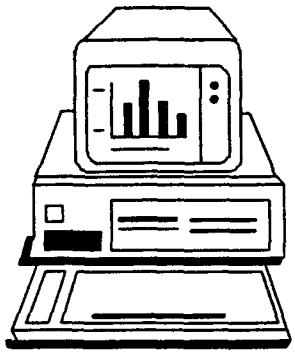
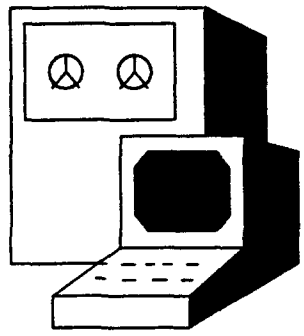
(2)

BUREAU OF NAVAL PERSONNEL
NAVY OCCUPATIONAL DEVELOPMENT AND ANALYSIS CENTER

OFFICER COMPUTER UTILIZATION REPORT





March 1992

Prepared by:

K. A. Doyle
LCDR NC USN

Approved by:

K. E. Kuntz
Director, NOOCS Department

A. E. Hunter, EdD
Technical Director

C. W. Davie
CAPT USN
Officer in Charge

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY (Leave Blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	March 1992	Final

4. TITLE AND SUBTITLE
OFFICER COMPUTER UTILIZATION REPORT

5. FUNDING NUMBERS

6. AUTHOR(S) Karen A. Doyle

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Bureau of Naval Personnel Navy Occupational Development and Analysis Center
Building 150, Washington Navy Yard (Anacostia) Washington DC 20374-1501

8. PERFORMING ORGANIZATION REPORT NUMBER
001

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
Naval Information System Management Center
Washington DC 20360

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited

12b. DISTRIBUTION CODE
1231
NODAC 10/

13. ABSTRACT (Maximum 200 words)

Computer utilization at all levels within the Navy continues to grow exponentially. This study examines naval officers' involvement with all levels and types of automated resources. A Navy-wide officer survey was conducted by the Navy Occupational Development and Analysis Center in the second quarter of FY91. The survey was mailed to a random sample of naval officers stratified across 35 officer communities and proportionated by the ranks of chief warrant officer to captain. For purposes of this study, the findings represent the sample. Descriptive statistics were used to interpret the data. The findings underscore the importance of computer literacy as an entry level skill for officers in all fields as well as the need for standardization of software packages.

14. SUBJECT TERMS
Computer, Survey, Officers, ADP Resources, Hardware, Software

15. NUMBER OF PAGES
120

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UL

ACKNOWLEDGMENTS

The contributors to this study were subject matter experts on the Staff of the Director, Department of The Navy Information Resources Management (DONIRM) and in the computer-related fields throughout the Navy. The Navy Occupational Development and Analysis Center (NODAC) expresses its appreciation to these contributors for their help, advice, and support. In addition the Center would like to recognize LT Susan Fiorino, who developed the study, administered the survey instrument, and conducted the initial analysis of the data.

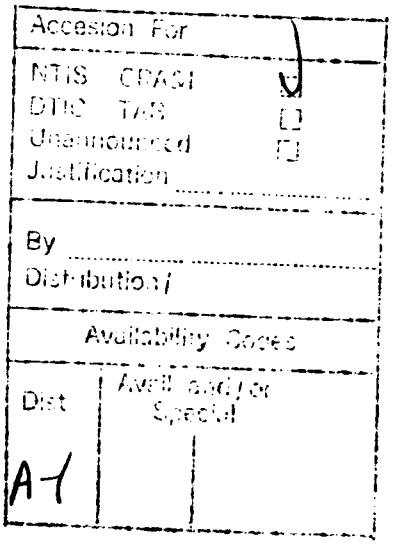


Table of Contents

List of Tables Page

List of Figures Page

EXECUTIVE SUMMARY

The purpose of this study was to describe officers' involvement with all levels and types of automated resources, as requested by the Director, Department of the Navy Information Resources Management (DONIRM). Study questions were directed at: who is using ADP resources; what types of hardware and software are being used; to what end are these resources being applied; and the relative time spent in ADP efforts.

Answering these questions was accomplished by a Navy-wide officer survey in the second quarter of FY 91. The survey was mailed to a random sample of 10,923 officers drawn from an eligible population of approximately 61,000. The sample was stratified across 35 officer communities and proportionated by the ranks of chief warrant officer to captain. A total of 6,764 responses (62%) were returned. For purposes of this report, the findings represent the sample. Descriptive statistics were used to interpret the data. A one-page summary of the findings for each of the 35 officer communities is found in Appendix B.

Some type of computer was used by 88% of the respondents in their jobs. An additional 7% had access to some type of computer but reported no use, while 5% lacked access to a computer. Officers in all fields reported computer usage, with the highest usage reported in the Manpower, Personnel, and Training field. Microcomputers were the most frequently used hardware, while word processing, graphics, spreadsheets, and database management were the most popular software packages. Use of communication packages was reported by approximately 20% of the respondents.

The findings underscore the importance of computer literacy as an entry level skill for officers in all fields, as well as the need for standardization of software packages. This standardization, if officially adopted, might contribute to increased productivity by decreasing retraining requirements and increasing system compatibility between commands. Additionally, the specific utilization patterns have ramifications for both training and computer asset allocation in an environment of constrained resources. With shrinking budgets a reality, it is important that assets be carefully matched to user needs and that users receive training which allows them to derive full benefit from assets available. The area of communication interface may be a particularly fruitful one for consideration as information sources proliferate and travel dollars decrease.

I. Purpose of the Study

Authority

The Navy Occupational Development and Analysis Center (NODAC) is chartered by the Chief of Naval Personnel (Pers 00) to identify occupational requirements; determine specific tasks performed by job incumbents; analyze and compare tasks performed by members of an officer community; and report the findings to the appropriate authorities (e.g., resource sponsors, program planners, and manpower, personnel, and training [MPT] managers).

Objectives

As requested by the Director, Department of the Navy Information Resources Management (DONIRM), the primary objective of the Officer Computer Utilization (OCU) Study was to determine officers' involvement with levels and types of automated resources. Intrinsic to this objective was a delineation of who was using which ADP resources, the functional areas being supported by ADP resources, as well as the relative time spent using these resources in mission accomplishment. The secondary objective was to establish a basis for DONIRM to consider changes which may be needed to accommodate our increasing reliance on computers.

Assumptions

- The reported data in this study reflect a broad spectrum of information that includes all officer designators and grades.

- All anecdotal and mail survey data were accurate assessments of the respondents' current billet assignments.

Limitations

The findings reported are not to be generalized to all officers within the cited designators, general officer categories or grades unless specifically stated.

Questions

The questions addressed in this report are the following:

1. Who is using ADP resources? Are these resources being used directly or indirectly?
2. What is the relative time spent in ADP efforts?
3. What types of hardware are being used?
4. What types of software are being used?
5. To what end are these resources being applied?

Glossary

ADA - DOD standard programming language which is named after Ada Augusta.

ADP - Automated Data Processing

DONIRM - Department of the Navy Information Resources Management

Interface software package - Allows the computer user to move from one software application to another through use of menus or different screens.

Integrated Real-Time System - A system that uses a combination of processes to coordinate data processing with external related physical events on a timely basis, thereby permitting reporting on conditions promptly (e.g. Shipboard Non-tactical ADP Program (SNAP),Navy Intelligence Processing System (NIPS), Retail Operation Management (ROM)).

Mainframe - An extremely powerful computer capable of handling many different jobs at the same time. It allows as many as several hundred people to carry out computing work simultaneously.

Microcomputer - A machine based around a microprocessor or "silicon chip". It consists of three parts, a central processing unit (CPU), a monitor and a keyboard.

Minicomputer - A midrange computer system designed for multiple users; provides greater speed and storage than microcomputers.

Missing or invalid data - Number of respondents who did not respond to a survey question or answered the question incorrectly.

N - Number of members in a population.

N - Number of total members in a sample population.

n - Number of respondents in a sample population.

n - Number of respondents in a limited portion of the total sample.

Supercomputer - The fastest and most expensive computer available, used, for example, in designing aircraft, weather forecasting, and research.

Technical/Tactical System - A computer designed for a specialized purpose i.e., fire control, patient monitoring, navigation.

Technical Workstation - A high performance micro or mini computer specialized for graphics or design.

II. Background of Study

In April 1989, DONIRM requested NODAC conduct a Navy-wide occupational survey to determine officers' involvement with all levels and types of automated resources. In response to this request, NODAC, in conjunction with the Staff of the Director, Naval Communication/Information Systems, developed the Officer Computer Utilization Survey (OCU). A copy of the survey instrument is provided at Appendix A.

III. Methodology

Survey Design

The Navy officer community was defined by designator, billet classification, and selected other demographics. The methodology used to assess the officer community was an occupational survey process known as the Navy Occupational Task Analysis Program (NOTAP). The survey was divided into seven sections: Billet Information; Personal and Job Background Information; Education, Training, Knowledge, and Experience; ADA Programming Language; Current Computer Usage; Microcomputers; and a Job Task Inventory.

Background characteristics of respondents included those which are standard to officer NOTAP surveys (e.g., designator, grade, and subspecialty code). In addition, the survey contained 52 "special interest questions" and 178 computer-related job task statements. The special interest questions were provided by two sources: a) the Staff of the Director, Naval Communications/Information Systems, and b) responses to NODAC's request for input from the fleet in June 1989. The job task statements were developed from existing computer-related task lists used by the military services and inputs from Navy subject matter experts working in computer fields.

The survey instrument was pretested to ensure its accuracy, completeness, and proper format. Norfolk, Virginia and Washington, D.C. were the two major sites selected to ensure the participation of officers across communities and in a variety of commands.

Sample Selection and Data Collection

For purposes of this study the Navy's officer corps was divided into 35 communities. These communities are presented by designator in Appendix B. The sample was selected from officers in the ranks of Captain (CAPT/O-6) through Chief Warrant Officer (CWO2/W-2) assigned to both sea and shore commands. This population did not include personnel in training or in other forms of transient status. The sample was stratified by community and proportionated by rank. The sample size was calculated to provide a 90% confidence level with 5% error (i.e., there would be a 90% probability that any statistics calculated on these samples would approximate those of the total population in that community, within plus or minus 5%).

In July 1990, the survey was mailed to a random sample of 10,923 Navy officers (N) from an eligible population of approximately 61,000 (N). The number of surveys mailed allowed for a 65% return rate. A total of 6,764 (n) responses (62% of the surveys mailed) were returned.

For several reasons despite these sampling efforts, caution was used in relying on confidence intervals and in applying them to the population of officers. It was difficult to determine whether the characteristics of the nonrespondents were the same as the characteristics of the respondents. Traditionally, the NOTAPs were directed at homogenous populations such as Aviation or Surface Warfare officers. For example, in the Aviation community the survey design was such that both the nonrespondents and respondents had common characteristics of belonging to the Aviation community. In administering the OCU, there was a strong likelihood that the respondents would have a higher proportion of computer users than the nonrespondents. Thus, the resulting sample would over-represent the amount of computer usage, if the calculated statistics were applied to the population as a whole. For purposes of this report, the findings represent only the sample.

The data were coded, stored on computerized data tape, and processed using the Statistical Package for the Social Sciences (SPSSx). To achieve the purpose of this study, descriptive statistics were obtained (i.e., frequencies, means, standard deviations) for those special interest questions which provided information relevant to the analysis requested by DONIRM.

Background data were collected in three groups: information about the billet (e.g., billet designator and grade), information about the officer (e.g., individual designator, grade, subspecialty code) and information about the job (e.g., job title, time in job, and number of personnel supervised). These data were used to conduct comparative analysis on the information obtained in the survey.

Analysis was directed at the sample of officers with at least 3 months job experience. Using the survey question "Time Served in Current Job", respondents with less than 3 months in their current job were deleted from the sample resulting in 6083 respondents (n) available for analysis. Table 1 presents the distribution of these respondents by rank.

Table 1

Respondents with at Least 3 Months Current Job Experience: Distribution by Rank

Rank	*n*	Percentage
CAPT (O-6)	*392*	6.4
CDR (O-5)	*718*	11.8
LCDR (O-4)	*1297*	21.3
LT (O-3)	*2101*	34.5
LTJG (O-2)	*549*	9.0
ENS (O-1)	*296*	4.9
CWO4 (W-4)	*223*	3.7
CWO3 (W-3)	*217*	3.6
CWO2 (W-2)	*290*	4.8
Total	*6083*	100.0

IV. Findings

Findings are presented for the study questions listed in section I. Appendix B provides a listing of findings for each of the 35 designator communities. Additionally, highlights from individual designator communities or grades are discussed in this report.

Who is Using ADP Resources?

Answering the question "Who is using ADP resources?", was accomplished by examining the responses to types of computer systems. Respondents were provided a list of seven types of computers: Microcomputers, Technical workstations, Minicomputers, Mainframes, Supercomputers, Integrated real-time systems, and Technical-tactical systems.

Respondents were asked "Thinking about YOUR JOB AS A WHOLE (not just the computer-related portion), how frequently do you use the following types of computers?" The following scale was provided for respondents to answer the question for each type of computer:

0 - Not Applicable (not available)
1 - Never (i.e., available but do not use)
2 - Almost Never
3 - Occasionally
4 - Routinely
5 - Frequently
6 - Almost Always
7 - Always

The respondents were divided into groups based on their involvement with each type of computer. A NO ACCESS group was comprised of respondents who answered Not Applicable (not available) (0). ACCESS NON-USERS were obtained from respondents who answered Never (i.e., available but do not use) (1). USERS were obtained from the respondents who answered Almost Never (2) to Always (7). Additionally, respondents who used at least one type of computer system were grouped into a category of ANYUSER (any computer user). Figure 1 illustrates the distribution of these groups for all officers for each type of computer.

Figure 1 presents a series of multiple bar graphs which report that 88% of the responding officers used at least one type of computer in their jobs. Approximately 7% had access to a computer but did not use a computer in their jobs. Inspection of the ACCESS NON-USER data revealed that 10% of officers had access to supercomputers but did not use them. Between 14% and 16% of the officers had access to technical workstations, minicomputers, and mainframe computers but did not use them.

