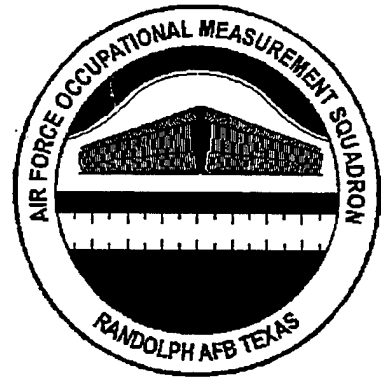


DTIC



UNITED STATES AIR FORCE

# OCCUPATIONAL SURVEY REPORT

STILL PHOTOGRAPHIC

AFSC 3V0X2

OSSN 2292

APRIL 1998

19980428 063

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

DTIC QUALITY INSPECTED 5

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

**DISTRIBUTION FOR AFSC 3V0X2 OSR**

	<u>OSR</u>	<u>ANL EXT</u>	<u>TNG EXT</u>	<u>JOB INV</u>
AFCIC/SYSM	1		1	
AFOMS/OMDQ	1			
AFOMS/OMYXL	10		5	10
AL/HRMM	2			
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
COMMANDANT DEFENSE INFO SCHOOL	1		1	
DEFENSE TECHNICAL INFORMATION CENTER	2			
HQ ACC/DPPTF	3		3	
HQ AETC/DPSE	1		1	
HQ AFMC/DPE	3		3	
HQ AFPC/DPAAD2	1			
HQ AFPC/DPPAPC	1			
HQ AFSPC/DPEE	3		3	
HQ AIA/DPT	3		3	
HQ AMC/DPPET	1			
HQ PACAF/DPPET	3		3	
HQ USAFE/DPATTJ	3		3	
HQ USMC/STANDARDS BRANCH	1			
NAVMAC	1			
81 TRG/TGET (KEESLER AFB MS 39534-2235)	1		1	
335 TRS/TRA (600 HANGAR ROAD, KEESLER AFB MS 39534-2235, ATTENTION: MR. HUMPHRIES)	3	1	1	3

# TABLE OF CONTENTS

	<b><u>PAGE NUMBER</u></b>
<b>PREFACE</b> .....	vi
<b>SUMMARY OF RESULTS</b> .....	viii
<b>INTRODUCTION</b> .....	1
Background.....	1
<b>SURVEY METHODOLOGY</b> .....	2
Inventory Development .....	2
Survey Administration .....	2
Survey Sample .....	3
Task Factor Administration .....	3
<b>SPECIALTY JOBS (Career Ladder Structure)</b> .....	6
Overview of Specialty Jobs .....	6
Group Descriptions.....	8
Comparison to Previous Study .....	17
<b>ANALYSIS OF DAFSC GROUPS</b> .....	17
Skill-Level Descriptions.....	17
Active Duty.....	17
ANG .....	21
Summary.....	30
<b>ANALYSIS OF AFMAN 36-2108 <i>SPECIALTY DESCRIPTIONS</i></b> .....	30
<b>TRAINING ANALYSIS</b> .....	30
First-Enlistment Personnel .....	32
Task Difficulty (TD) Data .....	32
Specialty Training Standard (STS) Analysis .....	32
<b>JOB SATISFACTION ANALYSIS</b> .....	40
<b>IMPLICATIONS</b> .....	43

**THIS PAGE INTENTIONALLY LEFT BLANK**

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

	<u>PAGE NUMBER</u>
<b>TABLE 1</b> MAJCOM DISTRIBUTION OF ACTIVE DUTY 3V0X2 PERSONNEL .....	4
<b>TABLE 2</b> PAYGRADE DISTRIBUTION OF SAMPLE .....	5
<b>TABLE 3</b> AVERAGE TIME SPENT ON DUTIES BY CAREER LADDER JOBS.....	9
<b>TABLE 4</b> SELECTED BACKGROUND DATA FOR AFSC 3V0X2 CAREER LADDER JOBS .....	10
<b>TABLE 5</b> SPECIALTY JOB COMPARISONS BETWEEN CURRENT AND PREVIOUS SURVEYS.....	18
<b>TABLE 6</b> DISTRIBUTION OF SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS .....	19
<b>TABLE 7</b> TIME SPENT ON DUTIES BY MEMBERS OF SKILL-LEVEL GROUPS (RELATIVE PERCENT OF JOB TIME) .....	20
<b>TABLE 8</b> REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 3V032 PERSONNEL .....	22
<b>TABLE 9</b> REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 3V052 PERSONNEL .....	23
<b>TABLE 10</b> TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSC 3V032 AND DAFSC 3V052 PERSONNEL (PERCENT MEMBERS PERFORMING) .....	24
<b>TABLE 11</b> REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 3V072 PERSONNEL .....	25
<b>TABLE 12</b> TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSC 3V052 AND DAFSC 3V072 PERSONNEL (PERCENT MEMBERS PERFORMING) .....	26
<b>TABLE 13</b> REPRESENTATIVE TASKS PERFORMED BY ANG 3V052 PERSONNEL.....	27
<b>TABLE 14</b> REPRESENTATIVE TASKS PERFORMED BY ANG 3V072 PERSONNEL.....	28
<b>TABLE 15</b> TASKS WHICH BEST DIFFERENTIATE BETWEEN ANG DAFSC 3V052 AND AND 3V072 PERSONNEL (PERCENT MEMBERS PERFORMING) .....	29
<b>TABLE 16</b> TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY AND ANG DAFSC 3V0X2 PERSONNEL (PERCENT MEMBERS PERFORMING) .....	31
<b>TABLE 17</b> RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES BY ACTIVE DUTY FIRST-ENLISTMENT AFSC 3V0X2 PERSONNEL.....	34
<b>TABLE 18</b> MOST COMMONLY PERFORMED TASKS FOR ACTIVE DUTY FIRST- ENLISTMENT 3V0X2 PERSONNEL.....	35

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

	<b><u>PAGE</u></b> <b><u>NUMBER</u></b>
<b>TABLE 19</b> EQUIPMENT AND SOFTWARE USED OR OPERATED BY 20 PERCENT OR MORE OF FIRST-JOB OR FIRST-ENLISTMENT AFSC 3V0X2 PERSONNEL.....	36-38
<b>TABLE 20</b> TASKS WITH HIGHEST DIFFICULTY RATINGS.....	39
<b>TABLE 21</b> STS ITEMS NOT SUPPORTED BY SURVEY DATA.....	41
<b>TABLE 22</b> TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE CRITERION GROUP PERSONNEL AND NOT REFERENCED TO THE STS.....	42
<b>TABLE 23</b> COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 3V0X2 TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE (PERCENT MEMBERS RESPONDING).....	44
<b>TABLE 24</b> COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 3V0X2 TAFMS GROUPS IN CURRENT STUDY TO PREVIOUS STUDIES (PERCENT MEMBERS RESPONDING).....	45
<b>TABLE 25</b> JOB SATISFACTION INDICATORS FOR AFSC 3V0X2 JOBS (PERCENT MEMBERS RESPONDING).....	46
<b>FIGURE 1</b> JOBS PERFORMED BY AFSC 3V0X2 PERSONNEL.....	7
<b>FIGURE 2</b> JOBS PERFORMED BY FIRST-ENLISTMENT AFSC 3V0X2 PERSONNEL.....	33
<b>APPENDIX A</b> REPRESENTATIVE TASKS PERFORMED BY MEMBERS OF CAREER LADDER JOBS.....	47

## PREFACE

This report presents the results of an Air Force Occupational Survey of the Still Photographic (AFSC 3V0X2) career ladder. Authority for conducting occupational surveys is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Functional Manager, the operations training location, all major using commands, and other interested operations and training officials.

The survey instrument was developed by Second Lieutenant Jeffrey Nagy, Inventory Development Specialist, with computer programming support furnished by Ms. Jeanie C. Guesman. Mr. Richard G. Ramos provided administrative support. Mrs. Joan St. John, Occupational Analyst, analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Roger W. Barnes, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

Additional copies of this report can be obtained by writing to AFOMS/OMYXI, 1550 5th Street East, Randolph AFB Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our web site at <http://www.omsq.af.mil>.

GEORGE KAILIWAI III, Lt Col, USAF  
Commander  
Air Force Occupational Measurement Squadron

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

**THIS PAGE INTENTIONALLY LEFT BLANK**

## SUMMARY OF RESULTS

1. **Survey Coverage:** The Still Photographic (AFSC 3V0X2) career ladder incumbents were surveyed to obtain current task and equipment data for use in examining training programs. Survey results are based on responses from 401 Active Duty and 99 Air National Guard members worldwide.
2. **Career Ladder Structure:** Structure analysis identified three clusters and four jobs: Digital Imaging Job, Base Visual Information System Center (BVISC) Job, General Photographer Cluster, Color Printing Cluster, Supervisor Cluster, Black and White (BW) Printing Job and Color Photoprocessing Job.
3. **Career Ladder Progression:** This career ladder is typical in that 3- and 5-skill level members spend most of their time performing technical tasks, while 7-skill level members are typically first-line supervisors performing a mixture of technical and supervisory tasks. There were no 9-skill level or CEM personnel in the survey sample.
4. **Training Analysis:** First-enlistment members spend approximately 94 percent of their duty time devoted to technical and administrative or supply functions. Analysis of career ladder documents indicates a fair level of support for the current Specialty Training Standard (STS). All of the unsupported STS elements should be reviewed as to their possible deletion from the STS. These items received little to no support from either percent members performing data. Also, there were many technical tasks performed by a high percentage of members possessing a very high TD rating which could not be matched to the STS. These tasks should be reviewed by career field functional managers and technical training subject-matter experts as to the possible need for their inclusion in the STS.
5. **Job Satisfaction Analysis:** AFSC 3V0X2 members are generally more satisfied with their jobs in all areas than are members of a comparative sample of direct support personnel. Members of the current sample are relatively more satisfied with their jobs than 3V1X1 personnel surveyed in 1993 and less satisfied than 231X2 personnel surveyed in 1992. Job satisfaction data of specific career ladder jobs show most job members are satisfied with their jobs. Only the Color Photoprocessing Job personnel appear genuinely dissatisfied with their work.
6. **Implications:** The AFMAN 36-2108 *Specialty Descriptions* accurately describe the jobs and tasks personnel at all skill levels perform. Job satisfaction is satisfactory for identified jobs and satisfaction ratings of AFSC 3V0X2 personnel were generally higher than those of the comparative sample. The training document analysis revealed some unsupported areas of the STS which should be considered for deletion. There are also some technical tasks with high percent members performing not referenced to the STS which should be considered for inclusion in the STS. Training personnel and career ladder functional managers should review this document to ensure it is complete and appropriate.

**THIS PAGE INTENTIONALLY LEFT BLANK**

**OCCUPATIONAL SURVEY REPORT (OSR)  
STILL PHOTOGRAPHIC CAREER LADDER  
(AFSC 3V0X2)**

**INTRODUCTION**

This is an OSR of the Still Photographic (AFSC 3V0X2) career ladder. It was completed in 1998 and is the first since the April 1996 merger of Imagery Production (AFSC 3V1X1) and Still Photographic (AFSC 3V0X2). This survey, containing both Active Duty (AD) and Air National Guard (ANG) personnel, is intended to update the current data base and to identify any changes that may have taken place since the last surveys in 1992 (Still Photographic (AFSC 231X2)) and 1993 (Imagery Production (AFSC 3V1X1)).

Background

As described in the AFMAN 36-2108 *Specialty Description*, dated 30 April 1996, Still Photographic members accomplish, process, or supervise still, continuous, and computer generated imagery. They support base level, technical, contingency, reconnaissance, aerial mapping, special mission production, or combat requirements. Personnel perform imagery tests and analysis, and certify, monitor and regulate imaging equipment. They also capture, store, enhance, crop, print, or transmit images via satellite, telephone, or secure transmission systems.

