.

AFPT 90-911-411

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## PREFACE

This report presents the results of a detailed occupational survey of the Aerospace Physiology (911X0) specialty. The report was administered in accordance with AFR 35-2 and ATC Regulation 52-22. The primary objective of the survey is to provide current data on jobs and tasks performed by career field incumbents. Computer outputs used to analyze the information for this report are available to operations and training officials.

Dr. Raymond E. Christal of the Manpower and Personnel Division, Air Force Human Resources Laboratory (AFHRL), designed the computer programs used to analyze the data. The programs were written by the Computer Programming Branch, Technical Services Division, AFHRL.

The United States Air Force occupational analysis program originated in 1956 when the Air Force Human Resources Laboratory began initial research into developing the methodology for conducting occupational surveys. In 1967, Air Training Command established an operational occupational analysis program which produced 12 enlisted career ladder surveys annually. The program was expanded in 1972 to produce surveys of 51 career ladders each year. It was expanded again in 1976 to include the survey of officer utilization fields, to permit special management application projects, and to support interservice or joint service occupational analyses.

The survey instrument used in this project was developed by Second Lieutenant Julia Hoskins, Inventory Development Specialist. Captain James H. Gilbert, Captain Michael D. Hill, and Dr. Henry C. Lindsey analyzed the survey data and Captain Gilbert wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center.

Copies of this report are available to air staff sections, major commands, and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention to the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78148.

This report has been reviewed and is approved.

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## SUMMARY OF RESULTS

1. Survey Coverage: The Aerospace Physiology career ladder job inventory was administered worldwide to job incumbents in all commands. The 334 survey respondents represent 80 percent of the total assigned AFSC 911X0 personnel.
2. Career Ladder Structure: Analysis of the specialty structure revealed that differences between the jobs which incumbents perform are a function of the types of equipment and mission objective of the base where personnel are assigned. Most job groups emphasize operating and maintaining hypobaric chambers and other types of training equipment used to provide aerospace physiology training for aircrew personnel. Smaller groups, such as Hyperbaric Medicine Personnel and Physiological Research Technicians, performed more unique jobs involving aerospace physiology equipment. In addition, pressure suit and life support equipment functions performed at Beale AFB and Edwards AFB are considerably different from other jobs because of the support role of 911X0 incumbents at these locations.
3. Career Ladder Progression: Both 3- and 5-skill level incumbents spend much of their time operating and maintaining physiological training equipment. However, pressure suit support functions are performed almost exclusively by DAFSC 91150 and 91170 personnel. At the 7-skill level, incumbents also perform training and research functions in addition to being first-line supervisors. Although 9-skill level and CEM Code personnel are primarily managers, they also perform some training tasks.
4. MAJCOM Analysis: As expected, personnel in all commands perform as crewmembers on hypobaric chamber flights. However, many differences in the tasks incumbents perform exist because of the various types of equipment available to personnel in different MAJCOM groups. Examples include pressure suit equipment (SAC and AFSC), parachute and water survival training devices (ATC), and research equipment (AFSC).
5. Comparison To Previous Survey: Results of previous survey data indicated overlap in pressure suit functions performed by DAFSC 911X0 and 922X0 Aircrew Life Support personnel at Beale AFB. Although a comparison of current survey data to the September 1975 OSR survey information on 922X0 incumbents indicated both groups still perform common tasks, no inference could be made that both groups perform similar jobs.
6. Discussion: Survey data indicate that strong formal training programs are necessary to provide adequate training for career ladder incumbents. The most complicated training situation appears to be at Beale AFB, where supervisors must provide an extensive pressure suit maintenance and life support equipment training program for both 911X0 and 922X0 personnel. Because of the indicated overlap in jobs performed by these groups, personnel in both specialties should be surveyed together to determine similarities in job structures. This type of information can help career ladder managers to assess whether pressure suit and life support functions might more appropriately be performed by either 911X0 or 922X0 incumbents.

OCCUPATIONAL SURVEY REPORT  
AEROSPACE PHYSIOLOGY CAREER LADDER  
(AFSC 911X0)

INTRODUCTION

This is a report of an occupational survey of the Aerospace Physiology career ladder (AFSC 911X0) completed by the Occupational Analysis Branch, USAF Occupational Measurement Center, in July 1980. A previous survey of the 911X0 career ladder was published in May 1974.

Historically, the Aerospace Physiology career ladder was created in July 1954 as the Physiological Training (901X2) Specialty. Superintendents for this specialty were identified as AFSC 90080 Medical Services Superintendents until February 1960, when AFS 90192, Physiological Training Superintendent, was created. On 31 December 1965, the career ladder was redesignated as AFS 911X0. However, the specialty title remained unchanged until April 1978 when the specialty title was changed from Physiological Training to Aerospace Physiology. In October 1978, the 91100 chief enlisted manager position was created.

The basic job of the 911X0 incumbent, as described by AFR 39-1, is to operate and maintain aerospace physiological devices and indoctrinate flying personnel in physical and physiological stresses encountered in flight. Generally, more junior personnel perform more of the less difficult, routine maintenance types of tasks. As personnel become more experienced, many tend to specialize to some extent in a particular area of the specialty, i.e., conducting research or performing pressure suit support functions. However, most 911X0 personnel perform a common core of tasks associated with hypobaric (altitude) chamber operations.

Prior to the award of the 3-skill level, all prospective incumbents must attend the basic Aerospace Physiology Specialist course (5ABY91130) taught at Brooks AFB TX. This course is currently a four-week and four day category "A" school. Approximately 150 incumbents successfully complete the course yearly.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 40-911-411. As a starting point, the inventory developer reviewed tasks from the 1973 inventory and the findings of the 1974 Occupational Survey Report. Pertinent specialty publications and directives were also examined. From these reviews, a tentative task list was formulated and validated by 19 Aerospace Physiology subject matter specialists from five bases. These subject matter specialists carefully reviewed the tentative task

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list for completeness and accuracy. This process resulted in a final inventory of 445 tasks grouped under 13 duty headings. In addition to the task listing, a background section was included to determine such things as the respondent's grade, duty title, DAFSC, job interest, etc.

### Survey Administration

Job inventories were administered to all DAFSC 911X0 and 91100 personnel worldwide during the period December 1979 to March 1980 by local base consolidated personnel offices. The sample was obtained from Uniform Airman Record (UAR) data tapes generated by the Air Force Manpower and Personnel Center (AFMPC) and maintained by the Air Force Human Resources Laboratory (AFHRL).

As previously stated, a job inventory consists of two sections. The first of these is a background section which includes questions about such items as reenlistment intent, Total Active Federal Military Service (TAFMS), DAFSC, etc. The second is a task section which contains a comprehensive listing of tasks performed by career ladder personnel. Incumbents are instructed to check all tasks they currently perform on their present job. They are then directed to go back and indicate the relative amount of time they devote to each checked task. This relative rating is obtained using a 9-point scale ranging from one (very small amount of time spent) to nine (very large amount of time spent).

To determine the relative amount of time an incumbent devotes to each task, all of his ratings are assumed to account for 100 percent of his or her time spent on the job. The individual's ratings are then summed and each task rating is then divided by the total number of task responses and the quotient is multiplied by 100. This procedure provides a basis for comparing personnel not only in terms of the types of tasks they perform, but also in terms of how incumbents spend their time.

### Survey Sample

Due to the small size of this career ladder, all AFS 911X0 personnel were requested to complete a job inventory. Of the 415 incumbents in the specialty, useable data were collected from 334 respondents (80 percent of the career ladder). Table 1 lists the distribution of the sample by MAJCOM, while Table 2 lists paygrade group distributions. Both tables reflect the survey sample to be representative across MAJCOM and paygrade groups. Table 3 lists the sample distribution by Total Active Federal Military Service (TAFMS) groups.

TABLE 1  
COMMAND REPRESENTATION OF 911XO PERSONNEL

| <u>COMMAND</u>                                     | <u>PERCENT OF<br/>ASSIGNED*</u> | <u>PERCENT OF<br/>SAMPLE</u> |
|--|---------------------------------|------------------------------|
| SAC  | 30                              | 31                           |
| ATC  | 25                              | 24                           |
| AFSC   | 16                              | 16                           |
| TAC  | 8                               | 9                            |
| MAC  | 7                               | 7                            |
| AFLC   | 4                               | 4                            |
| USAFE  | 3                               | 4                            |
| PACAF  | 3                               | 4                            |
| OTHER  | 4                               | 1                            |
| TOTAL ASSIGNED - 415 (MANNING AS OF DECEMBER 1979) |                                 |                              |
| TOTAL SAMPLED - 334                                |                                 |                              |
| PERCENT SAMPLED - 80%                              |                                 |                              |

TABLE 2  
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

| <u>PAYGRADE</u> | <u>PERCENT OF<br/>ASSIGNED</u> | <u>PERCENT OF<br/>SAMPLE</u> |
|-----------------|--------------------------------|------------------------------|
| AIRMAN          | 35                             | 33                           |
| E-4             | 15                             | 14                           |
| E-5             | 18                             | 18                           |
| E-6             | 16                             | 16                           |
| E-7             | 12                             | 13                           |
| E-8             | 2                              | 4                            |
| E-9             | 2                              | 2                            |

TABLE 3  
TAFMS DISTRIBUTION OF SURVEY SAMPLE

| <u>MONTHS TAFMS</u> | <u>1-48</u> | <u>49-96</u> | <u>97-144</u> | <u>145-192</u> | <u>193-240</u> | <u>241+</u> |
|---------------------|-------------|--------------|---------------|----------------|----------------|-------------|
| NUMBER IN SAMPLE*   | 130         | 58           | 41            | 37             | 39             | 28          |
| PERCENT OF SAMPLE   | 39%         | 17%          | 12%           | 11%            | 12%            | 9%          |

\*TOTAL NUMBER SHOWN EQUALS 333. ONE RESPONDENT DID NOT INDICATE HIS TAFMS.

### Task Factor Administration

In addition to completing a job inventory, selected senior 911X0 personnel were also asked to complete a second task difficulty or training emphasis booklet. These task difficulty and training emphasis booklets were processed separately from the Job Inventory booklets. The resulting task difficulty and training emphasis ratings are used in a number of different analyses. A brief explanation of these rating factors and their application is provided below.

Task Difficulty. Each individual selected to complete a task difficulty booklet was instructed to rate tasks on a nine-point scale from extremely low to extremely high difficulty. Difficulty was defined as the length of time it would take an average individual to learn to do the task. Ratings were then adjusted to reflect an average task difficulty rating of 5.00 with a standard deviation of 1.00.

Task difficulty data were independently collected from 54 experienced 7- and 9-skill level personnel stationed worldwide. The interrater reliability (as assessed through components of variance of standard group means) of .96 reflected high agreement among these senior 911X0 raters. The resulting task difficulty data yielded a rank ordering of all 445 tasks ranging in relative difficulty from most to least difficult.

Job Difficulty Index (JDI). After computing a task difficulty rating for each task, it was then possible to compute a Job Difficulty Index (JDI) for each of the groups identified in the career ladder structure analysis. The JDI provides a relative measure of the difficulty for each of the job groups identified in the career ladder structure analysis. The JDI is derived from an equation which uses the number of tasks performed and the average task difficulty per unit time spent (ATDPUTS) as variables. The JDI ranges from one for very easy jobs to 25 for very difficult jobs. The JDI is then adjusted so that a job of average difficulty reflects a mean rating of 13.00. Using this JDI equation, groups which devote more time to difficult tasks and/or perform more tasks will have a higher Job Difficulty Index. Average number of tasks and JDI data are presented in the CAREER LADDER STRUCTURE section of this report.

Training Emphasis. Individuals selected to complete training emphasis booklets were instructed to rate all 445 tasks on a ten-point scale ranging from no training required to extremely heavy training. These training emphasis ratings indicate the emphasis each task should receive in a structured training program for first-term personnel. Structured training is defined as training provided by the technical training school, Mobile Training Teams (MTTs), formal OJT, or any other organized training method.

Training emphasis data were independently collected from 53 experienced 7- and 9-skill level personnel stationed worldwide. The interrater reliability (as assessed through components of variance of standard group means) for these raters was .97. This high reliability indicates substantial agreement among raters as to which tasks require some form of structured training and which do not.

When used in conjunction with other factors, such as percent members performing and task difficulty data, training emphasis ratings provide valuable insight into appropriate training. This data may help validate the lengthening or shortening of specific units of instruction in various training curriculum. It can also be used by training managers in making decisions as to how training should be administered to first-term incumbents.

## CAREER LADDER STRUCTURE

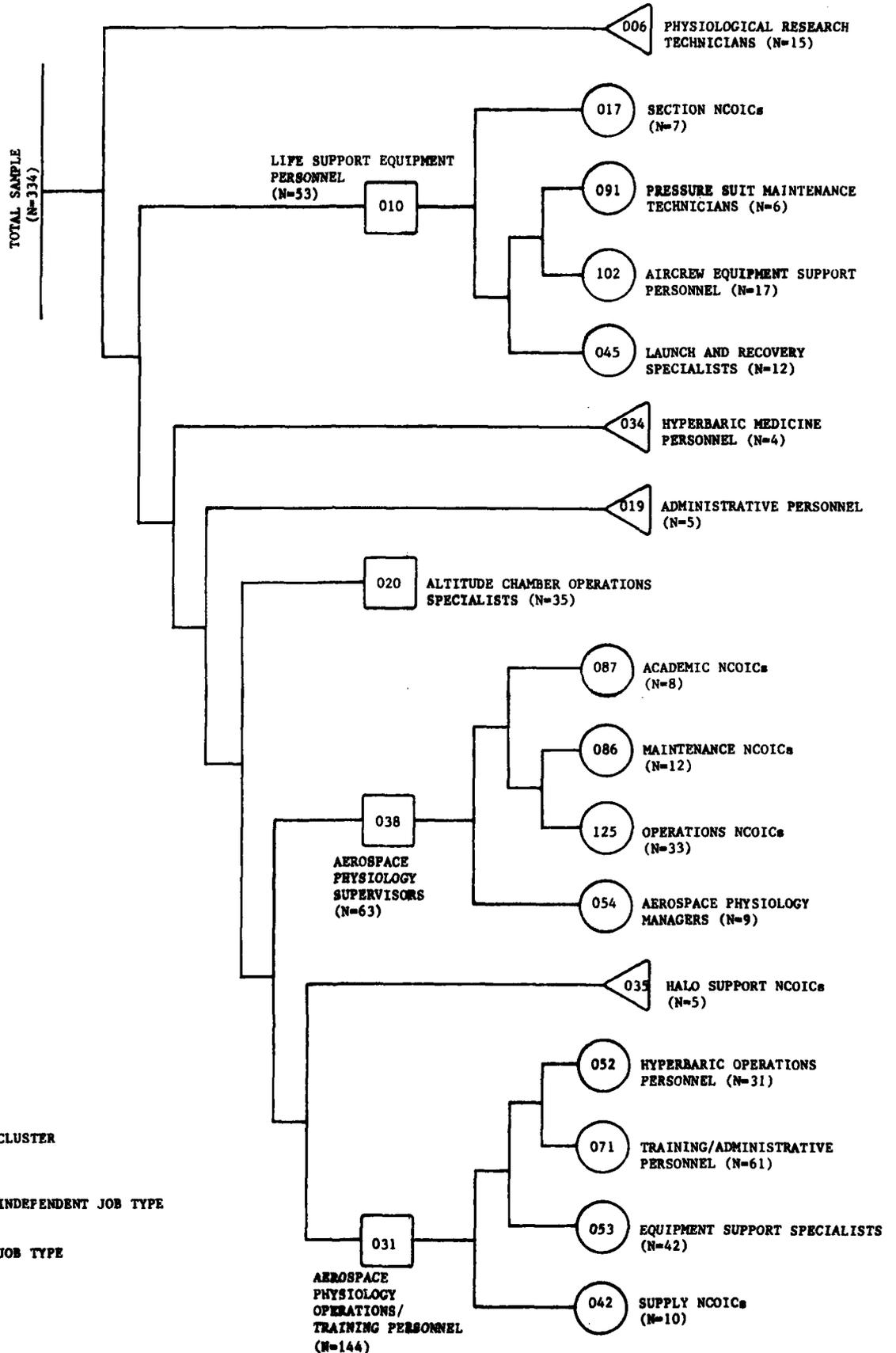
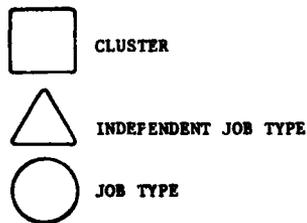
An essential part of the USAF Occupational Analysis Program is the examination of tasks performed by career ladder incumbents to capture a picture of utilization and determine if the jobs performed are accurately reflected in official career ladder documents. The Comprehensive Occupational Data Analysis Programs (CODAP) provide a proven method for analyzing the job structure of any given career ladder. Using CODAP, a hierarchical clustering of all jobs performed in the career field is generated based on the similarity of tasks performed and the relative time spent on these tasks. Once the major job groups are identified for a career ladder, they are examined in terms of job descriptions and background data to determine the particular characteristics of each group.

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

The jobs performed by Aerospace Physiology personnel are illustrated in Figure 1. Based on task and time similarity, four clusters and four independent job types were identified. The clusters, their respective job types, and the independent job types are listed below.

- I. AEROSPACE PHYSIOLOGY OPERATIONS AND TRAINING PERSONNEL, (GRP031, N=144)
  - a. Supply NCOICs (GRP042, N=10)
  - b. Equipment Support Specialists (GRP053, N=42)
  - c. Training and Administrative Personnel (GRP071, N=61)
  - d. Hyperbaric Operations Personnel (GRP052, N=31)
- II. HALO SUPPORT NCOICs (GRP035, N=5)
- III. AEROSPACE PHYSIOLOGY SUPERVISORS (GRP038, N=63)
  - a. Aerospace Physiology Managers (GRP054, N=9)
  - b. Operations NCOICs (GRP125, N=33)
  - c. Maintenance NCOICs (GRP086, N=12)
  - d. Academic NCOICs (GRP087, N=8)
- IV. ALTITUDE CHAMBER OPERATIONS SPECIALISTS (GRP020, N=35)
- V. ADMINISTRATIVE PERSONNEL (GRP019, N=5)
- VI. HYPERBARIC MEDICINE PERSONNEL (GRP034, N=4)

FIGURE 1  
CAREER LADDER STRUCTURE DIAGRAM  
(AFSC 911X0)



VII. LIFE SUPPORT EQUIPMENT PERSONNEL (GRP010, N=53)

- a. Launch and Recovery Specialists (GRP045, N=12)
- b. Aircrew Equipment Support Personnel (GRP102, N=17)
- c. Pressure Suit Maintenance Technicians (GRP091, N=6)
- d. Section NCOICs (GRP017, N=7)

VIII. PHYSIOLOGICAL RESEARCH TECHNICIANS (GRP006, N=15)

The groups identified above account for 97 percent of the survey sample. The other three percent of the respondents did not group meaningfully with these incumbents because of their unique task responses. Examples of the job titles provided by the ten incumbents who are not in the above job groups include: Superintendent of Aerospace Physiology; NCOIC, Logistics; Physiological Training Superintendents; NCOIC, Physiological Support Division; and Assistant NCOIC of Research Chamber.

Job Group Descriptions

The following paragraphs contain brief job descriptions of the clusters, their representative job types, and the independent job types identified through the specialty structure analysis. Selected background and job satisfaction data are provided for these job groups in Tables 4 through 7. Appendix A contains a listing of representative tasks performed by incumbents in each of the job groups discussed on the following pages.

I. AEROSPACE PHYSIOLOGY OPERATIONS AND TRAINING PERSONNEL (N=144). Personnel in this cluster account for 44 percent of the survey respondents. Incumbents perform a common core of tasks related to the operation of hypobaric (altitude) chambers. Personnel also operate and maintain equipment used to provide aircrew members either aerospace physiological orientation or refresher training as well as provide instruction on the use and purpose of training equipment. Representative tasks performed include:

- serving as chamber operator on training chamber flights
- serving as inside observer on training chamber flights
- briefing on rapid decompression during chamber flights
- serving as chamber operator on medical evaluation chamber flights
- briefing on preflight procedures of chamber flights

Forty-nine percent of the incumbents in this group are in their first enlistment. The cluster respondents perform an average of 81 tasks, and have an average job difficulty index (JDI=12.6). Most of the incumbents (74 percent) said their job is interesting, while 59 percent indicated plans to reenlist.

Because of the wide range of specialized tasks these personnel perform, four job groups were identified within this cluster. Primary differences between these groups related to the individual's primary work area, the equipment the incumbent operates or maintains, and the respondent's MAJCOM.

a. Supply NCOICs (N=10). Personnel in this job type spend much of their time performing functions involving the management of unit supplies and equipment. They not only maintain supply and equipment accounts and procure equipment or supplies, but also draft and evaluate budget or financial requirements. Incumbents also provide classroom instruction. Three of the personnel in this group are assigned to limited status units.

b. Equipment Support Specialists (N=42). All of the personnel in this job group are 3- and 5-skill level airmen. Much of their time is spent operating or maintaining hypobaric chambers and performing life support equipment functions. Some of the tasks which distinguish this group are:

- perform periodic or 30-day inspections of oxygen masks
- remove or replace oxygen equipment items on hypobaric chamber consoles
- remove or replace operator panel instruments
- add oil to vacuum pumps
- recharge portable oxygen assemblies

Ninety-three percent of these respondents indicated their job utilizes their training fairly well or better.

Although these incumbents perform many tasks in common, they work on different types of training or chamber equipment which vary as to the particular base or MAJCOM to which members are assigned. Consequently, this job group can be broken down into three subgroups: Hyperbaric Maintenance Specialists (GRP216, N=6), Equipment Maintenance Specialists (GRP124, N=13) and ATC Equipment Specialists (GRP097, N=15). Members of the first two subgroups identified above are assigned to non-ATC bases. The primary difference between these two subgroups involves the compression chamber maintenance and operation tasks performed by personnel assigned to bases which have both altitude and dive chambers (see job description for Hyperbaric Maintenance Specialists in Appendix A4). In contrast, the Equipment Maintenance Specialists are located at bases with only altitude chambers and place greater emphasis on maintaining training and life support equipment (see Appendix A5). These groups also differed with respect to reenlistment intentions. Fifty-four percent of the equipment maintenance personnel plan to reenlist while only 33 percent of the Hyperbaric Maintenance respondents indicated they will reenlist.

Personnel assigned to ATC bases perform an average of 113 tasks, 27 more than either of the two non-ATC groups. These personnel perform a variety of tasks involving the maintenance and operation of egress training equipment, such as ejection seat trainers and parachute training devices. Incumbents also provide training on egress equipment (see Appendix A6 for representative tasks).

c. Training and Administrative Personnel (N=61). Incumbents in this group conduct aerospace physiology instruction and perform administrative functions. Tasks involving training chamber flights are among the most common tasks performed by this group. Some characteristic tasks which distinguish this group include:

- preparing Chamber Flight Record forms (AF Form 701)
- preparing Individual Physiological Training Record forms (AF Form 702)
- serving as lecturer observer on training chamber flights
- briefing on use of vertigon trainers
- demonstrating spatial disorientation using the vertigon trainer
- conducting tours of aerospace physiology facilities

Although personnel in this group perform a variety of administrative and briefing or instructing tasks, their jobs vary considerably as to the types of forms maintained and the types of training tasks performed. Like the Equipment Support Specialists (Ib), differences in jobs are a function of the MAJCOM and base to which individuals are assigned. These differences are apparent among three smaller job groups within this job type: (1) Refresher Training Administrative Specialists (GRP092); (2) Administrative NCOICs (GRP127); and (3) ATC Physiological Training Instructors (GRP088). Refresher Training Administrative Specialists are assigned to non-ATC bases. In addition to their normal chamber training functions, these incumbents enter training data on physiological training forms, such as Physiological Training Record forms (AF Form 699) and Individual Physiological Training Record forms (AF Form 702). They also maintain Instructor's Flight/Drive Record forms (AF Form 712) and Chamber Flight Crew Record forms (AF Form 755). Twelve of the incumbents in this group serve as members of hyperbaric compression therapy teams. The personnel operating the hyperbaric chambers prepare Compression Chamber Operation Record forms (AF Form 1354) and Hyperbaric Patient Information and Therapy Record forms (AF Form 1352) in addition to other forms (see Appendix A8).

In addition to performing administrative tasks which are characteristic of the previous group, the Administrative NCOICs perform tasks such as directing maintenance of administrative files, writing correspondence, planning work assignments, initiating Chamber Reactor Case Report forms (AF Form 361), and preparing APRs (see Appendix A9). These NCOICs average 152 months TAFMS and perform an average of 102 tasks, 47 more than the Refresher Training Administrative Specialists discussed above.

The job performed by ATC Physiological Training Instructors is distinguished by the unique training functions performed at ATC bases. Incumbents provide parachute, water survival, and ejection seat training to student aircrew personnel in addition to altitude chamber training. Part of their job includes briefing on the use of vertigon trainers and on in-flight egress procedures (see Appendix A10). Personnel in this group average 85 months TAFMS. Ninety-six percent of the members reported their job as interesting, and 76 percent plan to reenlist. An unexpected finding for this group revealed that personnel at two ATC bases, Columbus AFB and Sheppard AFB, place greater job emphasis on classroom instruction while instructors from the other ATC bases perform more tasks related to administration and parachute familiarization training. Tasks peculiar to Columbus AFB and Sheppard AFB personnel include:

conducting classroom instructions on principle and problems associated with night vision  
instructing in-flight egress principles and procedures using procedural trainers other than the TU-103  
conducting classroom instruction on principles and procedures of hazardous condition survival

Other ATC instructors commonly perform tasks such as:

maintain administrative files  
serve as crew chief on parachute familiarization training teams  
maintain Instructor's Flight/Dive Record forms (AF Form 712)

One possible explanation for this difference is that the ATC Equipment Specialists (GRP097) from Columbus AFB and Sheppard AFB perform the required parachute familiarization functions. Another reason for placing emphasis on classroom training at these two bases is that they both train foreign pilots.

d. Hyperbaric Operations Personnel (N=31). Ninety percent of the personnel in this group reported serving as hyperbaric therapy team members. Incumbents perform a broad range of tasks involving the operation of both hypobaric and hyperbaric chambers. Some of the common compression chamber tasks which characterize this group include:

serving as timekeeper on proficiency chamber dives  
serving as inside observer on proficiency chamber dives  
serving as chamber operator on treatment chamber dives  
serving as recorder on treatment chamber dives

Fifty-two percent of the respondents are assigned to SAC bases. Other incumbents were assigned to Brooks AFB (AFSC), Kadena AFB (PACAF), or Wright-Patterson AFB (AFLC). Only fifty-eight percent of this group responded that their job was interesting and 52 percent indicated plans to reenlist.