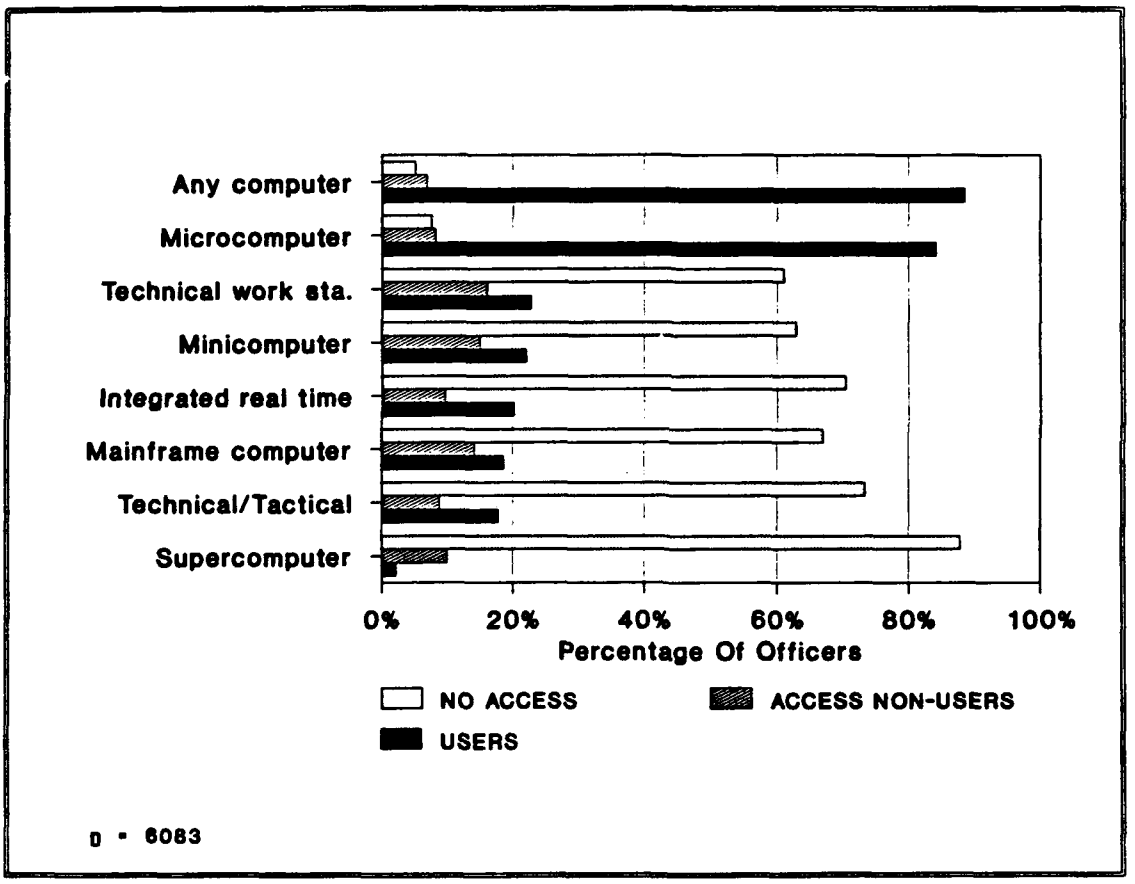


Figure 1. Percentage of Officers Who Used Different Types of Computers

Are These Resources Being Used Directly or Indirectly?

The indirect users of computers were determined by examining the responses to the question "How many people under your supervision use ANY TYPE OF COMPUTER in their job?" Respondents were asked to record the number of officers, enlisted, and civilian personnel supervised. These responses were compared with the ANYUSER group to create four categories of direct and indirect users:

- **Used Only:** an officer who used a computer but did not supervise personnel who used a computer (direct user)

- **Used and Supervised:** a direct computer user and an officer who also supervised personnel who used computers (direct and indirect user)

- **Supervised Only:** an officer who only supervised personnel who used computers (indirect user)

- **Not Involved:** an officer who did not directly use a computer or supervise personnel who used a computer.

Table 2 displays the distribution of officers for the direct and indirect users. The majority of officers, 72.2%, used computers and supervised personnel who used computers. Approximately 8% were indirect users who "supervised only".

Table 2

Direct and Indirect Use of Computers by Officers

Category	Percentage	*n*
Used and Supervised	72.2	*4371*
Used only	15.7	*952*
Supervised only	7.6	*462*
Not involved	4.4	*267*
Total	99.9	*6052*

Note. Percentages do not total 100 due to rounding error.

Figure 2 displays the distribution of the direct and indirect users by grade. When examining the direct and indirect users of computers by grade, a greater percentage of captains (O-6) were indirect users who supervised personnel who used computers. As was expected, the junior officers (ensigns (O-1) and lieutenants junior grade (O-2)) were more involved with computers by using computers and supervising personnel who used computers.

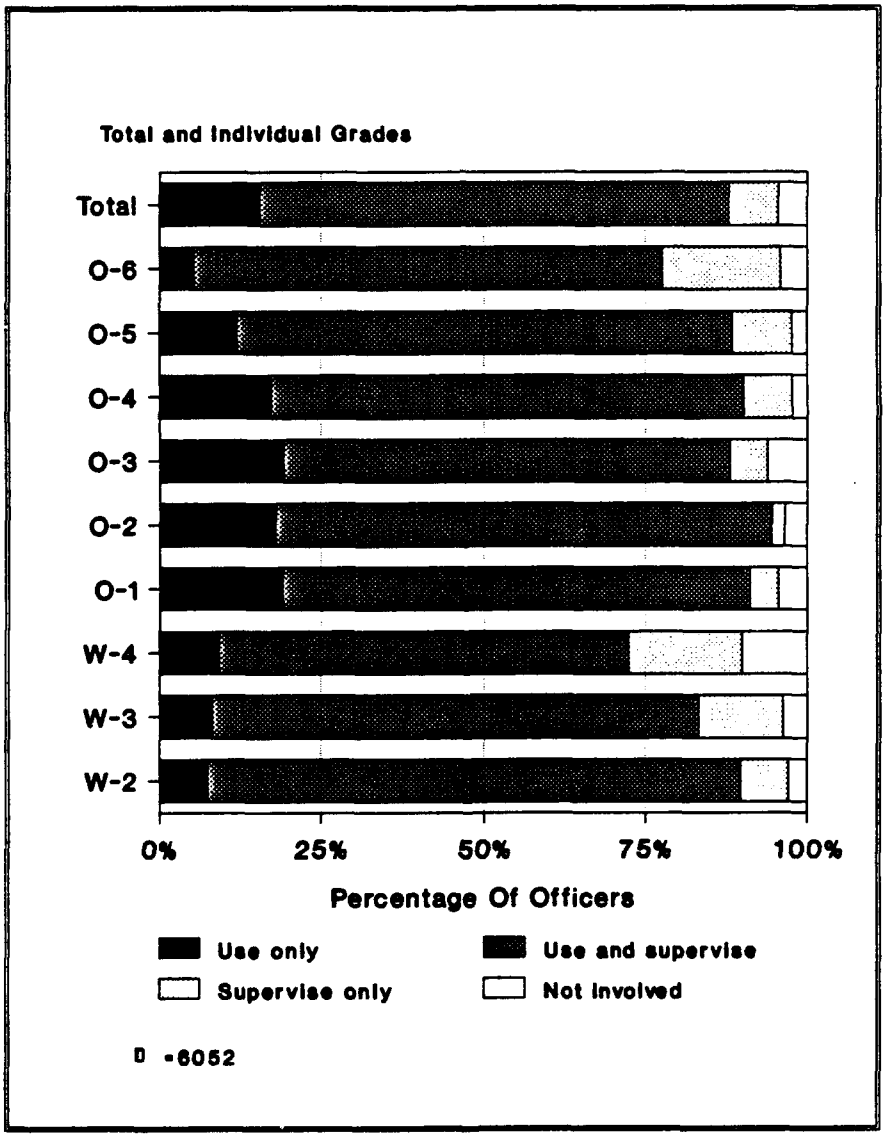


Figure 2. Direct and Indirect Use of Computers

What is the Relative Time Spent in ADP Efforts?

Respondents were asked "On average, what PERCENTAGE of your work day involves computers, whether directly or indirectly?". Only the respondents who had some involvement with computers (i.e., used at least one type of computer or supervised at least one person who used a computer) were included in the analysis of this question. This resulted in an n of 5630. These respondents were sorted into two time groups: a) spending less than 50% of their day involved with computers and b) spending greater than 50% of their day involved with computers.

Two thirds of the officers (69%) spent less than 50% of their day involved with computers. On average, they spent approximately 31% of their working day involved with computers. The community with the highest average percentage of their work day involved with computers was the Oceanography community, 51%.

By rank, the percentage of work day involving computers ranged from a high of 40% for the ensigns, to a low of 21% for the captains. This indicates that as rank increases, time spent using a computer decreases (see Table 3).

Table 3

Average Percentage of Work Day Involving Computers by Rank

Rank	Percentage of Work Day	n
CAPT (O-6)	21	362
CDR (O-5)	29	676
LCDR (O-4)	30	1216
LT (O-3)	33	1922
LTJG (O-2)	30	512
ENS (O-1)	40	270
CWO4 (W-4)	28	198
CWO3 (W-3)	34	200
CWO2 (W-2)	34	274
Total	31[a]	5630

[a] Total percentage represents the average percentage of the work day for all respondents.

Throughout the remainder of the report, analysis is based on the officers who used at least one type of computer, n = 5323 of n = 6052 respondents. Analyzed this way, the data are more representative of the officers' true involvement with computers than if officers who did not use computers were included.

What Types of Hardware are Being Used?

In Table 4 the level of use for each type of computer was determined by summing the responses, Almost Never (2) to Always (7) for each type of computer hardware and dividing by the number of those respondents. These data represent the average frequency of use for each type of computer by officers who were direct users of the computer.

When the responses to frequency of use for each type of computer were examined, the microcomputer was the type of hardware used by the majority (84.2%), who used them Frequently (5.0). Supercomputers had the least number of users (2.2%) and the lowest frequency of use: Occasionally (3.2). Table 4 also displays the percentages of computer users who operated each type of computer and the average response as to how often they used the computer.

Table 4

Current Hardware Usage: Average Response by Officers Who Used Computers

Hardware	Average Response (scale)		% Response (*n* = 5323)
Microcomputers	Frequently	(5.0)	84.2
Technical/tactical systems	Routinely	(4.4)	17.8
Integrated real-time systems	Routinely	(4.3)	20.1
Mainframes	Routinely	(4.0)	18.7
Minicomputers	Routinely	(3.8)	22.1
Technical work-stations	Routinely	(3.7)	22.8
Supercomputers	Occasionally	(3.2)	2.2

RESPONSE SCALE	
2-Almost Never	5-Frequently
3-Occasionally	6-Almost Always
4-Routinely	7-Always

What Types of Software are Being Used?

The survey provided a list of eight programming languages, three language processors, as well as 28 software and 13 word processing packages. Respondents were asked to indicate how frequently they used each brand, relative to their entire job. Respondents were given the opportunity to mark "Other" for each section to indicate that they used a programming language, processor, software package, or word processing package that was not listed. The scale used was:

0 - Not Applicable (not available)
1 - Never (i.e., available but do not use)
2 - Almost Never
3 - Occasionally
4 - Routinely
5 - Frequently
6 - Almost Always
7 - Always

For each programming language, language processor, software package, and word processing package, computer users were divided into three categories relative to their responses to the above scale. A NO ACCESS group was comprised of computer users who answered Not applicable (not available) (0). An ACCESS NON-USERS group answered Never (i.e., available but do not use) (1). The USERS group are the computer users who answered between (2) and (7). The level of use for each type of programming language, language processor, software package, and word processing package was determined by summing the responses, Almost Never (2) to Always (7) for each type of computer hardware and dividing by the number of those respondents. See Table 5, 6 and 7 in the following sections for individual findings.

Programming Languages and Language Processors.

Table 5 displays the percentages of computer users for each programming language and language processor. Each programming language had less than 10% USERS, with the exception of *BASIC* which had over 30%. However, these respondents had an average frequency of use of 3.7 to 4.4 for each brand of programming language. This indicated that these computer users were employing programming languages Routinely in their jobs. Eight percent of the respondents were using language compilers. *ADA* has become the Department of Defense (DOD) standard as a high-order programming language. Table 5 shows that 2% of computer users were employing *ADA* and 9.5% had access but did not use it.

Table 5

Percentage of Computer Users of Each Programming Language and Language Processor

Software	Computer Users (n=5323) Users	Access	Non-Users No Access
	Programming Languages		
ADA	2.1	9.5	82.4
BASIC	31.6	18.2	45.5
C	4.6	10.8	78.6
COBOL	3.4	11.3	79.0
FORTRAN	5.9	11.7	76.1
LISP	0.8	8.4	84.3
PASCAL	3.6	10.4	79.7
SQL	2.1	8.8	82.6
Other Programming Languages	3.3	5.8	76.8
	Language Processors		
Assembler	5.0	10.4	76.8
Compiler	8.0	10.3	74.1
Interpreter	4.5	10.0	77.5

Note. Percentages do not total 100 due to invalid or missing data.

Software Packages.

The 28 software packages were divided into eight sections: graphics, spreadsheets, interface, statistics, database, communications, utilities packages, and canned Navy applications. Word processing packages are discussed in a separate section. With the exception of the statistics packages, all were being used on average Frequently (5) or Routinely (4). Table 6 displays the percentages of computer users who employed various types of software. The top three types of software used were graphics, database management, and spreadsheets packages.

Table 6

Percentage of Computer Users of Each Software Package

	Computer Users (n=5323)		
Software Type	Users	Access Non-Users	No Access
Graphics (3)	54.5	9.6	30.2
Database (5)	53.8	10.6	28.5
Spreadsheets (2)	44.9	12.2	34.9
Utilities (2)	34.9	7.9	47.2
Navy Applications (1)	22.1	6.4	63.4
Interface (2)	19.5	11.9	57.7
Communications (4)	19.3	7.7	61.1
Statistics (2)	2.0	3.7	80.9

Note. Percentages do not total 100 due to invalid or missing data.

Note. The number in parentheses indicates the number of packages in each software category.

More than two thirds of computer users had at least one graphics package available. Higher grades (O-4, O-5, O-6) had a higher percentage of graphic package users than did lower grades. Aerospace Engineering Duty Officers had a higher percentage of graphics package users (70%) than any other community. *Harvard Graphics* (31.7%) was chosen more often than *Enable Graphics* (16.1%).

Lotus 1-2-3 was the most popular spreadsheet package, selected by 1706 out of 2389 (71%) of the spreadsheet users. *Lotus 1-2-3* was used by a greater percentage of the Supply and Civil Engineering Corps communities than by any other community (73.3% and 84.8% respectively).

Nearly two thirds of computer users did not have interface packages available. Among users, far more officers indicated *Windows* (931) than indicated *DesqView* (75).

More than 80% of computer users did not have a statistical package available. Only 2% actually used a statistical package, with *SAS* and *SPSS* receiving relatively the same number of responses (50 and 53 respectively). Both packages had the same frequency of use: Occasionally (3).

Two thirds of computer users had a database management package available and over half of all computer users used a database management package. The communities with the highest percentage responding to use of database management packages were Supply (65%), Civil Engineering Corps (67%) and Medical Service Corps (70%). Among database management systems, *dBase* was the package with the greatest percentage of users (47%).