Members prepare photographic assignments. They accomplish photographic imaging. Personnel operate or supervise the operation of image acquisition equipment. They perform copy and duplication functions. Incumbents process or supervise the process of black and white and color imagery. They mix, analyze and control chemical processes. They operate or supervise the operation of imagery print production equipment, including projection, optical, automated, and computer controlled printers, and perform quality assurance. They perform medical image recording functions and supervise or perform photographic imaging functions.

Entry into the career ladder is from a 67-day training course conducted at Ft George Meade MD. This course provides instruction in theory and application of photographic fundamentals, chemistry, optics, sensitized materials, light sources, exposure and processing black and white (BW) films; printing BW negatives; camera operations for general, specialized, and reproduction photography; portraiture; exposure and processing; color reversal film; color slide reproduction; exposure, processing and printing color negatives; sensitometric procedures; and electronic imaging techniques. Entry into the career ladder currently requires an Armed Services Vocational Aptitude Battery score of 43 General and a strength factor of H (50 lbs).

**APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED**

## SURVEY METHODOLOGY

### Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) OASN 2292, dated March 1997. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, and tasks from previous applicable OSRs. The preliminary task list was refined and validated through personal interviews with 29 subject-matter experts (SME) selected to cover a variety of major commands (MAJCOM) at the following locations:

<u>BASE</u>	<u>UNIT VISITED</u>
Pensacola Naval Air Station FL	Defense Photography School
Langley AFB VA	1 CS/SCSV
Charleston AFB SC	1st Combat Camera Sq
Lackland AFB TX	59 MG/ETIT
Nellis AFB NV	99 CS/SCS
Vandenberg AFB CA	30 CS/SCS

Others contacted include Air Force Personnel Center (AFPC) classification personnel, training and resource managers, and the Air Force functional manager.

The resulting JI contains a comprehensive listing of 849 tasks grouped under 21 duty titles, with a background section requesting incumbents to answer questions such as their grade, job title, component status, AFSC before 31 April 1996, time in present job, time in service, and job satisfaction.

### Survey Administration

From June 1997 to November 1997, base training offices at operational bases worldwide administered the inventory, on computer disk, to all eligible AFSC 3V0X2 personnel. Members eligible for the survey consisted of the total assigned 3-, 5-, and 7-skill level populations, excluding the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring within the time the inventories were administered to the field; and (4) personnel in their jobs less than 6 weeks. Participants were selected from a computer-generated mailing list obtained from personnel data tapes maintained by AFPC, Randolph AFB TX.

Each individual completing the inventory first filled in an identification and biographical information section and then checked each task he or she currently performed on the job. After checking tasks performed, each individual rated tasks checked on a 9-point scale showing relative time spent on that task, compared to other tasks performed. The ratings range from 1 (very small amount time spent) to 9 (very large amount time spent).

To determine relative time spent for each task, all incumbent's ratings are assumed to account for 100 percent of job time. The ratings are, therefore, summed and each individual task rating is divided by the total of all task ratings and subsequently multiplied by 100 to provide a relative percentage of time spent on each task.

### Survey Sample

Personnel were selected to participate in this study to ensure an accurate representation across MAJCOMs and paygrades. Table 1 reflects the percentage, by MAJCOM, of assigned and sampled AFSC 3V0X2 AD individuals. As of November 1997, the 401 AD respondents in the final sample represent 55 percent of all assigned AD AFSC 3V0X2 personnel. Also included within the sample were 99 ANG 3V0X2 personnel. Table 2 reflects the percentage distribution by paygrade groups.

### Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 3V0X2 personnel (generally E-6 or E-7 craftsmen) also completed a second booklet for either training emphasis (TE) or task difficulty (TD). The TE and TD booklets were processed separately from the JIs. The information gained from these task factor data is used in various analyses and is a valuable part of the training decision process.

**Training Emphasis (TE).** TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 33 senior AFSC noncommissioned officers (NCO) who completed a TE booklet were asked to select tasks they felt required some sort of structured training for entry-level personnel and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident technical schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. In order for TE data to be reliable and reportable, sufficient rater agreement must exist. In this study, there was a wide range of rating policies, due primarily to the merger of Still Photographic with Imagery Production in April 1996. As a result, raters were unable to agree sufficiently on a training policy; hence, no TE data are reported in this survey.

TABLE 1

MAJCOM DISTRIBUTION OF ACTIVE DUTY 3V0X2 PERSONNEL

<u>COMMAND</u>	<u>PERCENT OF ACTIVE DUTY ASSIGNED</u>	<u>PERCENT OF ACTIVE DUTY SAMPLE</u>
ACC	25	29
AMC	16	12
AFSPC	12	17
PACAF	10	13
AETC	6	6
USAFE	5	8
USEUC	4	*
AIA	4	2
AFMC	3	5
STRATCOM	3	3
PACOM	2	*
OTHER	10	4
TOTAL	100	100

	<u>ACTIVE DUTY</u>	<u>AIR NATIONAL GUARD</u>	<u>TOTAL</u>
Total Assigned:	734	346	1,080
Total Eligible/Surveyed:	669	333	1,002
Total in Survey Sample:	401	99	500
Percent of Assigned in Sample:	55%	29%	46%
Percent of Surveyed in Sample:	57%	30%	50%

NOTE: All data is as of May 1997

\*Less than 1 percent

TABLE 2

## PAYGRADE DISTRIBUTION OF SAMPLE

PAYGRADE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
E-1 to E-3	19	12
E-4	33	30
E-5	28	33
E-6	11	15
E-7	8	8
E-8	*	*

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

**Task Difficulty (TD).** TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 40 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was high. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

## **SPECIALTY JOBS** (Career Ladder Structure)

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

The basic group used in the hierarchical clustering process is the *Job*. When two or more jobs have a substantial degree of similarity in tasks performed and time spent performing tasks, they are grouped together and identified as a *Cluster*. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

### Overview of Specialty Jobs

Based on analysis of tasks performed and amount of time spent performing each task, four independent jobs (IJ) and three job clusters were identified. Figure 1 illustrates the jobs performed by AFSC 3V0X2 personnel.

A listing of these clusters and IJs is provided below. The stage (STG) number shown beside each title references computer-printed information, while the letter "N" represents the number of personnel in each group.

- I. DIGITAL IMAGING JOB (STG105, N=6)
- II. BASE VISUAL INFORMATION SYSTEM CENTER (BVISC) PHOTOGRAPHER JOB (STG060, N=38)
- III. GENERAL PHOTOGRAPHER CLUSTER (STG059, N=281)

# JOBS PERFORMED BY AFSC 3V0X2 PERSONNEL

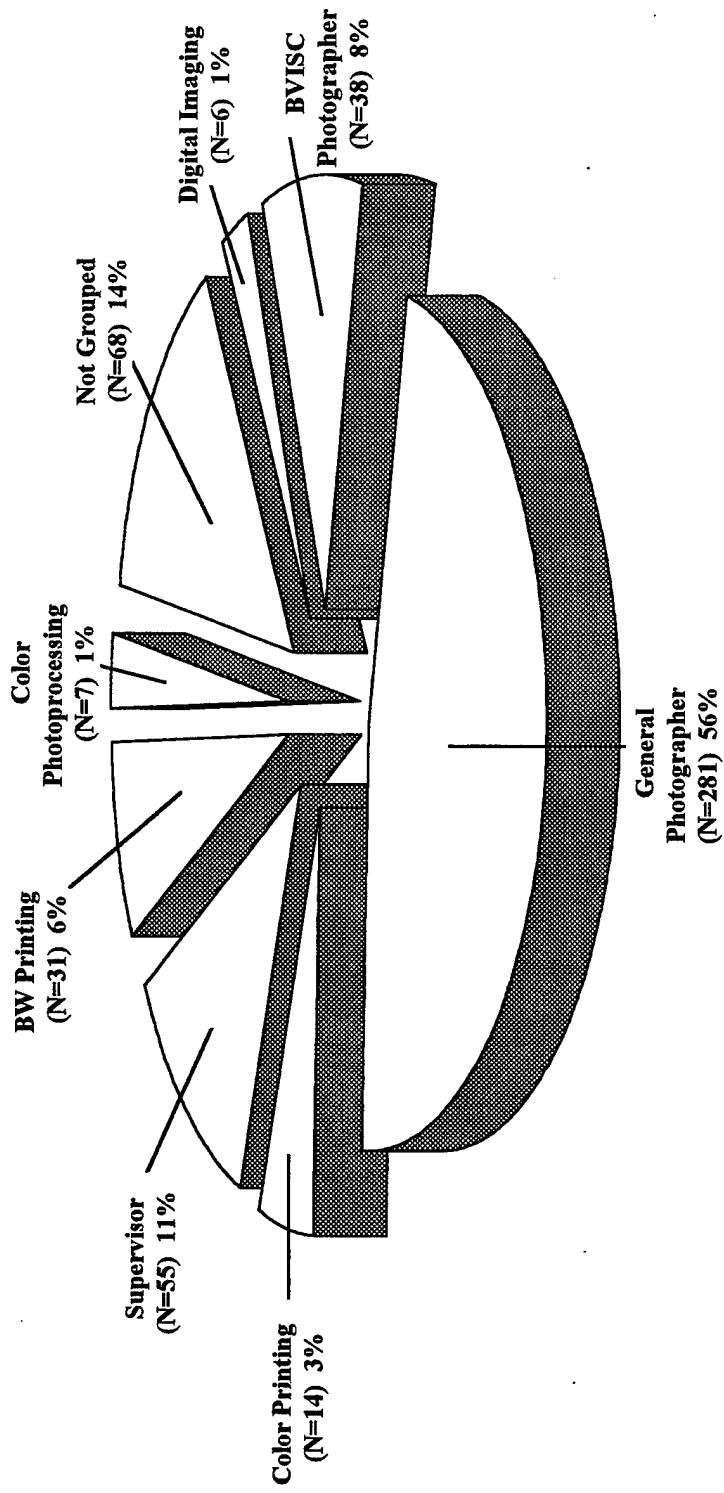


FIGURE 1

- A. Photoprocessing Job
  - B. Audiovisual Manager Job
- IV. COLOR PRINTING CLUSTER (STG056, N=14)
- A. Printing Job
  - B. Processing Job
- V. SUPERVISOR CLUSTER (STG046, N=55)
- A. OJT Job
  - B. NCOIC Job
  - C. Superintendent Job
- VI. BLACK AND WHITE (BW) PRINTING JOB (STG054, N=31)
- VII. COLOR PHOTOPROCESSING JOB (STG064, N=7)

The respondents forming these groups account for 86 percent of the survey sample. The remaining 14 percent were performing tasks which did not group with any defined jobs. Job titles given by respondents which were representative of these personnel include: Forensic Photographer, Combat Photographer, Command Visual Information Program Manager, Microfilm Technician, Micrographics, Photo Waste Supervisor, and Film Librarian.

#### Group Descriptions

The following paragraphs contain brief descriptions of the three clusters and four IJs identified in the career ladder structure analysis. Appendix A lists representative tasks performed by the identified job cluster and IJs. Table 3 displays time spent on duties, while Table 4 provides demographic information for each job discussed in this report.