Three job groups identified within this job type are Hyperbaric Training NCOs (GRP120), Hyperbaric Support NCOICs (GRP126), and Dive Chamber Crewmembers (GRP116). Five of the nine Training NCOs are located at Brooks AFB. Incumbents provide classroom instruction, administer and score tests, construct training aids, and operate visual aid equipment in addition to their normal hyperbaric and hypobaric functions. Only 56 percent of these incumbents, who average 136 months TAFMS, find their job interesting and plan to reenlist.

Although the Hyperbaric Support NCOICs (N=8) average 22 months less TAFMS than the previous group, all but one of these eight incumbents indicated they find their job interesting and plan to reenlist. Tasks which distinguish members of this group include supervisory and management functions, such as preparing APRs, demonstrating how to locate technical information, counseling personnel on personnel or military related problems,

and determining work priorities. Incumbents reported supervising a minimum of two subordinates. Members of this group are assigned to SAC (63 percent), AFSC (25 percent), and AFLC (12 percent).

The 12 Dive Chamber Crewmembers perform routine tasks which involve operating and maintaining hyperbaric and hypobaric chambers. They also spend much of their time cleaning work areas, cutting grass, and trimming shrubbery. Only 33 percent of the incumbents in this group, which averages just 38 months TAFMS, indicated their job as interesting and plan to reenlist. These personnel perform a job which is much less difficult (JDI=9.1) than the more experienced personnel identified as Training NCOs (JDI=14.2) and Support NCOICs (JDI=15.0).

II. HALO SUPPORT NCOICs (N=5). Like personnel in the previous cluster, members of this job group spend much of their time performing tasks related to the operation and maintenance of hypobaric chambers. However, four of the five incumbents reported that their primary work area was maintenance and that they perform unique tasks such as installing and downloading high altitude low opening (HALO) oxygen systems in aircraft and observing HALO parachutists.

Some of the more common tasks include:

- briefing on preflight and postflight procedures of chamber flights
- servicing as inside observer on training chamber flights
- servicing as chamber operator on equipment check chamber flights
- determining work priorities
- preparing APRs
- counseling personnel on personal or military related problems

Eighty percent of the group's incumbents, who average 163 months TAFMS, indicated they find their job interesting and plan to reenlist. All personnel in this group supervise at least two airmen.

III. AEROSPACE PHYSIOLOGY SUPERVISORS (N=63). The experienced personnel (members average 197 months TAFMS) in this cluster also perform typical training tasks related to operating and maintaining hypobaric chambers. However, the emphasis of their job is on conducting aerospace physiology training and performing managerial and supervisory functions. Representative tasks include:

- servicing as inside observer on training chamber flights
- servicing as lecturer observer on training chamber flights
- determining work priorities
- writing correspondence
- interpreting policies, directives, or procedures for subordinates
- developing work methods and procedures

Although the jobs performed by personnel in this cluster differ depending on the job scope and primary work area, 92 percent of these respondents find their job interesting, and 70 percent plan on reenlisting. Ninety-five percent or more of the incumbents indicated their job utilizes their talents and training fairly well or better.

a. Aerospace Physiology Managers (N=9). While these personnel perform an average of only 59 tasks, incumbents place much greater emphasis on staff and managerial level tasks than the other job types in this cluster. Their typical tasks include supervising Aerospace Physiology supervisors (AFSC 91170), conducting staff meetings, indorsing airman performance reports (APRs), evaluating work schedules, and assigning personnel to duty positions. Since the managerial tasks performed by these incumbents were rated high in task difficulty by 7-skill level incumbents, the average task difficulty per unit time spent (ATDPUTS) by these incumbents was as high as any job group identified in this survey. However, because incumbents performed an average of only 59 tasks, the job difficulty index for this group was not as high as the other groups in this cluster (see comparison of JDIs and ATDPUTS in Tables 4 and 5).

b. Operations NCOICs (N=33). Like personnel in the previous job group, these incumbents spend much of their job time performing managerial and supervisory functions. However, members of this group perform an average of 64 more tasks than the Aerospace Physiology Managers. These personnel are much more involved in unit training programs and chamber operation tasks, such as determining OJT training requirements, directing or implementing OJT programs, assigning OJT trainers, serving as inside observer on equipment check chamber flights, and serving as operator on equipment and medical evaluation chamber flights. Eighty-five percent of these respondents reported supervising 7-skill level incumbents. Because of the high number of difficult tasks these incumbents perform, their JDI (19.2) was the second highest index computed for any job group.

c. Maintenance NCOICs (N=12). As members of the most difficult job group identified in the survey, these personnel perform an average of 153 tasks. They perform a variety of tasks related to operating and maintaining hypobaric chambers, conducting aerospace physiology instruction, performing administrative functions, and operating and maintaining physiological training equipment. Seventy-five percent of these incumbents reported they supervise 91150 personnel. Distinguishing tasks include:

- evaluating inspection reports or procedures
- performing periodic inspection of hypobaric chamber assemblies  
other than experimental chambers
- maintaining records on status or inspection of equipment
- preparing requisition for supplies or equipment
- servng as crew chief or equipment check chamber flights

Personnel in this group average 142 months TAFMS.

d. Academic NCOICs (N=8). In addition to the two previous job groups, some units also have Academic NCOICs who supervise the organization's academic training program. Characteristic tasks for this group, which performs an average of 84 tasks, include developing and administering tests, assigning aerospace physiology instructors, evaluating training methods or techniques, and evaluating progress of students (see Appendix A20).

IV. ALTITUDE CHAMBER OPERATIONS SPECIALISTS (N=35). This group of 3- and 5-skill level personnel perform various combinations of routine tasks related to operating or maintaining hypobaric chambers, conducting aerospace physiological instruction, and performing life support equipment functions. Because of the diversity of the jobs these specialists perform, only six tasks are performed by more than 80 percent of the incumbents. Individuals serve in the various positions associated with hypobaric training flights: crew chief, chamber operator, lock operator, inside observer, and recorder. They also spend much of their job time cleaning work areas (see Appendix A21 for a list of representative tasks). In addition to these tasks, these airman, who average only 26 months TAFMS, appear to specialize on either training or maintenance functions. Personnel who specialize in training and aerospace physiology instruction provide assistance to the academic instructors by administering and scoring tests and operating visual aid equipment. They also brief on the use of vertigon trainers as well as on oxygen equipment and systems used during hypobaric chamber flights. In contrast, the tasks which distinguish maintenance specialists in this job group include serving as crew chief and recorder on both equipment check and medical evaluation chamber flights.

Incumbents in this group perform an average of 39 routine tasks. Consequently, the job difficulty index (JDI=5.8) for this group indicates members perform the least difficult job identified in the survey. Reenlistment intentions for the cluster (34 percent) were also very low in comparison to the responses of other groups. However, many of these incumbents indicated their job was interesting (60 percent) and utilized their training fairly well or better (74 percent).

V. ADMINISTRATIVE PERSONNEL (N=5). In contrast with personnel in the Training and Administrative Personnel job group (Ic), incumbents in this independent job type place much greater emphasis on administrative functions than the training and chamber operations oriented group. While only 17 tasks are performed by 80 percent of the incumbents, 15 of these tasks are directly related to administrative functions (see Appendix A22). Four of the five members reported that they supervise Aerospace Physiology Specialists. Although these incumbents perform an average of 46 tasks, four of the members indicated their job is interesting, and all five airmen said they plan to reenlist.

VI. HYPERBARIC MEDICINE PERSONNEL (N=4). The four members of this unique independent job type are located at Brooks AFB. Unlike the Aerospace Physiology Operations and Training Personnel (I) who operate or maintain both hyperbaric and hypobaric chambers, these individuals specialize in providing medical treatment using compression chambers. Typical tasks include serving as crew chief/lock operator on treatment chamber dives, loading or unloading patients into or from hyperbaric chambers, preparing dive data worksheet forms (SAM Form 21), and performing daily inspections of the hyperbaric chamber assemblies. Incumbents perform an average of 46 tasks and perceive their jobs as interesting (100 percent). However, only one of the four respondents indicated plans to reenlist.

VII. LIFE SUPPORT EQUIPMENT PERSONNEL (N=53). Except for a few tasks involving hypobaric chamber activities and supervisory functions, there is very little overlap between the jobs performed by members of this group and those jobs identified in the previous job group descriptions. All the individuals in this group are assigned either to Beale AFB (85 percent) or Edwards AFB (15 percent). The primary purpose of their job is to provide support for aircrew members who fly on high altitude missions requiring pressure suits and other life support equipment. Representative tasks include:

- assisting crew members in donning and doffing pressure suit assemblies
- performing occupied full pressure suit integration tests
- driving pilot transport vans
- connecting or disconnecting crew members to or from aircraft systems
- servicing as inside observer on equipment check chamber flights

All of the personnel identified in this cluster are 5- or 7-skill level airmen. As a general rule, the jobs performed by 91150 airmen place greater emphasis on launching and recovering of aircrew personnel and preflighting pressure suit and oxygen equipment. The 91170 incumbents supervise and provide the technical expertise to perform maintenance of pressure suit and life support equipment. Although most incumbents find their job interesting (79 percent), only 53 percent of these respondents plan to reenlist.

a. Launch and Recovery Specialists (N=12). These 91150 incumbents spend the major portion of their job time performing support functions which prepare aircrew personnel for the launch and recovery phases of their mission. Representative tasks include connecting or disconnecting crew members to or from aircraft systems, performing occupied full pressure suit integration tests, driving pilot transport vans, and filling portable liquid oxygen ventilation units. Fifty-eight percent of the personnel said their job utilizes their training little or not at all.

b. Aircrew Equipment Support Personnel (N=17). In addition to performing the tasks listed above, personnel in the group perform a broad range of maintenance tasks, such as performing preflight or postflight inspections of partial pressure suits, isolating portable liquid oxygen ventilation unit malfunctions, and removing or replacing pressure suit ventilation hose assembly components. Most of their tasks involve working with partial and full pressure suits, oxygen equipment, and other life support equipment, such as parachutes and survival kits. These incumbents also perform preflight physical examinations.

c. Pressure Suit Maintenance Technicians (N=6). Four of the members in this group are located at Edwards AFB. Like the previous group, members perform maintenance tasks, such as adjust full pressure units, remove and replace full pressure suit components, and size and fit full pressure suits. However, this group places very little emphasis on working with oxygen and life support equipment other than equipment directly related to pressure suit functions. Instead, these NCOICs, who average 137 months TAFMS, perform additional supervisory and management functions. They plan work assignments, determine work priorities, maintain bench stock of spare parts for pressure suits, and supervise donning and integration tests of occupied full pressure suits. All of the respondents reported testing and

evaluating new or proposed pressure suit assemblies. As a result of the difficult technical and managerial tasks incumbents perform, this was one of the more difficult jobs identified in this survey (JDI=18.7).

d. Section NCOICs (N=7). All of these senior NCOs (average 200 months TAFMS) are located at Beale AFB. Incumbents reported supervising not only 91130 and 91150 personnel, but also personnel with AFSCs other than 911X0. In contrast with the previous job type, these personnel place much greater emphasis on supervisory tasks and little on pressure suit maintenance functions. Some tasks which distinguish this job include briefing on ground egress escape procedures, counseling personnel on personal or military related problems, conducting tours of aerospace physiology facilities, preparing APRs, and maintaining training records, charts, or graphs. Incumbents perform an average of 53 tasks, 42 fewer than the Pressure Suit Maintenance Technicians.

VIII. PHYSIOLOGICAL RESEARCH TECHNICIANS (N=15). With the exception of Hyperbaric Medicine Personnel (VI), individuals in this group perform some of the most unique jobs identified in the survey. Only 12 of the tasks listed in Appendix A29 are performed by 60 percent or more of these incumbents. Some of the more common tasks are:

- connecting biomedical instrumentation to subjects
- operating trip chart recorders
- attending military formations or performing squadron duties
- calibrating analytical devices, such as flow meters or recording equipment
- serving as inside observer on research chamber flights
- serving as volunteer subject on research chamber flights

The reason that few tasks are performed by most of the incumbents is that many tasks performed by these respondents are peculiar to their specialized research area. Two respondents from Brooks AFB and one from Wright-Patterson AFB were identified as Centrifuge Technicians (GRP016). These personnel perform as centrifuge operator/crew chief, connect personnel equipment to centrifuges, construct seat configuration for centrifuges, and size and fit anti-G protective equipment (see Appendix A30).

A second group of personnel in this job group were identified as In-flight Biomedical Research personnel (GRP057). Although these incumbents are from three different locations--Brooks AFB, Edwards AFB, and Fort Rucker, they all gather in-flight physiological information. All three personnel operate in-flight monitoring equipment, install or remove in-flight monitoring equipment on aircrafts, operate strip chart recorders and medilog equipment, and connect biomedical instrumentation to subjects (see Appendix A31).

A group of five Research Chamber Technicians (GRP073) were also identified in the survey. Members of this group are all located at Brooks AFB and serve at various crew positions on research chamber flights. Some typical tasks listed in Appendix A32 performed by these incumbents include mixing and analyzing breathing gases; operating doppler ultrasound devices; testing and evaluating aeromedical evacuation equipment, such as respirators or incubators; and performing annual inspections of temperature chamber refrigeration systems.

Other personnel located at Brooks AFB, Wright-Patterson AFB, and Walter Reed Hospital reported performing as crewmembers on research chamber flights. However, the four Research Administrative NCOs (GRP051) at these bases provide administrative support for units performing research functions. Some of their more common administrative tasks include maintaining records on research subjects, reviewing research subject records for compliance with the Human Use Committee directive, preparing draft of Physiological Training Monthly Report forms (AF Form 700), and requesting hazardous duty orders for research subject volunteers (see Appendix A33).

### Summary

This analysis of the Aerospace Physiology specialty structure reveals that the bases to which incumbents are assigned impact the types of tasks personnel perform. Some of the more obvious job differences were identified for individuals located on ATC bases and on non-ATC bases which had both hyperbaric and hypobaric chambers. Even more evident are the unique life support functions performed by personnel located at Beale AFB and Edwards AFB and the specialized jobs involving physiological research at Wright-Patterson AFB and Brooks AFB. These differences can easily be explained by examining the particular mission of each base.

With the exception of the unique research functions performed by career ladder incumbents, the most unusual jobs are performed by 911X0 personnel at Beale AFB and Edwards AFB. The life support equipment and pressure suit maintenance functions these Life Support Equipment Personnel (VII) perform are not characteristic of other job groups in the career ladder. Even the tasks involving hypobaric chamber operations or maintenance which are typical of most aerospace physiology personnel are secondary functions for incumbents in this cluster. While all other groups identified in this survey emphasize training aircrew personnel, maintaining chamber and training equipment, or performing research using aerospace physiology equipment, personnel at Beale AFB perform jobs which are operationally oriented to provide equipment support for aircrew personnel.

TABLE 4

SELECTED BACKGROUND DATA FOR CAREER LADDER JOB GROUPS

| AEROSPACE<br>PHYSIOLOGY<br>OPERATIONS/<br>TRAINING<br>PERSONNEL* | NUMBER IN GROUP | SUPPLY |            | EQUIPMENT   |         | TRAINING/<br>ADMINIS-<br>TRATIVE |           | HYPERBARIC HALO |         | AEROSPACE |            | AEROSPACE  |            | OPERATIONS |            | MAINTENANCE |            | ACADEMIC   |            |
|--|-----------------|--------|------------|-------------|---------|----------------------------------|-----------|-----------------|---------|-----------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|
|  |                 | NCOICs | PHYSICIAN* | SPECIALISTS | SUPPORT | PERSONNEL                        | PERSONNEL | PERSONNEL       | NCOICs* | SUPPORT   | PHYSIOLOGY | PHYSIOLOGY | PHYSIOLOGY | PHYSIOLOGY | PHYSIOLOGY | PHYSIOLOGY  | PHYSIOLOGY | PHYSIOLOGY | PHYSIOLOGY |
|  | 144             | 10     | 42         | 61          | 31      | 5                                | 63        | 9               | 33      | 12        | 8          |            |            |            |            |             |            |            |            |
| PERCENT LOCATED OVERSEAS   | 43%             | 3%     | 13%        | 18%         | 9%      | 1%                               | 19%       | 3%              | 10%     | 4%        | 2%         |            |            |            |            |             |            |            |            |
|  | 9%              | 10%    | 12%        | 7%          | 10%     | 20%                              | 10%       | 11%             | 9%      | 8%        | 12%        |            |            |            |            |             |            |            |            |

DAFSC DISTRIBUTION

|       |     |     |     |     |     |     |     |     |     |     |     |   |   |   |   |   |   |   |   |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|---|---|---|---|---|---|
| 91130 | 22% | -   | 38% | 21% | 10% | -   | -   | -   | -   | -   | -   | - | - | - | - | - | - | - | - |
| 91150 | 60% | 60% | 62% | 56% | 64% | 40% | 11% | -   | 6%  | 8%  | 38% |   |   |   |   |   |   |   |   |
| 91170 | 18% | 40% | -   | 23% | 26% | 60% | 63% | 67% | 55% | 92% | 62% |   |   |   |   |   |   |   |   |
| 91190 | -   | -   | -   | -   | -   | -   | 21% | 22% | 33% | -   | -   |   |   |   |   |   |   |   |   |
| 91100 | -   | -   | -   | -   | -   | -   | 5%  | 11% | 6%  | -   | -   |   |   |   |   |   |   |   |   |

AVERAGE GRADE

|                             |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |  |  |  |  |
|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|--|--|--|--|
| AVERAGE MONTHS IN CAREER    | 4   | 5   | 4   | 4   | 5   | 6   | 7   | 7   | 7   | 6   | 6   |  |  |  |  |  |  |  |  |
| FIELD                       | 66  | 92  | 38  | 71  | 86  | 158 | 177 | 247 | 191 | 123 | 127 |  |  |  |  |  |  |  |  |
| AVERAGE MONTHS IN SERVICE   | 76  | 106 | 51  | 79  | 92  | 163 | 197 | 252 | 218 | 142 | 140 |  |  |  |  |  |  |  |  |
| PERCENT IN FIRST ENLISTMENT | 49% | 20% | 62% | 51% | 35% | 0%  | 0%  | 0%  | 0%  | 0%  | 0%  |  |  |  |  |  |  |  |  |

PERCENT MEMBERS SUPERVISING

|                           |     |     |     |     |     |      |     |     |      |     |     |  |  |  |  |  |  |  |  |
|---------------------------|-----|-----|-----|-----|-----|------|-----|-----|------|-----|-----|--|--|--|--|--|--|--|--|
| AVERAGE NUMBER SUPERVISED | 33% | 60% | 19% | 33% | 45% | 100% | 89% | 89% | 100% | 75% | 75% |  |  |  |  |  |  |  |  |
|                           | 1   | 1   | 0   | 1   | 1   | 3    | 3   | 5   | 3    | 2   | 2   |  |  |  |  |  |  |  |  |

AVERAGE NUMBER OF TASKS

|                            |      |      |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|--|
| PERFORMED                  | 81   | 74   | 91   | 80   | 72   | 64   | 114  | 59   | 123  | 153  | 84   |  |  |  |  |  |  |  |  |
| ADDPITS                    | 4.4  | 4.7  | 4.3  | 4.4  | 4.6  | 4.7  | 5.0  | 5.3  | 5.1  | 4.7  | 4.8  |  |  |  |  |  |  |  |  |
| JOB DIFFICULTY INDEX (JDI) | 12.6 | 13.2 | 12.9 | 12.6 | 12.3 | 11.8 | 17.9 | 14.1 | 19.2 | 19.6 | 14.9 |  |  |  |  |  |  |  |  |

\* DENOTES CLUSTER OR INDEPENDENT JOB TYPE GROUPS

TABLE 5  
SELECTED BACKGROUND DATA FOR CAREER LADDER JOB GROUPS

|                                   | ALTITUDE<br>CHAMBER<br>OPERATIONS<br>SPECIALISTS* | ADMINIS-<br>TRATIVE<br>PERSONNEL* | HYPERBARIC<br>MEDICINE<br>PERSONNEL* | LIFE<br>SUPPORT<br>EQUIPMENT<br>PERSONNEL* | LAUNCH<br>AND<br>RECOVERY<br>SPECIALISTS | AIRCREW<br>EQUIPMENT<br>SUPPORT<br>PERSONNEL | PRESSURE<br>SUIT<br>MAINTENANCE<br>TECHNICIANS | SECTION<br>MCOICs | PHYSIOLOGICAL<br>RESEARCH<br>TECHNICIANS* |
|-----------------------------------|---|-----------------------------------|--------------------------------------|--|--|--|--|-------------------|---|
| NUMBER IN GROUP                   | 35  | 5                                 | 4                                    | 53   | 12                                       | 17   | 6  | 7                 | 15  |
| PERCENT OF SAMPLE                 | 10%   | 1%                                | 1%                                   | 16%  | 4%                                       | 5%   | 2%   | 2%                | 4%  |
| PERCENT LOCATED OVERSEAS          | 14%   | 0%                                | 0%                                   | 2%   | 0%                                       | 0%   | 0%   | 0%                | 0%  |
| DAFSC DISTRIBUTION                |   |                                   |                                      |  |  |  |  |                   |   |
| 91130                             | 46%   | 20%                               | -                                    | -  | -  | -  | -  | -                 | -   |
| 91150                             | 54%   | 20%                               | 25%                                  | 62%  | 100%                                     | 65%  | 33%  | 14%               | 20%                                       |
| 91170                             | -   | 60%                               | 50%                                  | 38%  | -  | 35%  | 67%  | 86%               | 73%                                       |
| 91190                             | -   | -                                 | 25%                                  | -  | -  | -  | -  | -                 | 7%  |
| 91100                             | -   | -                                 | -                                    | -  | -  | -  | -  | -                 | -   |
| AVERAGE GRADE                     | 3   | 4                                 | 6                                    | 5  | 3  | 5  | 6  | 6                 | 6   |
| AVERAGE MONTHS IN CAREER          | 20  | 60                                | 84                                   | 87   | 29                                       | 78   | 134  | 188               | 135                                       |
| FIELD                             | 26  | 91                                | 140                                  | 93   | 31                                       | 85   | 137  | 200               | 157                                       |
| AVERAGE MONTHS IN SERVICE         | 92%   | 20%                               | 25%                                  | 42%  | 83%                                      | 29%  | 17%  | 0%                | 7%  |
| PERCENT IN FIRST ENLISTMENT       |   |                                   |                                      |  |  |  |  |                   |   |
| PERCENT MEMBERS SUPERVISING       | 3%  | 80%                               | 80%                                  | 47%  | 0%                                       | 53%  | 100%   | 100%              | 33%                                       |
| AVERAGE NUMBER SUPERVISED         | 3   | 2                                 | 1                                    | 1  | 0  | 1  | 5  | 3                 | 1   |
| AVERAGE NUMBER OF TASKS PERFORMED | 39  | 46                                | 46                                   | 85   | 43                                       | 93   | 95   | 53                | 50  |
| ATDFPUTS                          | 4.2   | 4.7                               | 4.9                                  | 5.0  | 4.7                                      | 5.1  | 5.3  | 5.2               | 5.2                                       |
| JOB DIFFICULTY INDEX (JDI)        | 5.8   | 9.2                               | 10.7                                 | 14.8                                       | 8.8                                      | 17.3   | 18.7   | 12.7              | 12.4                                      |