Two thirds of computer users did not have a communication package available. *PROCOMM* received the highest number of users (632). *BITCOM* received the fewest responses (49). While usage of graphics and spreadsheet features of *Enable* was high (857 and 867 respectively), the *Enable* communication package only received 287 responses.

Almost 50% of computer users had utility programs available. Both utility programs received similar responses. *PC Tools* is used by 1316 respondents and *Norton Utilities* was indicated by 1210 respondents. Occasionally (3) was the most often chosen response for both types of utility software, with the average response being Routinely (4) for these utility packages.

The general program, *canned Navy applications* referred to programs such as those specifically developed and used for tracking qualifications or conducting inventory in the Navy. This program received 1179 responses. The most often chosen response was 3 which means it was Occasionally used, and the average response was 4.4 which indicated Routine use. Of those who responded to canned Navy applications, the greatest percentage of any community came from the Supply Corps (35%).

Word Processing Software Packages.

Respondents were provided with a list of 13 word processing packages and were asked to rate each package according to how frequently they used it in their current jobs. The response scale ranged from Never (i.e., available, but do not use) (1) to Always (7). A Not Applicable (0) column was provided for those who did not have a given package available to them. In addition to the 13 word processing packages listed, respondents could rate "Other" if they had a package which was not listed. The average frequency of use was calculated using only those respondents who marked a value from Almost Never to Always (2 to 7).

When the responses were totaled, 93% of computer users employed a word processing package. Three percent (184) did not have a word processing package available. Table 7 summarizes the percentages of computer users who employed word processing packages.

Ten of the 13 word processing packages were used by less than 20% of the officers. The word processing packages chosen by the majority of respondents were *WordPerfect* (3162), *WordStar* (2042), and *Enable* (1148). *WordPerfect* and *WordStar* were used on average Frequently. The remaining word processing packages were used on average Routinely.

Table 7

Percentage of Computer Users of Each Word Processing Package

Word Processing Package	Computer Users (n = 5323)	
	Users	Access Non-Users	No Access
WordPerfect	53.5	13.3	30.9
WordStar	34.5	14.4	48.1
Enable	19.4	18.1	59.2
Machine Specific	8.7	9.2	78.7
Word	6.8	8.2	81.5
Multimate	6.5	9.4	80.8
Other	5.8	4.3	74.8
MacWrite	4.8	8.3	83.4
Appleworks	3.7	7.4	85.6
Office Writer	3.6	7.4	85.4
Peachtext	3.4	8.9	84.2
PFS: Write	2.8	7.4	86.1
Display Write	1.9	7.8	86.9
Sprint	.5	6.7	89.1

Note. Percentages do not total 100 due to invalid or missing data.

Figure 3 identifies usage choices reported by officers who had two of the top three word processing packages available. The majority of officers who had two packages available used both regardless of the combination. When officers had two packages available, but used one exclusively, *WordPerfect* appeared to be the package of choice most frequently. It was chosen approximately twice as often as *WordStar* (20% compared to 10%) and approximately five times as often as *Enable* (35% compared to 7%).

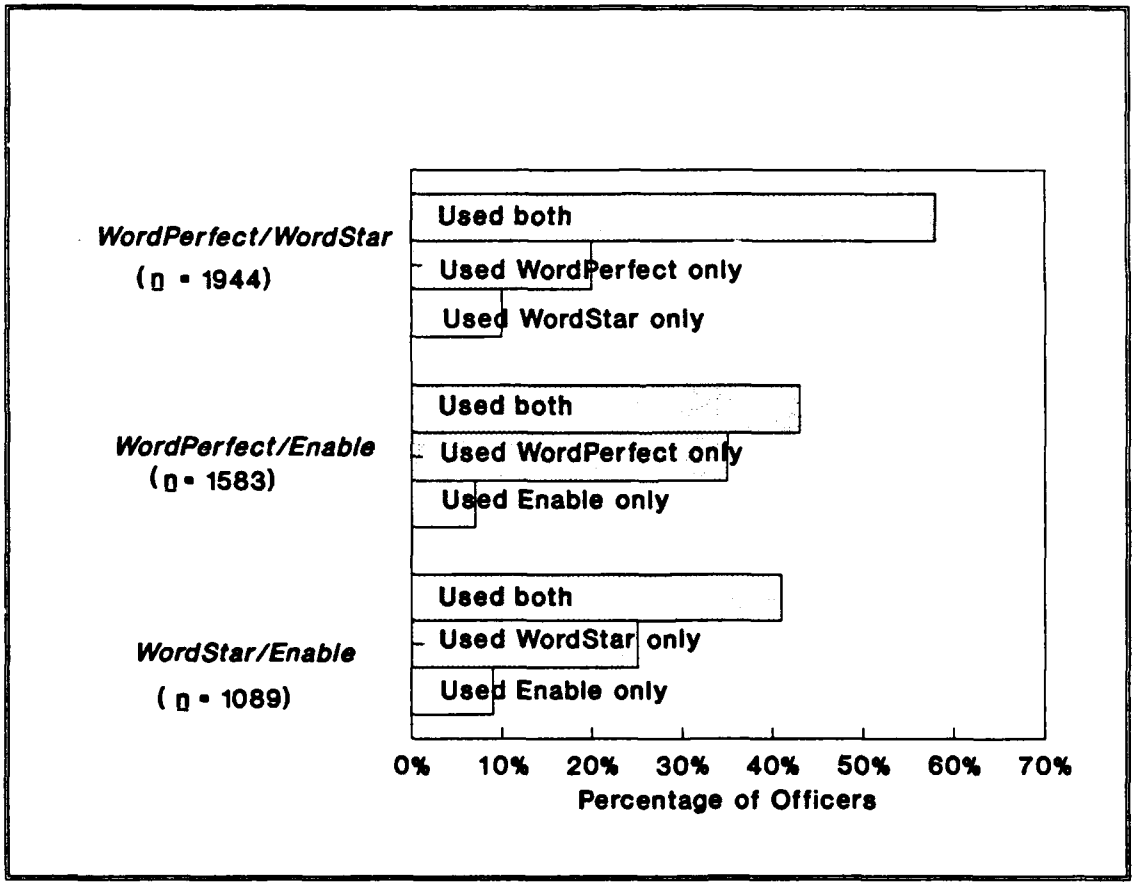


Figure 3. Percentage of Officers Who Used 2 of 3 Available Top Word Processing Packages

Officers were also asked to rate how satisfied or dissatisfied they were with each of the word processing packages on a scale from Completely Dissatisfied (1) to Completely Satisfied (7). Table 8 displays the average response by officers who indicated that they used each word processing package. *WordPerfect* users had the highest average response of Somewhat Satisfied. *Enable* had the lowest average response of any of the top three word processing packages, Neither Satisfied Nor Dissatisfied.

Table 8

Satisfaction With Word Processing Packages: Average Response by Officers Who Used Computers

Word Processing Package	Average Response (scale)	% Response (*n* = 5323)
WordPerfect	Somewhat Satisfied (5.8)	53.4
Word	Slightly Satisfied (5.5)	6.8
Other	Slightly Satisfied (5.5)	5.8
MacWrite	Slightly Satisfied (5.3)	4.8
Appleworks	Slightly Satisfied (5.3)	3.7
WordStar	Slightly Satisfied (5.0)	34.5
Office Writer	Slightly Satisfied (4.9)	3.6
PFS: Write	Slightly Satisfied (4.9)	2.8
Multimate	Slightly Satisfied (4.6)	6.5
Enable	Neither (4.4)	19.4
Sprint	Neither (4.2)	.5
Machine Specific	Neither (4.3)	8.7
Display Write	Neither (4.1)	1.9
Peachtext	Neither (3.5)	3.4

RESPONSE SCALE

1-Completely Dissatisfied
2-Somewhat Dissatisfied
3-Slightly Dissatisfied
4-Neither Satisfied Nor Dissatisfied
5-Slightly Satisfied
6-Somewhat Satisfied
7-Completely Satisfied

To What End are These Resources Being Applied?

Respondents were provided with a list of 65 functional fields. These fields were grouped into four functional areas:

Administrative/Management/Logistics Support
Warfare Mission
Strategic/Tactical/Operational Support
Other

Respondents were asked to mark all the fields applicable to them in their use of computers. Appendix C lists the four functional areas and 65 functional fields. The following were the most frequently chosen functional fields:

Manpower, Personnel, and Training	2250	(42%)
Information Resource Management	1420	(27%)
Plans and Policies	1389	(26%)
Budgeting	1383	(26%)
Supply	1036	(19%)

The Manpower, Personnel, and Training field was chosen the most often by respondents. Even though the respondents were allowed to choose more than one functional field, 1066 (20%) selected only one field and 448 (8%) didn't select any field. The average number of functional fields chosen was five. Sixty-one percent of all fields chosen were in the administrative area.

The Submarine and Aviation (Pilot) communities chose similar numbers of functional fields across the administrative, warfare, and strategic areas. The Special Warfare and Aviation (Naval Flight Officer) communities chose more fields from the warfare mission area; whereas, the Cryptology, Intelligence, and Oceanography communities chose more fields from the strategic area. The remaining communities chose the majority of functional fields from the administrative area.

All of the functional fields except Fire Control incorporated microcomputer usage. Fire Control employed the technical/tactical system. Table 9 displays the percentages of officers that chose at least one functional field within a functional area.

Table 9

Percentage of Computer Users Who Chose at Least One Functional Field Within a Functional Area

Functional Area	Percentage (n=5323)
Administrative/ Management/ Logistics Support	83
Strategic/Tactical/Operational	28
Warfare Mission Areas	29
Other	10

Summary of Findings

Eighty-eight per nt of officers used some type of computer in their jobs. Five percent of officers did not have access to any type f computer. Seven percent of the officers had access to some type of computer but did not use them. The majority of officers used computers and supervised personnel who used computers. On average, officers spent approximately 30% of their day either directly or indirectly involved with computers.

The microcomputer was used frequently by the majority of officers (84.2%) to perform their work in all the functional fields except Fire Control, which was performed using a technical/tactical system. Approximately 20% of officers were using technical workstations, minicomputers, and mainframe computers while, between 14% and 16% had access but did not use these systems.

All software packages were being used at least routinely except for the statistical packages. The top four types of software packages used were word processing, graphics, spreadsheets, and data base management. At least two thirds of computer users had these available and at least half of computer users were using the top brand in each software type frequently or routinely.

Ten of the 13 word processing packages were used by less than 20% of the officers. *WordPerfect* and *WordStar* were chosen by more computer users than any other type of word processing software. When officers had two of the top three packages (*WordPerfect*, *WordStar*, and *Enable*) available, most used both. Where only one was used, *WordPerfect* and *WordStar* both were chosen much more than *Enable*. *WordPerfect* was also chosen more than *WordStar*, though the margin was less than in any choice which included *Enable*.

Harvard Graphics and *Desktop Publishing* were selected by more computer users than the *Enable Graphics* package. *Lotus 1-2-3* was the top brand of the spreadsheet packages. *dBase* was chosen by more respondents than any other data base management package and on average was used routinely. Two thirds of computer users did not have communication or interface packages available.

Manpower, Personnel, and Training was the functional field in which most officers were involved when they used computers. Other fields with relatively large numbers of officers involved were Information Resource Management Plans and Policies, Budgeting, Supply, Maintenance, and Accounting.

V. Discussion and Recommendations

Discussion

As written in the memo by Admiral Tobin to the officers chosen to complete the OCU Survey, "Computer utilization at all levels within the Navy continues to grow exponentially." Eighty-eight percent of the officers represented in the survey used at least one type of computer system; at least 20% of all officers were involved with sophisticated computer systems beyond the level of the microcomputer. If not already a given, computer literacy beyond the level of word processing as well as knowledge of computer applications, will become a required entry level skill for all officers. These skills will be necessary for officers to perform their jobs and optimize their productivity in the current environment of downsizing the military.

At least two thirds of computer users had word processing, spreadsheet, database, and graphics packages available. Half of these users also chose the top brand in each software category and 20% of the officers used communications packages. This implies that the packages chosen meet the perceived needs of the users. It also suggests that a *de facto* standardization process is taking place. This standardization, if officially adopted, might contribute to increased productivity by decreasing retraining requirements and increasing system compatibility between commands.

The number of ACCESS NON-USERS in the various categories could be interpreted as being related to lack of training in the application of the hardware or software. However, the officer may not need the particular hardware or software application to perform his/her job, yet the command may require it to complete their mission. This finding may also relate to decisions regarding allocation of hardware and software assets. In a constrained resource environment, optimizing deployment of resources to ensure tools are available where needed rather than placed where not required, becomes essential.

The finding that only 20% of the officers used communication packages is noteworthy. As the Navy relies on electronic bulletin boards and automated systems to replace TAD conferences as a means of communications between levels and echelons of command, these software packages may increase in need and application.

Recommendations

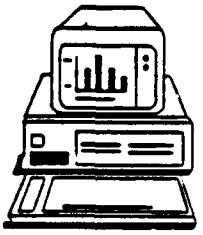
- Evaluate the requirement for establishing computer literacy as an entry level skill for officers.

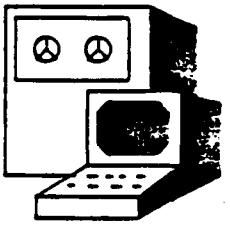
- Standardize software packages for major functional requirements.

- Conduct ongoing evaluation of computer asset allocation to optimize constrained resources.

- Evaluate the future requirements for communication software.

NAVY OCCUPATIONAL TASK ANALYSIS PROGRAM OCCUPATIONAL TASK INVENTORY





OFFICER COMPUTER UTILIZATION

NAVY OCCUPATIONAL DEVELOPMENT AND ANALYSIS CENTER (NODAC)

NAVAL MILITARY PERSONNEL COMMAND DETACHMENT WASHINGTON, D.C. 20374-1501

JULY 1990

DEPARTMENT OF THE NAVY
NAVAL MILITARY PERSONNEL COMMAND DETACHMENT
NAVY OCCUPATIONAL DEVELOPMENT AND ANALYSIS CENTER
BUILDING 150, WASHINGTON NAVY YARD, ANACOSTIA
WASHINGTON, D.C. 20374-1501

INTRODUCTION

The Navy Occupational Task Analysis Program (NOTAP) provides occupational data to Navy Manpower, Personnel and Training (MPT) decision-makers. We store this data in the occupational data bank. We make it available to MPT personnel for: occupational studies of the officer communities, updating the officer manpower and personnel classifications manual, revising training manuals and school curricula.

We randomly select the participants in NOTAP surveys, using the names for mailing purposes only. We welcome your comments on the survey; they will be treated confidentially. Please enter your comments on the last page.

Although this is a survey and not a test, thoughtful and accurate answers are needed.

If you have any questions about how to complete this survey, please contact us at the numbers listed in the box below.

Thank you for your assistance.