I. DIGITAL IMAGING JOB (STG105). The 6 members of this job account for 1 percent of the survey sample. The incumbents are concerned mainly with using electronic imaging equipment for printing. Expectedly, members spend 44 percent of their time performing electronic imaging activities (see Table 3). Members also store electronic images on master disks, operate electronic imaging cameras, and scan prints onto master disks. None of the personnel in this job report being ANG personnel (see Table 4). Representative tasks of this job include:

TABLE 3

## AVERAGE TIME SPENT ON DUTIES BY CAREER LADDER JOBS

DUTIES	DIGITAL IMAGING JOB (STG105)	BVISC PHOTOG- RAPHER JOB (STG060)	GENERAL PHOTOG- RAPHER CLUSTER (STG059)	COLOR PRINT JOB (STG056)	SUPV CLUSTER (STG046)	BW PRINT JOB (STG054)	COLOR PHOTO- PROCESS JOB (STG064)
A DETERMINING PHOTOGRAPHIC EXPOSURES	7	11	6	2	1	1	2
B PERFORMING PHOTOGRAPHIC ASSIGNMENTS	13	56	29	11	7	3	2
C PROCESSING AND PRINTING BLACK & WHITE (BW) MATERIALS	0	1	2	1	1	13	*
D PROCESSING AND PRINTING COLOR MATERIALS	0	2	11	19	2	6	12
E PERFORMING GENERAL PHOTO LABORATORY ACTIVITIES	1	3	6	10	2	10	3
F MAINTAINING RELOCATABLE PHOTOGRAPHIC FACILITIES	1	1	2	4	1	4	6
G OPERATING COPY CAMERAS	0	1	2	3	*	1	0
H PROCESSING BLACK AND WHITE (BW) MATERIALS BY CONTINUOUS METHODS	0	*	1	0	*	20	0
I PRINTING BLACK AND WHITE MATERIALS BY CONTINUOUS METHODS	0	0	*	0	*	6	0
J PROCESSING COLOR MATERIALS BY CONTINUOUS METHODS	0	1	5	18	1	3	63
K PRINTING COLOR MATERIALS BY CONTINUOUS METHODS	0	*	1	3	*	1	*
L MAINTAINING QUALITY CONTROL	*	*	2	6	1	11	*
M EDITING AND CLEANING IMAGERY	0	*	1	1	*	2	2
N TITLING IMAGERY	0	0	*	*	*	3	0
O PRODUCING CHEMICAL MIXES AND PERFORMING CHEMICAL ANALYSIS	0	2	3	9	1	6	*
P PERFORMING ELECTRONIC IMAGING ACTIVITIES	44	10	8	2	4	1	0
Q PERFORMING MANAGEMENT & SUPERVISORY ACTIVITIES	13	7	10	6	49	5	5
R PERFORMING TRAINING ACTIVITIES	10	1	3	2	10	1	2
S PERFORMING GENERAL ADMIN AND TECHNICAL ORDER SYSTEM ACTIVITIES	6	1	2	1	10	2	*
T PERFORMING GENERAL SUPPLY & EQUIPMENT ACTIVITIES	3	2	2	1	5	1	2
U PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2	1	4	*	4	1	*

\* Denotes less than 1 percent members performing

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

TABLE 4

SELECTED BACKGROUND DATA FOR AFSC 3V0X2 CAREER LADDER JOBS

	DIGITAL IMAGING JOB	BVISC PHOTOG -RAPHER JOB	GENERAL PHOTOG- RAPHER CLUSTER	COLOR PRINT JOB	SUPV CLUSTER	BW PRINT JOB	COLOR PHOTO- PROCESS JOB
NUMBER IN GROUP	6	38	281	14	55	31	7
PERCENT OF SAMPLE	1%	8%	56%	14%	11%	6%	1%
PERCENT IN CONUS	83%	89%	74%	93%	82%	58%	86%
DAFSC DISTRIBUTION:							
3V032	0%	18%	16%	29%	2%	3%	29%
3V052	100%	50%	54%	64%	15%	71%	71%
3V072	0%	32%	30%	7%	84%	26%	0%
COMPONENT STATUS							
ACTIVE DUTY	100%	55%	80%	100%	96%	68%	100%
GUARD	0%	45%	20%	0%	4%	32%	0%
PREDOMINANT PAYGRADE(S)							
AVERAGE MONTHS TAFMS ACTIVE DUTY ONLY	E-4 64	E-4/E-5 95	E-4 100	E-3 69	E-5/E-6 181	E-5 116	E-3 61
PERCENT IN FIRST ENLISTMENT ACTIVE DUTY ONLY	17%	26%	33%	57%	2%	12%	57%
AVG NUMBER OF TASKS PERFORMED							
PERCENT SUPERVISING	44	61	195	130	101	215	56
	17%	42%	45%	36%	93%	42%	29%

- enhance images for printing using electronic imaging systems
- print pictures using electronic imaging printers
- operate scanners to produce electronic imagery
- load disks in electronic imaging equipment
- scan prints onto master disks
- operate electronic imaging cameras
- store electronic images on master disks
- operationally check electronic imaging equipment
- insure compatibility of electronic imaging system components

The members of this job perform a relatively low number of tasks, with 44 the average performed by all members. A 5-skill level is held by all job members, with E-4 being the predominant paygrade (see Table 4). Members average 64 months TAFMS, and 33 percent are in their first enlistment. Supervisory positions are fairly few in number, with just 17 percent of all job members indicating they supervise other personnel.

II. BASE VISUAL INFORMATION SYSTEM CENTER (BVISC) PHOTOGRAPHER JOB (STG060). The 38 members of this job represent 8 percent of the survey sample. Members in this job spend 56 percent of their time performing photographic assignments, 11 percent of time spent on determining photographic exposures, and 10 percent of their time on the performance of electronic imaging activities (see Table 3). As part of their job, members shoot photographs of groups, select camera lenses, and adjust lens apertures or shutter speeds. They shoot photographs of awards and presentations. Representative tasks for this job include:

- shoot photographs of awards and presentations
- shoot photographs of groups
- select camera lenses
- load film in cameras
- select camera lenses
- adjust lens apertures or shutter speeds
- select camera angles
- shoot photographs for historical archives

The members of this job perform an average of 61 tasks. Members have an average of 95 months TAFMS, with 26 percent of its members in their first enlistment (see Table 4). Thirty-two percent of the members perform supervisory functions, 50 percent hold a 5-skill level, with E-4 and E-5 the predominant paygrades (see Table 4). Forty-five percent of the personnel in this job are in ANG units.

III. GENERAL PHOTOGRAPHY CLUSTER (STG059). The General Photography job is performed by the largest number of respondents, comprising 56 percent of the survey sample (see Table 4). This job is distinguished by the amount of time spent performing photographic assignments (29 percent of their relative job time) (see Table 3). Members of this cluster perform a wide variety of tasks. They are responsible essentially for a full range of career ladder functions, including shooting photographs, printing pictures, and performing management and supervisory activities. These personnel perform an average of 195 tasks, and within this cluster, two jobs were identified: Photoprocessing and Audiovisual Manager. These jobs will be discussed in detail below. Distinguishing tasks for this cluster include:

- load film in cameras
- adjust lens apertures or shutter speeds
- select film for assignments
- shoot photographs of groups
- select camera angles
- select camera lenses
- pose subjects for portraits
- shoot photographs of awards and presentations

The first job within this cluster is the Photoprocessing Job. These personnel, although performing some of the same tasks as the general photographer personnel, are distinguished from the other general photographers in that they specialize in photo processing functions. They average 85 months TAFMS and the predominant paygrade is E-4. Thirty-two percent are in their first enlistment. Differentiating tasks for these personnel in this job include:

- select negatives for printing
- clean automatic color film processing equipment
- add chemicals to automatic color film processors
- clean automatic color print processing equipment

The second job within this cluster is the Audiovisual Manager Job. This job focuses on activities involving supervision and management, as well as technical activities. Typical tasks include:

- supervise military personnel
- evaluate work schedules
- develop or establish work methods or procedures

- evaluate photographic and lab assignments
- print pictures using electronic imaging printers
- conduct OJT

Fifty-four percent of members in this cluster hold a 5-skill level, and average 101 months TAFMS (see Table 4). The predominant paygrade for job members is E-4 and E-5, 25 percent are in their first enlistment and the average number of tasks performed is 195. Supervisory positions are fairly numerous, with 33 percent of job members indicating they supervise personnel. Twenty percent of the respondents indicated that they were in an ANG unit.

IV. COLOR PRINTING CLUSTER (STG056). The 14 members of this cluster represent 3 percent of the survey sample. This cluster is comprised only of AD personnel. Members spent 19 percent of their time processing and printing color materials, an additional 18 percent of their time processing color materials by continuous methods and 9 percent of their time producing chemical mixes or performing chemical analysis. Representative tasks of this cluster include:

- perform color processor shutdown procedures
- perform color processor startup procedures
- fill color processor chemical tanks with color chemistry
- clean color processor rollers
- clean color processors prior to startup
- clean color processor racks
- drain color processor chemical tanks

This cluster contains two jobs. The first, the Printing Job, contains six members who print color materials. This is indicated by tasks being performed that relate to color prints. Personnel have the least experience, with 67 percent in their first enlistment. All members of this job are AD and average 47 months TAFMS. They perform an average of 121 tasks. The predominant paygrade is E-3. Representative tasks for this job include:

- determine filter packs for manual printers
- correct color prints produced manually using color correction filters
- determine exposure for manual color prints
- perform channel balance procedures on automated printer processors, including minilabs

- compose, focus, or expose color prints
- perform daily shutdown procedures on automated printer processors, including minilabs

The second job is the Processing Job. The eight members of this job are distinguished from other personnel in this cluster by their performance of tasks relating to color processor procedures. These personnel average 85 months TAFMS and perform an average of 137 tasks. The predominant paygrade is E-4 and only 25 percent are in their first enlistment. Representative tasks include:

- perform color processor shutdown procedures
- perform color processor startup procedures
- clean color processor rollers
- clean color processor rooms
- clean color processor racks
- inspect color processors prior to startup

V. SUPERVISOR CLUSTER (STG046). This nontechnical job is distinguished from the rest of the jobs because incumbents spend most of their time on supervisory and training duties. These include counseling, evaluating subordinates, conducting OJT, and scheduling training. The 55 members within this job spend 74 percent of their time performing these functions. Four percent of the job incumbents are ANG personnel. Three jobs were identified within this cluster: OJT, NCOIC, and Superintendent. These jobs will be discussed in detail below. AFSC 3V0X2 personnel within the Supervisor Cluster are distinguished by the time they spend performing the following tasks:

- participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting
- develop or establish work methods or procedures
- supervise military personnel
- inspect personnel for compliance with military standards
- counsel subordinates concerning personal matters
- write performance reports or supervisory appraisals
- schedule work assignments or priorities
- direct training functions
- develop or establish work schedules

Respondents holding this job perform an average of 101 tasks. Eighty-four percent hold the 7-skill level. Incumbents average 181 months TAFMS and 2 percent are in their first enlistment. Ninety-six percent are on active duty and the remaining 4 percent are ANG (see Table 4).

As noted above, this cluster contains three jobs. These are OJT, NCOIC, and Superintendent. Although most of the members of the Supervisor Cluster indicated they perform tasks pertaining to supervision, these jobs warrant discussion of their own. A description of each job follows:

A. OJT Job (STG063). Members of the OJT Job are distinguished by spending 17 percent of their time on training activities such as maintaining training records, scheduling training, evaluating progress of trainees, and conducting OJT. Representative tasks performed by members of this job are:

- maintain training records for files
- conduct OJT
- evaluate personnel to determine training needs
- supervise military personnel
- schedule training

B. NCOIC Job (STG072). The 10 members of the NCOIC Job differ from the members of the Superintendent Job in that they indicate performing technical tasks in addition to those of a supervisory nature. Incumbents in this job spend 36 percent of their duty time performing supervisory and training tasks, plus 64 percent on technical tasks related to still photography. Representative tasks performed by members of this job are:

- schedule work assignments or priorities
- operate electronic imaging cameras
- shoot photographs of awards and presentations
- supervise military personnel
- participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting

C. Superintendent Job (STG051). The 39 members of this final job distinguish themselves from the other jobs by the amount of time they spend performing management and supervisory activities (57). Representative tasks performed by members of this job are:

- write performance reports or supervisory appraisals
- interpret policies, directives, or procedures for subordinates
- write recommendations for awards or decorations

- supervise military personnel
- participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting

VI. BLACK AND WHITE (BW) PRINTING JOB (STG054). The 31 members of this job represent 6 percent of the survey sample. Personnel primarily print BW materials by continuous methods (20 percent). In addition, they spend time processing and printing BW materials (13 percent) and 11 percent of their time maintaining quality control. Incumbents perform an average of 215 tasks. Representative tasks of this job include:

- perform BW processor startup procedures
- perform BW processor shutdown procedures
- clean BW processor rollers
- drain or refill BW processor washtanks
- clean and rinse chemical mixing equipment
- load or unload BW processor magazines

Seventy-one percent of personnel in this job hold the 5-skill level and the average time in service is 116 months. Twelve percent of the personnel are in their first enlistment, and 32 percent are in ANG units.