\* DENOTES CLUSTER OR INDEPENDENT JOB TYPE GROUPS

TABLE 6  
JOB SATISFACTION DATA FOR FUNCTIONAL JOB GROUPS  
(PERCENT MEMBERS RESPONDING)

|                                     | AEROSPACE<br>PHYSIOLOGY/<br>OPERATIONS/<br>TRAINING<br>PERSONNEL*<br>(N=144) |    | EQUIPMENT<br>SUPPORT<br>SPECIALISTS<br>(N=62) |    | TRAINING/<br>ADMINIS-<br>TRATIVE<br>PERSONNEL<br>(N=61) |    | HYPERBARIC<br>OPERATIONS<br>PERSONNEL<br>(N=31) |    | HALO<br>SUPPORT<br>NCOICs*<br>(N=5) |    | AEROSPACE<br>PHYSIOLOGY<br>SUPERVISORS*<br>(N=63) |    | AEROSPACE<br>PHYSIOLOGY<br>MANAGERS<br>(N=9) |    | OPERATIONS<br>NCOICs<br>(N=33) |    | MAINTENANCE<br>NCOICs<br>(N=12) |    | ACADEMIC<br>NCOICs<br>(N=8) |    |  |
|-------------------------------------|--|----|---|----|---|----|---|----|-------------------------------------|----|---|----|--|----|--------------------------------|----|---------------------------------|----|-----------------------------|----|--|
|                                     | I FIND MY JOB:   |    |   |    |   |    |   |    |                                     |    |   |    |  |    |                                |    |                                 |    |                             |    |  |
| DULL                                | 13   | 20 | 7   | 11 | 19  | 3  | 2   | 17 | 12                                  | 17 | 17  | 17 | 17   | 17 | 17                             | 17 | 17                              | 17 | 17                          | 17 |  |
| SO-SO                               | 13   | 20 | 17  | 5  | 23  | 2  | 2   | 23 | 20                                  | 2  | 2   | 2  | 2  | 2  | 2                              | 2  | 2                               | 2  | 2                           | 2  |  |
| INTERESTING                         | 74   | 60 | 76  | 84 | 58  | 92 | 84  | 58 | 80                                  | 92 | 92  | 92 | 92   | 92 | 92                             | 92 | 92                              | 92 | 92                          | 92 |  |
| NOT REPORTED                        | -  | -  | -   | -  | -   | 3  | -   | -  | -                                   | 3  | 3   | 3  | 3  | 3  | 3                              | 3  | 3                               | 3  | 3                           | 3  |  |
| <b>MY JOB UTILIZES MY TALENTS:</b>  |  |    |   |    |   |    |   |    |                                     |    |   |    |  |    |                                |    |                                 |    |                             |    |  |
| LITTLE OR NOT AT ALL                | 27   | 40 | 29  | 21 | 32  | 5  | 32  | 20 | 20                                  | 5  | 17  | 17 | 17   | 17 | 17                             | 17 | 17                              | 17 | 17                          | 17 |  |
| FAIRLY WELL TO VERY WELL            | 64   | 60 | 64  | 64 | 65  | 65 | 65  | 80 | 80                                  | 65 | 65  | 65 | 65   | 65 | 65                             | 65 | 65                              | 65 | 65                          | 65 |  |
| EXCELLENTLY TO PERFECTLY            | 9  | -  | 7   | 15 | 3   | 30 | 3   | -  | -                                   | 30 | 30  | 30 | 30   | 30 | 30                             | 30 | 30                              | 30 | 30                          | 30 |  |
| NOT REPORTED                        | -  | -  | -   | -  | -   | -  | -   | -  | -                                   | -  | -   | -  | -  | -  | -                              | -  | -                               | -  | -                           | -  |  |
| <b>MY JOB UTILIZES MY TRAINING:</b> |  |    |   |    |   |    |   |    |                                     |    |   |    |  |    |                                |    |                                 |    |                             |    |  |
| LITTLE OR NOT AT ALL                | 9  | 30 | 7   | 8  | 6   | 3  | 6   | 20 | 20                                  | 3  | 8   | 8  | 8  | 8  | 8                              | 8  | 8                               | 8  | 8                           | 8  |  |
| FAIRLY WELL TO VERY WELL            | 76   | 50 | 83  | 72 | 81  | 64 | 81  | 80 | 80                                  | 64 | 72  | 72 | 72   | 72 | 72                             | 72 | 72                              | 72 | 72                          | 72 |  |
| EXCELLENTLY TO PERFECTLY            | 15   | 20 | 10  | 20 | 13  | 33 | 13  | 20 | 20                                  | 33 | 20  | 20 | 20   | 20 | 20                             | 20 | 20                              | 20 | 20                          | 20 |  |
| NOT REPORTED                        | -  | -  | -   | -  | -   | -  | -   | -  | -                                   | -  | -   | -  | -  | -  | -                              | -  | -                               | -  | -                           | -  |  |
| <b>I PLAN TO REENLIST:</b>          |  |    |   |    |   |    |   |    |                                     |    |   |    |  |    |                                |    |                                 |    |                             |    |  |
| NO OR PROBABLY NO                   | 40   | 50 | 38  | 36 | 48  | 30 | 48  | 20 | 20                                  | 30 | 22  | 22 | 22   | 22 | 22                             | 22 | 22                              | 22 | 22                          | 22 |  |
| YES OR PROBABLY YES                 | 59   | 50 | 62  | 62 | 52  | 70 | 52  | 80 | 80                                  | 70 | 78  | 78 | 78   | 78 | 78                             | 78 | 78                              | 78 | 78                          | 78 |  |
| NOT REPORTED                        | 1  | -  | -   | 2  | -   | -  | -   | -  | -                                   | -  | -   | -  | -  | -  | -                              | -  | -                               | -  | -                           | -  |  |

\* DENOTES CLUSTER OR INDEPENDENT JOB TYPE GROUPS

TABLE 7  
JOB SATISFACTION DATA FOR FUNCTIONAL JOB GROUPS  
(PERCENT MEMBERS RESPONDING)

|                                     | ALTITUDE<br>CHAMBER<br>OPERATIONS<br>SPECIALISTS*<br>(N=35) | ADMINIS-<br>TRATIVE<br>PERSONNEL*<br>(N=5) | HYPERBARIC<br>MEDICINE<br>PERSONNEL*<br>(N=4) | LIFE<br>SUPPORT<br>EQUIPMENT<br>PERSONNEL*<br>(N=53) | LAUNCH<br>AND<br>RECOVERY<br>SPECIALISTS<br>(N=12) | AIRCREW<br>EQUIPMENT<br>SUPPORT<br>PERSONNEL<br>(N=17) | PRESSURE<br>SUIT<br>MAINTENANCE<br>TECHNICIANS<br>(N=6) | SECTION<br>NCOICs<br>(N=7) | PHYSIOLOGICAL<br>RESEARCH<br>TECHNICIANS*<br>(N=15) |
|-------------------------------------|---|--|---|--|--|--|---|----------------------------|---|
| <u>I FIND MY JOB:</u>               |   |  |   |  |  |  |   |                            |   |
| DULL                                | 11  | -  | -   | 2  | 8  | -  | -   | -                          | 7   |
| SO-SO                               | 29  | 20   | -   | 19   | 34   | 18   | -   | -                          | 27  |
| INTERESTING                         | 60  | 80   | 100   | 79   | 58   | 82   | 100   | 100                        | 66  |
| NOT REPORTED                        | -   | -  | -   | -  | -  | -  | -   | -                          | -   |
| <u>MY JOB UTILIZES MY TALENTS:</u>  |   |  |   |  |  |  |   |                            |   |
| LITTLE OR NOT AT ALL                | 34  | -  | 25  | 13   | 25   | 12   | -   | 14                         | 27  |
| FAIRLY WELL TO VERY WELL            | 63  | 100  | 25  | 74   | 67   | 82   | 67  | 72                         | 60  |
| EXCELLENTLY TO PERFECTLY            | 3   | -  | 50  | 13   | 8  | 6  | 33  | 14                         | 13  |
| NOT REPORTED                        | -   | -  | -   | -  | -  | -  | -   | -                          | -   |
| <u>MY JOB UTILIZES MY TRAINING:</u> |   |  |   |  |  |  |   |                            |   |
| LITTLE OR NOT AT ALL                | 26  | 20   | 50  | 36   | 58   | 41   | 17  | 14                         | 40  |
| FAIRLY WELL TO VERY WELL            | 60  | 80   | -   | 53   | 25   | 53   | 66  | 86                         | 53  |
| EXCELLENTLY TO PERFECTLY            | 14  | -  | 50  | 11   | 17   | 6  | 17  | -                          | 7   |
| NOT REPORTED                        | -   | -  | -   | -  | -  | -  | -   | -                          | -   |
| <u>I PLAN TO REENLIST:</u>          |   |  |   |  |  |  |   |                            |   |
| NO OR PROBABLY NO                   | 66  | -  | 75  | 43   | 42   | 47   | 17  | 43                         | 20  |
| YES OR PROBABLY YES                 | 34  | 100  | 25  | 53   | 58   | 53   | 83  | 43                         | 80  |
| NOT REPORTED                        | -   | -  | -   | 4  | -  | -  | -   | 14                         | -   |

\* DENOTES CLUSTER OR INDEPENDENT JOB TYPE GROUPS

## ANALYSIS OF DAFSC GROUPS

A comparison of DAFSC groups forms a part of each occupational analysis. This DAFSC analysis helps identify differences across skill level groups within the career ladder. It also assists in evaluating the accuracy of career ladder documents, such as AFR 39-1 specialty descriptions and the specialty training standard (STS).

The DAFSC analysis presents a discussion of common and differentiating duties and tasks performed by 3-, 5-, 7-, and 9-skill level/CEM Code 91100 respondents. This kind of analysis clearly illustrates the similarities and differences which exist across skill level groups.

The information in Table 8 illustrates the amount of relative time each skill level group devotes to tasks in each of the 13 duty categories, while Table 9 presents the distribution of DAFSC groups across the jobs identified in the CAREER LADDER STRUCTURE section. As expected, there are several duties which are fairly common across DAFSC groups. These duties include training, conducting aerospace physiology instruction, operating or maintaining hyperbaric chambers, and performing general aerospace physiology functions (see Table 8). Although personnel at all skill levels perform tasks within these duty areas, there is a definite trend for the higher skill level groups to perform jobs involving less time on routine maintenance and life support equipment tasks and to devote more of their relative job time performing supervisory and managerial functions (see Table 9). Further analysis of Table 8 information indicates that 3-skill level personnel spend a large share of their relative job time operating and maintaining physiological equipment, such as ejection seat and vertigon trainers, than any other skill level group. In contrast, pressure suit physiological support functions are performed almost exclusively by 91150 and 91170 personnel. The 7-skill level incumbents also perform much of the physiological research done in the career field. Although Tables 8 and 9 highlight differences between skill level groups, the discussion below provides more specific information on each skill level group as well as differences between these groups.

### 911X0 Skill Level Groups

DAFSC 91130. These personnel account for 15 percent of the total 911X0 sample. Appendix B1 reveals that 15 of the 30 most representative tasks performed by this group involve operating or maintaining hypobaric chambers. The most common tasks involve performing at various crew positions during training chamber flights. Members also brief on rapid decompression during chamber flights and on the use of vertigon trainers. Overall, 3-skill level incumbents perform an average of 31 tasks. Forty percent of this group are assigned to ATC while 20 percent are assigned to SAC.

DAFSC 91150. In general, 5-skill level incumbents perform many of the same basic types of tasks as 3-skill level personnel (see Appendix B2). Some routine life support equipment and chamber maintenance tasks, although performed by 5-skill level personnel, appear to be more commonly performed by 91130 incumbents (see Table 10). The most obvious difference between

the two groups involve the pressure suit support tasks which the 3-skill level personnel do not perform. Twenty-two percent or more of the 91150 respondents perform pressure suit tasks, such as assist crew members in donning and doffing full pressure suit assemblies, filling liquid oxygen ventilation units, and performing occupied full pressure suit integration tests. In performing these pressure suit tasks, the 5-skill level incumbents use equipment such as aircraft face heat testers, exhalation valve testers, and flotation garment testers, which are unique to the flying mission at Beale AFB and Edwards AFB. Another difference is that 91150 incumbents not only brief on use of equipment and chamber activities, but some also serve as lecturer observer on equipment check and medical evaluation chamber flights. In contrast with their less skilled counterparts, 42 percent of this group are assigned to SAC while 19 percent are at ATC bases.

DAFSC 91170. Appendix B3 lists representative tasks performed by 91170 personnel. It is readily apparent that many of the 7-skill level individuals perform supervisory and management tasks, such as preparing APRs, counseling personnel on personal or military related problems, writing correspondence, and determining work priorities. However, it is important to note that equally high percentages of these personnel perform a large number of training and chamber tasks, many of which are also typical of 3- and 5-skill level personnel. Other tasks which are performed by 91170 incumbents involve research and pressure suit maintenance functions. Approximately 24 percent of the 7-skill level incumbents perform pressure suit physiological support functions while 16 percent perform some types of research tasks. Most incumbents are assigned to AFSC (25 percent), ATC (23 percent), or SAC (24 percent) bases.

Tasks which differentiate this group from 5-skill level airmen are presented in Table 11. As expected, large percentages of 91150 personnel perform the more routine maintenance and custodial tasks while tasks which distinguish DAFSC 91170 incumbents are primarily supervisory in nature.

DAFSC 91190 and CEM Code 91100. At this level, incumbents spend the majority of their time performing management, supervisory, and staff level functions. Common tasks include writing correspondence, updating local operating instructions, indorsing APRs, and analyzing workload requirements (see Appendix B4). In addition, incumbents continue performing some chamber training tasks, such as serving as an inside observer or lock operator on training chamber flights and briefing on preflight procedures of chamber flights. Tasks such as these are also common at the 7-skill level. However, the tasks presented in Table 12 clearly distinguish the technical and supervisory oriented 7-skill level functions from the managerial functions performed by the Superintendent group.

### Summary

The DAFSC analysis reveals a training and equipment oriented specialty with a common core of training chamber tasks which are performed by most incumbents in the career ladder. Common tasks include:

serve as inside observer on training chamber flights  
serve as chamber operator on training chamber flights  
brief on rapid decompression during chamber flights  
serve as recorder on training chamber flights

Generally, 3-skill level personnel perform more of the less difficult periodic inspection and maintenance related tasks. Five-skill level personnel, on the other hand, perform a broader range of tasks, which include pressure suit support functions. Although the career ladder remains technical through the 7-skill level, there is a clear progression from the 5-skill level to the 7-skill level as the more skilled personnel are not only technicians but also first-line supervisors. The 9-skill level and CEM Code incumbents are primarily managers, but also perform supervisory and some training tasks.

TABLE 8

## RELATIVE PERCENT TIME SPENT ON TASKS WITHIN DUTIES BY DAFSC GROUPS

| DUTIES  | DAFSC           | DAFSC            | DAFSC            | DAFSC                                |
|---|-----------------|------------------|------------------|--------------------------------------|
|   | 91130<br>(N=50) | 91150<br>(N=158) | 91170<br>(N=105) | 91190/CEM<br>CODE<br>91100<br>(N=21) |
| ORGANIZING AND PLANNING   | 2               | 2                | 8                | 16                                   |
| DIRECTING AND IMPLEMENTING  | 2               | 3                | 10               | 17                                   |
| INSPECTING AND EVALUATING   | 1               | 2                | 8                | 18                                   |
| TRAINING  | 8               | 7                | 10               | 9                                    |
| PERFORMING ADMINISTRATIVE FUNCTIONS   | 12              | 8                | 7                | 5                                    |
| CONDUCTING AEROSPACE PHYSIOLOGY INSTRUCTION   | 16              | 15               | 14               | 9                                    |
| OPERATING OR MAINTAINING HYPOBARIC CHAMBERS   | 26              | 21               | 13               | 10                                   |
| OPERATING OR MAINTAINING HYPERBARIC CHAMBERS  | 3               | 6                | 4                | 4                                    |
| PERFORMING LIFE SUPPORT EQUIPMENT FUNCTIONS<br>ON LIFE SUPPORT EQUIPMENT OTHER THAN PRESSURE<br>SUITS | 11              | 10               | 5                | 3                                    |
| PERFORMING PRESSURE SUIT PHYSIOLOGICAL SUPPORT<br>FUNCTIONS   | 1               | 13               | 8                | *                                    |
| OPERATING OR MAINTAINING PHYSIOLOGICAL TRAINING<br>EQUIPMENT  | 7               | 3                | 2                | 1                                    |
| PERFORMING GENERAL AEROSPACE PHYSIOLOGY FUNCTIONS   | 10              | 8                | 5                | 6                                    |
| PERFORMING PHYSIOLOGICAL RESEARCH FUNCTIONS   | 1               | 2                | 6                | 2                                    |

\* INDICATES LESS THAN ONE PERCENT

TABLE 9

## DAFSC DISTRIBUTION ACROSS AEROSPACE PHYSIOLOGY SPECIALTY JOB GROUPS

| GROUP   | DAFSC | DAFSC | DAFSC | DAFSC                      |
|---|-------|-------|-------|----------------------------|
|   | 91130 | 91150 | 91170 | 91190/CEM<br>CODE<br>91100 |
| AEROSPACE PHYSIOLOGY OPERATIONS AND TRAINING<br>PERSONNEL | 32    | 86    | 26    | -                          |
| HALO SUPPORT NCOICs                                       | -     | 2     | 3     | -                          |
| AEROSPACE PHYSIOLOGY SUPERVISORS                          | -     | 7     | 40    | 16                         |
| ALTITUDE CHAMBER OPERATIONS SPECIALISTS                   | 16    | 19    | -     | -                          |
| ADMINISTRATIVE PERSONNEL                                  | 1     | 1     | 3     | -                          |
| HYPERBARIC MEDICINE PERSONNEL                             | -     | 1     | 2     | 1                          |
| LIFE SUPPORT EQUIPMENT PERSONNEL                          | -     | 33    | 20    | -                          |
| PHYSIOLOGICAL RESEARCH TECHNICIANS                        | -     | 3     | 11    | 1                          |
| NOT GROUPED   | 1     | 6     | -     | 3                          |
| TOTAL PERSONNEL   | 50    | 158   | 105   | 21                         |

TABLE 10

TASKS WHICH BEST DISTINGUISH DAFSC 91130 AND 91150 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

| TASK   | DAFSC<br>91130<br>(N=50) | DAFSC<br>91150<br>(N=158) | DIFFERENCE |
|--|--------------------------|---------------------------|------------|
| G170 PERFORM DAILY INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN<br>EXPERIMENTAL HYPOBARIC CHAMBERS    | 54                       | 33                        | 21         |
| K336 LUBRICATE EJECTION SEAT TRAINER TOWER RAILS   | 30                       | 10                        | 20         |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 78                       | 59                        | 19         |
| G171 PERFORM OXYGEN FLOW CHECKS ON NARROW PANEL PRESSURE DEMAND OXYGEN REGULATORS                              | 56                       | 37                        | 19         |
| I249 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF HELMETS   | 50                       | 32                        | 18         |
| I250 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF OXYGEN MASKS  | 50                       | 32                        | 18         |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH                                     | 82                       | 65                        | 17         |
| G172 PERFORM PERIODIC INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN<br>EXPERIMENTAL HYPOBARIC CHAMBERS | 44                       | 27                        | 17         |
| G175 REMOVE OR REPLACE HYPOBARIC CHAMBER INTERCOM SYSTEM COMPONENTS  | 42                       | 25                        | 17         |
| K345 PERFORM PERIODIC INSPECTIONS OF NIGHT VISION TRAINERS   | 36                       | 19                        | 17         |
| I223 CLEAN STUDENT CREW MEMBER PROTECTIVE HELMETS  | 44                       | 27                        | 17         |
| K334 CHANGE COMPRESSED AIR SUPPLY ON EJECTION SEAT TRAINERS  | 28                       | 11                        | 17         |
| I257 REMOVE OR REPLACE OXYGEN MASK COMPONENTS  | 50                       | 34                        | 16         |
| G177 REMOVE OR REPLACE OPERATOR PANEL INSTRUMENTS  | 42                       | 26                        | 16         |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES   | 66                       | 50                        | 16         |
| B40 SUPERVISE APPRENTICE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91130)   | 12                       | 28                        | -16        |
| B38 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)  | 4                        | 22                        | -18        |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 48                       | 66                        | -18        |
| D69 CONDUCT OJT  | 8                        | 27                        | -19        |
| J293 OPERATE PORTABLE LIQUID OXYGEN VENTILATION UNITS  | 0                        | 20                        | -20        |
| J313 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF FULL PRESSURE SUITS  | 2                        | 23                        | -21        |
| J281 CONNECT OR DISCONNECT CREW MEMBERS TO OR FROM AIRCRAFT SYSTEMS  | 0                        | 21                        | -21        |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 50                       | 72                        | -22        |
| J295 PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS   | 0                        | 22                        | -22        |
| G189 SERVE AS LECTURER OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 6                        | 28                        | -22        |
| J282 DRIVE PILOT TRANSPORT VANS  | 0                        | 23                        | -23        |
| J283 FILL PORTABLE LIQUID OXYGEN VENTILATION UNITS   | 0                        | 23                        | -23        |
| J276 ASSIST CREWMEMBERS IN DONNING FULL PRESSURE SUIT ASSEMBLIES   | 0                        | 24                        | -24        |
| J274 ASSIST CREWMEMBERS IN DOFFING FULL PRESSURE SUIT ASSEMBLIES   | 0                        | 25                        | -25        |
| G188 SERVE AS LECTURER OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 4                        | 32                        | -28        |

TABLE 11

TASKS WHICH BEST DISTINGUISH DAFSC 91150 AND 91170 PERSONNEL  
(PERCENT MEMEBERS PERFORMING)

| TASK   | DAFSC<br>91150<br>(N=158) | DAFSC<br>91170<br>(N=105) | DIFFERENCE |
|--|---------------------------|---------------------------|------------|
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH   | 65                        | 18                        | 47         |
| L371 CLEAN WORK AREAS  | 84                        | 51                        | 33         |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 78                        | 47                        | 31         |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 87                        | 63                        | 24         |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 65                        | 42                        | 23         |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 63                        | 43                        | 20         |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)   | 60                        | 40                        | 20         |
| K338 PAINT PHYSIOLOGICAL TRAINING DEVICES  | 28                        | 12                        | 16         |
| I219 ASSEMBLE LIFE SUPPORT EQUIPMENT, SUCH AS OXYGEN MASKS OR HELMETS  | 27                        | 11                        | 16         |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES   | 50                        | 34                        | 16         |
| I249 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF HELMETS   | 32                        | 17                        | 15         |
| I250 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF OXYGEN MASKS  | 32                        | 18                        | 14         |
| L383 PAINT ITEMS OTHER THAN PHYSIOLOGICAL TRAINING DEVICES   | 29                        | 15                        | 14         |
| G170 PERFORM DAILY INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN<br>EXPERIMENTAL HYPOBARIC CHAMBERS                | 33                        | 19                        | 14         |
| I257 REMOVE OR REPLACE OXYGEN MASK COMPONENTS  | 34                        | 20                        | 14         |
| G188 SERVE AS LECTURER OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 32                        | 56                        | -24        |
| G189 SERVE AS LECTURER OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 28                        | 60                        | -32        |
| C44 ANALYZE WORKLOAD REQUIREMENTS  | 10                        | 49                        | -39        |
| C46 EVALUATE COMPLIANCE WITH WORK PERFORMANCE STANDARDS  | 14                        | 53                        | -39        |
| A2 ASSIGN PERSONNEL TO DUTY POSITIONS  | 11                        | 52                        | -41        |
| A16 PLAN WORK ASSIGNMENTS  | 24                        | 67                        | -43        |
| B39 SUPERVISE AEROSPACE PHYSIOLOGY SUPERVISORS (AFSC 91170)  | 2                         | 45                        | -43        |
| D72 COUNSEL TRAINEES ON TRAINING PROGRESS  | 16                        | 60                        | -44        |
| A9 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), STANDARD<br>OPERATING PROCEDURES (SOP), OR EMERGENCY PLANS | 13                        | 57                        | -44        |
| C59 INDORSE AIRMAN PERFORMANCE REPORTS (APRs)  | 6                         | 50                        | -44        |
| B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES   | 18                        | 63                        | -45        |
| A21 UPDATE LOCAL OPERATING INSTRUCTIONS  | 15                        | 60                        | -45        |
| A5 DETERMINE WORK PRIORITIES   | 22                        | 70                        | -48        |
| B38 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)  | 22                        | 72                        | -50        |
| B43 WRITE CORRESPONDENCE   | 22                        | 72                        | -50        |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS   | 23                        | 80                        | -57        |

TABLE 12

TASKS WHICH BEST DISTINGUISH DAFSC 91170 AND DAFSC 91190/CEM CODE 91100 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

| TASK  | DAFSC<br>91170<br>(N=105) | DAFSC<br>91190/CEM<br>CODE 91100<br>(N=21) | DIFFERENCE |
|---|---------------------------|--|------------|
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS                                       | 53                        | 19   | 34         |
| B38 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)                                     | 72                        | 38   | 34         |
| L371 CLEAN WORK AREAS   | 51                        | 19   | 32         |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 56                        | 24   | 32         |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS  | 63                        | 33   | 30         |
| B40 SUPERVISE APPRENTICE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91130)                          | 52                        | 24   | 28         |
| E106 MAINTAIN STOCK LEVEL OR BLANK FORMS  | 32                        | 5  | 27         |
| D86 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS  | 46                        | 19   | 27         |
| F145 CONDUCT CLASSROOM INSTRUCTION ON GROUND EGRESS ESCAPE PROCEDURES                           | 44                        | 19   | 25         |
| F150 CONDUCT CLASSROOM INSTRUCTION ON PRINCIPLES AND PROCEDURES OF PARACHUTING                  | 44                        | 19   | 25         |
| E112 PREPARE DRAFT OF PHYSIOLOGICAL TRAINING MONTHLY REPORT FORMS (AF FORM 700)                 | 30                        | 5  | 25         |
| G169 ADD OIL TO VACUUM PUMPS  | 24                        | 0  | 24         |
| F163 INSTRUCT IN-FLIGHT EGRESS PRINCIPLES AND PROCEDURES WITHOUT THE USE OF PROCEDURAL TRAINERS | 37                        | 14   | 23         |
| G188 SERVE AS LECTURER OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS                              | 56                        | 33   | 23         |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                  | 65                        | 43   | 22         |
| C44 ANALYZE WORKLOAD REQUIREMENTS   | 50                        | 90   | -40        |
| C48 EVALUATE INSPECTION REPORTS OR PROCEDURES   | 45                        | 86   | -41        |
| A19 SCHEDULE LEAVES OR PASSES   | 38                        | 81   | -43        |
| C55 EVALUATE UNIT EMERGENCY PLANS   | 18                        | 62   | -44        |
| C49 EVALUATE JOB DESCRIPTIONS   | 31                        | 76   | -45        |
| L370 ATTEND STAFF MEETINGS  | 50                        | 95   | -45        |
| A6 DEVELOP ORGANIZATIONAL CHARTS  | 30                        | 76   | -46        |
| C45 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS   | 33                        | 81   | -48        |
| A3 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL   | 32                        | 81   | -49        |
| C57 EVALUATE WORKLOAD REQUIREMENTS  | 39                        | 90   | -51        |
| C54 EVALUATE SUGGESTIONS  | 29                        | 81   | -52        |
| C61 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING   | 33                        | 86   | -53        |
| A8 DRAFT BUDGET AND FINANCIAL REQUIREMENTS  | 28                        | 81   | -53        |
| A13 PLAN LAYOUT OF FACILITIES   | 20                        | 76   | -56        |
| B37 SCHEDULE TEMPORARY DUTIES (TDYs)  | 20                        | 76   | -56        |
| C52 EVALUATE SAFETY PROGRAMS  | 24                        | 81   | -57        |
| B22 CONDUCT STAFF MEETINGS  | 23                        | 81   | -58        |

## ANALYSIS OF MAJCOM GROUPS

As noted in the CAREER LADDER STRUCTURE section, differences in the jobs performed by incumbents can be attributed to the mission of a specific command or base and to the types of equipment incumbents have available. Therefore, an analysis of tasks and background data for the major command groups was performed to highlight the similarities and dissimilarities among Aerospace Physiology personnel assigned to the various commands. The most common tasks performed by personnel in all commands involved serving as crewmembers and briefers on hypobaric chamber flights. The only other tasks performed by a majority of personnel in all MAJCOM groups were routine tasks, such as cleaning work areas and attending military formations or performing squadron duties.