E. L. NARO
CAPTAIN, U.S. NAVY
Officer in Charge

COMMANDS ADMINISTERING THIS SURVEY ARE REQUESTED TO RETURN THE COMPLETED SURVEY BOOK WITHIN 10 DAYS OF ITS RECEIPT TO:	IMPORTANT: MARK RETURN ENVELOPE "FIRST CLASS MAIL"
Naval Military Personnel Command Detachment Navy Occupational Development and Analysis Center Building 150, Washington Navy Yard (Anacostia) Washington, D.C. 20374-1501	NODAC Contact Numbers: AUTOVON 288-4622, commercial (202) 433-4622 or FAX 433-4898.

PRIVACY ACT STATEMENT

Authority to request this information is derived from Title 5 USC 301, Departmental Regulations. The purpose of this information is to identify job requirements, determine specific tasks being performed by job incumbents and to analyze and compare groups of individuals within an officer community. The data may be used to improve the use, training and assignment of personnel. Completion of this survey is voluntary; however, failure to provide the requested information could result in delay or errors in detecting and correcting discrepancies in officer personnel management.

SURVEY AUTHORIZATION

Authorization to conduct this survey is granted by the Chief of Naval Operations (OP-01). This survey is exempt from reporting requirements of OPNAVINST 5300.8.

TRADEMARK INFORMATION

All brand and product names appearing in this survey are trademarks or registered trademarks of their respective companies.

1549

DO NOT MARK IN THIS AREA

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350-2000

From: Chief of Naval Operations (OP-941)
To: All Naval Officers Completing the Officer Computer Utilization Survey

Subj: OFFICER COMPUTER UTILIZATION SURVEY

1. Computer utilization at all levels within the Navy continues to grow exponentially. Computers are becoming more central to mission accomplishment with each passing day, yet the planning and management of resources has been decentralized. The key to successful management of our increasing reliance on computers is the availability of accurate data reflecting occupational requirements for information resources management personnel.

2. The Navy Occupational Development and Analysis Center (NODAC), in conjunction with the Staff of the Director, Naval Communications/Information Systems, developed a survey in an effort to identify naval officers' involvement with all types of computers. This involvement ranges from word processing on a desktop personal computer to such sophisticated systems as weapons engineering, medical diagnosis, and computer-aided software engineering.

3. This survey is a major step toward achieving intelligent management of the Navy's computer-related resources. The time you invest in completing this survey will have a direct and enduring effect on the officer billet and personnel classification structure, as well as on training and education programs. Please consider each question carefully and respond accurately.

P. E. TOBIN
Rear Admiral, U.S. Navy
Director, Naval Communications/
Information Systems

IMPORTANT MARKING INSTRUCTIONS

USE NO. 2 PENCIL ONLY

ot use ink, ballpoint or felt tip pens.
e black marks that fill the circle. Erase
ıly and completely any changes you
e. Do not make stray marks on the form.

CORRECT MARK: ○●○○

INCORRECT MARKS: ⊗⊘◔①

NUMBERS

Write the numbers in the boxes at the top of the block, making sure that the number is always placed as far to the right as possible. Place a ZERO in any blank box(es) preceding the number. Fill in the corresponding circles below. For example to mark the number 32, mark as follows:

0	0	3	2
●	●	0	0
1	1	1	1
2	2	2	●
3	3	●	3
4	4	4	4
9	9	9	9

LETTERS

To mark the AQD Code of ABE:

A	B	E
○	○	○
●	A	A
B	●	B
C	C	C
D	D	D
E	E	●

TO BE COMPLETED BY THE COMMAND

Enter the name of the member completing sections B through G NAME (Last, First, Middle Initial)	ACTIVITY NAME

SECTION A: BILLET INFORMATION

Complete this section on the BILLET the officer is FILLING. For billet information, refer to your command's Manpower Authorization Documents (OPNAV 1000/2) or the Officer Distribution Control Report (ODCR) located in your Personnel or Administrative Office.

ITEM	OPNAV 1000/2 BLOCK LOCATION	DESCRIPTION
1. ACTIVITY CODE	#3	Ten digit number. (Also can be found on the mailing label)
2. BILLET POSITION SEQUENCE CODE	#18	Five digit number.
3. BILLET DESIGNATOR (DES)	#22	Four digit number.
4. BILLET GRADE (GR)	#22	Single letter after designator.
5. BILLET PRIMARY NOBC (PNOBC)	#23	Four digit number. All billets have PNOBCS.
6. BILLET PRIMARY SUBSPECIALTY (PSSP)	#24	Four digit number followed by a letter. If two are listed, use the top code. If the billet has none, leave blank.
7. BILLET PRIMARY AQD (PAQ)	#25	Three character code. If the billet has none, leave blank.

SHIP OR STATION ACTIVITY CODE (SEE FRONT COVER LABEL)

2 BILLET SEQUENCE CODE

3 BILLET DESIGNATOR

4 BILLET GRADE

0-1 (L)
0-2 (K)
0-3 (J)
0-4 (I)
0-5 (H)
0-6 (G)
0-7 (F)
0-8 (D)
W-2 (O)
W-3 (N)
W-4 (M)

5 BILLET PRIMARY NOBC

6 BILLET PRIMARY SUBSPECIALTY CODE

7 BILLET PRIMARY AQD

PLEASE PASS THIS SURVEY TO THE OFFICER WHO WILL BE COMPLETING IT, STARTING WITH SECTION B.

IMPORTANT MARKING INSTRUCTIONS

USE NO. 2 PENCIL ONLY

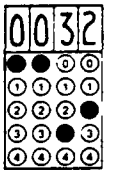
INCORRECT MARKS: ⊗ ⊘ ◍ ⊖
CORRECT MARK: ○ ● ○ ○

- Make black marks that completely fill the circle.
- Erase cleanly and completely any changes you make.
- Do not make stray marks in this booklet.

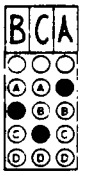
1. Print the required information in each row of boxes provided.
2. Blacken the corresponding circle under the number or letter you printed.
3. Make sure the number is always placed as far right as possible.

MARKING EXAMPLES

To mark the number 32



To mark the AQD CODE BCA



TO BE COMPLETED BY THE OFFICER BEING SURVEYED

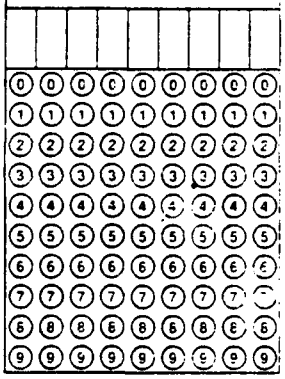
SECTION B: PERSONAL AND JOB BACKGROUND INFORMATION

Please ensure that your name and activity name are entered on PAGE 4. Review the important marking instructions at the top of the page before completing this survey booklet.

SEX

MALE ①
FEMALE ②

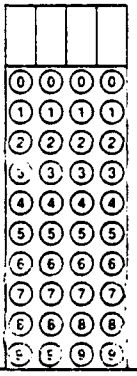
SOCIAL SECURITY NUMBER



DESIGNATOR

Enter your designator.

EXAMPLE: If you are an NFO in the Naval Reserve, your designator is 1325.



GRADE

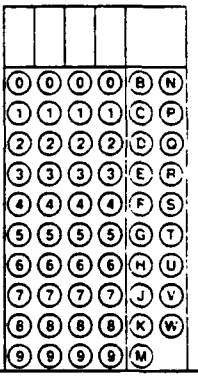
Indicate your CURRENT grade. Enter frocked grade, if applicable.

0-1 Ⓛ
0-2 Ⓚ
0-3 Ⓙ
0-4 Ⓘ
0-5 Ⓗ
0-6 Ⓖ
W-2 Ⓞ
W-3 Ⓝ
W-4 Ⓜ

SUBSPECIALTY CODE

SUBSPECIALTY (SSP) CODES are five characters consisting of four numerals and an alphabetic suffix. Subspecialty codes are assigned to officers as a result of subspecialty selection board action and identify postgraduate education or experience training. Enter your FIRST subspecialty code. If you are uncertain of your actual SSP, consult your Manpower or Personnel Office. This information can be found on your ODCR and Officer Data Card.

EXAMPLE: If you are a Naval Flight Officer (NFO) with a proven subspecialty in anti-submarine warfare, you would enter "4044R" as your SSP. If you have no subspecialty, LEAVE BLANK.



SIGNIFICANCE OF SUBSPECIALTY

Indicate the significance of the knowledge and experience you have obtained in your SSP as it relates to your CURRENT JOB. If you have no subspecialty, LEAVE BLANK.

INSIGNIFICANT ①
SLIGHTLY SIGNIFICANT ②
SOMEWHAT SIGNIFICANT ③
MODERATELY SIGNIFICANT ④
QUITE SIGNIFICANT ⑤
HIGHLY SIGNIFICANT ⑥
EXTREMELY SIGNIFICANT ⑦

Do you feel that the billet you are in should be coded for a computer subspecialty (XX9X), regardless of whether or not it is currently coded?

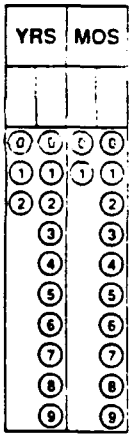
DON'T KNOW ⓪
NO ①
YES ②

If you have a computer-related subspecialty code (XX9X), have you ever been assigned to a billet coded for this subspecialty?

NOT APPLICABLE. DO NOT HAVE AN XX9X SUBSPECIALTY (SKIP TO PAGE 6) ⓪
NO (SKIP TO PAGE 6) ①
YES, CURRENTLY ②
YES, PREVIOUSLY ③
YES, BOTH CURRENTLY AND PREVIOUSLY ④

How much time elapsed between assignment of your XX9X subspecialty code and assignment to an XX9X billet?

(e.g., if you completed a three-year tour in an uncoded billet after receiving your XX9X subspecialty code and were then assigned to an XX9X billet, enter "03" for 3 years and "00" for 0 months.)



SOURCE OF COMMISSION

Fill in the circle which indicates the source of your most recent commission.

AVIATION OFFICER CANDIDATE SCHOOL (AOCS)	①
AVIATION RESERVE OFFICER CANDIDATE (AVROC)	②
DIRECT APPOINTMENT: STAFF CORPS	③
DIRECT APPOINTMENT: OTHER	④
LIMITED DUTY OFFICER (LDO)	⑤
MERCHANT MARINE OFFICER CANDIDATE	⑥
NAVAL ACADEMY	⑦
NAVAL AVIATION CADET (NAVCAD)	⑧
NAVAL RESERVE OFFICER TRAINING CORPS (NROTC) – CONTRACT	⑨
NAVAL RESERVE OFFICER TRAINING CORPS (NROTC) – REGULAR	⑩
NAVY ENLISTED NURSING EDUCATION PROGRAM (NENEP)	⑪
NAVY ENLISTED SCIENTIFIC EDUCATION PROGRAM (NESEP)	⑫
OFFICER CANDIDATE HOSPITALMAN (OCHN)	⑬
OFFICER CANDIDATE SCHOOL (OCS)	⑭
OTHER SERVICE ACADEMY	⑮
OTHER SERVICE COMMISSIONING PROGRAM OR SOURCE	⑯
RESERVE OFFICER CANDIDATE (ROC)	⑰
WARRANT OFFICER	⑱
WOMEN OFFICER OFFICER CANDIDATE SCHOOL (WOS OR WOCS)	⑲
OTHER NAVAL COMMISSIONING PROGRAM OR SOURCE	⑳

COMMISSIONED SERVICE

Indicate your total commissioned service.

EXAMPLE: If your total commissioned service is 7 years, 1 month, enter "07" for 7 years and "01" for 1 month.

YRS	MOS
0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9

TIME SERVED IN CURRENT GRADE

Include time in a frocked status.

EXAMPLE: If you were frocked for 6 months and have actually been promoted to LT for 2 years, 7 months, enter "03" and "01" to indicate 3 years and 1 month.

YRS	MOS
0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9

FORMAL EDUCATION AND MAJOR FIELDS OF STUDY

Indicate the highest level of formal education you have COMPLETED.

HIGH SCHOOL DIPLOMA OR EQUIVALENT	①
SOME COLLEGE, BUT LESS THAN A TWO-YEAR DEGREE	②
ASSOCIATE DEGREE, OR BETWEEN 2 AND 4 YEARS	③
BACHELOR'S DEGREE	④
MASTER'S DEGREE	⑤
POST-MASTER'S DEGREE	⑥
DOCTORAL DEGREE	⑦
POST-DOCTORAL DEGREE	⑧

Indicate your PRIMARY field of study for the degrees you have received. See page 7 for major fields of study.

EXAMPLE: If you have a bachelor's degree in Finance and a master's in Operations Analysis, you would enter "006" in the undergraduate block, "127" in the master's block and "000" in the post-master's and beyond block. If you do not have the degree, enter "000" in the block.

UNDER-GRADUATE	MASTER'S	POST-MASTER'S OR BEYOND
0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9

SERVICE COLLEGE(S) OR SERVICE COLLEGE EQUIVALENTS ATTENDED

Indicate the level of the service colleges or equivalent programs you have completed. For the purpose of this survey, service college refers to those institutions such as the Naval War College, other service war colleges, staff colleges, etc. (Do not include the Naval Postgraduate School or Naval Academy in your response.) If you have completed both junior and senior service colleges, enter both responses. If you have completed neither, LEAVE BLANK.