VII. COLOR PHOTOPROCESSING JOB (STG064). The 7 members of this job represent 1 percent of the survey sample. All are AD members in USSPACECOM. On the average, personnel perform 56 tasks. Incumbents spend 63 percent of their time processing color materials by continuous methods. An additional 12 percent of their time is spent in processing and printing color materials. Representative tasks for this job include:

- clean color processor racks
- make color film running splices during processor operations
- perform corrosion control on color processing equipment
- prepare color film machine certification startups
- perform color processor shutdown procedures
- process color film control strips
- splice color film control strips
- perform color processor startup procedures
- splice color film runout leaders to processing runs
- splice color film using staples only

Members of this job hold either a 3- or 5-skill level, and have predominant paygrade of E-3 (see Table 4). Color Photoprocessing personnel have an average 61 months. In addition, only 57 percent of Color Photoprocessing personnel are in their first enlistment, while 29 percent indicate they supervise other personnel.

#### Comparison to Previous Study

A list of jobs identified in the current survey as compared to those identified in the two previous surveys is provided in Table 5. Since the merger, five of the seven jobs currently identified can be traced to one of the two previous AFSCs (231X2, 3V1X1) surveyed in 1992 and 1993, respectively. Although the job titles vary among the three studies, generally the tasks that personnel in these studies perform are the same. As shown in Table 5, all but two of the jobs in the current study, BVISC and Digital Imagery, were identified in either the 1992 Still Photographic or the 1993 Imagery Production OSR.

### **ANALYSIS OF DAFSC GROUPS**

An analysis of DAFSC groups, in conjunction with analysis of the career ladder structure, is an important part of each occupational survey. DAFSC analysis examines differences in tasks performed between skill-level members. This information may then be used to evaluate how well career ladder documents, such as AFMAN 36-2108 *Specialty Descriptions*, reflect what career ladder personnel are doing in the field.

The distribution of AFSC 3V0X2 skill-level groups across career ladder jobs is displayed in Table 6. Sixty-two percent of AD 3-skill level personnel and 18 percent ANG 5-skill level personnel are located in the General Photographic Cluster. In addition, 72 percent of ANG 7-skill level personnel are located in this General Photographic Cluster as well. Basically, the personnel in the General Photographic Cluster easily represent the core job of AFSC 3V0X2. The other identified jobs receive a fairly equal distribution of both ANG and AD personnel (see Table 6). The only other item of note is AD 7-skill levels have a high representation in the Supervisor Cluster, (39 percent versus 2 and 4 percent for the 3-skill level and 5-skill level respectively).

#### Skill-Level Descriptions

##### Active Duty

**DAFSC 3V032.** The 66 AD 3-skill level personnel, representing 13 percent of the survey sample, perform an average of 119 tasks. Sixty-two percent of 3-skill level personnel perform the General Photographic Job (see Table 6). Table 7 displays the relative time spent on each duty across the

TABLE 5

SPECIALTY JOB COMPARISONS BETWEEN CURRENT AND PREVIOUS SURVEYS

<u>CURRENT 3V0X2 OSR</u>	<u>1992 231X2 OSR</u>	<u>1993 3V1X1 OSR</u>
General Photographer Cluster	General Photographer Cluster	<i>Not Identified</i>
Color Photoprocessing Job	Audio Visual Manager IJT	Continuous Color Photoprocessing
Digital Imaging Job	Color Photoprocessor IJT	<i>Not Identified</i>
BVISC Job	<i>Not Identified</i>	<i>Not Identified</i>
Color Printing Cluster	<i>Not Identified</i>	Manual Color Printing
Supervisor Cluster	<i>Not Identified</i>	Supervision and Management
Black and White Printing Job	<i>Not Identified</i>	Manual Black and White Printing
<i>Not Identified</i>	Photo Lab Chief Cluster	Continuous Black and White (BW) Printing
<i>Not Identified</i>	Studio Photographer IJT	<i>Not Identified</i>
<i>Not Identified</i>	<i>Not Identified</i>	<i>Not Identified</i>
<i>Not Identified</i>	<i>Not Identified</i>	Black and White (BW) Quality Control
<i>Not Identified</i>	<i>Not Identified</i>	Chemical Analysis
<i>Not Identified</i>	<i>Not Identified</i>	Relocatable Photo Facility
<i>Not Identified</i>	<i>Not Identified</i>	Tech School Instruction

TABLE 6

DISTRIBUTION OF SKILL-LEVEL MEMBERS  
ACROSS CAREER LADDER JOBS

SPECIALTY JOBS	ACTIVE DUTY			ANG	
	DAFSC 3V032 (N=66)	DAFSC 3V052 (N=221)	DAFSC 3V072 (N=114)	DAFSC 3V052 (N=40)	DAFSC 3V072 (N=54)
I. DIGITAL IMAGING JOB	0	3	0	0	0
II. BVISC PHOTOGRAPHER JOB	9	5	3	18	17
III. GENERAL PHOTOGRAPHER CLUSTER	62	63	40	33	72
IV. COLOR PRINTING CLUSTER	6	4	1	0	0
V. SUPERVISOR CLUSTER	2	4	39	0	4
VI. BLACK AND WHITE (BW) PRINTING JOB	2	6	6	23	2
VII. COLOR PHOTOPROCESSING JOB	3	2	0	0	0
VIII. NOT GROUPED	16	11	11	26	5

TABLE 7

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

DUTIES	ACTIVE DUTY			ANG		
	DAFSC	DAFSC	DAFSC	DAFSC	DAFSC	DAFSC
	3V032 (N=66)	3V052 (N=221)	3V072 (N=114)	3V052 (N=40)	3V072 (N=54)	
A DETERMINING PHOTOGRAPHIC EXPOSURES	6	5	3	5	7	
B PERFORMING PHOTOGRAPHIC ASSIGNMENTS	33	24	15	25	31	
C PROCESSING AND PRINTING BLACK & WHITE (BW) MATERIALS	1	2	1	11	7	
D PROCESSING AND PRINTING COLOR MATERIALS	14	10	5	8	4	
E PERFORMING GENERAL PHOTO LABORATORY ACTIVITIES	6	6	4	12	7	
F MAINTAINING RELOCATABLE PHOTOGRAPHIC FACILITIES	2	3	2	1	2	
G OPERATING COPY CAMERAS	1	2	1	1	2	
H PROCESSING BLACK AND WHITE (BW) MATERIALS BY CONTINUOUS METHODS	2	3	2	9	3	
I PRINTING BLACK AND WHITE MATERIALS BY CONTINUOUS METHODS	*	1	1	1	*	
J PROCESSING COLOR MATERIALS BY CONTINUOUS METHODS	10	7	2	3	1	
K PRINTING COLOR MATERIALS BY CONTINUOUS METHODS	1	1	*	1	*	
L MAINTAINING QUALITY CONTROL EDITING AND CLEANING IMAGERY	3	4	2	2	1	
N TITLING IMAGERY	*	2	*	1	*	
O PRODUCING CHEMICAL MIXES & PERFORMING CHEMICAL ANALYSIS	*	*	*	1	*	
P PERFORMING ELECTRONIC IMAGING ACTIVITIES	4	4	1	4	3	
Q PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	6	9	5	6	7	
R PERFORMING TRAINING ACTIVITIES	4	8	33	6	12	
S PERFORMING GENERAL ADMIN & TECHNICAL ORDER SYSTEM ACTIVITIES	1	3	8	*	3	
T PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	2	7	1	3	
U PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2	2	4	3	4	

\* Denotes less than 1 percent

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

skill-level groups. The focus of the 3-skill level job is shown by figures in Table 8, which lists representative tasks performed. Most tasks listed relate to Duty B (Performing Photographic Assignments).

**DAFSC 3V052.** The 221 AD 5-skill level personnel, representing 44 percent of the survey sample, perform an average of 155 tasks. While 63 percent of 5-skill level personnel work in the General Photographic Cluster, all 5-skill level members are represented in all of the specialty jobs (see Table 6). Table 9 shows that, like their junior counterparts, 5-skill level personnel perform primarily technical tasks. Like the 3-skill level job, most tasks listed also relate to Duty B (Performing Photographic Assignments). What distinguishes 5-skill level personnel from 3-skill level personnel is that a higher percentage of 5-skill level personnel perform some basic supervisory functions (see Table 10).

**DAFSC 3V072.** The 114 7-skill level personnel, representing 23 percent of the survey sample, perform an average of 158 tasks. Thirty-nine percent of 7-skill level personnel are grouped in the Supervisor Cluster (see Table 6). Table 7 shows they spend most of their time performing management and supervisory activities. Table 11 illustrates this high concentration. Seven-skill level personnel distinguish themselves from 5-skill level personnel by the numbers performing supervisory tasks, such as interpreting policies, directives, or procedures for subordinates, writing award recommendations, and evaluate work schedules (see Table 12).

### ANG

**DAFSC 3V052.** The 40 5-skill level ANG personnel, representing 8 percent of the survey sample, perform an average of 118 tasks. The 5-skill level ANG personnel surveyed were identified as members in three of the seven specialty jobs (see Table 6). Although their time spent is in all duties identified by the JI, the highest concentration is in Performing Photographic assignments (see Table 7). Representative tasks performed are listed in Table 13. Eighteen percent of the 5-skill level personnel work in the BVISC Photographer Job, 33 percent in the General Photographer Job and an additional 23 percent in the BW Printing Job.

**DAFSC 3V072.** The 54 7-skill level ANG personnel, representing 11 percent of the survey sample, perform an average of 185 tasks, the most of any skill group surveyed. Seventy-two percent of 7-skill level ANG personnel belong, like their 5-skill level counterparts, to the General Photographer Cluster (see Table 6). Seven-skill level ANG personnel represent many of the supervisors in the General Photographer Cluster, with 12 percent of their time spent performing supervisory and managerial activities (see Table 7). Representative tasks of 7-skill level ANG personnel are shown in Table 14. Table 15 shows those tasks that best differentiate the 5- and 7-skill levels. As expected, the key difference is a shift toward supervisory and training functions.