A list of representative tasks which best distinguish the MAJCOM groups is presented in Table 13. The listing is by no means complete, but does highlight differences between the various groups. As expected, some of the more unique tasks are performed by personnel assigned to Systems Command (AFSC), Strategic Air Command (SAC), and Air Training Command (ATC). Research tasks, such as connecting biomedical instrumentation to subjects and recording experimental data, are performed almost exclusively by personnel in AFSC. An exception to this is research chamber tasks which personnel in Logistics Command (AFLC) also perform. The pressure suit support tasks are peculiar to both AFSC and SAC. However, personnel at Edwards AFB (AFSC) appear to place more emphasis on pressure suit maintenance tasks, while Beale AFB (SAC) respondents also perform life support equipment functions involving maintenance of parachutes and survival kits as well as perform preflight physical examinations.

In contrast to other command groups, ATC personnel are responsible for providing one-time aerospace physiological training for undergraduate pilot and navigator trainees. Special training provided by these personnel includes initial water survival training and parachute training. As indicated in Table 13, SAC personnel indicated they provide water survival training. However, SAC personnel provide training for personnel wearing pressure suits.

As indicated by the representative tasks in Table 13, personnel from all commands do not perform tasks involving Hyperbaric chambers, high altitude low opening (HALO) equipment, and ejection seat training. Again, depending on the specific mission of the MAJCOM, the percentage of personnel who perform these types of functions will vary considerably. For example, hyperbaric chambers are strategically located to provide immediate medical support for personnel in need of compression therapy. In contrast, ejection seat training is emphasized by commands which have training and fighter aircraft.

Differences between MAJCOM personnel were also noted while reviewing the background information for survey respondents. Command groups could be readily distinguished by the number of incumbents who were in their first enlistment. Commands with the largest number of first-term incumbents included AFLC (57 percent), MAC (48 percent), SAC (48 percent), and ATC (41 percent). Personnel in AFSC (19 percent), TAC (29 percent), and both overseas commands, PACAF (33 percent) and USAFE (33 percent), normally have more experience.

Table 14 presents differences between the MAJCOM groups' responses to survey questions involving job satisfaction indicators. Responses by personnel assigned to USAFE, AF'LC, SAC, and PACAF imply they have lower job interest and perceived utilization of talents. Except for SAC respondents, at least 81 percent of each group said their job utilizes their training fairly well or better. Perhaps the most critical trend is that only three commands--ATC, PACAF, and TAC--had 60 percent or more of their respondents indicate plans to reenlist.

Data presented in this MAJCOM analysis provide a further implication that specialized training programs are needed in addition to the general aerospace physiology and chamber training provided at Brooks AFB. This supports the OJT programs presently provided at the base level. Career development course (CDC) material should also be considered as a possible method to provide incumbents information on the various equipment and tasks which are not common to all MAJCOM groups.

TABLE 13

REPRESENTATIVE TASKS WHICH DISTINGUISH MAJCOM GROUPS  
(PERCENT MEMBERS PERFORMING)

|  | AFSC<br>(N=53) | SAC<br>(N=104) | ATC<br>(N=80) | AFLC<br>(N=14) | MAC<br>(N=25) | PACAF<br>(N=12) | TAC<br>(N=31) | USAFE<br>(N=12) |
|--|----------------|----------------|---------------|----------------|---------------|-----------------|---------------|-----------------|
| CONNECT BIOMEDICAL INSTRUMENTATION TO SUBJECTS                         | 23             | 0              | 0             | 0              | 0             | 0               | 0             | 0               |
| OPERATE MEDIALOG REPRODUCER EQUIPMENT                                  | 25             | 1              | 0             | 0              | 0             | 0               | 0             | 0               |
| RECORD EXPERIMENTAL DATA   | 21             | 1              | 1             | 0              | 0             | 0               | 0             | 0               |
| SERVE AS CREW CHIEF ON RESEARCH CHAMBER FLIGHTS                        | 15             | 2              | 0             | 21             | 0             | 0               | 0             | 0               |
| ASSIST CREWMEMBERS IN DOFFING FULL PRESSURE<br>SUIT ASSEMBLIES         | 25             | 46             | 0             | 0              | 0             | 0               | 0             | 0               |
| DRIVE PILOT TRANSPORT VANS   | 21             | 42             | 0             | 0              | 0             | 0               | 0             | 0               |
| ISOLATE FULL PRESSURE SUIT MALFUNCTIONS                                | 19             | 36             | 0             | 0              | 0             | 0               | 0             | 0               |
| PERFORM PREFLIGHT PHYSICAL EXAMINATIONS                                | 0              | 33             | 0             | 0              | 0             | 0               | 0             | 0               |
| SIZE AND FIT FULL PRESSURE SUITS                                       | 25             | 15             | 0             | 0              | 0             | 0               | 0             | 0               |
| PACK SURVIVAL KITS   | 0              | 20             | 0             | 0              | 0             | 0               | 0             | 0               |
| PERFORM PREFLIGHT OR POSTFLIGHT INSPECTION OF<br>PARACHUTES            | 0              | 34             | 1             | 0              | 0             | 0               | 0             | 8               |
| OBSERVE STUDENTS DURING WATER SURVIVAL TRAINING                        | 4              | 12             | 64            | 0              | 0             | 0               | 0             | 0               |
| SERVE AS CREW CHIEF ON PARACHUTE FAMILIARIZATION<br>TRAINING TEAMS     | 0              | 1              | 67            | 0              | 0             | 0               | 0             | 0               |
| VISUALLY INSPECT SWING LANDING TRAINERS                                | 8              | 1              | 56            | 0              | 0             | 0               | 0             | 0               |
| LOAD OR UNLOAD PATIENTS INTO OR FROM HYPER-<br>BARIC CHAMBERS          | 23             | 26             | 0             | 100            | 0             | 75              | 0             | 0               |
| SERVE AS CHAMBER OPERATOR ON TREATMENT<br>CHAMBER DIVES                | 34             | 30             | 0             | 100            | 0             | 83              | 0             | 0               |
| INSTALL HALO OXYGEN SYSTEMS IN AIRCRAFT                                | 13             | 4              | 1             | 0              | 28            | 25              | 3             | 50              |
| OBSERVE HALO PARACHUTISTS  | 17             | 4              | 0             | 0              | 40            | 33              | 6             | 50              |
| BRIEF PREEJECTION PROCEDURES ON EJECTION<br>SEAT TRAINERS              | 15             | 15             | 70            | 0              | 12            | 50              | 26            | 50              |
| OBSERVE STUDENT PERFORMANCES DURING LIVE<br>FIRE EJECTION SEAT TRAINER | 17             | 10             | 76            | 0              | 8             | 42              | 39            | 75              |

TABLE 14

COMPARISON OF JOB SATISFACTION INDICATORS FOR  
MAJCOM GROUPS (PERCENT MEMBERS PERFORMING)

| <u>EXPRESSED JOB INTEREST:</u>            | <u>USAFE</u><br><u>(N=12)</u> | <u>AFLC</u><br><u>(N=14)</u> | <u>AFSC</u><br><u>(N=53)</u> | <u>ATC</u><br><u>(N=80)</u> | <u>MAC</u><br><u>(N=25)</u> | <u>PACAF</u><br><u>(N=12)</u> | <u>SAC</u><br><u>(N=104)</u> | <u>TAC</u><br><u>(N=31)</u> |
|---|-------------------------------|------------------------------|------------------------------|-----------------------------|-----------------------------|-------------------------------|------------------------------|-----------------------------|
| INTERESTING                               | 42                            | 41                           | 83                           | 89                          | 92                          | 75                            | 68                           | 81                          |
| <u>PERCEIVED UTILIZATION OF TALENTS:</u>  |                               |                              |                              |                             |                             |                               |                              |                             |
| FAIRLY WELL TO PERFECTLY                  | 58                            | 50                           | 83                           | 86                          | 88                          | 75                            | 74                           | 90                          |
| <u>PERCEIVED UTILIZATION OF TRAINING:</u> |                               |                              |                              |                             |                             |                               |                              |                             |
| FAIRLY WELL TO PERFECTLY                  | 100                           | 86                           | 81                           | 93                          | 100                         | 92                            | 71                           | 90                          |
| <u>REENLISTMENT PLANS:</u>                |                               |                              |                              |                             |                             |                               |                              |                             |
| PROBABLY YES OR YES                       | 50                            | 50                           | 55                           | 71                          | 56                          | 67                            | 52                           | 61                          |

## ANALYSIS OF EXPERIENCE (TAFMS) GROUPS

In addition to the skill level analysis, utilization patterns for survey respondents across various total active federal military service (TAFMS) groups were reviewed to determine differences in the tasks incumbents perform. Like most other career ladders, the trend for Aerospace Physiology respondents is to show an increase in the percentage of relative time spent on supervisory duties with increasing months TAFMS (see Table 15). However, the 911X0 career ladder is unusual in that it is not until the sixth enlistment (241+ months AFMS) that personnel devote the majority of their time to supervisory and managerial duties (Duties A through D). The shift usually occurs by the fifth enlistment in other specialties. This delayed progression is primarily the result of the Aerospace Physiology mission, which includes providing initial and refresher training for aircrew personnel, performing research on aerospace physiology equipment, and performing life support equipment and pressure suit support functions. The relative percent time spent data presented in Table 15 clearly indicate incumbents continue to support the various aspects of the Aerospace Physiology mission as their tenure increases.

Table 15 also indicates pressure suit support functions, such as performing preflight or postflight inspection of full pressure suits and assisting crewmembers in donning and doffing full pressure suit assemblies, are performed by personnel in their first four enlistments. The fact that the first enlistment and 5-skill level personnel perform these types of tasks indicates either that supervisory personnel at Beale AFB are upgrading personnel to the 5-skill level prior to training them on pressure suit support functions or that 91150 personnel coming from other units perform these functions.

Another trend can be seen in the time incumbents spend performing research functions. The relative amount of time spent by incumbents increases through the fourth enlistment. Then, as members become more involved in supervision and management functions, they spend less time on research related tasks.

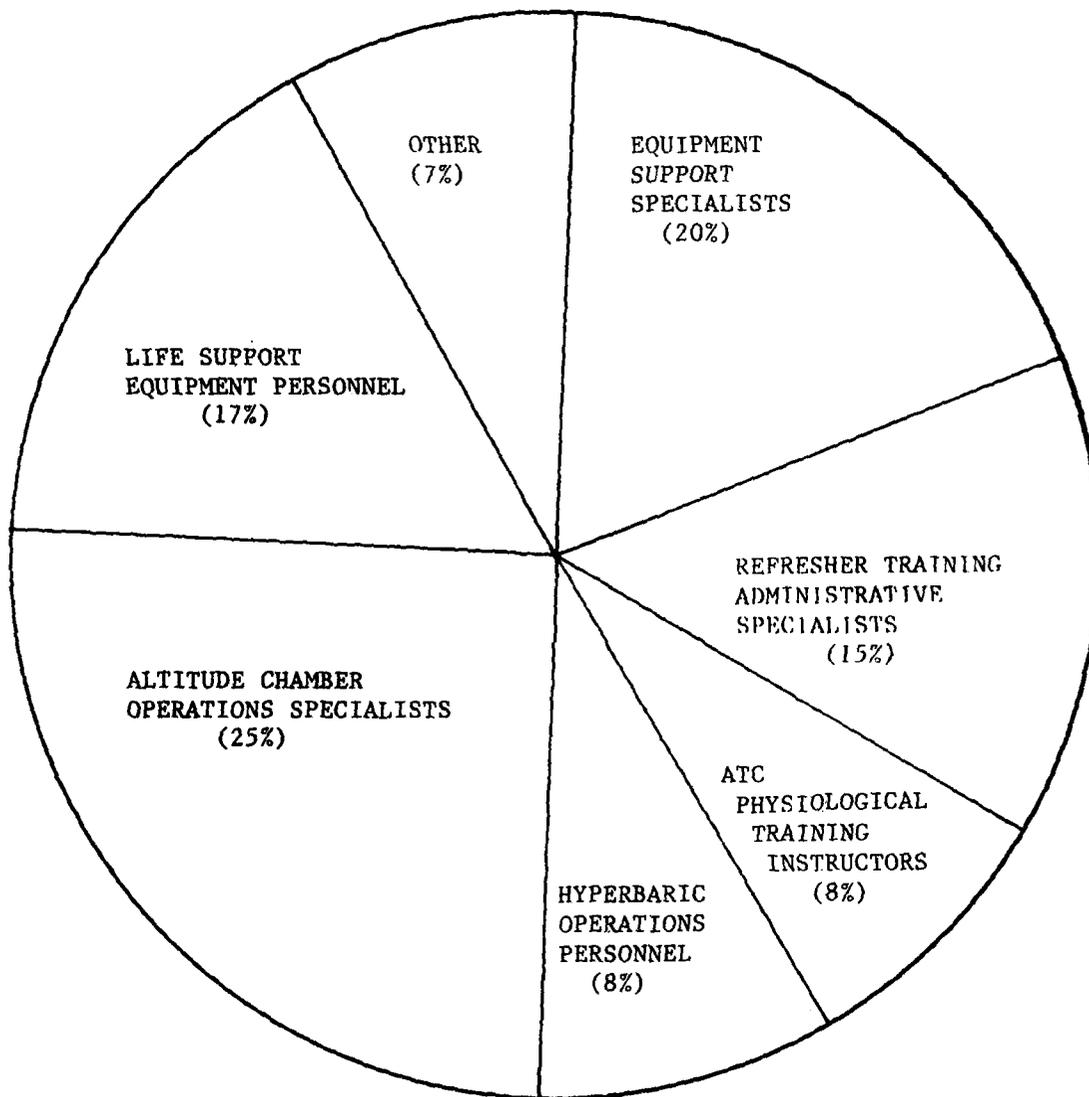
### First Enlistment Personnel

Because of the ongoing emphasis on Air Force training programs, the TAFMS analysis concentrates on first-term respondents for the purpose of providing data to help analyze training. Table 16 provides a list of the common tasks first-term respondents perform. As expected, most incumbents serve at the various crew positions on training chamber flights. In addition, they brief on rapid decompression during chamber flights and on the use of vertigon trainers. Incumbents also perform routine tasks, such as cut grass, trim shrubbery, police squadron areas, or dispose of trash.

Although the tasks listed above are characteristic of most first-enlistment personnel, other functions performed by these incumbents vary widely depending on the job they perform. Figure 2 presents the distribution of first-term 911X0 airmen across job groups identified in the CAREER LADDER STRUCTURE section. Most first-enlistment incumbents can be identified as

FIGURE 2

JOB GROUP DISTRIBUTION FOR FIRST-TERM 911XO AIRMEN  
(PERCENT OF FIRST ENLISTMENT PERSONNEL)  
(N=130)



either Altitude Chamber Operations Specialists, Equipment Support Specialists, Life Support Equipment Personnel, or Refresher Training Administrative Specialists. Tasks which are typical of first-term airmen in these groups are listed below with the respective job group:

Altitude Chamber Operations Specialists-

- Serve as chamber operator on training chamber flights
- Clean work areas
- Brief on rapid decompression during chamber flights
- Operate visual aid equipment, such as movie or slide projectors

Equipment Support Specialists-

- Perform daily inspection of hypobaric chamber assemblies other than experimental hypobaric chamber
- Perform periodic or 30-day inspections of helmets
- Add oil to vacuum pumps
- Recharge portable oxygen assemblies

Life Support Equipment Personnel-

- Assist crewmembers in doffing full pressure suit assemblies
- Perform occupied full pressure suit integration tests
- Drive pilot transport vans
- Connect or disconnect crewmembers to or from aircraft systems

Refresher Training Administrative Specialists-

- Prepare Chamber Flight Record forms (AF Form 701)
- Enter training data on Physiological Training Record forms (AF Form 702)
- Sign in students for classes

First-term incumbents who are identified as ATC Physiological Training Instructors or Hyperbaric Operations Personnel also perform tasks which are not typical of other job groups. The ATC instructors perform unique tasks such as conduct parachute landing fall training, serve as lecturer observer on training chamber flights, and serve as tower hookup crewmember on descent and landing techniques (DLT) training teams. The first-term Hyperbaric Operations personnel perform specialized tasks, such as serve as chamber operator or timekeeper on proficiency or treatment chamber dives.

Although personnel in their first job (1-24 months TAFMS) and second job (25-48 months TAFMS) perform similar tasks, there are some tasks which are more typically performed by the more experienced second job group. Approximately 20 percent more of the second job incumbents serve as crewmembers on equipment check flights. In addition, the 25-48 month TAFMS personnel are also more likely to perform tasks involving briefings and classroom instructions. Like the equipment check flight functions, these tasks require a good understanding of chamber equipment, as well as physiological functions. Therefore, it is not surprising that the more experienced personnel normally perform these tasks.

Although first-enlistment personnel perform a core of hypobaric chamber training tasks, the analysis of first-term data reveals the diverse job functions career field incumbents perform following their initial training. It also clearly indicates the importance of strong OJT programs to provide training on specialized equipment and functions not thoroughly covered in the technical school.

TABLE 15

## RELATIVE PERCENT TIME SPENT PERFORMING DUTIES BY AFMS GROUPS

| DUTY  | MONTHS AFMS     |                 |                  |                   |                   |                |
|---|-----------------|-----------------|------------------|-------------------|-------------------|----------------|
|   | 1-48<br>(N=130) | 49-96<br>(N=58) | 97-144<br>(N=41) | 145-192<br>(N=37) | 193-240<br>(N=39) | 241+<br>(N=28) |
| ORGANIZING AND PLANNING   | 1               | 3               | 5                | 8                 | 11                | 13             |
| DIRECTING AND IMPLEMENTING  | 2               | 5               | 7                | 9                 | 11                | 16             |
| INSPECTING AND EVALUATING   | *               | 3               | 4                | 7                 | 10                | 15             |
| TRAINING  | 8               | 9               | 8                | 10                | 10                | 11             |
| PERFORMING ADMINISTRATIVE FUNCTIONS   | 9               | 7               | 10               | 8                 | 6                 | 5              |
| CONDUCTING AEROSPACE PHYSIOLOGY INSTRUCTION   | 15              | 15              | 14               | 12                | 15                | 12             |
| OPERATING OR MAINTAINING HYPOBARIC CHAMBERS   | 23              | 20              | 15               | 13                | 13                | 11             |
| OPERATING OR MAINTAINING HYPERBARIC CHAMBERS  | 5               | 4               | 4                | 4                 | 5                 | 2              |
| PERFORMING LIFE SUPPORT EQUIPMENT FUNCTIONS ON LIFE SUPPORT EQUIPMENT OTHER THAN PRESSURE SUITS | 11              | 9               | 8                | 4                 | 5                 | 3              |
| PERFORMING PRESSURE SUIT PHYSIOLOGICAL SUPPORT FUNCTIONS  | 10              | 10              | 11               | 11                | 2                 | 2              |
| OPERATING OR MAINTAINING PHYSIOLOGICAL TRAINING EQUIPMENT                                       | 5               | 5               | 2                | 2                 | 3                 | 1              |
| PERFORMING GENERAL AEROSPACE PHYSIOLOGY FUNCTIONS   | 9               | 7               | 7                | 6                 | 5                 | 6              |
| PERFORMING PHYSIOLOGICAL RESEARCH FUNCTIONS   | 1               | 2               | 5                | 6                 | 4                 | 3              |

\* LESS THAN ONE PERCENT

TABLE 16  
COMMON TASKS PERFORMED BY FIRST-TERM RESPONDENTS  
(N=130)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| L371 CLEAN WORK AREAS  | 91                               |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 91                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 91                               |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 91                               |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 90                               |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 88                               |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH   | 83                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 75                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 68                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 65                               |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 65                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 64                               |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 63                               |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 62                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 62                               |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 62                               |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)   | 62                               |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 62                               |
| D88 OPERATE VISUAL AID EQUIPMENT, SUCH AS MOVIE OR SLIDE PROJECTORS  | 61                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS                 | 61                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 60                               |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER   | 59                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS               | 56                               |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES  | 56                               |
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 56                               |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES   | 55                               |
| I232 FIT STUDENT OR PATIENT OXYGEN MASKS   | 51                               |
| G197 VISUALLY INSPECT COMPONENTS OF PRESSURE DEMAND OXYGEN SYSTEMS, SUCH AS<br>PRESSURE DEMAND PORTABLE ASSEMBLIES | 50                               |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 49                               |

## JOB SATISFACTION INDICATORS

Job satisfaction data for Aerospace Physiology respondents were compared to combined satisfaction data for Medical specialties surveyed in 1979. (The total comparative sample of 2,349 respondents included the following AFSCs: 902X0, 902X2, 912X5, 913X0, and 915X0.) A comparison of data for these groups to the 911X0 group reveals whether incumbents in a specialty are more or less satisfied than members of related specialties. This aids managers in identifying positive or adverse trends which are characteristic of a specific career ladder.

Job interest, perceived utilization of talents and training, and reenlistment intentions for 911X0 AFMS groups are presented in Table 17 along with comparative data compiled for other medical specialties. The most disturbing finding indicated in this table is the low percentage of 911X0 second-job (25-48 months TAFMS) respondents who said they plan to reenlist. Although the difference is significant with respect to the comparative sample's responses, the dropoff in reenlistment intentions from that indicated by 911X0 first-job personnel is of greater importance. Survey data indicate that poor reenlistment intention for second-job personnel may be a problem for all MAJCOM groups since only one command had more than 50 percent of its 25-48 months respondents indicate they plan to reenlist. In contrast, 911X0 incumbents in their second and subsequent enlistments show slightly more favorable responses to the job satisfaction indicators than personnel in the comparative sample. The high percent members responding that their job utilizes their training indicates that all of these medical oriented specialties provide appropriate training.

TABLE 17

COMPARISON OF JOB SATISFACTION INDICATORS  
(PERCENT MEMBERS RESPONDING)

|   | 1-24 MONTHS AFMS         |                                   | 25-48 MONTHS AFMS        |                                   | 49-96 MONTHS AFMS        |                                   | 97+ MONTHS AFMS           |                                   |
|---|--------------------------|-----------------------------------|--------------------------|-----------------------------------|--------------------------|-----------------------------------|---------------------------|-----------------------------------|
|   | DAFSC<br>911X0<br>(N=66) | COMPARATIVE<br>SAMPLE*<br>(N=403) | DAFSC<br>911X0<br>(N=64) | COMPARATIVE<br>SAMPLE*<br>(N=557) | DAFSC<br>911X0<br>(N=58) | COMPARATIVE<br>SAMPLE*<br>(N=559) | DAFSC<br>911X0<br>(N=145) | COMPARATIVE<br>SAMPLE*<br>(N=830) |
| <u>EXPRESSED JOB INTEREST:</u>                |                          |                                   |                          |                                   |                          |                                   |                           |                                   |
| INTERESTING                                   | 76                       | 68                                | 64                       | 64                                | 72                       | 69                                | 86                        | 77                                |
| <u>PERCEIVED UTILIZATION<br/>OF TALENTS:</u>  |                          |                                   |                          |                                   |                          |                                   |                           |                                   |
| FAIRLY WELL TO<br>PERFECTLY                   | 67                       | 73                                | 66                       | 70                                | 83                       | 77                                | 88                        | 82                                |
| <u>PERCEIVED UTILIZATION<br/>OF TRAINING:</u> |                          |                                   |                          |                                   |                          |                                   |                           |                                   |
| FAIRLY WELL TO<br>PERFECTLY                   | 80                       | 82                                | 80                       | 75                                | 88                       | 78                                | 85                        | 83                                |
| <u>REENLISTMENT PLANS:</u>                    |                          |                                   |                          |                                   |                          |                                   |                           |                                   |
| PROBABLY YES OR YES                           | 45                       | 40                                | 33                       | 42                                | 69                       | 60                                | 73                        | 72                                |

\* COMPARATIVE SAMPLE WAS TAKEN FROM MEDICAL SPECIALTIES SURVEYED IN 1979

## ANALYSIS OF TASK FACTOR RATINGS

As discussed in the INTRODUCTION, task factor data were gathered from subject matter specialists to determine the difficulty level of tasks and to identify those tasks which should be emphasized in training first-term Aerospace Physiology personnel. These factors, when used with percent members performing data, provide valuable information which can assist training managers evaluate career ladder documents and insure training is tailored to meet the job requirements of career ladder incumbents.

### Task Difficulty

Table 18 lists tasks which are rated highest in task difficulty. Those tasks which the 54 raters indicate require the most time to learn involve research, pressure suit maintenance, and management orientated tasks. Acting as research or training program advisors, performing centrifuge research functions, isolating pressure suit equipment malfunctions, and drafting and evaluating budget or financial requirements are examples of the more difficult tasks. As expected, these types of tasks are performed primarily by 91170, 91190, and CEM Code 91100 incumbents.

In contrast with the above tasks, the least difficult tasks involve administrative, custodial, and life support equipment functions (see Table 19). Scoring tests and operating visual aid equipment are also some of the least difficult tasks identified in the survey.