JUNIOR OR INTERMEDIATE	①
SENIOR	②

MAJOR FIELDS OF STUDY

BUSINESS AND MANAGEMENT

001 ACCOUNTING
002 BUSINESS ADMINISTRATION
003 BUSINESS EDUCATION
004 COMPUTER SCIENCE
005 ECONOMICS
006 FINANCE
007 MANAGEMENT
008 MANAGEMENT, ACQUISITION AND CONTRACT
009 MANAGEMENT, COMPUTER SYSTEMS
010 MANAGEMENT, FINANCIAL
011 MANAGEMENT, HUMAN RESOURCES
012 MANAGEMENT, INDUSTRIAL
013 MANAGEMENT, INFORMATION SYSTEMS
014 MANAGEMENT, MANPOWER, PERSONNEL & TRAINING
015 MANAGEMENT, MATERIAL LOGISTICS SUPPORT
016 MANAGEMENT, PERSONNEL
017 MANAGEMENT, PETROLEUM
018 MANAGEMENT, SUPPLY ACQUISITION/DISTRIBUTION
019 MANAGEMENT, SYSTEMS INVENTORY
020 MANAGEMENT, TELECOMMUNICATIONS SYSTEMS
021 MANAGEMENT, TRANSPORTATION LOGISTICS
022 MARKETING
023 ORGANIZATIONAL EFFECTIVENESS
024 PUBLIC ADMINISTRATION
025 REAL ESTATE/INSURANCE
026 RETAILING
027 OTHER BUSINESS FIELD

COMMUNICATIONS AND LANGUAGE

028 ENGLISH
029 COMMUNICATIONS
030 FOREIGN LANGUAGE
031 JOURNALISM
032 LITERATURE
033 PUBLIC AFFAIRS
034 OTHER COMMUNICATIONS/LANGUAGE FIELD

EDUCATION

035 ADULT
036 EARLY CHILDHOOD
037 EDUCATION AND TRAINING MANAGEMENT
038 ELEMENTARY
039 HEALTH PHYSICAL
040 INDUSTRIAL
041 SECONDARY
042 SPECIAL
043 OTHER EDUCATION FIELD

FINE AND PERFORMING ARTS

044 ART
045 ART EDUCATION
046 ART HISTORY
047 DANCE
048 FILM PHOTOGRAPHY
049 MUSIC
050 MUSIC EDUCATION
051 RADIO TELEVISION
052 STUDIO ART
053 THEATER DRAMATICS
054 OTHER ARTS FIELD

HEALTH CARE, SCIENCE AND ADMINISTRATION

055 DENTISTRY
056 ENVIRONMENTAL HEALTH
057 HEALTH ADMINISTRATION
058 HOSPITAL ADMINISTRATION
059 MEDICINE
060 NURSING
061 OCCUPATIONAL THERAPY
062 PHARMACY
063 PHYSICAL THERAPY
064 SPEECH THERAPY
065 OTHER HEALTH ADMINISTRATION FIELD
066 OTHER HEALTH CARE FIELD
067 OTHER HEALTH SCIENCE FIELD

HISTORY AND AREA STUDIES

068 AMERICAN
069 ASIAN
070 BLACK AFRO-AMERICAN
071 LATIN AMERICAN
072 RUSSIAN
073 URBAN
074 OTHER HISTORY FIELD
075 OTHER AREA STUDIES

MATHEMATICS AND SCIENCE

076 ANTISUBMARINE WARFARE SYSTEMS TECHNOLOGY
077 ARCHITECTURE
078 ARCHITECTURE, NAVAL
079 ASTRONOMY
080 BIOLOGY
081 BOTANY
082 CHEMISTRY
083 ENGINEERING
084 ENGINEERING, AERONAUTICAL
085 ENGINEERING, AEROSPACE
086 ENGINEERING, BIOMEDICAL
164 ENGINEERING, CIVIL
087 ENGINEERING, COMMUNICATIONS
088 ENGINEERING, ELECTRICAL
089 ENGINEERING, ELECTRONIC WARFARE
090 ENGINEERING, FACILITIES
091 ENGINEERING, INDUSTRIAL
092 ENGINEERING, MARINE
093 ENGINEERING, MECHANICAL
094 ENGINEERING, NAVAL
095 ENGINEERING, NUCLEAR
096 ENGINEERING, OCEAN
097 ENGINEERING, PETROLEUM
098 ENGINEERING, SPACE SYSTEMS
099 ENGINEERING, SYSTEMS
100 ENGINEERING, WEAPONS SYSTEMS
101 ENGINEERING ACOUSTICS
102 ENGINEERING MANAGEMENT
103 MATHEMATICS
104 MATHEMATICS, APPLIED
105 METEOROLOGY
106 METEOROLOGY & OCEANOGRAPHY
107 OCEANOGRAPHY
108 PHYSICS
109 PHYSICS, NUCLEAR
110 SCIENCE, APPLIED
111 SCIENCE, EARTH
112 SCIENCE, ENGINEERING
113 SCIENCE, ENVIRONMENTAL OR ECOLOGY
114 SCIENCE, GENERAL
115 SCIENCE, HYDROGRAPHIC
116 SCIENCES, NATURAL
117 SCIENCES, PHYSICAL
118 STATISTICS
119 SYSTEMS TECHNOLOGY
120 UNDERWATER ACOUSTICS
121 ZOOLOGY
122 OTHER MATHEMATICS FIELD
123 OTHER SCIENCE FIELD

OPERATIONS

124 COMMAND, CONTROL & COMMUNICATIONS
125 INTELLIGENCE
126 OPERATIONAL LOGISTICS
127 OPERATIONS ANALYSIS
128 OPERATIONS RESEARCH
129 SPACE SYSTEMS OPERATIONS
130 OTHER OPERATIONS FIELD

PHILOSOPHY AND HUMANITIES

131 CLASSICS
132 HUMANITIES
133 PHILOSOPHY
134 RELIGION OR THEOLOGY
135 OTHER PHILOSOPHY/HUMANITIES FIELD

SOCIAL AND BEHAVIORAL SCIENCE

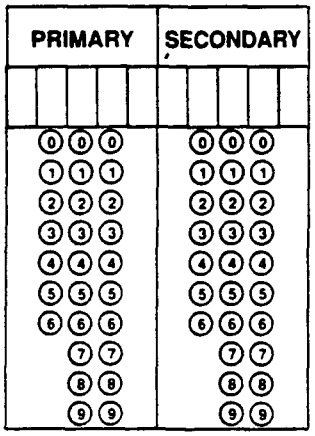
136 ANTHROPOLOGY
137 CRIMINAL JUSTICE
138 GEOGRAPHY
139 GOVERNMENT
140 NATIONAL SECURITY AFFAIRS
141 POLITICAL SCIENCE
142 PSYCHOLOGY
143 PSYCHOLOGY, INDUSTRIAL
144 SOCIAL SCIENCE
145 SOCIAL WORK
146 SOCIOLOGY
147 OTHER BEHAVIORAL SCIENCE FIELD
148 OTHER SOCIAL SCIENCE FIELD

OTHER PROFESSIONAL FIELDS

149 AGRICULTURE
150 FORESTRY
151 HOME ECONOMICS
152 LAW
153 LAW, CRIMINAL
154 LAW, ENVIRONMENTAL
155 LAW, FORENSIC SCIENCE
156 LAW, INTERNATIONAL
157 LAW, LABOR
158 LAW, OCEAN
159 LAW, TAX
160 LIBRARY SCIENCE
161 MINISTRY OR DIVINITY
162 VETERINARY
163 OTHER

PRIMARY JOB TITLE

Select the job title from the list on pages 9 to 13 that BEST describes your primary job. Enter the job title number in the block below. If you have an additional job of equal importance, complete both the primary and secondary block. If a block does not apply, enter "000." DO NOT INCLUDE COLLATERAL DUTIES.



TIME SERVED IN CURRENT JOB

Fill in the circle which corresponds to the amount of time you have been in your CURRENT JOB at your present command.

EXAMPLE: If you have been in your CURRENT JOB for 1 year and 10 months fill in the circle marked "1 year but less than 4 years."

LESS THAN 3 MONTHS	①
3 MONTHS BUT LESS THAN 6 MONTHS	②
6 MONTHS BUT LESS THAN 12 MONTHS	③
1 YEAR BUT LESS THAN 4 YEARS	④
4 YEARS OR MORE	⑤

INDEX OF JOB TITLES

Below is a breakdown of job titles by subcategory and number to assist you in locating your title(s) from the list on pages 9 to 13. The list is not all inclusive, but does contain the major types of jobs found in the Navy.

JOB TITLES

AVIATION

FLIGHT

001 AIRBORNE ANTISUBMARINE WARFARE (ASW) SENSOR OFFICER
002 AIRBORNE ASW TACTICAL COORDINATOR
003 AIRBORNE COMMUNICATIONS OFFICER
004 AIRBORNE EARLY WARNING PILOT
005 AIRBORNE MULTISENSOR OCEAN RECONNAISSANCE COORDINATOR
006 AIRBORNE RADAR INTERCEPT OFFICER
007 AIRBORNE TACTICAL DATA SYSTEM–COMBAT INFORMATION CENTER (CIC) OFFICER
008 ANTISUBMARINE PILOT
009 ATTACK PILOT
010 AVIATION DETACHMENT OFFICER IN CHARGE
011 BOMBARDIER NAVIGATOR
012 CARRIER AIRBORNE CIC OFFICER
013 ELECTRONIC COUNTERMEASURES (ECM) PILOT
014 FIGHTER PILOT
015 FLIGHT INSTRUCTOR
016 HELICOPTER ANTISUBMARINE PILOT
017 HELICOPTER PILOT
018 INSTRUMENT FLIGHT INSTRUCTOR – PILOT
019 NAVAL FLIGHT OFFICER INSTRUCTOR
020 NAVIGATOR, AERIAL
021 NAVIGATOR ECM OFFICER
022 PATROL PLANE COMMANDER
023 PHOTOGRAPHIC PILOT
024 SPECIAL PROJECT AIRBORNE ELECTRONICS EVALUATOR
025 SPECIAL PROJECT PILOT
026 TEST PILOT
027 TRANSPORT PLANE COMMANDER
028 UTILITY PILOT

GENERAL AVIATION

029 AIRCRAFT MATERIAL CONTROL AND ALLOCATION OFFICER
030 AVIATION TACTICAL READINESS OFFICER
031 NAVY AIRSPACE OFFICER
032 STAFF AIR TACTICAL OFFICER
033 STAFF AVIATION SAFETY OFFICER
034 TARGET AIRCRAFT CONTROLLER

GROUND OPERATIONS

035 AERIAL MINING OFFICER
036 AIR TRAFFIC CONTROL OFFICER
037 AIRCRAFT FUELING OFFICER
039 CONTROLLED APPROACH OFFICER
040 ELECTRONIC WARFARE OFFICER, AVIATION
041 GUIDED MISSILE TEST OFFICER, AIR-LAUNCHED
042 LANDING SIGNAL OFFICER
043 NATOPS OFFICER
044 OPERATIONS LOG OFFICER
038 SAFETY OFFICER
045 SQUADRON COMMUNICATIONS OFFICER
046 SQUADRON FLIGHT OFFICER
047 SQUADRON NAVIGATION OFFICER
048 SQUADRON OPERATIONS OFFICER
049 SQUADRON SCHEDULES OFFICER
050 SQUADRON SPECIAL MISSIONS OFFICER
051 SQUADRON WEAPONS TRAINING OFFICER
052 STAFF AIR DEFENSE OFFICER
053 STAFF AIR OPERATIONS AND PLANNING OFFICER
054 STRIKE OPERATIONS OFFICER
055 SURVIVAL OFFICER

EDUCATION AND TRAINING

056 EDUCATION TRAINING PLANNING AND PROGRAM OFFICER
057 EDUCATIONAL FACILITIES OFFICER
058 EDUCATIONAL SERVICES OFFICER
059 GROUND SCHOOL INSTRUCTOR
060 INDOCTRINATION TRAINING OFFICER
061 INSTRUCTOR, ACADEMIC
062 INSTRUCTOR, GENERAL
063 INSTRUCTOR, NAVAL SCIENCE
064 INSTRUCTOR, TECHNICAL
065 INSTRUCTOR TRAINING OFFICER
066 OFFICER CANDIDATE COMPANY OFFICER
067 PHYSICAL TRAINING OFFICER
068 PROFESSOR OF NAVAL SCIENCE
069 SCHOOL ADMINISTRATOR
070 STUDENT
071 TRAINING AIDS OFFICER
072 TRAINING OFFICER
073 TRAINING PUBLICATIONS AND CURRICULUM OFFICER

ENGINEERING AND MAINTENANCE

AVIATION

074 AERODYNAMICS ENGINEERING OFFICER
075 AERONAUTICAL ENGINEERING OFFICER, AIRCRAFT MECHANICAL AND SAFETY EQUIPMENT
076 AERONAUTICAL PROPULSION SYSTEMS ENGINEER
077 AIR WING MAINTENANCE OFFICER
078 AIRCRAFT ARMAMENT DEVELOPMENT OFFICER
079 AIRCRAFT ELECTRICAL EQUIPMENT INSTALLATION DESIGN AND DEVELOPMENT OFFICER
080 AIRCRAFT/GUIDED MISSILE ENGINE PROJECT OFFICER
081 AIRCRAFT INTERMEDIATE MAINTENANCE MATERIAL CONTROL OFFICER
082 AIRCRAFT INTERMEDIATE MAINTENANCE OFFICER
083 AIRCRAFT MAINTENANCE QUALITY CONTROL OFFICER
084 AIRCRAFT ORGANIZATIONAL MAINTENANCE/MATERIAL CONTROL OFFICER
085 AIRCRAFT ORGANIZATIONAL MAINTENANCE OFFICER
086 AIRCRAFT PRODUCTION OFFICER
087 AIRCRAFT STRUCTURES ENGINEERING OFFICER
088 AIRCRAFT TEST ENGINEER
089 AVIATION MAINTENANCE ENGINEERING OFFICER
090 AVIATION MAINTENANCE FIELD REPRESENTATIVE
091 AVIATION MAINTENANCE MANAGEMENT ENGINEER
092 AVIATION MAINTENANCE PLANNING OFFICER
093 AVIATION OVERHAUL SCHEDULES OFFICER
094 CATAPULT AND ARRESTING GEAR PLANNING SUPERINTENDENT
095 DEPOT MAINTENANCE ENGINEERING AND QUALITY OFFICER
096 DEPOT MAINTENANCE FLIGHT TEST OFFICER
097 DEPOT MAINTENANCE PRODUCTION OFFICER
098 GROUND SUPPORT EQUIPMENT AND SHIP FACILITIES ARRANGEMENT OFFICER
099 LAUNCHING RECOVERY AND LANDING AIDS ENGINEERING OFFICER
100 TYPE AIRCRAFT DESIGN AND DEVELOPMENT OFFICER

ELECTRONICS

101 AIRCRAFT ELECTRONICS DIRECTOR
102 ELECTRONIC ENGINEERING PLANS AND POLICIES DIRECTOR
103 ELECTRONIC EQUIPMENT INSTALLATION, MAINTENANCE AND REPAIR OFFICER
104 ELECTRONIC EQUIPMENT MILITARY CHARACTERISTICS OFFICER
105 ELECTRONIC EQUIPMENT RESEARCH OFFICER
106 ELECTRONIC INSPECTION AND SURVEY OFFICER
107 ELECTRONICS ENGINEERING OFFICER
108 ELECTRONICS INSTALLATION AND MAINTENANCE PLANNING OFFICER
109 ELECTRONICS LOGISTICS OFFICER
110 ELECTRONICS PLANNING, INSTALLATION, AND REPAIR SUPERINTENDENT
111 ELECTRONICS RESEARCH ADMINISTRATOR
112 SPACE REQUIREMENTS ANALYST
113 STAFF ELECTRONIC MATERIAL OFFICER
114 TRAINING DEVICE PROGRAM COORDINATOR
115 TRAINING DEVICES ADMINISTRATOR
116 TRAINING ELECTRONIC DEVICES UTILIZATION OFFICER

FACILITIES

117 FACILITIES CONSTRUCTION/FACILITIES SERVICES OFFICER
118 FACILITIES DESIGN OFFICER
119 FACILITIES ENGINEERING OFFICER
120 FACILITIES PLANNING AND PROGRAMMING OFFICER
121 FACILITIES RESEARCH OFFICER
122 NUCLEAR SHORE POWER SYSTEMS ENGINEERING OR CONSTRUCTION OFFICER
123 NUCLEAR SHORE SYSTEM OFFICER
124 PETROLEUM PRODUCTION ENGINEERING OFFICER
125 PUBLIC WORKS MAINTENANCE OFFICER
126 PUBLIC WORKS OFFICER
127 PUBLIC WORKS OPERATIONS OFFICER
128 PUBLIC WORKS PLANNING OFFICER
129 PUBLIC WORKS TRANSPORTATION OFFICER
130 PUBLIC WORKS UTILITIES OFFICER
131 STAFF CIVIL ENGINEER

NAVAL ENGINEERING

132 COMBAT SYSTEMS SUPERINTENDENT
133 DIVING AND SALVAGE EQUIPMENT ENGINEERING OFFICER
134 ENGINEERING LIAISON OFFICER
135 ENGINEERING MATERIAL PLANNING AND PROCUREMENT OFFICER
136 FUELS AND LUBRICANTS TECHNICAL OFFICER
137 HULL INSPECTION OFFICER
138 HULL SUPERINTENDENT
139 INDUSTRIAL ENGINEER
140 MACHINERY INSPECTION OFFICER
141 MACHINERY INSTALLATION AND REPAIR SUPERINTENDENT

ENGINEERING AND MAINTENANCE (cont.)