TABLE 8

## REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 3V032 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=66)	
B104	Shoot photographs of awards and presentations	85
A1	Adjust lens apertures or shutter speeds	85
B106	Shoot photographs of groups	85
B49	Load film in cameras	83
B83	Select camera angles	80
B105	Shoot photographs of ground accidents, other than those involving aircraft	79
B73	Pose subjects for portraits	77
B85	Select camera lenses	77
D170	Clean automatic color film processing equipment	76
B95	Shoot photographs for legal or criminal investigations	76
B86	Select film for assignments	76
B107	Shoot photographs of sporting events	76
B91	Shoot passport or identification photographs	71
D171	Clean automatic color print processing equipment	71
D169	Add chemicals to automatic color print processors	71
B78	Position personnel or objects to improve photographic composition	71
B93	Shoot photographs for historical archives	70
D168	Add chemicals to automatic color film processors	70
B72	Pose subjects for photographs, other than portraits	70
B112	Shoot studio full-length photographs	68
B64	Operationally check cameras and accessories	67
B90	Shoot official studio portraits	67
B98	Shoot photographs for picture stories or news features	65
D196	Perform daily shutdown procedures on automated printer processors, including minilabs	64
E267	Visually inspect finished photographic products	64
B38	Determine cameras and lenses for work order	64
A6	Calculate or set up lighting ratios	64
D197	Perform daily startup procedures on automated printer processors, including minilabs	64
D172	Compose, focus, or expose color prints	64

TABLE 9

## REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 3V052 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=221)
A1 Adjust lens apertures or shutter speeds	80
B49 Load film in cameras	80
B83 Select camera angles	74
B86 Select film for assignments	74
B106 Shoot photographs of groups	73
B104 Shoot photographs of awards and presentations	71
P605 Print pictures using electronic imaging printers	70
P603 Operate scanners to produce electronic imagery	69
B73 Pose subjects for portraits	69
B72 Pose subjects for photographs, other than portraits	69
A19 Expose film using existing light sources	68
B78 Position personnel or objects to improve photographic composition	67
P599 Load disks in electronic imaging equipment	66
E267 Visually inspect finished photographic products	66
D168 Add chemicals to automatic color film processors	66
B93 Shoot photographs for historical archives	66
B107 Shoot photographs of sporting events	66
B38 Determine cameras and lenses for work order	66
B64 Operationally check cameras and accessories	65
A11 Determine exposures using flash meters	65
A2 Balance exposures for electronic flash units to match existing ambient light	65
D197 Perform daily startup procedures on automated printer processors, including minilabs	65
E259 Select negatives for printing	64
P597 Enhance images for printing using electronic imaging systems	64
D196 Perform daily shutdown procedures on automated printer procedures, including minibals	64
B105 Shoot photographs of ground accidents, other than those involving aircraft	64
D170 Clean automatic color film processing equipment	64
D169 Add chemicals to automatic color print processors	62
D171 Clean automatic color print processing equipment	62
B32 Coordinate mission requirements with requesters	60
P602 Operate electronic imaging cameras	60

TABLE 10

TASKS WHICH BEST DIFFERENTIATE BETWEEN  
ACTIVE DUTY DAFSC 3V032 AND DAFSC 3V052 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

<u>TASKS</u>	DAFSC 3V032 (N=66)	DAFSC 3V052 (N=221)	<u>DIFFERENCE</u>
B105	79	64	15
B105	85	71	14
Q631	11	39	-28
R704	27	55	-27
R711	3	30	-27
Q691	9	36	-27
Q694	6	31	-25
Q673	11	34	-23
R715	8	31	-23
Q641	12	35	-23
Q627	11	34	-23
Q635	20	41	-21
Q653	6	28	-21

TABLE 11

## REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 3V072 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=114)
Q678 Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	81
Q631 Counsel subordinates concerning personal matters	80
Q691 Supervise military personnel	78
Q673 Inspect personnel for compliance with military standards	76
Q696 Write recommendations for awards or decorations	76
Q640 Develop or establish work methods or procedures	75
Q689 Schedule work assignments or priorities	75
Q694 Write performance reports or supervisory appraisals	74
Q627 Conduct supervisory performance feedback sessions	73
Q643 Direct training functions	71
Q653 Establish performance standards for subordinates	71
R704 Conduct OJT	71
Q621 Assign personnel to work areas or duty positions	71
Q641 Develop or establish work schedules	70
Q666 Evaluate workload requirements	70
Q629 Conduct supervisory orientation for newly assigned personnel	68
Q665 Evaluate work schedules	68
Q624 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	67
Q644 Distribute correspondence, forms, or records	67
Q674 Interpret policies, directives, or procedures for subordinates	66
R717 Maintain training records or files	66
Q663 Evaluate personnel for promotion, demotion, reclassification, or special awards	64
Q625 Conduct self-inspections or self-assessments	64
Q628 Conduct safety inspections of equipment or facilities	63
R705 Determine training requirements	62
Q672 Initiate actions required due to substandard performance of personnel	61
R711 Evaluate personnel to determine training needs	61
Q642 Direct administrative functions	60
Q687 Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	60

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN  
ACTIVE DUTY DAFSC 3V052 AND DAFSC 3V072 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

<u>TASKS</u>	<u>DAFSC 3V052 (N=221)</u>	<u>DAFSC 3V072 (N=114)</u>	<u>DIFFERENCE</u>
D197	65	32	33
D170	64	32	32
D196	64	32	32
D171	62	31	31
D172	59	29	30
J410	52	22	30
J412	49	19	30
D169	62	32	30
J417	53	24	29
Q696	25	76	-51
Q663	19	64	-45
Q672	17	61	-44
Q629	24	68	-44
Q674	22	66	-44
Q666	27	70	-43
Q653	28	71	-43
Q653	31	74	-43
Q642	17	60	-43
Q691	36	78	-42
Q665	25	67	-42

TABLE 13

## REPRESENTATIVE TASKS PERFORMED BY ANG 3V052 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=40)
A1 Adjust lens apertures or shutter speeds	78
E267 Visually inspect finished photographic products	70
B49 Load film in cameras	70
E236 Load film onto reels	68
B104 Shoot photographs of awards and presentations	65
B106 Shoot photographs of groups	60
E259 Select negatives for printing	60
B83 Select camera angles	58
B85 Select camera lenses	58
B86 Select film for assignments	55
B64 Operationally check cameras and accessories	55
E244 Mount slides	55
E229 Dodge slides	55
B84 Select camera filters	53
O579 Clean and rinse chemical mixing equipment	53
E230 Dry processed film using film drying cabinets	53
C122 Clean automated BW film processors	53
B73 Pose subjects for portraits	53
A19 Expose film using existing light sources	50
B94 Shoot photographs for instructional system development projects	50
B98 Shoot photographs for picture stories or news features	50
E217 Burn-in prints	50
D583 Fill chemical mix tanks with water at mix temperatures	50
C142 Maintain temperatures of manual BW film or print processing solutions	48
O576 Add chemicals to mix tanks	48
B32 Coordinate mission requirements with requesters	45
B97 Shoot photographs for personality features	45
C133 Expose BW prints using projection printers	45
U801 Don or doff chemical warfare personal protective clothing	45
C124 Clean manual BW processing laboratory equipment	45
A11 Determine exposures using flash meters	45
P605 Print pictures using electronic imaging printers	43
P602 Operate electronic imaging cameras	43
P603 Operate scanners to produce electronic imagery	43

TABLE 14

## REPRESENTATIVE TASKS PERFORMED BY ANG 3V072 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=54)
B49 Load film in cameras	94
A1 Adjust lens apertures or shutter speeds	94
B106 Shoot photographs of groups	93
B85 Select camera lenses	91
B64 Operationally check cameras and accessories	91
B104 Shoot photographs of awards and presentations	89
B84 Select camera filters	89
B86 Select film for assignments	89
B73 Pose subjects for portraits	87
B83 Select camera angles	87
B38 Determine cameras and lenses for work order assignments	85
B93 Shoot photographs for historical archives	85
B91 Shoot passport or identification photographs	85
B90 Shoot official studio portraits	85
B112 Shoot studio full-length photographs	85
B105 Shoot photographs of ground accidents, other than those involving aircraft	85
B65 operationally check lighting equipment	85
B98 Shoot photographs for picture stories or news features	81
B78 Position personnel or objects to improve photographic composition	81
A2 Balance exposures for electronic flash units to match existing ambient light	81
A19 Expose film using existing light sources	80
A11 Determine exposure using flash meters	80
B47 Evaluate photographic and lab assignments	78
B92 Shoot photographs for editorials or spot news use	76
E267 Visually inspect finished photographic products	76
B75 Position lighting controls, such as diffusers, barn doors, reflectors, umbrellas, or light banks	74
A12 Determine exposures using incident light meters	74

TABLE 15

TASKS WHICH BEST DIFFERENTIATE BETWEEN  
ANG DAFSC 3V052 AND 3V072 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

<u>TASKS</u>	DAFSC 3V052 (N=40)	DAFSC 3V072 (N=54)	<u>DIFFERENCE</u>
R717 Maintain training records or files	3	52	-49
Q691 Supervise military personnel	10	59	-49
B74 Position lighting angles for copy work	25	74	-49
B90 Shoot official studio portraits	38	85	-47
A12 Determine exposure using incident light meters	28	74	-46
B47 Evaluate photographic and lab assignments	33	78	-45
B65 Operationally check lighting equipment	40	85	-45
B112 Shoot studio full-length photographs	40	85	-45
B91 Shoot passport or identification photographs	40	85	-45
R715 Evaluate progress of trainees	3	46	-43

## Summary

For the AD personnel, 3- and 5-skill level airmen perform many tasks in common and both groups spend the majority of their relative job time on technical functions. Five-skill level personnel do perform some supervisory tasks, but neither group performs many training-type tasks. The 7-skill level personnel perform all aspects of a 5-skill level job, in addition to being introduced to many more supervisory functions. There are no 9-skill level personnel in the survey.

The ANG personnel reflect the same trends as do the AD personnel. The difference is the 5-skill level ANG personnel are concentrated only in three jobs: BVISC Photographer, General Photographer, and BW Printing. The 5-skill level ANG personnel are doing technical work, while the 7-skill level ANG personnel, in addition to performing all phases of the 5-skill level position, perform more tasks concerned with supervision, training and management. Table 16 shows a comparison between AD and ANG AFSC 3V0X2 personnel.

## **ANALYSIS OF AFMAN 36-2108 *SPECIALTY DESCRIPTIONS***

Survey data were compared to AFMAN 36-2108 *Specialty Descriptions* for AFSC 3V0X2, Still Photographic, dated 30 April 1996. The descriptions for the 3-, 5-, and 7-skill level members were accurate, depicting technical aspects of the job, as well as the increase in supervisory responsibilities previously described in the DAFSC analysis. The descriptions also capture the primary responsibilities of work identified in the job structure analysis.

## **TRAINING ANALYSIS**

Occupational surveys provide information which can be used to assist in the development of training programs relevant to needs of personnel in their first enlistment. Primary factors used in this study to evaluate entry-level training, jobs performed by personnel during their first enlistment (1-48 months TAFMS), and relative TD ratings. As mentioned earlier, TE ratings are not available for this study.

TABLE 16

TASKS WHICH BEST DIFFERENTIATE BETWEEN  
ACTIVE DUTY AND ANG DAFSC 3V0X2 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	ACTIVE DUTY		ANG		DIFFERENCE
	DAFSC 3V0X2 (N=401)		DAFSC 3V0X2 (N=99)		
D199	45	Perform master balance procedures on automated printer processors, including minilabs	6	39	
D184	50	Load paper magazines for automated printer processors, including minilabs	16	33	
D195	43	Perform channel balance procedures on automated printer processors, including minilabs	10	33	
D200	40	Perform negative balance procedures on automated printer processors, including minilabs	7	32	
J410	43	Clean color processor racks	12	31	
E236	18	Load film onto reels	62	-44	
E230	13	Dry processed film using film drying cabinets	54	-41	
E229	12	Dodge prints	48	-36	
C135	11	Identify and correct causes of mechanical defects on BW negatives or prints	45	-34	
C134	10	Identify and correct causes of chemical defects on BW negatives or prints	44	-34	
C165	7	Sort BW prints by work order	41	-34	
E241	10	Manually produce contact prints	43	-33	
E225	10	Construct dodging devices	43	-33	

### First-Enlistment Personnel

In this study, there are 107 members in their first enlistment (1-48 months TAFMS) representing 21 percent of the survey sample. These personnel work primarily in the General Photographer Cluster (see Figure 2). As displayed in Table 17, approximately 91 percent of their time is devoted to technical tasks. Table 18 illustrates the tasks performed by first-enlistment personnel. The majority of tasks involve performing photographic assignments.