### Training Emphasis

The 20 tasks rated highest in training emphasis for first-term airmen are presented in Table 20. Most of these tasks involve serving as crewmembers and briefers on chamber flights. Data indicate the greatest emphasis should be placed on training chamber flights, especially since the percent of first-term incumbents participating in training flights is also high. Other tasks rated high in training emphasis, but which are performed by fewer first-term respondents include conducting classroom instruction on use and care of oxygen equipment, entering training data on Physiological Training Record forms (AF Form 699), and removing or replacing oxygen mask components. Although these types of tasks are typical functions performed by personnel in their first enlistment, the low percent members performing data provide an indication that first-term airmen perform a variety of routine tasks in addition to their chamber functions. However, subject-matter specialists indicate through their ratings that tasks like those above involving administrative and some life support equipment functions require some type of formal training.

Tasks rated lowest in training emphasis are listed in Table 21. These tasks are all research and supervisory functions performed by 7-skill level supervisors or by Aerospace Physiology Superintendents and are inappropriate for first-term training. Other types of tasks rated low in training emphasis involve pressure suit maintenance and life support equipment functions performed by personnel at Beale AFB and Edwards AFB. Little emphasis was also placed on high altitude low opening (HALO) equipment since few units actually have responsibility for providing support for HALO operational missions.

TABLE 18

TASKS RATED MOST DIFFICULT BY 7-SKILL LEVEL  
AEROSPACE PHYSIOLOGY RESPONDENTS

| TASK   | TASK<br>DIFFICULTY<br>INDEX | PERCENT<br>MEMBERS<br>PERFORMING<br>(N=334) |
|--|-----------------------------|---|
| A1 ACT AS RESEARCH PROGRAM ADVISOR AT MAJOR COMMAND LEVEL  | 7.79                        | 3   |
| D77 DEVELOP TECHNICAL SCHOOL OR CAREER DEVELOPMENT COURSE<br>(CDC) CURRICULUM MATERIALS                                    | 7.44                        | 2   |
| J332 TEST AND EVALUATE NEW OR PROPOSED PRESSURE SUIT ASSEMBLIES  | 7.42                        | 6   |
| D64 ACT AS TRAINING PROGRAM ADVISOR AT MAJOR COMMAND LEVEL   | 7.34                        | 4   |
| M393 DESIGN SEAT CONFIGURATIONS FOR CENTRIFUGES  | 7.28                        | 1   |
| A8 DRAFT BUDGET AND FINANCIAL REQUIREMENTS   | 7.24                        | 18  |
| M403 OPERATE COMPUTER SYSTEMS  | 7.21                        | 2   |
| J289 ISOLATE PRESSURE SUIT OXYGEN REGULATOR MALFUNCTIONS   | 7.06                        | 10  |
| J285 ISOLATE FULL PRESSURE SUIT MALFUNCTIONS   | 7.04                        | 14  |
| J288 ISOLATE PRESSURE SUIT CONTROLLER MALFUNCTIONS   | 7.03                        | 10  |
| L384 PARTICIPATE IN AIRCRAFT ACCIDENT INVESTIGATIONS   | 6.98                        | 3   |
| M400 MIX AND ANALYZE BREATHING GASES   | 6.97                        | 2   |
| A9 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI),<br>STANDARD OPERATING PROCEDURES (SOP), OR EMERGENCY PLANS | 6.94                        | 30  |
| C45 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS  | 6.94                        | 19  |
| M392 CONSTRUCT SEAT CONFIGURATIONS FOR CENTRIFUGES   | 6.92                        | 1   |
| M406 OPERATE IN-FLIGHT PHYSIOLOGICAL DATA ACQUISITION SYSTEM<br>(IFPDAS) DATA REPRODUCERS                                  | 6.79                        | 1   |
| C63 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS   | 6.79                        | 11  |
| L385 PARTICIPATE IN AIRCRAFT PHYSIOLOGICAL INCIDENT INVESTIGATIONS   | 6.73                        | 4   |
| J286 ISOLATE PARTIAL PRESSURE SUIT MALFUNCTIONS  | 6.72                        | 10  |
| M397 INSTALL GAS SYSTEMS ON CENTRIFUGE ACCORDING TO G PROFILE  | 6.67                        | 1   |

TABLE 19

TASKS RATED LEAST DIFFICULT BY 7-SKILL LEVEL  
AEROSPACE PHYSIOLOGY RESPONDENTS

| TASK   | TASK<br>DIFFICULTY<br>INDEX | PERCENT<br>MEMBERS<br>PERFORMING<br>(N=334) |
|--|-----------------------------|---|
| I263 STORE OXYGEN EQUIPMENT  | 3.17                        | 29  |
| I262 STORE LIFE RAFTS  | 3.14                        | 4   |
| H200 CLEAN HYPERBARIC CHAMBERS   | 3.09                        | 15  |
| I264 STORE PARACHUTE HARNESES  | 3.05                        | 9   |
| I265 STORE PARACHUTES  | 3.01                        | 8   |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES   | 3.00                        | 47  |
| I269 TRANSPORT PROTECTIVE EQUIPMENT TO OR FROM FLIGHTLINE  | 2.99                        | 8   |
| D88 OPERATE VISUAL AID EQUIPMENT, SUCH AS MOVIE OR SLIDE<br>PROJECTORS   | 2.97                        | 52  |
| E97 ENTER TRAINING DATA ON PHYSIOLOGICAL TRAINING RECORD FORMS<br>(AF FORM 699)  | 2.97                        | 33  |
| I270 TRANSPORT PROTECTIVE EQUIPMENT TO VARIOUS AGENCIES FOR<br>INSPECTION OR REPAIR                                    | 2.96                        | 4   |
| I223 CLEAN STUDENT CREWMEMBER PROTECTIVE HELMETS   | 2.93                        | 26  |
| L374 DRIVE GOVERNMENT VEHICLES OTHER THAN PILOT TRANSPORT VANS<br>OR TRUCKS USED IN PARACHUTE FAMILIARIZATION TRAINING | 2.92                        | 32  |
| E120 PREPARE TEMPORARY ISSUE RECEIPT FORMS (AF FORM 1297)  | 2.87                        | 20  |
| G169 ADD OIL TO VACUUM PUMPS   | 2.85                        | 31  |
| I222 CLEAN STUDENT CLOTH HELMETS   | 2.80                        | 12  |
| L383 PAINT ITEMS OTHER THAN PHYSIOLOGICAL TRAINING DEVICES   | 2.74                        | 23  |
| D92 SCORE TESTS  | 2.71                        | 36  |
| L371 CLEAN WORK AREAS  | 2.41                        | 71  |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR<br>DISPOSE OF TRASH  | 2.30                        | 49  |
| D93 SIGN IN STUDENTS FOR CLASSES   | 2.28                        | 32  |

TABLE 20

TASKS RATED HIGHEST IN TRAINING EMPHASIS  
FOR FIRST-TERM AEROSPACE PHYSIOLOGY PERSONNEL

| TASK   | TRAINING<br>EMPHASIS<br>RATING | PERCENT<br>MEMBERS<br>PERFORMING<br>(N=130) |
|--|--------------------------------|---|
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 7.53                           | 91  |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 7.21                           | 91  |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 7.19                           | 91  |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 7.15                           | 90  |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 7.11                           | 88  |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 6.79                           | 75  |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)   | 6.60                           | 62  |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSTRUCTION PROCEDURES<br>PRIOR TO HYPOBARIC CHAMBER FLIGHTS              | 6.42                           | 56  |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 6.30                           | 44  |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 6.26                           | 48  |
| G170 PERFORM DAILY INSPECTIONS OF HYPOBARIC CHAMBER ASSEMBLIES<br>OTHER THAN EXPERIMENTAL HYPOBARIC CHAMBERS       | 6.13                           | 41  |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS<br>DURING HYPOBARIC CHAMBER FLIGHTS                 | 6.09                           | 61  |
| F151 CONDUCT CLASSROOM INSTRUCTION ON USE AND CARE OF OXYGEN<br>EQUIPMENT  | 6.06                           | 38  |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 6.04                           | 48  |
| G197 VISUALLY INSPECT COMPONENTS OF PRESSURE DEMAND OXYGEN<br>SYSTEMS, SUCH AS PRESSURE DEMAND PORTABLE ASSEMBLIES | 6.00                           | 50  |
| E97 ENTER TRAINING DATA ON PHYSIOLOGICAL TRAINING RECORD FORMS<br>(AF FORM 699)                                    | 5.83                           | 38  |
| G178 REMOVE OR REPLACE OXYGEN EQUIPMENT ITEMS ON HYPOBARIC CHAMBER<br>CONSOLES                                     | 5.79                           | 30  |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER<br>FLIGHTS   | 5.77                           | 49  |
| I257 REMOVE OR REPLACE OXYGEN MASK COMPONENTS  | 5.77                           | 39  |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER<br>FLIGHTS   | 5.74                           | 62  |

TABLE 21

TASKS RATED LOWEST IN TRAINING EMPHASIS  
FOR FIRST-TERM AEROSPACE PHYSIOLOGY PERSONNEL

| TASK   | TRAINING<br>EMPHASIS<br>RATING | PERCENT<br>MEMBERS<br>PERFORMING<br>(N=130) |
|--|--------------------------------|---|
| M412 PERFORM AS CENTRAL OBSERVER ON CENTRIFUGES  | .06                            | *   |
| M413 PERFORM AS CENTRIFUGE OPERATOR/CREW CHIEF   | .06                            | *   |
| M414 PERFORM DAILY INSPECTIONS OF HUMAN EXPERIMENTAL HYPOBARIC OR<br>HYPERBARIC CHAMBERS       | .06                            | 2   |
| M433 REMOVE OR INSTALL AUTOMATIC CONTROLLERS ON RESEARCH<br>CHAMBERS                           | .06                            | *   |
| E126 REVIEW RESEARCH SUBJECT RECORDS FOR COMPLIANCE WITH THE<br>HUMAN USE COMMITTEE DIRECTIVES | .04                            | 2   |
| M409 OPERATE TREADMILLS IN HYPOBARIC CHAMBERS  | .04                            | *   |
| M420 PERFORM PERIODIC INSPECTIONS OF HYPOBARIC CHAMBER FIRE<br>SUPPRESSION SYSTEMS             | .04                            | *   |
| M424 PERFORM PLUMBING MODIFICATIONS TO SEALED ENVIRONMENTAL<br>CHAMBERS                        | .04                            | 2   |
| M389 CALIBRATE AUTOMATIC CONTROLLERS ON RESEARCH CHAMBERS                                      | .02                            | 2   |
| M444 TEST AND EVALUATE AEROMEDICAL EVACUATION EQUIPMENT,<br>SUCH AS RESPIRATORS OR INCUBATORS  | .02                            | *   |
| A1 ACT AS RESEARCH PROGRAM ADVISOR AT MAJOR COMMAND LEVEL                                      | .00                            | *   |
| B39 SUPERVISE AEROSPACE PHYSIOLOGY SUPERVISORS (AFSC 91170)                                    | .00                            | *   |
| B41 SUPERVISE CIVILIANS  | .00                            | *   |
| B42 SUPERVISE PERSONNEL WITH AFSCs OTHER THAN 911X0  | .00                            | 1   |
| D64 ACT AS TRAINING PROGRAM ADVISOR AT MAJOR COMMAND LEVEL                                     | .00                            | 1   |
| M410 PERFORM ANNUAL INSPECTIONS OF TEMPERATURE CHAMBER HEATING<br>SYSTEMS                      | .00                            | *   |
| M411 PERFORM ANNUAL INSPECTIONS OF TEMPERATURE CHAMBER<br>REFRIGERATION SYSTEMS                | .00                            | *   |
| M425 PERFORM PRE- OR POST-RUN INSPECTIONS ON CENTRIFUGE  | .00                            | *   |
| M427 PERFORM SPECIAL INSPECTIONS OF PORTABLE SMALL ANIMAL<br>HYPERBARIC OR HYPOBARIC CHAMBERS  | .00                            | *   |
| M428 PERFORM WEEKLY INSPECTIONS OF CENTRIFUGE AND RELATED<br>EQUIPMENT                         | .00                            | *   |

\* LESS THAN ONE PERCENT

## ANALYSIS OF CAREER LADDER DOCUMENTS

Since occupational survey information is gathered from career ladder incumbents, it provides excellent data which can be used to determine if critical career ladder documents, such as AFR 39-1 specialty descriptions and the specialty training standard (STS), are accurate and comprehensive. It is essential that these documents reflect actual career ladder information because of the impact they have on personnel and training decisions made by Air Force managers.

### AFR 39-1 Specialty Descriptions

Survey data were compared with the AFR 39-1 specialty descriptions for Aerospace Physiology Specialists, Technicians, and Superintendents. Overall, the 911X0 specialty descriptions provide excellent overviews of the tasks and functions performed by career ladder incumbents. The only exception is the deletion of specific reference to pressure suit support functions in the 7-skill level job description. Approximately 20 percent of the 91150 and 91170 respondents reported performing pressure suit tasks, such as assisting crewmembers in donning and doffing full pressure suit assemblies, performing periodic maintenance of full pressure suits, and performing overhead inspections of full pressure suits. Pressure suit functions are presently stated in the specialty descriptions for Aerospace Physiology Specialist and should also be considered for reference in the 91170 specialty description.

### STS 911X0

Survey and task factor data were also used to examine the 911X0 Specialty Training Standard (STS), dated February 1979. Subject-matter specialists from the USAF School of Aerospace Medicine assisted in this analysis by matching inventory tasks to related STS paragraphs. A computerized matching was then made, pairing task data such as training emphasis ratings, task difficulty ratings and percent members performing data for skill level groups to the respective tasks matched to the STS paragraphs. This provided information to assess the accuracy and completeness of the STS. The computer matchings for the 911X0 STS were furnished to training curriculum personnel at the USAF School of Aerospace Medicine to help evaluate training requirements and projected course changes for 911X0 personnel.

Like AFR 39-1, STS 911X0 provides very good coverage of the career ladder. However, one area which should be considered for more emphasis involves the pressure suit functions performed by approximately 20 percent of the 5- and 7-skill level incumbents. The STS only references knowledge of pressure suit items. Incumbents at Beale AFB and Edwards AFB could be trained to perform the pressure suit functions to a specified proficiency level through a formal OJT program.

## COMPARISON TO PREVIOUS SURVEY

Results of this study were compared to the findings of the May 1974 report on the Physiological Training career ladder. Overall, the comparison indicated the 911X0 specialty to be very stable with respect to the jobs incumbents perform. The only area where even minor differences occurred involved reenlistment intentions. The percentages of third (100 percent) and fifth (62 percent) enlistment respondents in the earlier survey who indicated they will reenlist were slightly higher than those of their counterparts in the present study (80 and 54 percent, respectively). Although the current figures remain relatively high, personnel performing subsequent surveys should monitor these groups for possible adverse trends.

A major comparison included in the 1974 survey involved examination of similar life support equipment and pressure suit support functions performed by 911X0 Aerospace Physiology and 922X0 Aircrew Life Support personnel. While the maintenance of life support equipment is a primary responsibility for 922X0 incumbents, 911X0 personnel perform life support equipment tasks as secondary functions in the process of providing aircrew personnel required aerospace physiology training. Therefore, a comparison of current job data to the September 1975 survey of Aircrew Life Support Specialists indicates that although 911X0 and 922X0 personnel perform some life support tasks in common, their overall job structure is different.

A notable exception, however, involves the 911X0 and 922X0 personnel assigned to Beale AFB. The 1975 Aircrew Life Support study identified a unique group of pressure suit specialists who perform tasks involving fitting and maintaining pressure suits. Table 22 presents a list of tasks used in the 1975 job inventory (AFPT 90-922-194) which were identical to or closely matched the tasks performed by 911X0 incumbents in the current study. As indicated by the data, members of both specialties perform the same types of pressure suit maintenance and support tasks, such as assisting crewmembers in doffing and donning pressure suits, fitting pressure suits, and transporting pressure suited aircrew members to or from aircraft. Although members of both specialties perform a common core of tasks, no inference can be made that jobs are the same until personnel in both AFSCs are surveyed together.

TABLE 22

TASKS PERFORMED BY DAFSC 911X0 AND 922X0 PERSONNEL  
(MEMBERS PERFORMING)

| <u>TASK</u>   | <u>DAFSC<br/>911X0<br/>(N=334)</u> | <u>DAFSC<br/>922X0*<br/>(N=1,470)</u> |
|---|------------------------------------|---------------------------------------|
| ADJUST PRESSURE SUITS AFTER INITIAL ISSUE AND FITTING   | 25                                 | 19                                    |
| ASSEMBLE OR DISASSEMBLE PRESSURE SUIT HARDWARE, SUCH AS NECK RINGS, WRIST RINGS, OR URINE COLLECTION VALVES | 46                                 | 16                                    |
| ASSIST AIRCREW MEMBERS IN DOFFING PRESSURE SUITS  | 61                                 | 22                                    |
| ASSIST AIRCREW MEMBERS IN DONNING PRESSURE SUITS  | 61                                 | 24                                    |
| CALIBRATE PRESSURE SUIT TEST EQUIPMENT  | 21                                 | 9                                     |
| CLEAN PRESSURE SUITS  | 48                                 | 15                                    |
| FIT PRESSURE SUITS  | 18                                 | 16                                    |
| HOOK OR UNHOOK PRESSURE SUIT CONNECTIONS FROM AIRCRAFT  | 51                                 | 19                                    |
| MAINTAIN SUPPLY OF SPARE PARTS FOR PRESSURE SUITS   | 21                                 | 13                                    |
| PERFORM PREFLIGHT, POSTFLIGHT, OR DAILY INSPECTIONS OF PRESSURE SUIT OR RELATED EQUIPMENT                   | 53                                 | 18                                    |
| TRANSPORT PRESSURE SUITED AIRCREW MEMBERS TO OR FROM AIRCRAFT   | 55                                 | 20                                    |

\* DATA FOR AIRCREW LIFE SUPPORT SPECIALISTS EXTRACTED FROM OSR COMPUTER PRINTOUTS, DATED SEPTEMBER 1975

## DISCUSSION

The only tasks which are common to the majority of Aerospace Physiology personnel are those which involve serving as crewmembers and briefing on training chamber flights. Additional tasks performed by career ladder incumbents vary considerable with the type of equipment and mission of the assigned base and MAJCOM. Because of these differences, data in this report perhaps provide greatest use by training managers. This study clearly supports the continued need for a strong centralized training program at Brooks AFB which emphasizes chamber and training equipment, such as ejection seat and vertigon trainers, which are typically used and maintained by first-term personnel in most commands. Consequently, it is also necessary that an efficient OJT program continue to provide training for personnel on equipment such as hyperbaric chambers, pressure suit equipment, and parachute and water survival training devices. In order to provide greater opportunity for career ladder progression, consideration should be given to providing incumbents CDC material on functions, such as those above, which are not common across commands.

Perhaps the greatest training challenge exists at Beale AFB and Edwards AFB because of the unique pressure suit functions incumbents must learn. This training role is even more complicated at Beale AFB since both 911X0 personnel and 922X0 incumbents must be trained to do similar tasks. Because of the need to provide this unique type of training for both groups, personnel in both AFSCs at Beale AFB should be surveyed together when the next 922X0 or 911X0 survey is administered. If the current survey implication is substantiated that the jobs are similar, the results should lead classification and manpower personnel to determine if the mission could be more appropriately performed by one of these two specialties instead of having to train two groups with separate backgrounds to perform the same job.

APPENDIX A

REPRESENTATIVE TASKS PERFORMED BY AEROSPACE PHYSIOLOGY  
OPERATIONS AND TRAINING PERSONNEL  
(N=144)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 99                               |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 97                               |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 97                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 97                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 93                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                 | 91                               |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 90                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 88                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS   | 87                               |
| L371 CLEAN WORK AREAS  | 85                               |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 85                               |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 84                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS | 83                               |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS                                       | 82                               |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 81                               |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                  | 78                               |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                                   | 77                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 77                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                    | 77                               |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 76                               |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES  | 74                               |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                       | 74                               |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)   | 73                               |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 73                               |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 73                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS                                     | 72                               |
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 70                               |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH                           | 65                               |
| D88 OPERATE VISUAL AID EQUIPMENT, SUCH AS MOVIE OR SLIDE PROJECTORS                                  | 65                               |
| F151 CONDUCT CLASSROOM INSTRUCTION ON USE AND CARE OF OXYGEN EQUIPMENT                               | 65                               |

REPRESENTATIVE TASKS PERFORMED BY SUPPLY NCOICs  
(N=10)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| L378 MAINTAIN BASE SUPPLY ACCOUNTS   | 100                              |
| L379 MAINTAIN MEDICAL EQUIPMENT ACCOUNTS   | 100                              |
| L380 MAINTAIN MEDICAL SUPPLY ACCOUNTS  | 100                              |
| L377 MAINTAIN BASE EQUIPMENT ACCOUNTS  | 100                              |
| A8 DRAFT BUDGET AND FINANCIAL REQUIREMENTS   | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 100                              |
| C45 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS  | 90                               |
| L376 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES   | 90                               |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 90                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 90                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS | 90                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 90                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS   | 90                               |
| G189 SERVE AS LECTURER OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                | 90                               |
| E119 PREPARE REQUISITION FOR SUPPLIES OR EQUIPMENT   | 80                               |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 80                               |
| L371 CLEAN WORK AREAS  | 80                               |
| F151 CONDUCT CLASSROOM INSTRUCTION ON USE AND CARE OF OXYGEN EQUIPMENT                               | 80                               |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                  | 80                               |
| D90 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT   | 70                               |
| A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES                               | 70                               |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 70                               |
| C51 EVALUATE PROCEDURES FOR STORAGE, INVENTORY, OR INSPECTION OF<br>PROPERTY ITEMS                   | 70                               |
| F147 CONDUCT CLASSROOM INSTRUCTION ON PRINCIPLES AND PROBLEMS ASSOCIATED<br>WITH NIGHT VISION        | 70                               |
| F148 CONDUCT CLASSROOM INSTRUCTION ON PRINCIPLES AND PROBLEMS OF AIRCRAFT<br>PRESSURIZATION          | 70                               |
| C50 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT OR SUPPLIES                                  | 70                               |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)   | 70                               |
| D69 CONDUCT OJT  | 70                               |

REPRESENTATIVE TASKS PERFORMED BY EQUIPMENT SUPPORT SPECIALISTS  
(N=42)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 98                               |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 98                               |
| L371 CLEAN WORK AREAS  | 95                               |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 95                               |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 95                               |
| G177 REMOVE OR REPLACE OPERATOR PANEL INSTRUMENTS  | 95                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 95                               |
| G170 PERFORM DAILY INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN<br>EXPERIMENTAL HYPOBARIC CHAMBERS        | 93                               |
| I249 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF HELMETS   | 93                               |
| G178 REMOVE OR REPLACE OXYGEN EQUIPMENT ITEMS ON HYPOBARIC CHAMBER CONSOLES  | 93                               |
| G171 PERFORM OXYGEN FLOW CHECKS ON NARROW PANEL PRESSURE DEMAND OXYGEN<br>REGULATORS                               | 93                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 93                               |
| G169 ADD OIL TO VACUUM PUMPS   | 93                               |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 93                               |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES   | 90                               |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 90                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 88                               |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH   | 88                               |
| I250 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF OXYGEN MASKS  | 88                               |
| G175 REMOVE OR REPLACE HYPOBARIC CHAMBER INTERCOM SYSTEM COMPONENTS  | 88                               |
| I257 REMOVE OR REPLACE OXYGEN MASK COMPONENTS  | 86                               |
| G172 PERFORM PERIODIC INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER<br>THAN EXPERIMENTAL HYPOBARIC CHAMBERS     | 86                               |
| G176 REMOVE OR REPLACE HYPOBARIC CHAMBER OXYGEN PLUMBING, SUCH AS TUBING<br>OR FITTINGS                            | 86                               |
| G197 VISUALLY INSPECT COMPONENTS OF PRESSURE DEMAND OXYGEN SYSTEMS, SUCH AS<br>PRESSURE DEMAND PORTABLE ASSEMBLIES | 83                               |
| G173 PERFORM SPECIAL INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN<br>EXPERIMENTAL HYPOBARIC CHAMBERS      | 83                               |
| K343 PERFORM DAILY INSPECTIONS OF VERTIGON TRAINERS  | 83                               |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 83                               |
| I263 STORE OXYGEN EQUIPMENT  | 81                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 81                               |

REPRESENTATIVE TASKS PERFORMED BY HYPERBARIC MAINTENANCE SPECIALISTS  
(N=6)

| TASK  | PERCENT MEMBERS PERFORMING |
|---|----------------------------|
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                        |
| L371 CLEAN WORK AREAS   | 100                        |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS  | 100                        |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS  | 100                        |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                        |
| H211 SERVE AS CREW CHIEF/LOCK OPERATOR ON TREATMENT CHAMBER DIVES   | 100                        |
| H199 CHARGE COMPRESSED AIR FLASKS   | 100                        |
| H208 SERVE AS CHAMBER OPERATOR ON PROFICIENCY CHAMBER DIVES   | 100                        |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 100                        |
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 100                        |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 100                        |
| H210 SERVE AS CREW CHIEF/LOCK OPERATOR ON PROFICIENCY CHAMBER DIVES   | 100                        |
| H214 SERVE AS RECORDER ON PROFICIENCY CHAMBER DIVES   | 100                        |
| G170 PERFORM DAILY INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN EXPERIMENTAL HYPOBARIC CHAMBERS    | 100                        |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH                                  | 100                        |
| H209 SERVE AS CHAMBER OPERATOR ON TREATMENT CHAMBER DIVES   | 100                        |
| H212 SERVE AS INSIDE OBSERVER ON PROFICIENCY CHAMBER DIVES  | 100                        |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 100                        |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 100                        |
| H201 LOAD OR UNLOAD PATIENTS INTO OR FROM HYPERBARIC CHAMBERS   | 100                        |
| H217 SERVE AS TIMEKEEPER ON TREATMENT CHAMBER DIVES   | 100                        |
| G169 ADD OIL TO VACUUM PUMPS  | 100                        |
| G177 REMOVE OR REPLACE OPERATOR PANEL INSTRUMENTS   | 100                        |
| G178 REMOVE OR REPLACE OXYGEN EQUIPMENT ITEMS ON HYPOBARIC CHAMBER CONSOLES                                 | 100                        |
| G172 PERFORM PERIODIC INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN EXPERIMENTAL HYPOBARIC CHAMBERS | 100                        |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES  | 100                        |
| L386 SOLDER WIRING  | 83                         |
| I249 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF HELMETS  | 83                         |
| M418 PERFORM DAILY INSPECTIONS OF VACUUM PUMP SYSTEMS   | 83                         |
| K336 LUBRICATE EJECTION SEAT TRAINER TOWER RAILS  | 83                         |
| K337 MAINTAIN TIME CHANGE CHARTS FOR PHYSIOLOGICAL TRAINING   | 83                         |
| I257 REMOVE OR REPLACE OXYGEN MASK COMPONENTS   | 83                         |
| K338 PAINT PHYSIOLOGICAL TRAINING DEVICES   | 83                         |
| K349 PERFORM PHASE I INSPECTIONS OF EJECTION SEAT TRAINERS  | 83                         |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 83                         |