142 NAVAL ENGINEERING HULL DEVELOPMENT OFFICER
143 NAVAL ENGINEERING INSPECTION OFFICER
144 NAVAL ENGINEERING LOGISTICS OFFICER
145 NAVAL ENGINEERING MACHINERY DEVELOPMENT OFFICER
146 NAVAL ENGINEERING OFFICER, SHIP DESIGN
147 NAVAL ENGINEERING RESEARCH PROJECT OFFICER
148 NAVAL ENGINEERING TRIALS AND SURVEY OFFICER
149 NUCLEAR POWER RESEARCH PROJECT OFFICER
150 NUCLEAR POWER SUPERINTENDENT
151 NUCLEAR SYSTEMS AND COMPONENTS REPAIR OFFICER
152 PRODUCTION ENGINEERING OFFICER
153 QUALITY ASSURANCE SUPERINTENDENT
154 SHIP ACTIVATION/INACTIVATION OFFICER
155 SHIP CONSTRUCTION AND REPAIR SUPERINTENDENT
156 SHIP PROJECT OFFICER
157 SHIP TYPE ENGINEERING OFFICER
158 SHIP TYPE PLANNING AND ESTIMATING SUPERINTENDENT
159 SHOP PRODUCTION OFFICER
160 SHOP SUPERINTENDENT
161 STAFF HULL MATERIAL OFFICER
162 STAFF MACHINERY MATERIAL OFFICER
163 SUPERVISOR OF SHIPBUILDING, CONVERSION AND REPAIR
164 YARD PLANNING OFFICER
165 YARD PRODUCTION OFFICER

WEAPONS

166 AMMUNITION MATERIAL OFFICER
167 ARMAMENT PROOF OFFICER
168 DEGAUSSING OFFICER
169 FIRE CONTROL INSPECTION AND REPAIR OFFICER
170 GUIDED MISSILE SYSTEMS RESEARCH AND DEVELOPMENT OFFICER
171 GUIDED MISSILE TEST OFFICER
172 GUIDED MISSILE TYPE PROJECT OFFICER
173 METROLOGY OFFICER
174 MINE ASSEMBLY AND REPAIR OFFICER
175 NAVAL PLANT REPRESENTATIVE
176 NAVAL WEAPONS TECHNICAL LIAISON OFFICER
177 NUCLEAR WEAPONS RESEARCH AND DEVELOPMENT OFFICER
178 OPTICAL REPAIR OFFICER
179 PROGRAM MANAGER, WEAPONS SYSTEMS
180 STAFF WEAPONS MATERIAL OFFICER
181 SURFACE MUNITIONS PROJECT OFFICER
182 TECHNICAL ASSISTANT FOR WEAPONS
183 TORPEDO TEST OFFICER
184 TORPEDO WEAPONS OFFICER
185 UNDERSEA WEAPONS PROJECT OFFICER
186 WEAPONS AND AMMUNITION INSPECTION/SAFETY OFFICER
187 WEAPONS AND AMMUNITION PRODUCTION OFFICER
188 WEAPONS CONTROL SYSTEMS PROJECT OFFICER
189 WEAPONS DESIGN OFFICER
190 WEAPONS DISTRIBUTION OFFICER
191 WEAPONS EQUIPMENT PROJECT OFFICER
192 WEAPONS INSTALLATION AND REPAIR SUPERINTENDENT
193 WEAPONS INSTALLATION OFFICER
194 WEAPONS LOGISTICS OFFICER
195 WEAPONS MAINTENANCE OFFICER
196 WEAPONS MATERIAL OFFICER
197 WEAPONS MILITARY CHARACTERISTICS OFFICER
198 WEAPONS OFFICER, NAVAL ACTIVITY
199 WEAPONS PLANNING AND PROGRESS OFFICER
200 WEAPONS PLANS AND POLICIES DIRECTOR
201 WEAPONS PROCUREMENT OFFICER
202 WEAPONS PRODUCTION PLANNING OFFICER
203 WEAPONS REPAIR OFFICER
204 WEAPONS RESEARCH PLANNING OFFICER
205 WEAPONS SAFETY OFFICER
206 WEAPONS SYSTEMS INSPECTION AND SURVEY OFFICER
207 WEAPONS TECHNICAL INFORMATION OFFICER
208 WEAPONS TECHNICAL OFFICER

HEALTH CARE SERVICES

HEALTH CARE SERVICES

209 ADMINISTRATIVE OFFICER, DENTAL SERVICE
210 AEROSPACE EXPERIMENTAL PSYCHOLOGIST
211 AEROSPACE PHYSIOLOGIST
212 AUDIOLOGIST
213 BIOCHEMIST
214 CLINICAL PSYCHOLOGIST
215 DIETITIAN
216 ENTOMOLOGIST
217 ENVIRONMENTAL HEALTH OFFICER
218 FOOD SERVICE OFFICER, MEDICAL FACILITY

HEALTH CARE SERVICES (continued)

219 HEALTH CARE ADMINISTRATOR
220 INDUSTRIAL HYGIENE OFFICER
221 MEDICAL FACILITIES LIAISON OFFICER
222 MEDICAL TECHNOLOGIST
223 MICROBIOLOGIST
224 OCCUPATIONAL THERAPIST
225 OPERATIONS MANAGEMENT OFFICER, MEDICAL FACILITY
226 OPTOMETRIST
227 PATIENT ADMINISTRATOR
228 PHARMACIST
229 PHYSICAL THERAPIST
230 PHYSIOLOGIST
231 PODIATRIST
232 RADIATION HEALTH OFFICER
233 RADIATION SPECIALIST
234 RESEARCH PSYCHOLOGIST
235 SOCIAL WORKER

HEALTH SERVICES MANAGEMENT

236 CHAIRMAN OF DEPARTMENT, TEACHING PROGRAM
237 COMMANDING OFFICER, FLEET MARINE FORCE COMPANY
238 DIRECTOR, HEALTH SERVICE OR PROGRAM
239 HEALTH SCIENCE RESEARCH OFFICER
240 HEALTH SERVICES BRANCH/CLINIC DIRECTOR
241 HEALTH SERVICES DEPARTMENT HEAD
242 HEALTH SERVICES QUALITY ASSURANCE COORDINATOR
243 MEDICAL DEPARTMENT STAFF OFFICER

MEDICAL SPECIALTIES (MEDICINE)

244 ANESTHESIOLOGIST
245 DERMATOLOGIST
246 EMERGENCY MEDICAL SPECIALIST
247 FAMILY PRACTITIONER
248 FLIGHT SURGEON
249 GENERAL PRACTICE MEDICAL OFFICER
250 HEALTH SERVICES RESIDENT
251 INTERN
252 INTERNIST
253 NEUROLOGIST
254 NUCLEAR MEDICINE SPECIALIST
255 PATHOLOGIST
256 PEDIATRICIAN
257 PHYSICIAN'S ASSISTANT
258 PREVENTIVE MEDICINE OFFICER
259 PSYCHIATRIST
260 RADIOLOGIST
261 UNDERSEA MEDICAL OFFICER

MEDICAL SPECIALTIES (SURGERY)

262 COLON RECTAL SURGEON
263 GENERAL SURGEON
264 NEUROSURGEON
265 OBSTETRICIAN-GYNECOLOGIST
266 OPHTHALMOLOGIST
267 ORTHOPEDIC SURGEON
268 OTOLARYNGOLOGIST
269 PLASTIC SURGEON
270 THORACIC AND CARDIOVASCULAR SURGEON
271 UROLOGIST

GENERAL DENTISTRY

272 DENTAL OFFICER GENERAL PRACTITIONER
273 OPERATIVE DENTIST

DENTAL SPECIALTIES

274 COMPREHENSIVE DENTIST
275 ENDODONTIST
276 MAXILLOFACIAL PROSTHETIST
277 ORAL DIAGNOSTICIAN
278 ORAL MAXILLOFACIAL SURGEON
279 ORAL PATHOLOGIST
280 ORTHODONTIST
281 PEDODONTIST
282 PERIODONTIST
283 PROSTHODONTIST
284 PUBLIC HEALTH PREVENTIVE DENTISTRY OFFICER

HEALTH CARE SERVICES (cont.)

NURSING

285 CHARGE NURSE
286 CLINICAL SPECIALIST, NURSING
287 NURSE ANESTHETIST
288 OPERATING ROOM NURSE
289 OUTPATIENT CARE NURSE
290 PATIENT CARE COORDINATOR
291 PRIMARY CARE NURSE PRACTITIONER
292 STAFF NURSE

MANAGEMENT, EXECUTIVE AND ADMINISTRATIVE SERVICES

293 ADMINISTRATIVE ASSISTANT
294 ADMINISTRATIVE OFFICER
295 COMMANDING OFFICER
296 COMMAND MANAGEMENT DIRECTOR
297 EXECUTIVE OFFICER
298 GENERAL SERVICES OFFICER DATA ANALYST
299 MAINTENANCE AND MATERIAL MANAGEMENT OFFICER
300 MANAGEMENT ANALYSIS AND CONTROL OFFICER
301 MANAGEMENT INFORMATION CENTER OFFICER
302 MANAGEMENT INFORMATION SYSTEMS OFFICER
303 OFFICER IN CHARGE
304 POSTAL OFFICER
305 PRINTING AND PUBLICATIONS OFFICER
306 RECORDS MANAGEMENT OFFICER
307 TECHNICAL LIBRARIAN

NAVAL OPERATIONS

AUTOMATIC DATA PROCESSING (ADP)

308 ADP CUSTOMER LIAISON OFFICER
309 ADP PLANS OFFICER
310 ADP PRODUCTION OFFICER
311 ADP PROGRAMS OFFICER
312 ADP SYSTEM DIRECTOR
313 ADP SYSTEMS MAINTENANCE OFFICER
314 ADP SYSTEMS SECURITY OFFICER
315 COMPUTER SYSTEMS ANALYST
316 DATA BASE MANAGEMENT OFFICER
317 DIGITAL COMPUTER SYSTEM PROGRAMMER
318 DOCUMENTATION AND PROGRAM CONTROL OFFICER
319 SHIPBOARD NONTACTICAL ADP SYSTEM COORDINATOR

COMMUNICATIONS

320 ARMED FORCES COURIER SERVICE OFFICER
321 AUTOMATED MESSAGE PROCESSING EXCHANGE OFFICER
322 CIRCUIT CONTROL OFFICER
323 COMMUNICATIONS OFFICER
324 COMMUNICATIONS SECURITY OFFICER
325 COMMUNICATIONS WATCH OFFICER
326 COMMUNICATIONS PLANS AND OPERATIONS OFFICER
327 COMMUNICATIONS SECURITY MATERIAL ISSUING OFFICER
328 COMMUNICATIONS TRAFFIC OFFICER
329 CRYPTOBOARD OFFICER
330 CRYPTOSECURITY OFFICER
331 CUSTODIAN OF CMS MATERIAL
332 DIRECTOR OF COMMUNICATIONS
333 FREQUENCY PLANS AND ASSIGNMENT OFFICER
334 NAVAL CONTROL OF SHIPPING COMMUNICATIONS PLANS OFFICER
335 RADIO STATION OFFICER
336 SATELLITE COMMUNICATIONS OFFICER
337 SIGNAL OFFICER
338 STAFF COMMUNICATIONS OFFICER

CRYPTOLOGY

339 CLASSIC WIZARD OPERATIONS OFFICER
340 DIRECT SUPPORT COORDINATOR
341 DIRECT SUPPORT OFFICER
342 ELECTRONICS INTELLIGENCE TECHNICAL GUIDANCE UNIT OFFICER
343 HFDF NET CONTROL OFFICER
344 HFDF ANALYSIS OFFICER
345 INFORMATION PROCESSING AND REPORTING OFFICER
346 MANUAL MORSE COLLECTION OFFICER
347 NON-MORSE COLLECTION OFFICER
348 OPERATIONS WATCH OFFICER
349 SPECIAL OPERATIONS OFFICER

ENGINEERING OPERATIONS

350 DEEP SUBMERGENCE VEHICLE OPERATOR
351 ENGINEERING MAINTENANCE OFFICER
352 EXAMINER, SURFACE SHIP PROPULSION PLANT
353 STAFF ENGINEER OFFICER
354 UNDERWAY REPLENISHMENT EQUIPMENT MAINTENANCE OFFICER

INTELLIGENCE

355 ADP INTELLIGENCE OFFICER
356 ASW INTELLIGENCE OFFICER
357 DEFENSE ATTACHE
358 ELECTRONIC INTELLIGENCE OFFICER
359 GEOGRAPHIC AREA INTELLIGENCE OFFICER
360 INTELLIGENCE INVESTIGATIONS OFFICER
361 INTELLIGENCE OFFICER
362 INTELLIGENCE SUPPORT OFFICER
363 MULTISENSOR INTELLIGENCE OFFICER
364 NAVAL ATTACHE
365 OPERATIONAL INTELLIGENCE OFFICER
366 PHOTOGRAPHIC INTELLIGENCE OFFICER
367 SCIENTIFIC AND TECHNICAL INTELLIGENCE OFFICER
368 TACTICAL INTELLIGENCE OFFICER

NAVAL OPERATIONS

369 ATOMIC ENERGY PLANS AND POLICIES OFFICER
370 DEPUTY/VICE COMMANDER
371 EXAMINER, REACTOR SAFEGUARDS
372 HEAD OF NAVAL MISSION
373 INSPECTOR, TECHNICAL
374 INSPECTOR GENERAL
375 INTERNATIONAL AFFAIRS OFFICER
376 JOINT STRATEGIC PLANS AND POLICY OFFICER
377 MILITARY SEALIFT COMMAND COMMANDER
378 PLANS AND POLICIES ASSISTANT
379 PLANS AND POLICIES DEPUTY
380 PLANS AND POLICIES DIRECTOR
381 PROGRAM MANAGER
382 ASSISTANT PROGRAM MANAGER
383 PROJECT MANAGER
384 ASSISTANT PROJECT MANAGER