The cameras, camera equipment, lighting, printing, processing, finishing, quality control, electronic imaging, photographic equipment and software that is maintained by at least 20 percent of AD first-job or first-enlistment personnel is shown in Table 19.

### Task Difficulty (TD) Data

TD data can help training development personnel decide which tasks to emphasize for entry-level training. TD ratings, based on the judgments of senior career ladder NCOs at operational units, provide a rank-ordering of tasks by the relative difficulty of those tasks. When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high TD ratings, accompanied by moderate to high percentages of first-enlistment personnel performing, may warrant resident training. Those tasks receiving high TD ratings, but low percentages performing, may be more appropriately planned for OJT programs. Low TD ratings may highlight tasks best omitted from training for first-enlistment personnel. These decisions must be weighed against percentages of personnel the tasks, command concerns, and criticality of the tasks.

As explained in the **INTRODUCTION**, no TE data are reported in this survey due to insufficient rater agreement. Table 20 lists the tasks having the highest TD ratings. The percentages of 1-24 months TAFMS, 1-48 months TAFMS, 3-, 5-, and 7-skill level personnel performing, are also included for each task. Many of the tasks with the highest TD ratings involve quality control and performing photographic assignments.

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

### Specialty Training Standard (STS) Analysis

A comprehensive review of the AFSC 3V0X2 STS, dated February 1997, was made by comparing survey data to STS elements. STS paragraphs containing knowledge information, mandatory entries, subject matter-knowledge-only requirements, or basic supervisory responsibilities were not examined. Task knowledge, performance elements, and dashed entries

# JOBS PERFORMED BY FIRST-ENLISTMENT AFSC 3V0X2 PERSONNEL

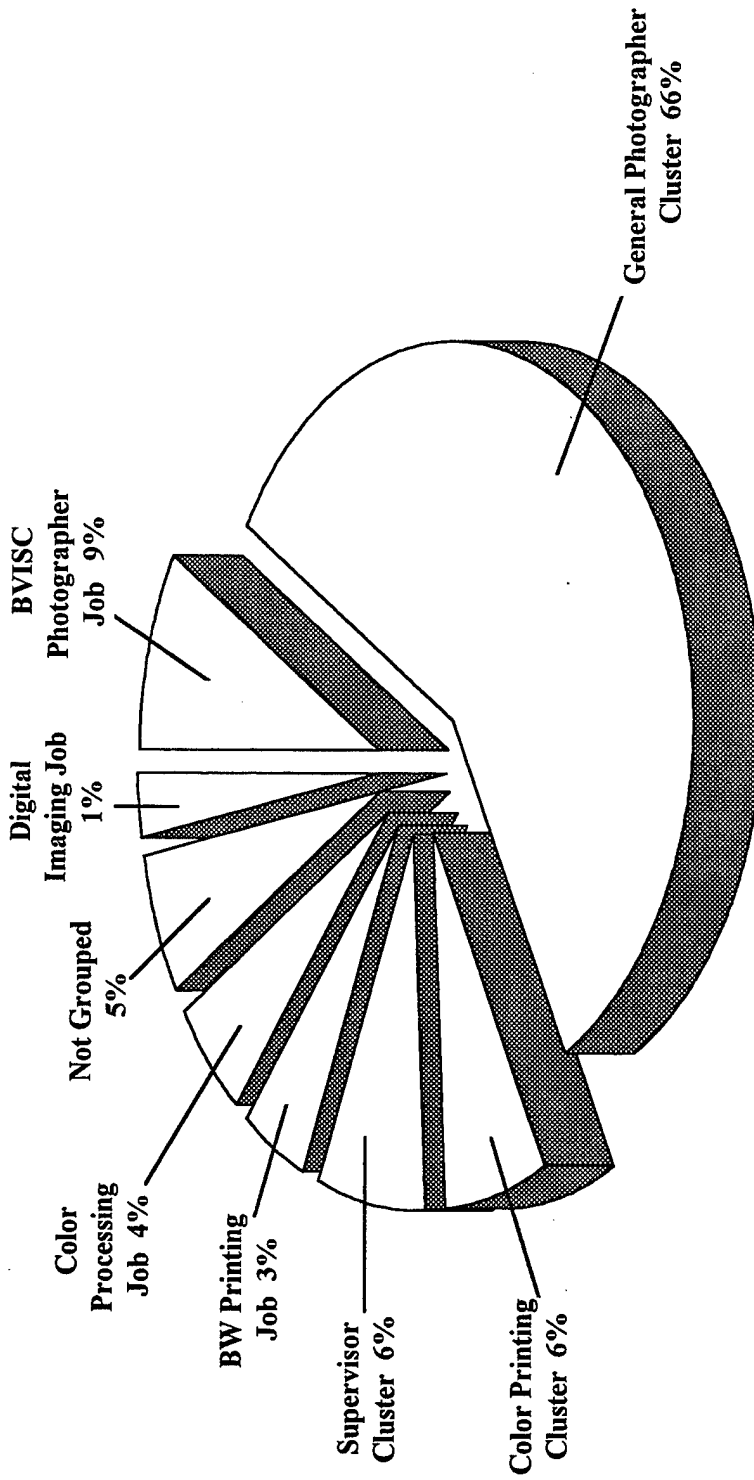


FIGURE 2

TABLE 17

RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES BY  
ACTIVE DUTY FIRST-ENLISTMENT AFSC 3V0X2 PERSONNEL

<u>DUTY AREA</u>	<u>PERCENT TIME SPENT</u>
A DETERMINING PHOTOGRAPHIC EXPOSURES	6
B PERFORMING PHOTOGRAPHIC ASSIGNMENTS	28
C PROCESSING AND PRINTING BLACK & WHITE (BW) MATERIALS	1
D PROCESSING AND PRINTING COLOR MATERIALS	13
E PERFORMING GENERAL PHOTO LABORATORY ACTIVITIES	6
F MAINTAINING RELOCATABLE PHOTOGRAPHIC FACILITIES	3
G OPERATING COPY CAMERAS	2
H PROCESSING BLACK AND WHITE (BW) MATERIALS BY CONTINUOUS METHODS	2
I PRINTING BLACK AND WHITE MATERIALS BY CONTINUOUS METHODS	1
J PROCESSING COLOR MATERIALS BY CONTINUOUS METHODS	10
K PRINTING COLOR MATERIALS BY CONTINUOUS METHODS	2
L MAINTAINING QUALITY CONTROL	4
M EDITING AND CLEANING IMAGERY	2
N TITLING IMAGERY	*
O PRODUCING CHEMICAL MIXES & PERFORMING CHEMICAL ANALYSIS	4
P PERFORMING ELECTRONIC IMAGING ACTIVITIES	7
Q PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	3
R PERFORMING TRAINING ACTIVITIES	1
S PERFORMING GENERAL ADMIN & TECHNICAL ORDER SYSTEM ACTIVITIES	2
T PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1
U PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2

TABLE 18

MOST COMMONLY PERFORMED TASKS FOR ACTIVE DUTY  
FIRST-ENLISTMENT 3V0X2 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=107)
A1 Adjust lens apertures or shutter speeds	80
B49 Load film in cameras	79
B83 Select camera angles	74
B106 Shoot photographs of groups	74
B104 Shoot photographs of awards and presentations	72
B85 Select camera lenses	70
D171 Clean automatic color print processing equipment	70
B86 Select film for assignments	69
B105 Shoot photographs of ground accidents, other than those involving aircraft	69
B107 Shoot photographs of sporting events	68
B95 Shoot photographs for legal or criminal investigations	67
B73 Pose subjects for portraits	67
D169 Add chemicals to automatic color print processors	66
D170 Clean automatic color film processing equipment	66
D197 Perform daily startup procedures on automated printer processors, including minilabs	66
D168 Add chemicals to automatic color film processors	65
D196 Perform daily shutdown procedures on automated printer processors, including minilabs	64
B72 Pose subjects for photographs, other than portraits	64
B78 Position personnel or objects to improve photographic composition	63
B91 Shoot passport or identification photographs	63
B93 Shoot photographs for historical archives	62
D172 Compose, focus, or expose color prints	61
B112 Shoot studio full-length photographs	61
E267 Visually inspect finished photographic products	61
B64 Operationally check cameras and accessories	60
A19 Expose film using existing light sources	60
J426 Perform color processor shutdown procedures	60

TABLE 19

EQUIPMENT AND SOFTWARE USED OR OPERATED BY  
20 PERCENT OR MORE OF FIRST-JOB OR FIRST-ENLISTMENT AFSC 3V0X2 PERSONNEL

	<u>PERCENT MEMBERS MAINTAINING</u>	
	1ST JOB (N=48)	1ST ENL (N=107)
<hr/> <b>CAMERA OR CAMERA EQUIPMENT</b> <hr/>		
Automatic Exposure Cameras, 35mm	71	64
Cameras, 35mm, not Auto/Underwater	52	46
Copy Cameras	54	46
Medium Format Cameras	48	53
Polaroid Cameras, not Copy Cameras	52	53
Slide Duplicators	54	52
<hr/> <b>LIGHTING EQUIPMENT</b> <hr/>		
Barn Doors	27	25
Electronic Flash Studio Lighting Systems	69	67
Photoflood Lamp Systems	25	20
Portable Electronic Flash Units	63	62
Quartz Halogen Lamp Systems	31	26
Umbrella Reflectors or Diffusers	48	50
<hr/> <b>PRINTING EQUIPMENT</b> <hr/>		
Compressed Air Dispensers	52	42
Contact Printing Frames	25	17
Dodging and Burning-in Tools	23	15
Off-Easel Densitometers	25	17
Printers, Digital Color	25	26
Printers, Kodak 8600	33	32
Printers, Noritsu Color	69	60
<hr/> <b>PROCESSING EQUIPMENT</b> <hr/>		
Noritsu Film Leader Retrievers	31	30
Processors, Color Negative	48	42
Processors, Hope, C-41	31	18
Processors, Hope, E-6	21	13
Processors, Noritsu Color	67	57
Silver Recovery Units	25	26
<hr/> <b>FINISHING EQUIPMENT</b> <hr/>		
Film Drying Cabinets	31	20
Negative Slevers	50	42
Slide Mounters, Automatic	71	66
Spotting Pencils or Brushes	21	16
Viewing Tables	58	51

TABLE 19 (CONTINUED)

EQUIPMENT AND SOFTWARE USED OR OPERATED BY  
20 PERCENT OR MORE OF FIRST-JOB OR FIRST-ENLISTMENT AFSC 3V0X2 PERSONNEL

	<u>PERCENT MEMBERS MAINTAINING</u>	
	<u>1ST JOB</u> (N=48)	<u>1ST ENL</u> (N=107)
<u>QUALITY CONTROL EQUIPMENT</u>		
Reflection Densitometers	44	41
Sensitometers	25	24
Thermometers	33	39
Transmission Densitometers	25	20
Water Filtrations	23	23
<u>PHOTOGRAPHIC EQUIPMENT</u>		
Cable Releases	15	21
Chemical Mixing Equipment	54	53
Daylight Loading Boxes	27	33
Filters for Haze Penetration	23	35
Filters, Color Balancing	40	39
Filters, Color Conversion	27	27
Filters, Color Viewing	40	32
Filters, Contrast or Correction	42	34
Filters, Light	29	24
Filters, Neutral Density	33	36
Filters, Polarizing	42	43
Filters, Print	21	15
Filters, UV	48	44
Fisheye Lenses	27	27
Flash Diffusers	42	45
Flash Meters	71	61
Focusing Loupes	40	37
Gray Cards	38	40
Lenses, Macro	67	63
Lenses, Micro	42	33
Lenses, Wide-Angle	92	79
Lenses, Zoom	88	79
Meters, Incident Exposure	35	39
Monopods or Tripods	71	66
Motor or Auto Drive Units	21	29
Polaroid Film Backs	44	43
Protective or Safety Equipment	71	64
Rechargeable Battery Packs	71	51
Slide Copy Attachments	21	16
Splicers, Film	46	31
Splicers, Tape	31	29
Spot Meters	23	22
Sync Cords	67	66
Temperature Control Units	23	19