REPRESENTATIVE TASKS PERFORMED BY EQUIPMENT MAINTENANCE SPECIALISTS  
(N=13)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH                                  | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G170 PERFORM DAILY INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN EXPERIMENTAL HYPOBARIC CHAMBERS    | 100                              |
| I250 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF OXYGEN MASKS   | 100                              |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| I257 REMOVE OR REPLACE OXYGEN MASK COMPONENTS   | 100                              |
| I249 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF HELMETS  | 100                              |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS  | 100                              |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES  | 100                              |
| G177 REMOVE OR REPLACE OPERATOR PANEL INSTRUMENTS   | 100                              |
| G169 ADD OIL TO VACUUM PUMPS  | 100                              |
| G174 RECHARGE BATTERIES FOR HYPOBARIC CHAMBER EMERGENCY SYSTEMS   | 100                              |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 100                              |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 100                              |
| L371 CLEAN WORK AREAS   | 92                               |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS  | 92                               |
| G178 REMOVE OR REPLACE OXYGEN EQUIPMENT ITEMS ON HYPOBARIC CHAMBER CONSOLES                                 | 92                               |
| I231 FIT STUDENT OR CREWMEMBER PROTECTIVE HELMETS   | 92                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES  | 92                               |
| I263 STORE OXYGEN EQUIPMENT   | 92                               |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES   | 92                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS  | 92                               |
| G175 REMOVE OR REPLACE HYPOBARIC CHAMBER SYSTEM COMPONENTS  | 92                               |
| G171 PERFORM OXYGEN FLOW CHECKS ON NARROW PANEL PRESSURE DEMAND OXYGEN REGULATORS                           | 92                               |
| L386 SOLDER WIRING  | 92                               |
| I259 REMOVE OR REPLACE STUDENT OR CREWMEMBER PROTECTIVE HELMET COMPONENTS                                   | 92                               |
| I232 FIT STUDENT OR PATIENT OXYGEN MASKS  | 85                               |
| E122 RECORD INSPECTION DATA ON HELMETS AND OXYGEN MASK/CONNECTOR INSPECTION DATA FORMS (AFTO FORM 334)      | 85                               |
| G172 PERFORM PERIODIC INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN EXPERIMENTAL HYPOBARIC CHAMBERS | 85                               |
| I244 PERFORM INSPECTION OF OXYGEN MASK TO REGULATOR CONNECTION ASSEMBLIES                                   | 85                               |
| F151 CONDUCT CLASSROOM INSTRUCTION ON USE AND CARE OF OXYGEN EQUIPMENT                                      | 85                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO HYPOBARIC CHAMBER FLIGHTS           | 85                               |
| K343 PERFORM DAILY INSPECTIONS OF VERTIGON TRAINERS   | 85                               |

REPRESENTATIVE TASKS PERFORMED BY ATC EQUIPMENT SPECIALISTS  
(N=15)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G178 REMOVE OR REPLACE OXYGEN EQUIPMENT ITEMS ON HYPOBARIC CHAMBER<br>CONSOLES                              | 100                              |
| G171 PERFORM OXYGEN FLOW CHECKS ON NARROW PANEL PRESSURE DEMAND OXYGEN<br>REGULATORS                        | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                              |
| I249 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF HELMETS  | 100                              |
| G176 REMOVE OR REPLACE HYPOBARIC CHAMBER OXYGEN PLUMBING, SUCH AS<br>TUBING OR FITTINGS                     | 100                              |
| G177 REMOVE OR REPLACE OPERATOR PANEL INSTRUMENTS   | 100                              |
| K336 LUBRICATE EJECTION SEAT TRAINER TOWER RAILS  | 100                              |
| K345 PERFORM PERIODIC INSPECTIONS OF NIGHT VISION TRAINERS  | 100                              |
| K343 PERFORM DAILY INSPECTIONS OF VERTIGON TRAINERS   | 100                              |
| L371 CLEAN WORK AREAS   | 93                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS  | 93                               |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS  | 93                               |
| G170 PERFORM DAILY INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER<br>THAN EXPERIMENTAL HYPOBARIC CHAMBERS | 93                               |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS   | 93                               |
| G157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER  | 93                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS  | 93                               |
| G175 REMOVE OR REPLACE HYPOBARIC CHAMBER INTERCOM SYSTEM COMPONENTS   | 93                               |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES  | 93                               |
| G169 ADD OIL TO VACUUM PUMPS  | 93                               |
| L351 PERFORM PHASE III INSPECTIONS OF EJECTION SEAT TRAINERS  | 93                               |
| K350 PERFORM PHASE II INSPECTIONS OF EJECTION SEAT TRAINERS   | 93                               |
| K341 PERFORM DAILY INSPECTIONS OF NIGHT VISION TRAINERS   | 93                               |
| K349 PERFORM PHASE I INSPECTIONS OF EJECTION SEAT TRAINERS  | 93                               |
| K334 CHANGE COMPRESSED AIR SUPPLY ON EJECTION SEAT TRAINERS   | 93                               |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 93                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 93                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 93                               |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 93                               |

REPRESENTATIVE TASKS PERFORMED BY TRAINING AND ADMINISTRATIVE PERSONNEL  
(N=61)

| TASK   | PERCENT MEMBERS PERFORMING |
|--|----------------------------|
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                        |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 98                         |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 97                         |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 97                         |
| B187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 95                         |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)   | 93                         |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 93                         |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                 | 93                         |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 92                         |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 89                         |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS                                       | 89                         |
| E97 ENTER TRAINING DATA ON PHYSIOLOGICAL TRAINING RECORD FORMS (AF FORM 699)                         | 87                         |
| L371 CLEAN WORK AREAS  | 87                         |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS      | 87                         |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO HYPOBARIC CHAMBER FLIGHTS    | 85                         |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 85                         |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 85                         |
| E114 PREPARE INDIVIDUAL PHYSIOLOGICAL TRAINING RECORD FORMS (AF FORM 702)                            | 84                         |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 84                         |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 84                         |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES  | 84                         |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                                   | 80                         |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                       | 80                         |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                    | 80                         |
| E128 TYPE INFORMATION ON FORMS, SUCH AS INDIVIDUAL PHYSIOLOGICAL TRAINING RECORD FORMS (AF FORM 702) | 79                         |
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 79                         |
| E100 MAINTAIN CHAMBER FLIGHT CREW RECORD FORMS (AF FORM 755)   | 77                         |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 77                         |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 75                         |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                  | 75                         |

REPRESENTATIVE TASKS PERFORMED BY REFRESHER TRAINING  
ADMINISTRATIVE SPECIALISTS  
(N=27)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)  | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                              |
| L371 CLEAN WORK AREAS   | 96                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS  | 96                               |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS  | 96                               |
| E97 ENTER TRAINING DATA ON PHYSIOLOGICAL TRAINING RECORD FORMS<br>(AF FORM 699)                         | 93                               |
| E114 PREPARE INDIVIDUAL PHYSIOLOGICAL TRAINING RECORD FORMS (AF FORM 702)                               | 93                               |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS   | 93                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS  | 93                               |
| E128 TYPE INFORMATION ON FORMS, SUCH AS INDIVIDUAL PHYSIOLOGICAL TRAINING<br>RECORD FORMS (AF FORM 702) | 89                               |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF<br>TRASH                           | 89                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES  | 89                               |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES   | 89                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 89                               |
| D93 SIGN IN STUDENTS FOR CLASSES  | 85                               |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 85                               |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                       | 85                               |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 85                               |
| E100 MAINTAIN CHAMBER FLIGHT CREW RECORD FORMS (AF FORM 755)  | 81                               |
| E96 DISTRIBUTE AEROSPACE PHYSIOLOGY RECORDS OR REPORTS  | 81                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS      | 81                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS  | 81                               |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 81                               |
| E99 MAINTAIN ADMINISTRATIVE FILES   | 78                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR<br>TO HYPOBARIC CHAMBER FLIGHTS    | 78                               |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS   | 78                               |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                                      | 78                               |
| E101 MAINTAIN INSTRUCTOR'S FLIGHT/DIVE RECORD FORMS (AF FORM 712)                                       | 74                               |
| E112 PREPARE DRAFT OF PHYSIOLOGICAL TRAINING MONTHLY REPORT FORMS<br>(AF FORM 700)                      | 74                               |
| H208 SERVE AS CHAMBER OPERATOR ON PROFICIENCY CHAMBER DIVES   | 48                               |
| H216 SERVE AS TIMEKEEPER ON PROFICIENCY CHAMBER DIVES   | 44                               |
| H215 SERVE AS RECORDER ON TREATMENT CHAMBER DIVES   | 37                               |
| H211 SERVE AS CREW CHIEF/LOCK OPERATOR ON TREATMENT CHAMBER DIVES                                       | 37                               |

REPRESENTATIVE TASKS PERFORMED BY ADMINISTRATIVE NCOICs  
(N=9)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| E99 MAINTAIN ADMINISTRATIVE FILES   | 100                              |
| E112 PREPARE DRAFT OF PHYSIOLOGICAL TRAINING MONTHLY REPORT FORMS<br>(AF FORM 700)                      | 100                              |
| E121 PROOFREAD CORRESPONDENCE, REPORTS, OR FORMS  | 100                              |
| B28 DIRECT MAINTENANCE OF ADMINISTRATIVE FILES  | 100                              |
| B43 WRITE CORRESPONDENCE  | 100                              |
| E96 DISTRIBUTE AEROSPACE PHYSIOLOGY RECORDS OR REPORTS  | 100                              |
| B38 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)   | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS   | 100                              |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS    | 100                              |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 100                              |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS  | 100                              |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS      | 100                              |
| E114 PREPARE INDIVIDUAL PHYSIOLOGICAL TRAINING RECORD FORMS (AF FORM 702)                               | 100                              |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                              |
| E128 TYPE INFORMATION ON FORMS, SUCH AS INDIVIDUAL PHYSIOLOGICAL TRAINING<br>RECORD FORMS (AF FORM 702) | 100                              |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                     | 100                              |
| E98 INITIATE CHAMBER REACTOR CASE REPORT FORMS (AF FORM 361)  | 100                              |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 100                              |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 100                              |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                       | 100                              |
| A16 PLAN WORK ASSIGNMENTS   | 89                               |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS   | 89                               |
| E100 MAINTAIN CHAMBER FLIGHT CREW RECORD FORMS (AF FORM 755)  | 89                               |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)  | 89                               |
| C60 PREPARE APRs  | 89                               |
| E97 ENTER TRAINING DATA ON PHYSIOLOGICAL TRAINING RECORD FORMS<br>(AF FORM 699)                         | 89                               |

REPRESENTATIVE TASKS PERFORMED BY ATC PHYSIOLOGICAL TRAINING INSTRUCTORS  
(N=25)

| TASK   | PERCENT MEMBERS PERFORMING |
|--|----------------------------|
| F132 BRIEF ON GROUND EGRESS ESCAPE PROCEDURES  | 100                        |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 100                        |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                        |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 100                        |
| F152 CONDUCT PARACHUTE LANDING FALL TRAINING   | 96                         |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 96                         |
| F144 BRIEF PREEJECTION PROCEDURES ON EJECTION SEAT TRAINERS  | 96                         |
| F139 BRIEF ON THE USE OF EJECTION SEAT TRAINERS  | 96                         |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 96                         |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 96                         |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                                   | 96                         |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                 | 96                         |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 96                         |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                    | 96                         |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 92                         |
| K365 SERVE AS TOWER HOOKUP CREWMEMBER ON DESCENT AND LANDING TECHNIQUES<br>(DLT) TRAINING TEAMS      | 92                         |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 92                         |
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 92                         |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 92                         |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS                                       | 92                         |
| F133 BRIEF ON IN-FLIGHT EGRESS PROCEDURES  | 88                         |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 88                         |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS | 88                         |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS   | 88                         |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)   | 88                         |
| K361 SERVE AS CANOPY ASSISTANCE OPERATOR ON PARACHUTE FAMILIARIZATION<br>TRAINING TEAMS              | 88                         |
| K363 SERVE AS LANDING ZONE SUPERVISOR ON PARACHUTE FAMILIARIZATION TRAINING<br>TEAMS                 | 88                         |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                  | 88                         |
| K364 SERVE AS RELEASE OPERATOR ON PARACHUTE FAMILIARIZATION TRAINING TEAMS                           | 88                         |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 88                         |

REPRESENTATIVE TASKS PERFORMED BY HYPERBARIC  
OPERATIONS PERSONNEL  
(N=31)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G187 SERVE AS INSIDE OBERVER ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                              |
| H208 SERVE AS CHAMBER OPERATOR ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H210 SERVE AS CREW CHIEF/LOCK OPERATOR ON PROFICIENCY CHAMBER DIVES                                  | 100                              |
| H214 SERVE AS RECORDER ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H216 SERVE AS TIMEKEEPER ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H212 SERVE AS INSIDE OBSERVER ON PROFICIENCY CHAMBER DIVES   | 100                              |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS   | 97                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 94                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 94                               |
| H209 SERVE AS CHAMBER OPERATOR ON TREATMENT CHAMBER DIVES  | 94                               |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 94                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS | 94                               |
| H211 SERVE AS CREW CHIEF/LOCK OPERATOR ON TREATMENT CHAMBER DIVES                                    | 90                               |
| H215 SERVE AS RECORDER ON TREATMENT CHAMBER DIVES  | 90                               |
| H217 SERVE AS TIMEKEEPER ON TREATMENT CHAMBER DIVES  | 90                               |
| H213 SERVE AS INSIDE OBSERVER ON TREATMENT CHAMBER DIVES   | 90                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                 | 87                               |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 84                               |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 84                               |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                  | 84                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 81                               |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                                   | 81                               |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 81                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS                                     | 77                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                    | 77                               |
| H201 LOAD OR UNLOAD PATIENTS INTO OR FROM HYPERBARIC CHAMBERS  | 74                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 74                               |

REPRESENTATIVE TASKS PERFORMED BY HYPERBARIC TRAINING NCOs  
(N=9)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| D88 OPERATE VISUAL AID EQUIPMENT, SUCH AS MOVIE OR SLIDE PROJECTORS                                  | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                              |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 100                              |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR<br>TO HYPOBARIC CHAMBER FLIGHTS | 100                              |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS   | 100                              |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 100                              |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 100                              |
| H208 SERVE AS CHAMBER OPERATOR ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H210 SERVE AS CREW CHIEF/LOCK OPERATOR ON PROFICIENCY CHAMBER DIVES                                  | 100                              |
| H214 SERVE AS RECORDER ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H216 SERVE AS TIMEKEEPER ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H212 SERVE AS INSIDE OBSERVER ON PROFICIENCY CHAMBER DIVES   | 100                              |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES  | 100                              |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                 | 100                              |
| H211 SERVE AS CREW CHIEF/LOCK OPERATOR ON TREATMENT CHAMBER DIVES                                    | 100                              |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                  | 100                              |
| H209 SERVE AS CHAMBER OPERATOR ON TREATMENT CHAMBER DIVES  | 100                              |
| H215 SERVE AS RECORDER ON TREATMENT CHAMBER DIVES  | 100                              |
| H213 SERVE AS INSIDE OBSERVER ON TREATMENT CHAMBER DIVES   | 100                              |
| H217 SERVE AS TIMEKEEPER ON TREATMENT CHAMBER DIVES  | 100                              |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 100                              |
| D87 OPERATE OR MAINTAIN CLASSROOM TRAINING AIDS OTHER THAN VISUAL<br>AID EQUIPMENT                   | 89                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 89                               |
| E108 PREPARE COMPRESSION CHAMBER OPERATION RECORD FORMS (AF FORM 1354)                               | 89                               |
| F148 CONDUCT CLASSROOM INSTRUCTION ON PRINCIPLES AND PROBLEMS OF<br>AIRCRAFT PRESSURIZATION          | 89                               |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)   | 89                               |
| D65 ADMINISTER TESTS   | 78                               |
| D71 CONSTRUCT TRAINING AIDS  | 78                               |
| F133 BRIEF ON IN-FLIGHT EGRESS PROCEDURES  | 78                               |
| F150 CONDUCT CLASSROOM INSTRUCTION ON PRINCIPLES AND PROCEDURES OF<br>PARACHUTING                    | 78                               |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHT   | 78                               |

REPRESENTATIVE TASKS PERFORMED BY HYPERBARIC SUPPORT NCOICs  
(N=8)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| B38 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)  | 100                              |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| H215 SERVE AS RECORDER ON TREATMENT CHAMBER DIVES  | 100                              |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 100                              |
| H213 SERVE AS INSIDE OBSERVER ON TREATMENT CHAMBER DIVES   | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| H209 SERVE AS CHAMBER OPERATOR ON TREATMENT CHAMBER DIVES  | 100                              |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS   | 100                              |
| H217 SERVE AS TIMEKEEPER ON TREATMENT CHAMBER DIVES  | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                              |
| H211 SERVE AS CREW CHIEF/LOCK OPERATOR ON TREATMENT CHAMBER DIVES                                    | 100                              |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 100                              |
| H208 SERVE AS CHAMBER OPERATOR ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H214 SERVE AS RECORDER ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H216 SERVE AS TIMEKEEPER ON PROFICIENCY CHAMBER DIVES  | 100                              |
| J210 SERVE AS CREW CHIEF/LOCK OPERATOR ON PROFICIENCY CHAMBER DIVES                                  | 100                              |
| H212 SERVE AS INSIDE OBSERVER ON PROFICIENCY CHAMBER DIVES   | 100                              |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS                                       | 100                              |
| C60 PREPARE APRs   | 100                              |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 100                              |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                  | 100                              |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 88                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 88                               |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 88                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR<br>TO HYPOBARIC CHAMBER FLIGHTS | 88                               |
| D73 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION  | 88                               |
| H201 LOAD OR UNLOAD PATIENTS INTO OR FROM HYPERBARIC CHAMBERS  | 88                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 88                               |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                                   | 88                               |
| G47 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION                                | 75                               |
| A5 DETERMINE WORK PRIORITIES   | 75                               |
| A10 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES   | 75                               |
| C50 EVALUATE MAINTENANCE OR USE OF WORKSHOP, EQUIPMENT, OR SUPPLIES                                  | 75                               |
| A16 PLAN WORK ASSIGNMENTS  | 75                               |

REPRESENTATIVE TASKS PERFORMED BY DIVE CHAMBER CREWMEMBERS  
(N 12)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                              |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS   | 100                              |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| H210 SERVE AS CREW CHIEF/LOCK OPERATOR ON PROFICIENCY CHAMBER DIVES                                  | 100                              |
| H208 SERVE AS CHAMBER OPERATOR ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H214 SERVE AS RECORDER ON PROFICIENCY CHAMBER DIVES  | 100                              |
| H212 SERVE AS INSIDE OBSERVER ON PROFICIENCY CHAMBER DIVES   | 100                              |
| H216 SERVE AS TIMEKEEPER ON PROFICIENCY CHAMBER DIVES  | 100                              |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR<br>TO HYPOBARIC CHAMBER FLIGHTS | 100                              |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 92                               |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF<br>TRASH                        | 92                               |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 92                               |
| L371 CLEAN WORK AREAS  | 83                               |
| H211 SERVE AS CREW CHIEF/LOCK OPERATOR ON TREATMENT CHAMBER DIVES                                    | 83                               |
| H209 SERVE AS CHAMBER OPERATOR ON TREATMENT CHAMBER DIVES  | 83                               |
| H215 SERVE AS RECORDER ON TREATMENT CHAMBER DIVES  | 83                               |
| H217 SERVE AS TIMEKEEPER ON TREATMENT CHAMBER DIVES  | 83                               |
| H213 SERVE AS INSIDE OBSERVER ON TREATMENT CHAMBER DIVES   | 83                               |
| H199 CHARGE COMPRESSED AIR FLASKS  | 75                               |
| H201 LOAD OR UNLOAD PATIENTS INTO OR FROM HYPERBARIC CHAMBERS  | 75                               |
| H202 PERFORM DAILY INSPECTION OF THE HYPERBARIC CHAMBER ASSEMBLIES                                   | 75                               |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                                   | 75                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 75                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                 | 75                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 67                               |
| I232 FIT STUDENT OR PATIENT OXYGEN MASKS   | 67                               |

REPRESENTATIVE TASKS PERFORMED BY  
HALO SUPORT NCOICs  
(N=5)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 100                              |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 100                              |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS                 | 100                              |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 100                              |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 100                              |
| G197 VISUALLY INSPECT COMPONENTS OF PRESSURE DEMAND OXYGEN SYSTEMS, SUCH<br>AS PRESSURE DEMAND PORTABLE ASSEMBLIES | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 100                              |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 100                              |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 100                              |
| A5 DETERMINE WORK PRIORITIES   | 80                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 80                               |
| C60 PREPARE APRs   | 80                               |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS   | 80                               |
| G172 PERFORM PERIODIC INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN<br>EXPERIMENTAL HYPOBARIC CHAMBERS     | 80                               |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 80                               |
| I242 OBSERVE HALO PARACHUTISTS   | 80                               |
| G188 SERVE AS LECTURER OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 80                               |
| G189 SERVE AS LECTURER OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 80                               |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 80                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 80                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 80                               |
| I226 DOWNLOAD HIGH ALTITUDE LOW OPENING (HALO) OXYGEN SYSTEMS FROM AIRCRAFT  | 80                               |
| I235 INSTALL HALO OXYGEN SYSTEMS IN AIRCRAFT   | 80                               |
| E117 PREPARE RECORDS ON STATUS OR INSPECTION OF EQUIPMENT  | 60                               |
| A10 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES   | 60                               |
| A40 SUPERVISE APPRENTICE AEROSPACE PHYSIOLOGY SPECIALISTS  | 60                               |

REPRESENTATIVE TASKS PERFORMED BY AEROSPACE  
PHYSIOLOGY SUPERVISORS  
(N=63)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 98                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 97                               |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 95                               |
| A5 DETERMINE WORK PRIORITIES   | 95                               |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 95                               |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 95                               |
| B43 WRITE CORRESPONDENCE   | 92                               |
| B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES   | 92                               |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS   | 92                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 92                               |
| A7 DEVELOP WORK METHODS OR PROCEDURES  | 92                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS                         | 89                               |
| C60 PREPARE APRs   | 89                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 89                               |
| A16 PLAN WORK ASSIGNMENTS  | 87                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 86                               |
| A9 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), STANDARD<br>OPERATING PROCEDURES (SOP), OR EMERGENCY PLANS | 84                               |
| A21 UPDATE LOCAL OPERATING INSTRUCTIONS  | 84                               |
| A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES   | 84                               |
| G189 SERVE AS LECTURER OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 84                               |
| C46 EVALUATE COMPLIANCE WITH WORK PERFORMANCE STANDARDS  | 83                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS                       | 83                               |
| A2 ASSIGN PERSONNEL TO DUTY POSITIONS  | 83                               |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES  | 83                               |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 81                               |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 79                               |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER   | 79                               |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 79                               |
| A10 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES   | 78                               |

REPRESENTATIVE TASKS PERFORMED BY AEROSPACE PHYSIOLOGY MANAGERS  
(N=9)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| B39 SUPERVISE AEROSPACE PHYSIOLOGY SUPERVISORS (AFSC 91170)  | 100                              |
| B43 WRITE CORRESPONDENCE   | 100                              |
| B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES   | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| C58 EVALUATE WORK SCHEDULES  | 100                              |
| C59 INDORSE AIRMAN PERFORMANCE REPORTS (APRs)  | 100                              |
| A9 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), STANDARD<br>OPERATING PROCEDURES (SOP), OR EMERGENCY PLANS | 100                              |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 100                              |
| A2 ASSIGN PERSONNEL TO DUTY POSITIONS  | 100                              |
| B22 CONDUCT STAFF MEETINGS   | 89                               |
| C46 EVALUATE COMPLIANCE WITH WORK PERFORMANCE STANDARDS  | 89                               |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS   | 89                               |
| A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES   | 89                               |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 89                               |
| A19 SCHEDULE LEAVES OR PASSES  | 89                               |
| A3 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL  | 89                               |
| E121 PROOFREAD CORRESPONDENCE, REPORTS, OR FORMS   | 78                               |
| C44 ANALYZE WORKLOAD REQUIREMENTS  | 78                               |
| C57 EVALUATE WORKLOAD REQUIREMENTS   | 78                               |
| A10 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES   | 78                               |
| A16 PLAN WORK ASSIGNMENTS  | 78                               |
| A21 UPDATE LOCAL OPERATING INSTRUCTIONS  | 78                               |
| A7 DEVELOP WORK METHODS OR PROCEDURES  | 78                               |
| L370 ATTEND STAFF MEETINGS   | 78                               |
| A5 DETERMINE WORK PRIORITIES   | 78                               |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 78                               |
| C60 PREPARE APRs   | 78                               |
| I232 FIT STUDENT OR PATIENT OXYGEN MASKS   | 78                               |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 78                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 78                               |