PHOTOGRAPHY

385 FILM CONTROL OFFICER
386 IMAGE FORMING SYSTEMS MAINTENANCE OFFICER
387 MOTION PICTURE AND TELEVISION PROJECT OFFICER
388 PHOTOGRAPHIC MATERIAL OFFICER
389 PHOTOGRAPHIC OFFICER

SHORE OPERATIONS

390 BEACHMASTER
391 CIVIL AFFAIRS OFFICER
392 COASTAL/HARBOR DEFENSE OFFICER
393 DRYDOCKING OFFICER
394 FACILITIES MANAGER
395 FLEET COMPOSITE OPERATIONAL READINESS GROUP OFFICER
396 INSHORE UNDERSEA WARFARE OFFICER
397 LANDING CRAFT AIR CUSHION MAINTENANCE OFFICER
398 MILITARY SEALIFT COMMAND REPRESENTATIVE
399 MOVEMENT REPORTING OFFICER
400 NAVAL CONTROL OF SHIPPING OFFICER
401 OCEAN SYSTEMS OPERATIONS OFFICER
402 OCEAN SYSTEMS WATCH OFFICER
403 OPERATIONS CONTROL CENTER BRIEFING OFFICER
404 PORT SERVICES OFFICER
405 SEARCH AND RESCUE OFFICER
406 SHIP PLOT OFFICER
407 SHIPPING OPERATIONS OFFICER
408 YARD BOATSWAIN

SPECIAL OPERATIONS

409 EXPLOSIVE ORDNANCE DISPOSAL OFFICER
410 SEA-AIR-LAND OFFICER

STAFF AND FLEET COMMAND

411 AMPHIBIOUS OPERATIONS OFFICER
412 ANTI-AIR WARFARE OPERATIONS OFFICER
413 AREA COMMANDER
414 ASSISTANT CHIEF OF STAFF
415 CHIEF OF STAFF
416 CHIEF STAFF OFFICER
417 COMMANDER, OPERATING FORCES COMMAND

NAVAL OPERATIONS (cont.)

418 DEPARTMENT DIRECTOR
419 DEPUTY DIRECTOR
420 EXECUTIVE ASSISTANT
421 FLAG AIDE
422 FLAG SECRETARY
423 LOGISTICS OFFICER
424 MILITARY ASSISTANCE PROGRAMS OFFICER
425 OPERATIONS ANALYST
378 PLANS AND POLICIES ASSISTANT
379 PLANS AND POLICIES DEPUTY
380 PLANS AND POLICIES DIRECTOR
381 PROGRAM MANAGER
382 ASSISTANT PROGRAM MANAGER
383 PROJECT MANAGER
384 ASSISTANT PROJECT MANAGER
426 SHIPPING CONTROL OFFICER
427 SPECIAL ASSISTANT
428 STAFF ADMINISTRATION OFFICER
429 STAFF ANTISUBMARINE OFFICER
430 STAFF COMBAT INFORMATION CENTER OFFICER
431 STAFF COMMAND AND CONTROL OFFICER
432 STAFF ELECTRONIC WARFARE OFFICER
433 STAFF LIAISON OFFICER
434 STAFF MATERIAL OFFICER
435 STAFF MINE WARFARE OFFICER
436 STAFF NAVAL CONTROL OF SHIPPING OFFICER
437 STAFF NUCLEAR WEAPONS OFFICER
438 STAFF OPERATIONS AND PLANS OFFICER
439 STAFF OPERATIONS COMMAND CENTER WATCH OFFICER
440 STAFF PLANS OFFICER
441 STAFF READINESS OFFICER
442 STAFF SPECIAL PROJECTS OPERATIONS OFFICER
443 STAFF SUBMARINE WARFARE OFFICER
444 STAFF WEAPONS OFFICER
445 STRATEGIC PLANS OFFICER

PERSONNEL

446 BRIG OFFICER
447 CIVILIAN MANPOWER MANAGEMENT OFFICER
448 COUNSELING AND ASSISTANCE CENTER DIRECTOR
449 DETAILER
450 DISCIPLINE ADMINISTRATION AND REVIEW OFFICER
451 EQUAL OPPORTUNITY/RACE RELATIONS PROGRAM OFFICER
452 HUMAN RESOURCE MANAGEMENT OFFICER
453 INDUCTION AND ENLISTMENT OFFICER
454 INTERNAL RELATIONS/MEDIA OFFICER
455 LEADERSHIP DEVELOPMENT/ENLISTED RETENTION OFFICER
456 MANPOWER PLANNING OFFICER
457 MANPOWER REQUIREMENTS DETERMINATION OFFICER
458 MANPOWER STAFF OFFICER
459 MILITARY MANPOWER REQUIREMENTS CONTROL OFFICER
460 MOBILIZATION AND SELECTION OFFICER
461 PERSONNEL MANPOWER MANAGEMENT OFFICER
462 PERSONNEL CLASSIFICATION OFFICER
463 PERSONNEL EVALUATION AND MEASUREMENTS OFFICER
464 PERSONNEL PERFORMANCE OFFICER
465 PERSONNEL PLANNING OFFICER
466 PERSONNEL PLANS AND POLICY CHIEF
467 PERSONNEL PLANS AND POLICY DIRECTOR
468 PERSONNEL PLANS AND POLICY OFFICER
469 PERSONNEL RESEARCH OFFICER
470 PERSONNEL STAFF OFFICER
471 PROCUREMENT AND RECRUITING OFFICER
472 STAFF PERSONNEL OFFICER
473 TRANSIENT PERSONNEL UNIT OFFICER

PHYSICAL AND NATURAL SCIENCES

NAVAL SCIENCE

474 DESIGNATED PROJECT ENGINEERING COORDINATOR
475 DESIGNATED PROJECT INTEGRATED LOGISTICS SYSTEM COORDINATOR
476 DESIGNATED PROJECT MANAGER
477 DESIGNATED PROJECT SUPPORT OFFICER
478 DESIGNATED PROJECT SYSTEMS INTEGRATION COORDINATOR
479 DESIGNATED PROJECT TEST AND EVALUATION COORDINATOR
480 LIAISON OFFICER, NAVAL RESEARCH AND DEVELOPMENT
481 MAJOR PROJECT MANAGER
482 MANAGER, DESIGNATED PROJECT FUNCTIONAL ELEMENT
483 NAVAL OBSERVATORY OFFICER
484 NAVAL SCIENCES RESEARCH COORDINATOR/ADMINISTRATOR
485 OPERATIONAL TEST AND EVALUATION OFFICER
486 PREOPERATIONAL TEST AND EVALUATION OFFICER
487 SPACE ACQUISITION OFFICER
488 WARFARE RESEARCH OFFICER

OCEANOGRAPHY

489 HYDROGRAPHY PROGRAM OFFICER
490 METEOROLOGICAL AND OCEANOGRAPHIC EQUIPMENT PROGRAM OFFICER
491 OCEANOGRAPHY SERVICES OFFICER
492 OCEANOGRAPHY WATCH OFFICER
493 STAFF OCEANOGRAPHY OFFICER

PHYSICAL AND NATURAL SCIENCES

494 CHEMIST
495 MATERIALS ENGINEERING OFFICER
496 MATHEMATICS RESEARCH OFFICER
497 PHYSICAL SCIENCES RESEARCH OFFICER
498 PHYSICIST
499 SPACE PROJECTS TECHNOLOGIST
500 STATISTICAL DATA ANALYST

SOCIAL SCIENCES

501 BEHAVIORAL SCIENTIST
502 LANGUAGE OFFICER
503 PSYCHOLOGICAL OPERATIONS OFFICER

SUPPLY AND FISCAL

FISCAL

504 ACCOUNTING OFFICER
505 ACCOUNTING SYSTEMS OFFICER
506 AUDITING OFFICER
507 BUDGET OFFICER
508 COMPTROLLER
509 DISBURSING ADMINISTRATION AND RECORDS OFFICER
510 DISBURSING OFFICER
511 FISCAL OFFICER

GENERAL SUPPLY AND FISCAL

512 EQUIPMENT PROGRAM SUPPORT OFFICER
513 FUEL DEPOT OFFICER
514 FUEL LOGISTICS PLANNING OFFICER
515 GENERAL SUPPLY OFFICER
516 NAVY EXCHANGE OFFICER
517 STAFF SUPPLY OFFICER
518 STORES OFFICER
519 SUPPLY FIELD SERVICES OFFICER
520 SUPPLY LOGISTICS OFFICER
521 SUPPLY PLANS OFFICER
522 TECHNICAL SUPPLY OFFICER

INVENTORY CONTROL

523 INVENTORY CONTROL METHODS OFFICER
524 INVENTORY FINANCE OFFICER
525 STOCK CONTROL OFFICER, REQUIREMENTS

MATERIAL DISTRIBUTION

526 ISSUE CONTROL OFFICER
527 MATERIAL DIVISION OFFICER
528 MATERIAL HANDLING EQUIPMENT OFFICER
529 MATERIAL IDENTIFICATION OFFICER
530 NAVAL SUPPLY CONTROL OFFICER
531 SUPPLY RECEIVING OFFICER
532 WAREHOUSE AND STORAGE OFFICER

PROCUREMENT

533 ADMINISTRATIVE CONTRACTING OFFICER
534 PROCUREMENT CONTRACTING OFFICER
535 PROCUREMENT MANAGEMENT OFFICER

SUBSISTENCE, OPEN MESS AND BACHELOR QUARTERS MANAGEMENT

536 BACHELOR QUARTERS MANAGER
537 COMMISSARY STORE OFFICER
538 FOOD SERVICE ADMINISTRATOR
539 FOOD SERVICE OFFICER
540 MESS TREASURER

SUPPLY AND FISCAL (cont.)

TRANSPORTATION

541 AIR TRAFFIC OFFICER
542 CARGO HANDLING OFFICER
543 FREIGHT TRAFFIC MANAGEMENT OFFICER
544 FREIGHT TRANSPORTATION OFFICER
545 HOUSEHOLD GOODS OFFICER
546 PASSENGER TRANSPORTATION OFFICER
547 TRANSPORTATION DIRECTOR
548 TRANSPORTATION LOGISTICS OFFICER
549 TRANSPORTATION SERVICES OFFICER

SUPPORT SERVICES

CHAPLAIN

550 CHAPLAIN
551 CLAIMANT CHAPLAIN
552 SUPERVISORY CHAPLAIN

LEGAL

553 ADMINISTRATIVE LAW ATTORNEY
554 ADMIRALTY ATTORNEY
555 APPELLATE COUNSEL
556 APPELLATE MILITARY JUDGE
557 CLAIMS ATTORNEY
558 COMMERCIAL AND BUSINESS LAW ATTORNEY
559 DEFENSE COUNSEL
560 GENERAL ATTORNEY
561 INTERNATIONAL LAW ATTORNEY
562 LEGAL ADMINISTRATIVE ASSISTANT
563 LEGAL ASSISTANCE ATTORNEY
564 LEGAL OFFICER
565 LEGISLATIVE COUNSEL
566 MILITARY JUDGE
567 MILITARY JUSTICE MANAGEMENT OFFICER
568 PATENT ATTORNEY
569 TRIAL COUNSEL

PUBLIC AFFAIRS

570 FIELD PRESS CENSORSHIP OFFICER
571 HISTORICAL OFFICER
572 INTRAGOVERNMENTAL INQUIRIES OFFICER
573 PICTORIAL EDITOR
574 PRESS OFFICER
575 PUBLIC AFFAIRS OFFICER
576 RADIO-TELEVISION PROGRAM OFFICER

SECURITY AND LAW ENFORCEMENT

577 AIRCRAFT CRASH AND SALVAGE OFFICER
578 DISASTER PREPAREDNESS OFFICER
579 FIRE PROTECTION OFFICER
580 NUCLEAR, BIOLOGICAL AND CHEMICAL DEFENSE OFFICER
581 SAFETY ENGINEER
582 SECURITY MANAGER
583 SECURITY OFFICER
584 SHORE PATROL OFFICER

WELFARE

585 MUSIC DIRECTOR
586 PERSONAL SERVICES AFFAIRS OFFICER
587 SPECIAL SERVICES OFFICER

SURFACE AND SUBSURFACE

ADMINISTRATIVE

588 3M DATA ANALYST
589 ENGINEERING LIAISON OFFICER

COMBAT SYSTEMS OR WEAPONS

590 ADP SYSTEMS MAINTENANCE OFFICER
591 ANTISUBMARINE WEAPONS OFFICER
592 COMBAT SYSTEMS OFFICER
593 FIRE CONTROL OFFICER
594 GUNNERY/ORDNANCE OFFICER
595 MISSILE SYSTEMS OFFICER
596 SPECIAL WEAPONS ASSEMBLY OFFICER
597 SPECIAL WEAPONS UNIT OFFICER
598 WEAPONS DIVISION OFFICER
599 WEAPONS OFFICER

DECK

600 BOAT GROUP OFFICER
601 DECK DIVISION OFFICER
602 FIRST LIEUTENANT
603 SALVAGE OPERATIONS OFFICER

ENGINEERING

604 AUXILIARY MACHINERY OFFICER
605 BOILER OFFICER
606 DAMAGE CONTROL ASSISTANT
607 MAIN ENGINE OFFICER
608 MAIN PROPULSION ASSISTANT
609 RADIOLOGICAL CONTROL OFFICER
610 SHIP'S ELECTRICAL OFFICER
611 SHIP'S ENGINEERING OFFICER
612 SHIP'S REACTOR CONTROL ASSISTANT
613 SHIP'S REACTOR MECHANICAL ASSISTANT
614 SHIP'S REACTOR OFFICER

NAVIGATION

615 SHIP'S NAVIGATOR

OPERATIONS, COMMUNICATIONS AND AIR TRAFFIC

616 AIR ANTISUBMARINE OFFICER
617 AIR BOATSWAIN
618 AIRCRAFT FUELING OFFICER
619 AIRCRAFT HANDLING OFFICER
620 AIR INTERCEPT CONTROLLER SUPERVISOR
621 AIR OFFICER
622 AIR OPERATIONS OFFICER
623 AIR TRAFFIC CONTROL OFFICER
624 ANTISUBMARINE AIR CONTROLLER
625 ANTISUBMARINE CLASSIFICATION AND ANALYSIS OFFICER
626 CATAPULT AND ARRESTING GEAR OFFICER
627 CIC OFFICER
628 NTDS CIC OFFICER
629 CIC WATCH OFFICER
630 NTDS CIC WATCH OFFICER
631 CMS CUSTODIAN
632 COMMUNICATIONS OFFICER
633 CONTROLLED APPROACH OFFICER
634 DIRECT SUPPORT OFFICER, NAVAL SECURITY GROUP
635 FLIGHT DECK OFFICER
636 HANGAR DECK OFFICER
637 MINESWEEPING OFFICER
638 OCEANOGRAPHY SERVICES OFFICER
639 OPERATIONAL INTELLIGENCE OFFICER
640 OPERATIONS OFFICER
641 PHOTOGRAPHY OFFICER
642 PHOTO INTELLIGENCE OFFICER
643 RADAR AIR TRAFFIC CONTROL CENTER OFFICER
644 RADIO OFFICER

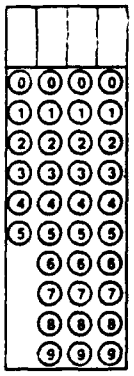
REPAIR

645 AIRCRAFT INTERMEDIATE MAINTENANCE/MATERIAL CONTROL OFFICER
646 AIRCRAFT INTERMEDIATE MAINTENANCE CONTROL OFFICER
647 DIVING OFFICER
648 ELECTRICAL REPAIR OFFICER
649 ELECTRONIC EQUIPMENT INSTALLATION, MAINTENANCE AND REPAIR
650 MACHINERY INSTALLATION AND REPAIR OFFICER
651 QUALITY ASSURANCE SUPERINTENDENT
652 OPTICAL REPAIR OFFICER
655 REPAIR OFFICER (TENDER)
653 SHIP'S REPAIR OFFICER
654 WEAPONS REPAIR OFFICER

TOTAL NUMBER OF PERSONNEL

Indicate the total number of personnel who work for you.