TABLE 19 (CONTINUED)

EQUIPMENT AND SOFTWARE USED OR OPERATED BY  
20 PERCENT OR MORE OF FIRST-JOB OR FIRST-ENLISTMENT 3V0X2 PERSONNEL

	PERCENT MEMBERS MAINTAINING	
	1ST JOB (N=48)	1ST ENL (N=107)
<b>ELECTRONIC IMAGING EQUIPMENT</b>		
Calibrator, Monitor	33	31
Camera, Digital DCS 200	27	30
Camera, Digital DCS 420	40	39
CD-ROM Drives	50	54
CD-Rom Recorders	27	28
Color Laser Copiers	48	47
Computer, Laptop PCs	19	23
Computer, Macintosh	60	64
Computer, Desktop PCs	33	39
Digital Scanner/Transparency Adapters	46	50
PCMCIA Memory Cards	23	19
Printer, Color Laser	40	43
Printer, Dye-Sublimated	21	22
Removable Drive, Bernoulli	33	45
Scanner, Kodak 2035	38	47
Zip Drives	33	33
<b>SOFTWARE</b>		
Corel Draw	27	23
Fetch	21	15
Norton Utilities	25	31
PageMaker	31	33
PhotoShop	69	71
Timbuktu	25	31

TABLE 20

## TASKS WITH HIGHEST DIFFICULTY RATINGS

TASKS	TSK DIFF	PERCENT MEMBERS PERFORMING			
		1ST JOB	ENL	3V052	3V072
B29	7.70	2	3	5	2
L512	7.38	2	3	4	2
B111	7.31	35	35	41	31
L470	7.25	0	1	1	0
L469	7.19	6	5	5	4
A4	7.19	13	9	10	6
L468	7.16	0	1	3	0
A22	7.14	13	18	31	25
Q645	6.98	2	4	10	50
D195	6.92	46	43	51	29
D199	6.89	54	48	52	31
U793	6.87	2	1	3	17
L467	6.87	8	9	11	5
P616	6.85	0	4	7	3
L464	6.84	4	5	7	6
P598	6.83	35	36	48	37
B69	6.83	6	6	12	16
B40	6.82	8	8	17	18
B110	6.78	25	28	34	20
Q684	6.77	2	1	6	24

TD MEAN = 5.00; S.D. = 1.00

of the STS were compared against the standard set forth in AETCI 36-2601, paragraph 2.2, (i.e., include tasks performed or knowledge required by 20 percent or more of the personnel in a skill level (criterion group) of the Air Force Specialty).

Using this criterion, STS 3V0X2 was found to be supported by occupational survey data. Overall, the STS captures the work performed by this career ladder as identified by the career ladder structure analysis of this AFSC. Even though some elements did not have high percentages of personnel performing matched tasks, the fact that the supporting tasks were part of an identifiable job being performed in the career ladder supports the retention of the STS element involving those tasks.

Some elements of the STS 3V0X2 were not supported by occupational data and do require review by training personnel and SMEs. Table 21 displays examples of these elements and survey data pertaining to tasks matched to these elements. Data covering the STS line items dealing with activities, such as calculate exposure; adjusting processors; mechanically, chemically, and sensitometrically certifying processors; certifying titlers and printers; using sensitometers; constructing characteristic curves; analyzing color balance; constructing and using charts; using time/speed gamma, time/temperature, and tone reductions; determining pH; calibrating flow rate meter; combat documentation using night vision devices; story ideas; and annotating record photography (VIRIN) were not supported by 20 percent or more respondents. A complete listing of STS paragraphs not supported by occupational data can be found in the TRAINING EXTRACT. These tasks reflect low task performance figures which necessitate evaluation to justify retention in the STS.

Tasks not matched to any element of the STS are listed at the end of the computer listing located in associated training documents. These were reviewed to determine if any tasks concentrate around particular functions or jobs. Sixty-nine technical tasks performed by 20 percent or more criterion group members not referenced to the STS are listed in Table 22. They involve determining photographic assignments, performing photographic assignments, processing and printing BW and color materials, performing general photo lab activities, maintaining relocatable photographic facilities, operating copy cameras, processing and printing color and BW materials by continuous methods, maintaining quality control, and editing and cleaning imagery (see Table 22). Training personnel should review these and other unreferenced tasks to determine if STS inclusion is warranted.

## **JOB SATISFACTION ANALYSIS**

An examination of job satisfaction indicators can be very useful for career ladder managers as they attempt to determine possible factors affecting job performance of career ladder airmen. Job satisfaction data can be expanded to provide indications of general attitudes within specific DAFSC groups.

TABLE 21

STS ITEMS NOT SUPPORTED BY SURVEY DATA

STS ITEMS/TASKS	3-SKL COURSE	PERCENT MEMBERS PERFORMING				TSK DIFF
		1ST JOB	1ST ENL	3V032	3V052	
<b>14 IMAGERY</b>						
14.2 PROCESSORS						
14.2.2 ADJUST	2b	8	7	6	10	9
C141 Maintain temperatures of automatic BW film or print processing solutions		6	6	5	10	9
C142 Maintain temperatures of manual BW film or print processing solutions		10	7	8	10	8
C143 Maintain transport speeds of automatic BW film or print processors						
<b>15 SENSITOMETRIC CONTROL FOR BLACK &amp; WHITE/COLOR PROCESS</b>						
15.3 CONSTRUCT AND USE CHARTS						
15.3.1 Time/speed gamma	2b	6	7	5	7	8
L478 Construct machine speed or gamma charts						6.64
<b>19 DOCUMENTARY PHOTOGRAPHY</b>						
19.3 COMBAT DOCUMENTATION						
193.3 Night Vision Devices	A	8	9	11	13	9
B109 Shoot photographs at night using light intensifier						6.69
<b>20 COLOR PHOTOGRAPHY</b>						
20.5 EVALUATE PRINTS/SLIDES FOR COLOR BALANCE USING						
20.5.2 Reflection/transmission densitometer equipment	2b	15	11	9	9	8
D179 Evaluate color transparencies for reversal printing						5.57

TD MEAN = 5.00; S.D. = 1.00

TABLE 22

TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE  
CRITERION GROUP PERSONNEL AND NOT REFERENCED TO THE STS

TASKS	PERCENT MEMBERS PERFORMING							TSK DIFF
	1ST JOB	ENL	3V032	3V052	3V072			
	38	45	47	50	35			
A7	Determine equivalent exposures for special effects, such as blurring background or stopping action	38	45	47	50	35		5.96
B94	Shoot photographs for instructional system development projects	44	46	44	45	30		5.61
D181	Identify and correct causes of chemical defects on color negatives or prints	46	34	29	45	31		6.40
D182	Identify and correct causes of mechanical defects on color negatives or prints	40	33	27	45	31		6.42
D198	Perform manual corrections to prints on automated printer processors, including minilabs	52	46	41	51	29		5.37
D200	Perform negative balance procedures on automated printer processors, including minilabs	23	16	17	15	18		5.51
D215	Spot color prints	33	26	29	24	21		5.88
E218	Calculate chemical replenishment rates	25	22	20	23	18		6.19
E240	Make process corrections using control chart information and manufacturer recommendations	27	24	23	29	19		5.79
E267	Visually inspect finished photographic products	60	61	64	66	52		4.76
F268	Assemble or disassemble relocatable photographic equipment	33	28	29	24	25		5.40
F270	Build up pallets for equipment transport	21	28	23	30	29		5.43
F280	Maintain shelter facility areas	17	21	15	28	20		5.04
F293	Secure film for transport	17	21	15	27	19		4.11
F311	Set up printers	23	27	17	27	12		5.22
F312	Set up processors	33	31	26	28	11		5.43
G318	Balance copy film light sources using filters	23	20	18	27	15		5.85
L485	Determine exposure corrections for printers	13	21	12	23	14		6.16
L488	Determine overexposures or unexposures of original negative film	21	25	20	27	22		5.91
O589	Rejuvenate film processing solutions	19	19	14	23	11		5.78
P606	Program electronic imaging cameras	17	18	20	34	27		6.53

TD MEAN = 5.00; S.D. = 1.00

With this in mind, job satisfaction responses for AD AFSC 3V0X2 personnel were analyzed and provide the following comparisons: (1) among TAFMS groups of the AFSC 3V0X2 career ladder and a comparative sample of direct support personnel surveyed in 1996; and (2) between respondents to both current and previous OSRs.

Table 23 shows the comparison of TAFMS group data of AFSC 3V0X2 respondents to a comparative sample of other direct support career ladders surveyed in 1996. These data provide a relative measure of how AFSC 3V0X2 personnel job satisfaction responses compare with similar Air Force specialties. AFSC 3V0X2 personnel show higher satisfaction ratings than their comparative sample counterparts in most satisfaction areas. However, all TAFMS groups reported lower satisfaction in reenlistment intentions than members of the 1996 comparative sample.

An indication of changes in job satisfaction perceptions within the career ladder over time is provided in Table 24. Table 24 compares TAFMS group data for current survey respondents to that of previous survey respondents. Comparison of job satisfaction indicator responses of the current survey TAFMS groups to those in the 1992 and 1993 surveys (see Table 24) indicate that responses are almost all higher than the 1993 survey, but lower than the 1992 survey.

Finally, job satisfaction data for identified jobs are provided in Table 25. Generally, job satisfaction data are high for personnel in identified jobs. One job, Color Photoprocessing, however, did show some fairly low satisfaction ratings. The lowest rating for this particular job group personnel came in the area of expressed job interest (see Table 25).

## IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted primarily to provide training personnel with current information on the Still Photographic career ladder for use in reviewing current training programs and training documents. Specialty Job Analysis indicates no big changes have occurred since the last surveys in 1992 (AFSC 231X2) and 1993 (AFSC 3V1X1). Overall job progression is normal and shows a distinct pattern as one moves from the 3- to the 7-skill level. Furthermore, the AFMAN 36-2108 *Specialty Description* broadly describes the jobs and tasks being performed. Job satisfaction is fairly high, and no serious problem areas were noted. Analysis of STS items reflect adequate support for some areas; however, there are unsupported items. These STS items should be closely reviewed to decide whether they belong in the STS. Some tasks, not referenced to the STS, which had supporting data are also recommended for review and possible inclusion in future revisions of the training program.

The findings of this OSR come directly from survey data collected from AFSC 3V0X2 personnel worldwide. Much of the data are compiled into extracts which are excellent tools in the decision-making process. These data extracts should be used when training or utilization decisions are made.