REPRESENTATIVE TASKS PERFORMED BY OPERATIONS NCOICs  
(N=33)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS   | 100                              |
| A5 DETERMINE WORK PRIORITIES   | 100                              |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 100                              |
| B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES   | 97                               |
| A9 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), STANDARD<br>OPERATING PROCEDURES (SOP), OR EMERGENCY PLANS | 97                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 97                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS                         | 97                               |
| A7 DEVELOP WORK METHODS OR PROCEDURES  | 97                               |
| A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES   | 97                               |
| A21 UPDATE LOCAL OPERATING INSTRUCTIONS  | 97                               |
| C60 PREPARE APRs   | 97                               |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 97                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 97                               |
| C46 EVALUATE COMPLIANCE WITH WORK PERFORMANCE STANDARDS  | 94                               |
| C58 EVALUATE WORK SCHEDULES  | 94                               |
| A10 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES   | 94                               |
| A16 PLAN WORK ASSIGNMENTS  | 94                               |
| A12 PLAN BRIEFINGS   | 94                               |
| C49 EVALUATE JOB DESCRIPTIONS  | 94                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 94                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 94                               |
| B43 WRITE CORRESPONDENCE   | 91                               |
| C44 ANALYZE WORKLOAD REQUIREMENTS  | 91                               |
| C57 EVALUATE WORKLOAD REQUIREMENTS   | 91                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS                       | 91                               |
| C50 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES   | 91                               |

REPRESENTATIVE TASKS PERFORMED BY MAINTENANCE NCOICs  
(N=12)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 100                              |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 100                              |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 100                              |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 100                              |
| B43 WRITE CORRESPONDENCE   | 100                              |
| A5 DETERMINE WORK PRIORITIES   | 100                              |
| G197 VISUALLY INSPECT COMPONENTS OF PRESSURE DEMAND OXYGEN SYSTEMS, SUCH<br>AS PRESSURE DEMAND PORTABLE ASSEMBLIES | 100                              |
| L376 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES   | 100                              |
| G172 PERFORM PERIODIC INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER<br>THAN EXPERIMENTAL HYPOBARIC CHAMBERS     | 100                              |
| C48 EVALUATE INSPECTION REPORTS OR PROCEDURES  | 100                              |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 100                              |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 100                              |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 100                              |
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 100                              |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 100                              |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 100                              |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 100                              |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 100                              |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 100                              |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 92                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS                 | 92                               |
| E119 PREPARE REQUISITION FOR SUPPLIES OR EQUIPMENT   | 92                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS               | 92                               |
| G136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 92                               |
| B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES   | 92                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 92                               |
| A16 PLAN WORK ASSIGNMENTS  | 92                               |
| E105 MAINTAIN RECORDS ON STATUS OR INSPECTION OF EQUIPMENT   | 92                               |

REPRESENTATIVE TASKS PERFORMED BY ACADEMIC NCOICs  
(N=8)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS                                     | 100                              |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS                                       | 100                              |
| D65 ADMINISTER TESTS  | 100                              |
| D92 SCORE TESTS   | 100                              |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES   | 100                              |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS   | 100                              |
| A7 DEVELOP WORK METHODS OR PROCEDURES   | 100                              |
| D94 WRITE TEST QUESTIONS  | 100                              |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                              | 100                              |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                             | 100                              |
| D72 COUNSEL TRAINEES ON TRAINING PROGRESS   | 88                               |
| D78 DEVELOP TESTS   | 88                               |
| L371 CLEAN WORK AREAS   | 88                               |
| A5 DETERMINE WORK PRIORITIES  | 88                               |
| F151 CONDUCT CLASSROOM INSTRUCTION ON USE AND CARE OF OXYGEN EQUIPMENT                          | 88                               |
| F147 CONDUCT CLASSROOM INSTRUCTION ON PRINCIPLES AND PROBLEMS ASSOCIATED WITH NIGHT VISION      | 88                               |
| F150 CONDUCT CLASSROOM INSTRUCTION ON PRINCIPLES AND PROCEDURES OF PARACHUTING                  | 88                               |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS                                  | 88                               |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS                                      | 88                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS  | 88                               |
| D82 EVALUATE OJT TRAINEES   | 88                               |
| D88 OPERATE VISUAL AID EQUIPMENT, SUCH AS MOVIE OR SLIDE PROJECTORS                             | 88                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS  | 88                               |
| F148 CONDUCT CLASSROOM INSTRUCTION ON PRINCIPLES AND PROBLEMS OF AIRCRAFT PRESSURIZATION        | 88                               |
| I232 FIT STUDENT OR PATIENT OXYGEN MASKS  | 88                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS | 88                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES                                      | 88                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS  | 88                               |
| F156 DEMONSTRATE SPATIAL DISORIENTATION USING THE BARANY CHAIR                                  | 88                               |
| G189 SERVE AS LECTURER OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                           | 88                               |

REPRESENTATIVE TASKS PERFORMED BY CHAMBER OPERATIONS SPECIALISTS  
(N=35)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 94                               |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 94                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 91                               |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 91                               |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 91                               |
| L371 CLEAN WORK AREAS  | 86                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 77                               |
| D88 OPERATE VISUAL AID EQUIPMENT, SUCH AS MOVIE OR SLIDE PROJECTORS                                  | 71                               |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH                           | 69                               |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS   | 69                               |
| D92 SCORE TESTS  | 54                               |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 54                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS   | 51                               |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 51                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS                                     | 51                               |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS                                       | 51                               |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                  | 51                               |
| D65 ADMINISTER TESTS   | 49                               |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                                   | 49                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 49                               |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 49                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                 | 49                               |
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 46                               |
| D87 OPERATE OR MAINTAIN CLASSROOM TRAINING AIDS OTHER THAN VISUAL AID<br>EQUIPMENT                   | 43                               |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)   | 43                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                    | 43                               |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                       | 43                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS | 40                               |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES  | 40                               |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES   | 37                               |

REPRESENTATIVE TASKS PERFORMED BY ADMINISTRATIVE PERSONNEL  
(N=5)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| E101 MAINTAIN INSTRUCTOR'S FLIGHT/DIVE RECORD FORMS (AF FORM 712)                                       | 100                              |
| E100 MAINTAIN CHAMBER FLIGHT CREW RECORD FORMS (AF FORM 755)  | 100                              |
| B28 DIRECT MAINTENANCE OF ADMINISTRATIVE FILES  | 100                              |
| E97 ENTER TRAINING DATA ON PHYSIOLOGICAL TRAINING RECORD FORMS (AF FORM 699)                            | 100                              |
| E99 MAINTAIN ADMINISTRATIVE FILES   | 80                               |
| E112 PREPARE DRAFT OF PHYSIOLOGICAL TRAINING MONTHLY REPORT FORMS (AF<br>FROM 700)                      | 80                               |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)  | 80                               |
| D86 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS  | 80                               |
| E111 PREPARE DRAFT OF CHAMBER REACTOR CASE REPORT FORMS (AF FORM 361)                                   | 80                               |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS  | 80                               |
| E96 DISTRIBUTE AEROSPACE PHYSIOLOGY RECORDS OR REPORTS  | 80                               |
| E114 PREPARE INDIVIDUAL PHYSIOLOGICAL TRAINING RECORD FORMS (AF FORM 702)                               | 80                               |
| E98 INITIATE CHAMBER REACTOR CASE REPORT FORMS (AF FORM 361)  | 80                               |
| D69 CONDUCT OJT   | 80                               |
| E128 TYPE INFORMATION ON FORMS, SUCH AS INDIVIDUAL PHYSIOLOGICAL TRAINING<br>RECORD FORMS (AF FORM 702) | 80                               |
| E129 TYPE NARRATIVE CORRESPONDENCE OR REPORTS IN FINAL FORM   | 80                               |
| E121 PROOFREAD CORRESPONDENCE, REPORTS, OR FORMS  | 80                               |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS   | 60                               |
| B43 WRITE CORRESPONDENCE  | 60                               |
| E127 TYPE DRAFTS OF NARRATIVE CORRESPONDENCE OR REPORTS   | 60                               |
| A16 PLAN WORK ASSIGNMENTS   | 60                               |
| B38 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)   | 60                               |
| A7 DEVELOP WORK METHODS OR PROCEDURES   | 60                               |
| C60 PREPARE APRs  | 60                               |
| A10 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES  | 60                               |
| E125 REQUEST HAZARDOUS DUTY ORDERS FOR DUTY PERSONNEL   | 60                               |
| A11 ESTABLISH PUBLICATION LIBRARIES   | 60                               |
| E116 PREPARE MILITARY PAY ORDER FORMS (DD FORM 114)   | 60                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 40                               |
| D93 SIGN IN STUDENTS FOR CLASSES  | 40                               |

REPRESENTATIVE TASKS PERFORMED BY HYPERBARIC MEDICINE PERSONNEL  
(N=4)

| TASK  | PERCENT MEMBERS PERFORMING |
|---|----------------------------|
| H211 SERVE AS CREW CHIEF/LOCK OPERATOR ON TREATMENT CHAMBER DIVES                   | 100                        |
| H209 SERVE AS CHAMBER OPERATOR ON TREATMENT CHAMBER DIVES                           | 100                        |
| H215 SERVE AS RECORDER ON TREATMENT CHAMBER DIVES                                   | 100                        |
| H217 SERVE AS TIMEKEEPER ON TREATMENT CHAMBER DIVES                                 | 100                        |
| H213 SERVE AS INSIDE OBSERVER ON TREATMENT CHAMBER DIVES                            | 100                        |
| H201 LOAD OR UNLOAD PATIENTS INTO OR FROM HYPERBARIC CHAMBERS                       | 100                        |
| E109 PREPARE DIVE DATA WORKSHEET FORMS (SAM FORM 21)                                | 100                        |
| H200 CLEAN HYPERBARIC CHAMBERS  | 100                        |
| H212 SERVE AS INSIDE OBSERVER ON PROFICIENCY CHAMBER DIVES                          | 100                        |
| H208 SERVE AS CHAMBER OPERATOR ON PROFICIENCY CHAMBER DIVES                         | 100                        |
| L371 CLEAN WORK AREAS   | 100                        |
| H210 SERVE AS CREW CHIEF/LOCK OPERATOR ON PROFICIENCY CHAMBER DIVES                 | 75                         |
| H214 SERVE AS RECORDER ON PROFICIENCY CHAMBER DIVES                                 | 75                         |
| H216 SERVE AS TIMEKEEPER ON PROFICIENCY CHAMBER DIVES                               | 75                         |
| H203 PERFORM PERIODIC OR 30-DAY INSPECTION OF THE HYPERBARIC CHAMBER ASSEMBLIES     | 75                         |
| H204 PERFORM SPECIAL OR 180-DAY INSPECTION OF THE HYPERBARIC CHAMBER ASSEMBLIES     | 75                         |
| E99 MAINTAIN ADMINISTRATIVE FILES   | 75                         |
| H207 REMOVE OR REPLACE OXYGEN EQUIPMENT ITEMS IN HYPERBARIC CHAMBERS                | 75                         |
| L370 ATTEND STAFF MEETINGS  | 75                         |
| H205 REMOVE OR REPLACE DEPTH GAUGES   | 75                         |
| H202 PERFORM DAILY INSPECTION OF THE HYPERBARIC CHAMBER ASSEMBLIES                  | 75                         |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES                          | 75                         |
| C60 PREPARE APRs  | 75                         |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES                               | 75                         |
| H198 ADJUST GROVE REGULATORS ON AIR SUPPLY MANIFOLD                                 | 50                         |
| B43 WRITE CORRESPONDENCE  | 50                         |
| H199 CHARGE COMPRESSED AIR FLASKS   | 50                         |
| I232 FIT STUDENT OR PATIENT OXYGEN MASKS  | 50                         |
| A7 DEVELOP WORK METHODS OR PROCEDURES   | 50                         |
| E113 PREPARE HYPERBARIC PATIENT INFORMATION AND THERAPY RECORD FORMS (AF FORM 1352) | 50                         |

REPRESENTATIVE TASKS PERFORMED BY LIFE SUPPORT EQUIPMENT PERSONNEL  
(N=53)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| J274 ASSIST CREWMEMBERS IN DOFFING FULL PRESSURE SUIT ASSEMBLIES  | 100                              |
| J276 ASSIST CREWMEMBERS IN DONNING FULL PRESSURE SUIT ASSEMBLIES  | 98                               |
| J295 PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS  | 94                               |
| J282 DRIVE PILOT TRANSPORT VANS   | 94                               |
| J313 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF FULL PRESSURE SUITS   | 89                               |
| J281 CONNECT OR DISCONNECT CREW MEMBERS TO OR FROM AIRCRAFT SYSTEMS   | 89                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 87                               |
| J283 FILL PORTABLE LIQUID OXYGEN VENTILATION UNITS  | 85                               |
| J293 OPERATE PORTABLE LIQUID OXYGEN VENTILATION UNITS   | 85                               |
| J285 ISOLATE FULL PRESSURE SUIT MALFUNCTIONS  | 83                               |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS   | 83                               |
| J277 ASSIST CREWMEMBERS IN DONNING PARTIAL PRESSURE SUIT ASSEMBLIES   | 77                               |
| J275 ASSIST CREWMEMBERS IN DOFFING PARTIAL PRESSURE SUIT ASSEMBLIES   | 77                               |
| J280 CLEAN PRESSURE SUITS   | 75                               |
| J273 ASSEMBLE OR DISASSEMBLE PRESSURE SUIT HARDWARE, SUCH AS NECK RINGS,<br>WRIST RINGS, OR URINE COLLECTION VALVES | 72                               |
| J302 PERFORM PERIODIC INSPECTIONS OF FULL PRESSURE SUITS  | 70                               |
| J296 PERFORM OCCUPIED PARTIAL PRESSURE SUIT INTEGRATION TESTS   | 68                               |
| J297 PERFORM OVERHAUL INSPECTIONS OF FULL PRESSURE SUITS  | 66                               |
| J319 REMOVE OR REPLACE FULL PRESSURE SUIT COMPONENTS  | 66                               |
| I237 LOAD OR DOWNLOAD LIFE SUPPORT EQUIPMENT, SUCH AS SURVIVAL KITS OR<br>PARACHUTES, FROM AIRCRAFT                 | 64                               |
| J311 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF LOW FLIGHT OXYGEN<br>REGULATORS                                 | 64                               |
| J315 PERFORM PREFLIGHT PHYSICAL EXAMINATIONS  | 62                               |
| L371 CLEAN WORK AREAS   | 60                               |
| I251 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF SURVIVAL KIT ASSEMBLIES   | 60                               |
| I252 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF PARACHUTES  | 60                               |
| J312 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF PARTIAL PRESSURE SUITS  | 60                               |
| J325 REMOVE OR REPLACE PRESSURE SUIT OXYGEN REGULATOR COMPONENTS  | 60                               |
| J324 REMOVE OR REPLACE PRESSURE SUIT CONTROLLER COMPONENTS  | 60                               |

REPRESENTATIVE TASKS PERFORMED BY LAUNCH AND RECOVERY SPECIALISTS  
(N=12)

| TASK   | PERCENT MEMBERS PERFORMING |
|--|----------------------------|
| J281 CONNECT OR DISCONNECT CREW MEMBERS TO OR FROM AIRCRAFT SYSTEMS                              | 100                        |
| J276 ASSIST CREWMEMBERS IN DONNING FULL PRESSURE SUIT ASSEMBLIES                                 | 100                        |
| J274 ASSIST CREWMEMBERS IN DOFFING FULL PRESSURE SUIT ASSEMBLIES                                 | 100                        |
| J295 PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS                                       | 100                        |
| J282 DRIVE PILOT TRANSPORT VANS  | 100                        |
| J313 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF FULL PRESSURE SUITS                          | 92                         |
| L371 CLEAN WORK AREAS  | 92                         |
| J283 FILL PORTABLE LIQUID OXYGEN VENTILATION UNITS   | 92                         |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS                                 | 92                         |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 92                         |
| J293 OPERATE PORTABLE LIQUID OXYGEN VENTILATION UNITS  | 83                         |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH                       | 83                         |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 83                         |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                | 83                         |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                   | 83                         |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS                                       | 83                         |
| I251 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF SURVIVAL KIT ASSEMBLIES                      | 75                         |
| I252 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF PARACHUTES                                   | 75                         |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 75                         |
| J280 CLEAN PRESSURE SUITS  | 67                         |
| J277 ASSIST CREWMEMBERS IN DONNING PARTIAL PRESSURE SUIT ASSEMBLIES                              | 67                         |
| J275 ASSIST CREWMEMBERS IN DOFFING PARTIAL PRESSURE SUIT ASSEMBLIES                              | 67                         |
| I237 LOAD OR DOWNLOAD LIFE SUPPORT EQUIPMENT, SUCH AS SURVIVAL KITS OR PARACHUTES, FROM AIRCRAFT | 58                         |
| J296 PERFORM OCCUPIED PARTIAL PRESSURE SUIT INTEGRATION TESTS                                    | 58                         |
| J311 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF LOW FLIGHT OXYGEN REGUALTORS                 | 58                         |
| J315 PERFORM PREFLIGHT PHYSICAL EXAMINATIONS   | 58                         |
| J318 PREPARE PRESSURE SUIT ASSEMBLIES FOR SHIPMENT   | 58                         |
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 58                         |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS   | 58                         |
| J285 ISOLATE FULL PRESSURE SUIT MALFUNCTIONS   | 50                         |

REPRESENTATIVE TASKS PERFORMED BY AIRCREW EQUIPMENT SUPPORT PERSONNEL  
(N=17)

| TASK   | PERCENT MEMBERS PERFORMING |
|--|----------------------------|
| J313 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF FULL PRESSURE SUITS  | 100                        |
| J293 OPERATE PORTABLE LIQUID OXYGEN VENTILATION UNITS  | 100                        |
| J274 ASSIST CREWMEMBERS IN DOFFING FULL PRESSURE SUIT ASSEMBLIES   | 100                        |
| J297 PERFORM OVERHAUL INSPECTIONS OF FULL PRESSURE SUITS   | 100                        |
| J312 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF PARTIAL PRESSURE SUITS                                       | 100                        |
| J275 ASSIST CREWMEMBERS IN DOFFING PARTIAL PRESSURE SUIT ASSEMBLIES  | 100                        |
| J277 ASSIST CREWMEMBERS IN DONNING PARTIAL PRESSURE SUIT ASSEMBLIES  | 100                        |
| J283 FILL PORTABLE LIQUID OXYGEN VENTILATION UNITS   | 100                        |
| J302 PERFORM PERIODIC INSPECTIONS OF FULL PRESSURE SUITS   | 100                        |
| J285 ISOLATE FULL PRESSURE SUIT MALFUNCTIONS   | 100                        |
| J273 ASSEMBLE OR DISASSEMBLE PRESSURE SUIT HARDWARE, SUCH AS NECK RINGS, WRIST RINGS, OR URINE COLLECTION VALVES | 100                        |
| J281 CONNECT OR DISCONNECT CREW MEMBERS TO OR FROM AIRCRAFT SYSTEMS  | 94                         |
| J276 ASSIST CREWMEMBERS IN DONNING FULL PRESSURE SUIT ASSEMBLIES   | 94                         |
| J295 PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS   | 94                         |
| J282 DRIVE PILOT TRANSPORT VANS  | 94                         |
| J324 REMOVE OR REPLACE PRESSURE SUIT CONTROLLER COMPONENTS   | 94                         |
| J325 REMOVE OR REPLACE PRESSURE SUIT OXYGEN REGULATOR COMPONENTS   | 94                         |
| J296 PERFORM OCCUPIED PARTIAL PRESSURE SUIT INTEGRATION TESTS  | 94                         |
| J311 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF LOW FLIGHT OXYGEN REGULATORS                                 | 94                         |
| J318 PREPARE PRESSURE SUIT ASSEMBLIES FOR SHIPMENT   | 94                         |
| J315 PERFORM PREFLIGHT PHYSICAL EXAMINATIONS   | 94                         |
| J319 REMOVE OR REPLACE FULL PRESSURE SUIT COMPONENTS   | 94                         |
| J280 CLEAN PRESSURE SUITS  | 94                         |
| J286 ISOLATE PARTIAL PRESSURE SUIT MALFUNCTIONS  | 94                         |
| I237 LOAD OR DOWNLOAD LIFE SUPPORT EQUIPMENT, SUCH AS SURVIVAL KITS OR PARACHUTES, FROM AIRCRAFT                 | 88                         |
| J314 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF PORTABLE LIQUID OXYGEN VENTILATION UNITS                     | 88                         |
| J326 REMOVE OR REPLACE PRESSURE SUIT VENTILATION HOSE ASSEMBLY COMPONENTS  | 88                         |
| J289 ISOLATE PRESSURE SUIT OXYGEN REGULATOR MALFUNCTIONS   | 88                         |
| J288 ISOLATE PRESSURE SUIT CONTROLLER MALFUNCTIONS   | 88                         |
| J287 ISOLATE PORTABLE LIQUID OXYGEN VENTILATION UNIT MALFUNCTIONS  | 88                         |

REPRESENTATIVE TASKS PERFORMED BY PRESSURE SUIT MAINTENANCE TECHNICIANS  
(N=6)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| J271 ADJUST FULL PRESSURE SUITS  | 100                              |
| J285 ISOLATE FULL PRESSURE SUIT MALFUNCTIONS   | 100                              |
| J319 REMOVE OR REPLACE FULL PRESSURE SUIT COMPONENTS   | 100                              |
| J328 SIZE AND FIT FULL PRESSURE SUITS  | 100                              |
| J276 ASSIST CREWMEMBERS IN DOWNING FULL PRESSURE SUIT ASSEMBLIES   | 100                              |
| J330 SUPERVISE DOWNING AND INTEGRATION TESTS OF OCCUPIED FULL PRESSURE SUITS                                     | 100                              |
| J295 PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS   | 100                              |
| J274 ASSIST CREWMEMBERS IN DOFFING FULL PRESSURE SUIT ASSEMBLIES   | 100                              |
| B38 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)  | 100                              |
| J281 CONNECT OR DISCONNECT CREW MEMBERS TO OR FROM AIRCRAFT SYSTEMS  | 100                              |
| J273 ASSEMBLE OR DISASSEMBLE PRESSURE SUIT HARDWARE, SUCH AS NECK RINGS, WRIST RINGS, OR URINE COLLECTION VALVES | 100                              |
| J313 PERFORM PREFLIGHT OR POSTFLIGHT INSPECTIONS OF FULL PRESSURE SUITS  | 100                              |
| J302 PERFORM PERIODIC INSPECTIONS OF FULL PRESSURE SUITS   | 100                              |
| J290 MAINTAIN BENCH STOCK OF SPARE PARTS FOR PRESSURE SUITS  | 100                              |
| J318 PREPARE PRESSURE SUIT ASSEMBLIES FOR SHIPMENT   | 100                              |
| J282 DRIVE PILOT TRANSPORT VANS  | 100                              |
| J279 CEMENT PRESSURE SUIT ASSEMBLIES   | 100                              |
| J316 PERFORM SPECIAL INSPECTIONS OF FULL PRESSURE SUITS  | 100                              |
| J293 OPERATE PORTABLE LIQUID OXYGEN VENTILATION UNITS  | 100                              |
| A5 DETERMINE WORK PRIORITIES   | 100                              |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 100                              |
| J280 CLEAN PRESSURE SUITS  | 100                              |
| J332 TEST AND EVALUATE NEW OR PROPOSED PRESSURE SUIT ASSEMBLIES  | 100                              |
| A16 PLAN WORK ASSIGNMENTS  | 100                              |
| J286 ISOLATE PARTIAL PRESSURE SUIT MALFUNCTIONS  | 83                               |
| J322 REMOVE OR REPLACE PARTIAL PRESSURE SUIT COMPONENTS  | 83                               |
| J297 PERFORM OVERHAUL INSPECTIONS OF FULL PRESSURE SUITS   | 83                               |
| J291 MAINTAIN PRESSURE SUIT TEST EQUIPMENT   | 83                               |
| J288 ISOLATE PRESSURE SUIT CONTROLLER MALFUNCTIONS   | 83                               |
| J289 ISOLATE PRESSURE SUIT OXYGEN REGULATOR MALFUNCTIONS   | 83                               |

REPRESENTATIVE TASKS PERFORM BY SECTION NCOICs  
(N=7)

| TASK  | PERCENT MEMBERS PERFORMING |
|---|----------------------------|
| J274 ASSIST CREWMEMBERS IN DOFFING FULL PRESSURE SUIT ASSEMBLIES                | 100                        |
| J275 ASSIST CREWMEMBERS IN DOFFING PARTIAL PRESSURE SUIT ASSEMBLIES             | 100                        |
| J276 ASSIST CREWMEMBERS IN DONNING FULL PRESSURE SUIT ASSEMBLIES                | 100                        |
| J277 ASSIST CREWMEMBERS IN DONNING PARTIAL PRESSURE SUIT ASSEMBLIES             | 100                        |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS                       | 100                        |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS                | 100                        |
| B42 SUPERVISE PERSONNEL WITH AFSCs OTHER THAN 911X0                             | 86                         |
| J330 SUPERVISE DONNING AND INTEGRATION TESTS OF OCCUPIED FULL PRESSURE SUITS    | 86                         |
| J331 SUPERVISE DONNING AND INTEGRATION TESTS OF OCCUPIED PARTIAL PRESSURE SUITS | 86                         |
| C60 PREPARE APRs  | 86                         |
| J282 DRIVE PILOT TRANSPORT VANS   | 86                         |
| F132 BRIEF ON GROUND EGRESS ESCAPE PROCEDURES                                   | 86                         |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS                  | 86                         |
| J295 PERFORM OCCUPIED FULL PRESSURE SUIT INTEGRATION TESTS                      | 86                         |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES                           | 86                         |
| C59 INDORSE AIRMAN PERFORMANCE REPORTS (APRs)                                   | 71                         |
| D86 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS                                | 71                         |
| L370 ATTEND STAFF MEETINGS  | 71                         |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES                      | 71                         |
| F145 CONDUCT CLASSROOM INSTRUCTION ON GROUND EGRESS ESCAPE PROCEDURES           | 71                         |
| J315 PERFORM PREFLIGHT PHYSICAL EXAMINATIONS                                    | 57                         |
| F137 BRIEF ON PRESSURE SUIT PERFORMANCE DURING CHAMBER FLIGHTS                  | 57                         |
| J296 PERFORM OCCUPIED PARTIAL PRESSURE SUIT INTEGRATION TESTS                   | 57                         |
| D72 COUNSEL TRAINEES ON TRAINING PROGRESS                                       | 57                         |
| F133 BRIEF ON IN-FLIGHT EGRESS PROCEDURES                                       | 57                         |
| A21 UPDATE LOCAL OPERATING INSTRUCTIONS   | 57                         |
| J293 OPERATE PORTABLE LIQUID OXYGEN VENTILATION UNITS                           | 57                         |
| J285 ISOLATE FULL PRESSURE SUIT MALFUNCTIONS                                    | 57                         |
| J281 CONNECT OR DISCONNECT CREW MEMBERS TO OR FROM AIRCRAFT SYSTEMS             | 57                         |
| B38 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)                     | 43                         |