TABLE 23

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 3V0X2 TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE (PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	AFSC	COMP	AFSC	COMP	AFSC	COMP
	3V0X2	SAMPLE	3V0X2	SAMPLE	3V0X2	SAMPLE
	(N=107)	(N=1,606)	(N=110)	(N=1,024)	(N=182)	(N=2,244)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	70	57	74	60	79	73
SO-SO	16	24	15	22	12	17
DULL	14	19	12	18	9	10
<u>PERCEIVED USE OF TALENTS:</u>						
FAIRLY WELL TO PERFECT	84	68	85	68	78	79
NONE TO VERY LITTLE	16	32	15	32	22	21
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECT	82	80	85	78	83	77
NONE TO VERY LITTLE	18	20	15	22	17	23
<u>SENSE OF ACCOMPLISHMENT FROM JOB:</u>						
SATISFIED	69	61	66	62	71	71
NEUTRAL	13	19	15	17	10	11
DISSATISFIED	19	20	19	21	19	18
<u>REENLISTMENT INTENTIONS:</u>						
YES OR PROBABLY YES	55	59	61	73	73	75
NO OR PROBABLY NO	45	41	39	26	9	8
WILL RETIRE	0	0	0	1	18	17

NOTE: Columns may not add to 100 due to rounding or nonresponse  
 Comparative data are from AFSCs 1T0X1, 1T1X1, 3C1X2, 3C3X1, 3E4X2, 3X4X3, 3E5X1, and 3P1X1/A surveyed in 1996

TABLE 24

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 3V0X2  
TAFMS GROUPS IN CURRENT STUDY TO PREVIOUS STUDIES  
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS			49-96 MONTHS TAFMS			97+ MONTHS TAFMS		
	AFSC 3V0X2 (N=107)	1992 AFSC 231X2 (N=126)	1993 AFSC 3V1X1 (N=98)	AFSC 3V0X2 (N=110)	1992 AFSC 231X2 (N=111)	1993 AFSC 3V1X1 (N=119)	AFSC 3V0X2 (N=182)	1992 AFSC 231X2 (N=169)	1993 AFSC 3V1X1 (N=180)
<u>EXPRESSED JOB INTEREST:</u>									
INTERESTING	70	87	60	74	77	58	79	85	65
SO-SO	16	10	19	15	10	23	12	10	16
DULL	14	4	20	12	12	19	9	5	19
<u>PERCEIVED USE OF TALENTS:</u>									
FAIRLY WELL TO PERFECT	84	89	63	85	82	72	78	87	71
NONE TO VERY LITTLE	16	10	37	15	16	28	22	13	29
<u>PERCEIVED USE OF TRAINING:</u>									
FAIRLY WELL TO PERFECT	82	92	71	85	88	77	83	83	68
NONE TO VERY LITTLE	18	7	29	15	11	23	17	16	32
<u>SENSE OF ACCOMPLISHMENT FROM JOB:</u>									
SATISFIED	69	74	74	66	68	50	71	75	68
NEUTRAL	13	9	9	15	12	23	10	9	12
DISSATISFIED	19	17	16	19	20	27	19	17	20
<u>REENLISTMENT INTENTIONS:</u>									
YES OR PROBABLY YES	55	57	54	61	68	70	73	70	73
NO OR PROBABLY NO	45	42	38	39	32	29	9	6	8
WILL RETIRE	0	0	1	0	0	1	18	24	19

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

TABLE 25

JOB SATISFACTION INDICATORS FOR AFSC 3V0X2 JOBS  
(PERCENT MEMBERS RESPONDING)

	DIGITAL IMAGING JOB (N=6)	BVISC PHOTOGRAPHER JOB (N=38)	GENERAL PHOTOGRAPHER CLUSTER (N=281)	COLOR PRINTING CLUSTER (N=128)	SUPV CLUSTER (N=55)	BW PRINTING JOB (N=31)	COLOR PHOTO- PROCESSING JOB (N=7)
<u>EXPRESSED JOB INTEREST:</u>							
INTERESTING	100	87	86	71	76	61	29
SO-SO	0	8	10	14	11	23	43
DULL	0	5	4	14	13	16	29
<u>PERCEIVED USE OF TALENTS:</u>							
FAIRLY WELL TO PERFECT	66	87	86	50	78	81	43
NONE TO VERY LITTLE	33	13	14	50	22	19	57
<u>PERCEIVED USE OF TRAINING:</u>							
FAIRLY WELL TO PERFECT	84	84	89	78	71	81	57
NONE TO VERY LITTLE	16	16	11	21	29	19	43
<u>SENSE OF ACCOMPLISHMENT FROM JOB:</u>							
SATISFIED	83	76	77	71	67	68	43
NEUTRAL	0	16	11	0	13	6	29
DISSATISFIED	17	8	12	29	20	26	29
<u>REENLISTMENT INTENTIONS:</u>							
YES OR PROBABLY YES	17	74	70	71	69	71	43
NO OR PROBABLY NO	83	21	22	29	2	26	57
WILL RETIRE	0	5	7	0	29	3	0

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

**APPENDIX A**  
**REPRESENTATIVE TASKS PERFORMED BY**  
**MEMBERS OF CAREER LADDER JOBS**

**THIS PAGE INTENTIONALLY LEFT BLANK**

**TABLE A1**  
**DIGITAL IMAGING**  
**(STG105, N=6)**

TYPICAL TASKS	PERCENT
P597 Enhance images for printing using electronic imaging	100
P605 Print pictures using electronic imaging printers	100
P614 Store electronic images on digital storage units	100
P599 Load disks in electronic imaging equipment	100
P610 Scan prints onto master disks	100
P598 Insure compatibility of electronic imaging system components	100
P613 Store electronic images on master disks	100
P604 Operationally check electronic imaging equipment	100
P602 Operate electronic imaging cameras	100
P600 Load thermal cartridges or paper in electronic imaging equipment	100
P611 Scan slides onto master disks	83
P609 Record outside images on disks	83
R704 Conduct OJT	83
A1 Adjust lens apertures or shutter speeds	83
B27 Assemble pictorial layouts	67
R722 Schedule training	67
P617 Transmit electronic images using conventional phone lines	67

**TABLE A2**  
**BVISC PHOTOGRAPHER**  
**(STG060, N=38)**

<b>TYPICAL TASKS</b>	<b>PERCENT</b>
B104 Shoot photographs of awards and presentations	97
B106 Shoot photographs of groups	97
B85 Select camera lens	97
B49 Load film in cameras	97
B83 Select camera angles	92
A1 Adjust lens apertures or shutter speeds	92
B86 Select film for assignments	87
B93 Shoot photographs for historical archives	87
B78 Position personnel or objects to improve photographic composition	84
B38 Determine cameras and lenses for work order assignments	84
B73 Pose subjects for portraits	84
A11 Determine exposures using flash meters	82
B72 Pose subjects for photographs, other than portraits	79
B84 Select camera filters	79
B105 Shoot photographs of ground accidents, other than those involving aircraft	79
A19 Expose film using existing light sources	71
B64 Operationally check cameras and accessories	71
B98 Shoot photographs for picture stories or news features	63
B92 Shoot photographs for editorials or spot news use	63
A2 Balance exposures for electronic flash units to match existing ambient light	63

**TABLE A3**  
**GENERAL PHOTOGRAPHER**  
**(STG059, N=281)**

<u>TYPICAL TASKS</u>	<u>PERCENT</u>
B49 Load film in cameras	98
B86 Select film for assignments	98
A1 Adjust lens apertures or shutter speeds	98
B106 Shoot photographs of groups	97
B83 Select camera angles	96
B85 Select camera angles	96
B73 Pose subjects for portraits	95
B104 Shoot photographs of awards and presentations	95
B64 Operationally check cameras and accessories	93
B93 Shoot photographs for historical archives	92
B78 Position personnel or objects to improve photographic composition	91
B72 Pose subjects for photographs, other than portraits	90
B95 Shoot photographs for legal or criminal investigations	90
B105 Shoot photographs of ground accidents, other than those involving aircraft	90
P603 Operate scanners to produce electronic imagery	90
B38 Determine cameras and lenses for work order assignments	89
A19 Expose film using existing light sources	88
B65 Operationally check lighting equipment	87
B107 Shoot photographs of sporting events	87
B91 Shoot passport or identification photographs	87
P603 Operate scanners to produce electronic imagery	86
B92 Shoot photographs for editorial or spot news use	85
B112 Shoot studio full-length photographs	85

TABLE A4

COLOR PRINTING  
(STG056, N=14)

TYPICAL TASKS	PERCENT
J426 Perform color processor shutdown procedures	100
J427 Perform color processor startup procedures	100
J417 Fill color processor chemical tanks with color chemistry	100
J411 Clean color processor rollers	100
J410 Clean color processor racks	100
J416 Drain color processor chemical tanks	100
O576 Add chemicals to mix tanks	93
D168 Add chemicals to automatic color film processors	93
D170 Clean automatic color film processing equipment	93
J412 Clean color processor rooms	93
O579 Clean and rinse chemical mixing equipment	93
D583 Fill chemical mix tanks with water at mix temperature	93
J431 Process color film control strips	93
O592 Store mixed chemicals	93
O581 Dispose of chemical waste according to local regulations	93
O593 Store unmixed chemicals	93
O585 Mix packaged chemicals	86
J432 Rinse color processor rollers or racks after shutdown	86
J414 Conduct color film inspections after processing	86
O580 Dilute mixed chemicals to volume	86

**TABLE A5**  
**SUPERVISOR**  
**(STG046, N=55)**

<u>TYPICAL TASKS</u>	<u>PERCENT</u>
Q678 Participate in general meetings, such as staff meetings, briefings, conferences, and workshops, other than conducting	91
Q642 Develop or establish work methods or procedures	91
Q691 Supervise military personnel	89
Q673 Inspect personnel for compliance with military standards	89
Q631 Counsel subordinates concerning personal matters	89
A45 Evaluate personnel for compliance with performance standards	78
Q694 Write performance reports or supervisory appraisals	85
Q644 Distribute correspondence, forms, or records	85
Q643 Direct training functions	85
Q641 Direct or establish work schedules	85
Q692 Write recommendations for awards or decorations	82
Q689 Schedule work assignments or priorities	82
Q635 Determine or establish work assignments or priorities	82
Q627 Conduct supervisory performance feedback sessions	82
Q666 Evaluate workload requirements	82
Q674 Interpret policies, directives, or procedures for subordinates	80
Q653 Establish performance standards for subordinates	78
A16 Counsel subordinates concerning personal matters	76
Q665 Evaluate work schedules	78
Q624 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	76

**TABLE A6**  
**BLACK AND WHITE (BW) PRINTING**  
**(STG054, N=31)**

TYPICAL TASKS	PERCENT
C143 Maintain temperatures of automatic BW film or print processing solutions	97
H357 Perform BW processor startup procedures	94
H356 Perform BW processor shutdown procedures	94
H342 Clean BW processor rollers	94
H349 Drain or refill BW processor washtanks	94
O579 Clean and rinse chemical mixing equipment	94
O585 Mix packaged chemicals	94
O576 Add chemicals to mix tanks	94
O583 Fill chemical mix tanks with water at mix temperature	94
O580 Dilute mixed chemicals to volume	94
H348 Drain BW processor chemical tanks	94
H350 Fill BW processor chemical tanks with BW chemistry	94
H364 Remove and clean BW processor racks	90
H368 Set or maintain BW processor chemistry temperatures	90
H343 Clean BW processor rooms	90
H335 Certify BW processors chemically	90
H359 Position BW processor racks	90

**TABLE A7**  
**COLOR PHOTOPROCESSING**  
**(STG064, N=7)**

<b>TYPICAL TASKS</b>	<b>PERCENT</b>
J410 Clean color processor racks	100
J424 Make color film running splices during processor operations	100
J428 Perform corrosion control on color processing equipment	100
J430 Prepare color film machine certification startups	100
J426 Perform color processor shutdown procedures	100
J431 Process color film control strips	100
J438 Splice color film control strips	100
J427 Perform color processor startup procedures	100
J440 Splice color film runout leaders to processing runs	100
J441 Splice color film scratch test materials to leaders or leader tabs	100
J437 Splice color film using staples only	100
J406 Adjust or change color processor squeegees	100
J412 Clean color processor rooms	86
J439 Splice color film mission material to leaders or leader tabs	86
J443 Verify color processor speed controls	86
J418 Inspect color processors prior to startup	86
J429 Preinspect and correct color film for physical defects, such as nicks or tears	86
J442 Thread color processors with leaders	86
J425 Monitor quality of processed color materials at processor takeup reels	86
J420 Inspect or change color processor antihalation backing scrubbers	86
J432 Rinse color processor rollers or racks after shutdown	86

**THIS PAGE INTENTIONALLY LEFT BLANK**