REPRESENTATIVE TASKS PERFORMED BY PHYSIOLOGICAL RESEARCH TECHNICIANS  
(N=15)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| M390 CONNECT BIOMEDICAL INSTRUMENTATION TO SUBJECTS  | 80                               |
| M394 DISCONNECT BIOMEDICAL INSTRUMENTATION FROM SUBJECTS                                       | 80                               |
| M408 OPERATE STRIP CHART RECORDERS   | 80                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES                                     | 73                               |
| M388 CALIBRATE ANALYTICAL DEVICES, SUCH AS FLOW METERS OR RECORDING<br>EQUIPMENT               | 67                               |
| M437 SERVE AS INSIDE OBSERVER ON RESEARCH CHAMBER FLIGHTS                                      | 67                               |
| M430 RECORD EXPERIMENTAL DATA  | 67                               |
| M439 SERVE AS OUTSIDE OBSERVER ON RESEARCH CHAMBER FLIGHTS                                     | 60                               |
| M436 SERVE AS CREW CHIEF ON RESEARCH CHAMBER FLIGHTS   | 60                               |
| M435 SERVE AS CHAMBER OPERATOR ON RESEARCH CHAMBER FLIGHTS                                     | 60                               |
| M442 SERVE AS VOLUNTEER SUBJECT ON RESEARCH CHAMBER FLIGHTS                                    | 60                               |
| M444 TEST FOR INBOARD LEAKAGE IN OXYGEN MASKS, PRESSURE SUITS, OR CHEMICAL<br>DEFENSE GEAR     | 60                               |
| E104 MAINTAIN RECORDS ON RESEARCH SUBJECTS   | 53                               |
| M441 SERVE AS RECORDER ON RESEARCH CHAMBER FLIGHTS   | 53                               |
| M431 REMOVE ANALYTICAL DEVICES FROM HYPOBARIC CHAMBERS   | 53                               |
| B43 WRITE CORRESPONDENCE   | 47                               |
| M438 SERVE AS LOCK OPERATOR ON RESEARCH CHAMBER FLIGHTS  | 47                               |
| M404 OPERATE DOPPLER ULTRASOUND DEVICES  | 47                               |
| L371 CLEAN WORK AREAS  | 47                               |
| E126 REVIEW RESEARCH SUBJECT RECORDS FOR COMPLIANCE WITH THE HUMAN USE<br>COMMITTEE DIRECTIVES | 47                               |
| M433 REMOVE OR INSTALL GAS SAMPLING SYSTEM COMPONENTS  | 47                               |
| M405 OPERATE DOPPLER ULTRASOUND DEVICES  | 40                               |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS                                      | 40                               |
| M424 PERFORM PLUMBING MODIFICATIONS TO SEALED ENVIRONMENTAL CHAMBERS                           | 40                               |
| M418 PERFORM DAILY INSPECTIONS OF VACUUM PUMP SYSTEMS  | 40                               |

REPRESENTATIVE TASKS PERFORMED BY CENTRIFUGE TECHNICIANS  
(N=3)

| TASK | PERCENT<br>MEMBERS<br>PERFORMING  |     |
|------|---|-----|
| B31  | IMPLEMENT SAFETY PROGRAMS   | 100 |
| M413 | PERFORM AS CENTRIFUGE OPERATOR/CREW CHIEF   | 100 |
| M391 | CONNECT PERSONAL EQUIPMENT TO CENTRIFUGES   | 100 |
| M394 | DISCONNECT BIOMEDICAL INSTRUMENTATION FROM SUBJECTS   | 100 |
| M395 | DISCONNECT PERSONAL EQUIPMENT FROM CENTRIFUGES  | 100 |
| M390 | CONNECT BIOMEDICAL INSTRUMENTATION TO SUBJECTS  | 100 |
| M408 | OPERATE STRIP CHART RECORDERS   | 100 |
| M392 | CONSTRUCT SEAT CONFIGURATIONS FOR CENTRIFUGES   | 100 |
| M443 | SIZE AND FIT ANTI-G PROTECTIVE EQUIPMENT  | 100 |
| L369 | ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 100 |
| M397 | INSTALL GAS SYSTEMS ON CENTRIFUGE ACCORDING TO G PROFILE  | 67  |
| M428 | PERFORM WEEKLY INSPECTIONS OF CENTRIFUGE AND RELATED EQUIPMENT                                  | 67  |
| B42  | SUPERVISE PERSONNEL WITH AFSCs OTHER THAN 911XO   | 67  |
| A15  | PLAN SECURITY PROGRAMS  | 67  |
| M425 | PERFORM PRE- OR POST-RUN INSPECTIONS ON CENTRIFUGE  | 67  |
| E104 | MAINTAIN RECORDS ON RESEARCH SUBJECTS   | 67  |
| L371 | CLEAN WORK AREAS  | 67  |
| M430 | RECORD EXPERIMENTAL DATA  | 67  |
| B43  | WRITE CORRESPONDENCE  | 67  |
| A14  | PLAN SAFETY PROGRAMS  | 67  |
| A21  | UPDATE LOCAL OPERATING INSTRUCTIONS   | 67  |
| I228 | FIT CREWMEMBER OXYGEN MASKS   | 67  |
| I267 | TEST AND EVALUATE NEW OR PROPOSED LIFE SUPPORT EQUIPMENT OTHER THAN<br>PRESSURE SUIT ASSEMBLIES | 67  |
| M412 | PERFORM AS CENTRAL OBSERVER ON CENTRIFUGES  | 67  |
| A5   | DETERMINE WORK PRIORITIES   | 67  |
| A2   | ASSIGN PERSONNEL TO DUTY POSITIONS  | 67  |
| A4   | DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES                             | 67  |
| M393 | DESIGN SEAT CONFIGURATIONS FOR CENTRIFUGES  | 67  |
| I255 | RECHARGE PORTABLE OXYGEN ASSEMBLIES   | 67  |
| I256 | REMOVE OR INSTALL OXYGEN MASK RETENTION KITS ON PROTECTIVE HELMETS                              | 67  |
| I259 | REMOVE OR REPLACE STUDENT OR CREWMEMBER PROTECTIVE HELMET COMPONENTS                            | 67  |
| A8   | DRAFT BUDGET AND FINANCIAL REQUIREMENTS   | 67  |

REPRESENTATIVE TASKS PERFORMED BY BIOMEDICAL RESEARCH PERSONNEL  
(N=3)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| M405 OPERATE IN-FLIGHT MONITORING EQUIPMENT   | 100                              |
| M398 INSTALL OR REMOVE IN-FLIGHT MONITORING EQUIPMENT ON AIRCRAFT                         | 100                              |
| M408 OPERATE STRIP CHART RECORDERS  | 100                              |
| M407 OPERATE MEDILOG REPRODUCER EQUIPMENT   | 100                              |
| M390 CONNECT BIOMEDICAL INSTRUMENTATION TO SUBJECTS                                       | 100                              |
| M394 DISCONNECT BIOMEDICAL INSTRUMENTATION FROM SUBJECTS                                  | 100                              |
| M406 OPERATE IN-FLIGHT PHYSIOLOGICAL DATA ACQUISITION SYSTEM (IFPDAS)<br>DATA REPRODUCERS | 67                               |
| M399 INSTRUMENT OR DE-INSTRUMENT CREWMEMBERS WITH IN-FLIGHT MONITORING<br>EQUIPMENT       | 67                               |
| B43 WRITE CORRESPONDENCE  | 67                               |
| E121 PROOFREAD CORRESPONDENCE, REPORTS, OR FORMS  | 67                               |
| M388 CALIBRATE ANALYTICAL DEVICES, SUCH AS FLOW METERS OR RECORDING<br>EQUIPMENT          | 67                               |
| M430 RECORD EXPERIMENTAL DATA   | 67                               |
| M403 OPERATE COMPUTER SYSTEMS   | 67                               |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS                                 | 67                               |
| B23 CONSULT CONCERNED ORGANIZATIONS ON PHYSIOLOGICAL QUESTIONS OR<br>PROBLEMS             | 67                               |
| E104 MAINTAIN RECORDS ON RESEARCH SUBJECTS  | 67                               |
| A8 DRAFT BUDGET AND FINANCIAL REQUIREMENTS  | 67                               |
| C45 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS   | 67                               |
| I225 CONSTRUCT LIFE SUPPORT EQUIPMENT OTHER THAN CUSTOM FITTED OXYGEN<br>MASKS            | 67                               |
| A12 PLAN BRIEFINGS  | 67                               |
| A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES                    | 67                               |
| B28 DIRECT MAINTENANCE OF ADMINISTRATIVE FILES  | 67                               |
| A7 DEVELOP WORK METHODS OR PROCEDURES   | 67                               |
| A21 UPDATE LOCAL OPERATING INSTRUCTIONS   | 67                               |
| B25 COORDINATE TEMPORARY EQUIPMENT LOANS WITH OUTSIDE AGENCIES                            | 67                               |

REPRESENTATIVE TASKS PERFORMED BY RESEARCH CHAMBER TECHNICIANS  
(N=5)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| M436 SERVE AS CREW CHIEF ON RESEARCH CHAMBER FLIGHTS  | 100                              |
| M437 SERVE AS INSIDE OBSERVER ON RESEARCH CHAMBER FLIGHTS                                     | 100                              |
| M438 SERVE AS LOCK OPERATOR ON RESEARCH CHAMBER FLIGHTS                                       | 100                              |
| M439 SERVE AS OUTSIDE OBSERVER ON RESEARCH CHAMBER FLIGHTS                                    | 100                              |
| M441 SERVE AS RECORDER ON RESEARCH CHAMBER FLIGHTS  | 100                              |
| M424 PERFORM PLUMBING MODIFICATIONS TO SEALED ENVIRONMENTAL CHAMBERS                          | 100                              |
| M404 OPERATE DOPPLER ULTRASOUND DEVICES   | 100                              |
| M388 CALIBRATE ANALYTICAL DEVICES, SUCH AS FLOW METERS OR RECORDING<br>EQUIPMENT              | 100                              |
| M444 TEST AND EVALUATE AEROMEDICAL EVACUATION EQUIPMENT, SUCH AS<br>RESPIRATORS OR INCUBATORS | 100                              |
| M433 REMOVE OR INSTALL GAS SAMPLING SYSTEM COMPONENTS   | 100                              |
| M435 SERVE AS CHAMBER OPERATOR ON RESEARCH CHAMBER FLIGHTS                                    | 100                              |
| M434 REMOVE OR INSTALL TREADMILLS FROM OR IN HYPOBARIC CHAMBERS                               | 100                              |
| M418 PERFORM DAILY INSPECTIONS OF VACUUM PUMP SYSTEMS   | 100                              |
| M419 PERFORM PERIODIC INSPECTIONS OF HUMAN EXPERIMENTAL HYPOBARIC OR<br>HYPERBARIC CHAMBERS   | 100                              |
| M432 REMOVE OR INSTALL AUTOMATIC CONTROLLERS ON RESEARCH CHAMBERS                             | 100                              |
| M420 PERFORM PERIODIC INSPECTIONS OF HYPOBARIC CHAMBER FIRE SUPPRESSION<br>SYSTEMS            | 100                              |
| N423 PERFORM PERIODIC INSPECTIONS OF VACUUM PUMP SYSTEMS                                      | 100                              |
| M422 PERFORM PERIODIC INSPECTIONS OF REFRIGERATION SYSTEMS                                    | 100                              |
| M411 PERFORM ANNUAL INSPECTIONS OF TEMPERATURE CHAMBER REFRIGERATION<br>SYSTEMS               | 100                              |
| M400 MIX AND ANALYZE BREATHING GASES  | 80                               |
| M442 SERVE AS VOLUNTEER SUBJECT ON RESEARCH CHAMBER FLIGHTS                                   | 80                               |
| M431 REMOVE ANALYTICAL DEVICES FROM HYPOBARIC CHAMBERS  | 80                               |
| M389 CALIBRATE AUTOMATIC CONTROLLERS ON RESEARCH CHAMBERS                                     | 80                               |
| M409 OPERATE TREADMILLS IN HYPOBARIC CHAMBERS   | 80                               |
| M414 PERFORM DAILY INSPECTIONS OF HUMAN EXPERIMENTAL HYPOBARIC OR<br>HYPERBARIC CHAMBERS      | 80                               |
| M415 PERFORM DAILY INSPECTIONS OF HYPOBARIC CHAMBER FIRE SUPPRESSION<br>SYSTEMS               | 80                               |
| M408 OPERATE STRIP CHART RECORDERS  | 80                               |
| M430 RECORD EXPERIMENTAL DATA   | 80                               |
| M445 TEST FOR INBOARD LEAKAGE IN OXYGEN MASKS, PRESSURE SUITS, OR<br>CHEMICAL DEFENSE GEAR    | 80                               |
| M417 PERFORM DAILY INSPECTIONS OF REFRIGERATION SYSTEMS                                       | 80                               |

REPRESENTATIVE TASKS PERFORMED BY RESEARCH ADMINISTRATIVE NCOs  
(N=4)

| TASK  | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| M437 SERVE AS INSIDE OBSERVER ON RESEARCH CHAMBER FLIGHTS                                     | 100                              |
| M439 SERVE AS OUTSIDE OBSERVER ON RESEARCH CHAMBER FLIGHTS                                    | 100                              |
| M435 SERVE AS CHAMBER OPERATOR ON RESEARCH CHAMBER FLIGHTS                                    | 100                              |
| M436 SERVE AS CREW CHIEF ON RESEARCH CHAMBER FLIGHTS  | 100                              |
| E104 MAINTAIN RECORDS ON RESEARCH SUBJECTS  | 100                              |
| E126 REVIEW RESEARCH SUBJECT RECORDS FOR COMPLIANCE WITH THE HUMAN USE<br>COMMITTEE DIRECTIVE | 100                              |
| L371 CLEAN WORK AREAS   | 100                              |
| E112 PREPARE DRAFT OF PHYSIOLOGICAL TRAINING MONTHLY REPORT FORMS (AF<br>FORM 700)            | 100                              |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES                                    | 100                              |
| M442 SERVE AS VOLUNTEER SUBJECT ON RESEARCH CHAMBER FLIGHTS                                   | 100                              |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                          | 100                              |
| E124 REQUEST HAZARDOUS DUTY ORDERS FOR RESEARCH SUBJECT VOLUNTEERS                            | 100                              |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                           | 100                              |
| M390 CONNECT BIOMEDICAL INSTRUMENTATION TO SUBJECTS   | 75                               |
| M394 DISCONNECT BIOMEDICAL INSTRUMENTATION FROM SUBJECTS                                      | 75                               |
| E100 MAINTAIN CHAMBER FLIGHT CREW RECORD FORMS (AF FORM 755)                                  | 75                               |
| M441 SERVE AS RECORDER ON RESEARCH CHAMBER FLIGHTS  | 75                               |
| E106 MAINTAIN STOCK LEVEL OF BLANK FORMS  | 75                               |
| E123 RECRUIT SUBJECT VOLUNTEERS FOR RESEARCH PROTOCOLS  | 75                               |
| B28 DIRECT MAINTENANCE OF ADMINISTRATIVE FILES  | 75                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                             | 75                               |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS                                   | 75                               |
| E99 MAINTAIN ADMINISTRATIVE FILES   | 75                               |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS                                | 75                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS                              | 75                               |
| M431 REMOVE ANALYTICAL DEVICES FROM HYPOBARIC CHAMBERS  | 75                               |
| B43 WRITE CORRESPONDENCE  | 75                               |
| G176 REMOVE OR REPLACE HYPOBARIC CHAMBER OXYGEN PLUMBING, SUCH AS TUBING<br>OR FITTINGS       | 75                               |
| G169 ADD OIL TO VACUUM PUMPS  | 50                               |
| E101 MAINTAIN INSTRUCTOR'S FLIGHT/DIVE RECORD FORMS (AF FORM 712)                             | 50                               |

APPENDIX B

REPRESENTATIVE TASKS PERFORMED BY DAFSC 91130 PERSONNEL  
(N=50)

| TASK  | PERCENT MEMBERS PERFORMING |
|---|----------------------------|
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS   | 96                         |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS  | 96                         |
| L371 CLEAN WORK AREAS   | 94                         |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS   | 94                         |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS  | 94                         |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS  | 92                         |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS  | 84                         |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH                                      | 82                         |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS  | 78                         |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES  | 72                         |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER  | 70                         |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 70                         |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 68                         |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)  | 66                         |
| D88 OPERATE VISUAL AID EQUIPMENT, SUCH AS MOVIE OR SLIDE PROJECTORS   | 66                         |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES  | 66                         |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS  | 66                         |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS   | 64                         |
| G197 VISUALLY INSPECT COMPONENTS OF PRESSURE DEMAND OXYGEN SYSTEMS, SUCH AS PRESSURE DEMAND PORTABLE ASSEMBLIES | 62                         |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS                 | 60                         |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES   | 60                         |
| I232 FIT STUDENT OR PATIENT OXYGEN MASKS  | 56                         |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO HYPOBARIC CHAMBER FLIGHTS               | 56                         |
| G171 PERFORM OXYGEN FLOW CHECKS ON NARROW PANEL PRESSURE DEMAND OXYGEN REGULATORS                               | 56                         |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 56                         |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 56                         |
| G170 PERFORM DAILY INSPECTION OF HYPOBARIC CHAMBER ASSEMBLIES OTHER THAN EXPERIMENTAL HYPOBARIC CHAMBERS        | 54                         |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS  | 52                         |
| E97 ENTER TRAINING DATA ON PHYSIOLOGICAL TRAINING RECORD FORMS (AF FORM 699)                                    | 50                         |
| I249 PERFORM PERIODIC OR 30-DAY INSPECTIONS OF HELMETS  | 50                         |

REPRESENTATIVE TASKS PERFORMED BY DAFSC 91150 PERSONNEL  
(N=158)

| TASK  | PERCENT MEMBERS PERFORMING |
|---|----------------------------|
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS   | 88                         |
| G181 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS  | 88                         |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS  | 87                         |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS   | 87                         |
| L371 CLEAN WORK AREAS   | 84                         |
| G184 SERVE AS CREW CHIEF ON TRAINING CHAMBER FLIGHTS  | 78                         |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS  | 76                         |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS                                  | 72                         |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                              | 71                         |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES  | 70                         |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING HYPOBARIC CHAMBER FLIGHTS   | 70                         |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                 | 70                         |
| G195 SERVE AS RECORDER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                      | 68                         |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                 | 68                         |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                    | 68                         |
| G194 SERVE AS RECORDER ON EQUIPMENT CHECK CHAMBER FLIGHTS   | 66                         |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                               | 66                         |
| G182 SERVE AS CREW CHIEF ON EQUIPMENT CHECK CHAMBER FLIGHTS                                       | 65                         |
| L373 CUT GRASS, TRIM SHRUBBERY, POLICE SQUADRON AREAS, OR DISPOSE OF TRASH                        | 65                         |
| G183 SERVE AS CREW CHIEF ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 63                         |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO HYPOBARIC CHAMBER FLIGHTS | 62                         |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS                                       | 61                         |
| E107 PREPARE CHAMBER FLIGHT RECORD FORMS (AF FORM 701)  | 60                         |
| F141 BRIEF ON THE USE OF VERTIGON TRAINERS  | 59                         |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 59                         |
| L372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES   | 58                         |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 57                         |
| F157 DEMONSTRATE SPATIAL DISORIENTATION USING THE VERTIGON TRAINER                                | 56                         |
| D88 OPERATE VISUAL AID EQUIPMENT, SUCH AS MOVIE OR SLIDE PROJECTORS                               | 55                         |
| I255 RECHARGE PORTABLE OXYGEN ASSEMBLIES  | 50                         |

REPRESENTATIVE TASKS PERFORMED BY DAFSC 91170 PERSONNEL  
(N=50)

| TASK   | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS  | 87                               |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES   | 87                               |
| C60 PREPARE APRs   | 84                               |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS                                       | 80                               |
| G131 SERVE AS CHAMBER OPERATOR ON TRAINING CHAMBER FLIGHTS   | 79                               |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS   | 77                               |
| G186 SERVE AS INSIDE OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                  | 77                               |
| G193 SERVE AS LOCK OPERATOR ON TRAINING CHAMBER FLIGHTS  | 76                               |
| G185 SERVE AS INSIDE OBSERVER ON EQUIPMENT CHECK CHAMBER FLIGHTS                                     | 76                               |
| B43 WRITE CORRESPONDENCE   | 73                               |
| B38 SUPERVISE AEROSPACE PHYSIOLOGY SPECIALISTS (AFSC 91150)  | 72                               |
| G190 SERVE AS LECTURER OBSERVER ON TRAINING CHAMBER FLIGHTS  | 72                               |
| G180 SERVE AS CHAMBER OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                 | 71                               |
| A5 DETERMINE WORK PRIORITIES   | 70                               |
| B372 CONDUCT TOURS OF AEROSPACE PHYSIOLOGY FACILITIES  | 68                               |
| F140 BRIEF ON THE USE OF EMERGENCY AND PORTABLE OXYGEN SYSTEMS DURING<br>HYPOBARIC CHAMBER FLIGHTS   | 67                               |
| A16 PLAN WORK ASSIGNMENTS  | 67                               |
| G179 SERVE AS CHAMBER OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                    | 66                               |
| G192 SERVE AS LOCK OPERATOR ON MEDICAL EVALUATION CHAMBER FLIGHTS                                    | 66                               |
| G191 SERVE AS LOCK OPERATOR ON EQUIPMENT CHECK CHAMBER FLIGHTS                                       | 65                               |
| F136 BRIEF ON PREFLIGHT PROCEDURES OF CHAMBER FLIGHTS  | 64                               |
| F135 BRIEF ON PREFLIGHT OXYGEN EQUIPMENT INSPECTION PROCEDURES PRIOR TO<br>HYPOBARIC CHAMBER FLIGHTS | 64                               |
| F134 BRIEF ON POSTFLIGHT PROCEDURES OF CHAMBER FLIGHTS   | 63                               |
| B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES                                   | 63                               |
| G196 SERVE AS RECORDER ON TRAINING CHAMBER FLIGHTS   | 63                               |
| D72 COUNSEL TRAINEES ON TRAINING PROGRESS  | 60                               |
| A21 UPDATE LOCAL OPERATING INSTRUCTIONS  | 60                               |
| G189 SERVE AS LECTURER OBSERVER ON MEDICAL EVALUATION CHAMBER FLIGHTS                                | 60                               |
| A7 DEVELOP WORK METHODS OR PROCEDURES  | 58                               |
| D69 CONDUCT OJT  | 57                               |

REPRESENTATIVE TASKS PERFORMED BY DAFSC 91190/CEM CODE 91100 PERSONNEL  
(N=21)

| TASK  | PERCENT MEMBERS PERFORMING |
|---|----------------------------|
| B34 WRITE CORRESPONDENCE  | 100                        |
| L370 ATTEND STAFF MEETINGS  | 95                         |
| C60 PREPARE APRs  | 95                         |
| A21 UPDATE LOCAL OPERATING INSTRUCTIONS   | 95                         |
| E121 PROOFREAD CORRESPONDENCE, REPORTS, OR FORMS  | 90                         |
| C59 INDORSE AIRMAN PERFORMANCE REPORTS (APRs)   | 90                         |
| A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES  | 90                         |
| C44 ANALYZE WORKLOAD REQUIREMENTS   | 90                         |
| C57 EVALUATE WORKLOAD REQUIREMENTS  | 90                         |
| L369 ATTEND MILITARY FORMATIONS OR PERFORM SQUADRON DUTIES  | 86                         |
| B39 SUPERVISE AEROSPACE PHYSIOLOGY SUPERVISORS (AFSC 91170)   | 86                         |
| G187 SERVE AS INSIDE OBSERVER ON TRAINING CHAMBER FLIGHTS   | 86                         |
| A9 ESTABLISH ORGANIZATION POLICIES, OFFICE INSTRUCTIONS (OI), STANDARD OPERATING PROCEDURES (SOP), OR EMERGENCY PLANS | 86                         |
| B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES  | 86                         |
| F138 BRIEF ON RAPID DECOMPRESSION DURING CHAMBER FLIGHTS  | 86                         |
| C48 EVALUATE INSPECTION REPORTS OR PROCEDURES   | 86                         |
| A2 ASSIGN PERSONNEL TO DUTY POSITIONS   | 86                         |
| A5 DETERMINE WORK PRIORITIES  | 86                         |
| C61 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING   | 81                         |
| B22 CONDUCT STAFF MEETINGS  | 81                         |
| B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS  | 81                         |
| C46 EVALUATE COMPLIANCE WITH WORK PERFORMANCE STANDARDS   | 81                         |
| A0 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES   | 81                         |
| C45 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS   | 81                         |
| C58 EVALUATE WORK SCHEDULES   | 81                         |
| C52 EVALUATE SAFETY PROGRAMS  | 81                         |
| A7 DEVELOP WORK METHODS OR PROCEDURES   | 81                         |
| C54 EVALUATE SUGGESTIONS  | 81                         |
| A19 SCHEDULE LEAVES OR PASSES   | 81                         |
| A3 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL   | 81                         |