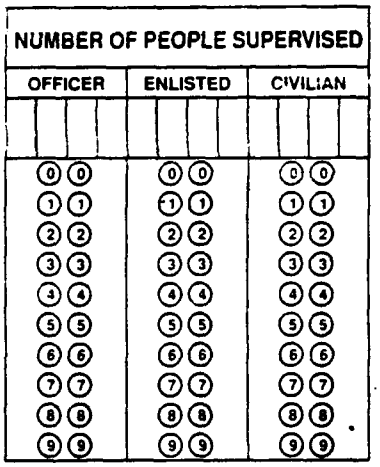
EXAMPLE: If you are the CO of a naval activity with 147 personnel assigned to you, you would enter "0147." If you are a Department Head of a naval activity and have 53 people assigned to you, you would enter "0053." If you do not supervise anyone, enter "0000."



NUMBER OF PERSONNEL THAT YOU DIRECTLY SUPERVISE

Indicate the number of personnel in each category who report DIRECTLY to you. Include only those personnel who exist in your chain of command and are identified on your command's organizational chart.

EXAMPLE: If, as a department head, you DIRECTLY supervise 2 officer division heads and 1 civilian division head, you would enter "02" in the officer block, "00" in the enlisted block and "01" in the civilian block. If a block does not apply, enter "00."



HIGHEST GRADE(S) OF SUBORDINATE(S)

Indicate the highest grade of personnel you DIRECTLY supervise in each category. If you do not supervise anyone in a category leave that block blank.

EXAMPLE: If you are the administrative officer and you have a YNC, YN1, and 3 YNSN who work for you, you would fill in the circle by the E-7 and leave the other blocks blank.

GRADE OF SENIOR SUBORDINATE

OFFICER	ENLISTED	CIVILIAN
0-1 (L)	E-1 (1)	GS-9 (1)
0-2 (K)	E-2 (2)	GS-10 (2)
0-3 (J)	E-3 (3)	GS-11 (3)
0-4 (I)	E-4 (4)	GS-12 (4)
0-5 (H)	E-5 (5)	GS-13 (5)
0-6 (G)	E-6 (6)	GM-13 (6)
W-2 (O)	E-7 (7)	GS-14 (7)
W-3 (N)	E-8 (8)	GM-14 (8)
W-4 (M)	E-9 (9)	GS-15 (9)
		GM-15 (10)
		SES (11)

GRADE OF YOUR IMMEDIATE SUPERVISOR

Fill in the circle which indicates the status and grade of your immediate supervisor.

IMMEDIATE SUPERVISOR

MILITARY GRADE	CIVILIAN GRADE
0-1 (L)	GS-9 (1)
0-2 (K)	GS-10 (2)
0-3 (J)	GS-11 (3)
0-4 (I)	GS-12 (4)
0-5 (H)	GS-13 (5)
0-6 (G)	GM-13 (6)
0-7 (F)	GS-14 (7)
0-8 (D)	GM-14 (8)
0-9 (C)	GS-15 (9)
W-2 (O)	GM-15 (10)
W-3 (N)	SES (11)
W-4 (M)	

COMPLETING THE QUESTIONNAIRE

This survey is designed to collect information on officers' involvement, direct and indirect, with ALL TYPES OF COMPUTERS. **Physically operating the computer is only one aspect of computer involvement; other aspects include managing information resources, computer security, acquisition, programming, system design, and many others.**

In addition to learning which types of jobs **do** involve computers, we also need to know which types of jobs **do not** involve computers. Computers may be a hidden part of your job, such as embedded in a weapon system that you use. Or, if your computer involvement is limited, you may find yourself marking "not applicable" or "none" for many of the questions. THIS IS EXACTLY WHAT WE NEED TO KNOW, AS LONG AS IT IS AN ACCURATE REFLECTION OF WHAT YOU DO IN YOUR CURRENT JOB.

Some questions may appear to be duplicates. This is because the same question may be asked with respect to different types of computers or different aspects of computer utilization. Read each section heading and question carefully to ensure you understand which aspect(s) the question is addressing.

If you do some of your computer work at home as part of your job (e.g., on your own micro-computer, via modem, etc.), include this work in your responses.

The remainder of this questionnaire is organized into five sections:

C. Education, Training, Knowledge and Experience
D. The ADA Programming Language
E. Current Computer Usage
F. Microcomputers
G. Job Task Inventory

SECTION C: EDUCATION, TRAINING, KNOWLEDGE AND EXPERIENCE

This section asks questions about your computer-related education, training and experience, and about the levels of knowledge required in order for you to perform effectively in your current job. The questions in this section refer to ANY type of computer.

For the purposes of this survey, the following definitions apply:

EDUCATION – formal classroom work in a degree-granting institution, whether or not you actually receive a degree.

TRAINING – all other sources for which you may or may not receive a certificate (e.g., Surface Warfare Officers School, Computer Security Course, Officer Candidate School, etc.)

1. What is your HIGHEST level of formal education involving computer science/technology or information resources management (IRM)?
MARK ONE ONLY.

NO FORMAL COMPUTER SCIENCE EDUCATION OR RELATED COURSE WORK	①
SOME FORMAL COURSE WORK AT OTHER THAN COLLEGE LEVEL	②
SOME COLLEGE (UNDERGRADUATE OR GRADUATE) LEVEL COURSE WORK	③
ASSOCIATE DEGREE	④
BACHELORS DEGREE OR SIGNIFICANT UNDERGRADUATE LEVEL COURSE WORK	⑤
MASTERS DEGREE OR SIGNIFICANT GRADUATE LEVEL COURSE WORK	⑥
PH.D. OR SIGNIFICANT DOCTORAL LEVEL COURSE WORK	⑦

2. What portion(s) of your current job require(s) knowledge of computers, whether directly or indirectly? (e.g., computer security, programming, management, data entry, etc.)
MARK ALL THAT APPLY.

NONE	⓪
PRIMARY JOB	①
COLLATERAL DUTIES	②
DUTY/WATCHSTANDING	③

3. **Indicate the source from which you have received the following types of training and education.**

   – Mark "NONE" if you have not received training in a subject.

   – Mark "NONE, BUT NEEDED" for those areas in which you have not received training but feel that it would be valuable to you in your current job.

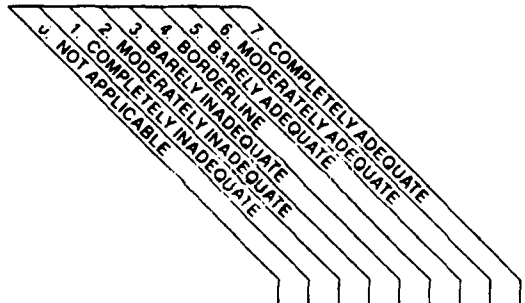
   Mark ONE SOURCE ONLY for each item. If you have received a given type of training/education from more than one source, mark the source which has been most useful to you in your current job.

		0 NONE	1 NONE, BUT NEEDED	2 ACCESSION TRAINING/EDUCATION (E.G., USNA, OCS, ETC.)	3 NAVY/DOD CLASSROOM TRAINING	4 NAVY-SPONSORED GRADUATE EDUCATION (E.G., NPS, ETC.)	5 OFF-DUTY EDUCATION	6 OFF-DUTY TRAINING	7 ON-THE-JOB TRAINING	8 VENDOR TRAINING
a.	ADP acquisition management	0	1	2	3	4	5	6	7	8
b.	ADP management	0	1	2	3	4	5	6	7	8
c.	ADP risk management	0	1	2	3	4	5	6	7	8
d.	ADP security	0	1	2	3	4	5	6	7	8
e.	Assembling/compiling	0	1	2	3	4	5	6	7	8
f.	Computer graphics	0	1	2	3	4	5	6	7	8
g.	Computer hardware/software selection	0	1	2	3	4	5	6	7	8
h.	Computer maintenance	0	1	2	3	4	5	6	7	8
i.	Computer programming (in general)	0	1	2	3	4	5	6	7	8
j.	Computer programming (specific languages)	0	1	2	3	4	5	6	7	8
k.	Computer simulation/modeling techniques	0	1	2	3	4	5	6	7	8
l.	Computer theory	0	1	2	3	4	5	6	7	8
m.	Computer wargaming	0	1	2	3	4	5	6	7	8
n.	Configuration management	0	1	2	3	4	5	6	7	8
o.	Contract administration	0	1	2	3	4	5	6	7	8
p.	Data base design	0	1	2	3	4	5	6	7	8
q.	Data communications	0	1	2	3	4	5	6	7	8
r.	Graphics design	0	1	2	3	4	5	6	7	8
s.	Job control language	0	1	2	3	4	5	6	7	8
t.	Keyboard data entry	0	1	2	3	4	5	6	7	8
u.	Life cycle management	0	1	2	3	4	5	6	7	8
v.	Local area networks	0	1	2	3	4	5	6	7	8
w.	Operating systems	0	1	2	3	4	5	6	7	8
x.	Planning, Programming and Budgeting System (PPBS)	0	1	2	3	4	5	6	7	8
y.	Project management	0	1	2	3	4	5	6	7	8
z.	Robotics	0	1	2	3	4	5	6	7	8
aa.	Software engineering	0	1	2	3	4	5	6	7	8
bb.	Spreadsheet development	0	1	2	3	4	5	6	7	8
cc.	Systems analysis and design	0	1	2	3	4	5	6	7	8
dd.	Troubleshooting hardware problems	0	1	2	3	4	5	6	7	8
ee.	Typing	0	1	2	3	4	5	6	7	8
ff.	Weapons system computer operation	0	1	2	3	4	5	6	7	8
gg.	Wide area networks	0	1	2	3	4	5	6	7	8
hh.	Word processing	0	1	2	3	4	5	6	7	8
ii.	Writing of contract work statements	0	1	2	3	4	5	6	7	8

4. **In general, has the Navy provided you with adequate information systems training for the information management and technology aspects of *your current job*?**

DON'T KNOW ⓪
NO ①
YES ②

5. **Indicate how adequate you feel your level of knowledge is in the following areas, *as it relates to your current job.* IF YOUR JOB DOES NOT REQUIRE YOU TO HAVE KNOWLEDGE IN A GIVEN AREA, MARK "NOT APPLICABLE."**



a. ADP acquisition management
b. ADP management
c. ADP risk management
d. ADP security
e. Assembling/compiling
f. Computer graphics
g. Computer hardware/software selection
h. Computer maintenance
i. Computer programming (in general)
j. Computer programming (specific languages)
k. Computer simulation/modeling techniques
l. Computer theory
m. Computer wargaming
n. Configuration management
o. Contract administration
p. Data base design
q. Data communications
r. Graphics design
s. Job control language
t. Keyboard data entry
u. Life cycle management
v. Local area networks
w. Operating systems
x. Planning, Programming and Budgeting System (PPBS)
y. Project management
z. Robotics
aa. Software engineering
bb. Spreadsheet development
cc. Systems analysis and design
dd. Troubleshooting hardware problems
ee. Typing
ff. Weapons system computer operation
gg. Wide area networks
hh. Word processing
ii. Writing of contract work statements

SECTION D: THE ADA PROGRAMMING LANGUAGE

ADA has become the Department of Defense (DoD) standard as a high-order programming language. The following questions are about ADA:

6. **Have you heard of the ADA programming language?**
   - NO (SKIP TO QUESTION #13) ①
   - YES ②

7. **To what extent are you familiar with DoD and/or Navy policy regarding the use of ADA in weapons system applications?**
   - NOT AT ALL ①
   - VERY SLIGHTLY ②
   - SLIGHTLY ③
   - TO SOME EXTENT ④
   - TO A MODERATE EXTENT ⑤
   - EXTENSIVELY ⑥
   - VERY EXTENSIVELY ⑦

8. **To what extent are you familiar with DOD and/or Navy policy regarding the use of ADA in non-tactical applications?**
   - NOT AT ALL ①
   - VERY SLIGHTLY ②
   - SLIGHTLY ③
   - TO SOME EXTENT ④
   - TO A MODERATE EXTENT ⑤
   - EXTENSIVELY ⑥
   - VERY EXTENSIVELY ⑦

9. **Indicate which of the following functions you have performed using the ADA programming language or ADA constructs.**
   - NONE ⓪
   - DESIGNED, OR ASSISTED IN DESIGNING, A SYSTEM THAT WILL BE PROGRAMMED PRIMARILY IN ADA ①
   - DEVELOPED A PROGRAM DESIGN LANGUAGE (PDL), CONSTRUCTED A FLOW CHART, OR DEVELOPED AN ALGORITHMIC LANGUAGE FOR AN ADA PROGRAM OR SYSTEM ②
   - CODED, TESTED, OR DEBUGGED AN ADA PROGRAM OR PROJECT ③
   - UPDATED OR MAINTAINED AN ADA PROGRAM OR PROJECT ④

10. **Have you had formal college-level or graduate-level computer science or software engineering courses in ADA? (This includes graduate education at the Naval Postgraduate School.)**
    - NO ①
    - YES ②

11. **Have you had formal DoD-sponsored training in ADA? (This DOES NOT include graduate education at the Naval Postgraduate School.)**
    - NO ①
    - YES ②

12. **Do you feel that you need more training in ADA to effectively perform your current job?**
    - NO ①
    - YES ②

PLEASE

CONTINUE

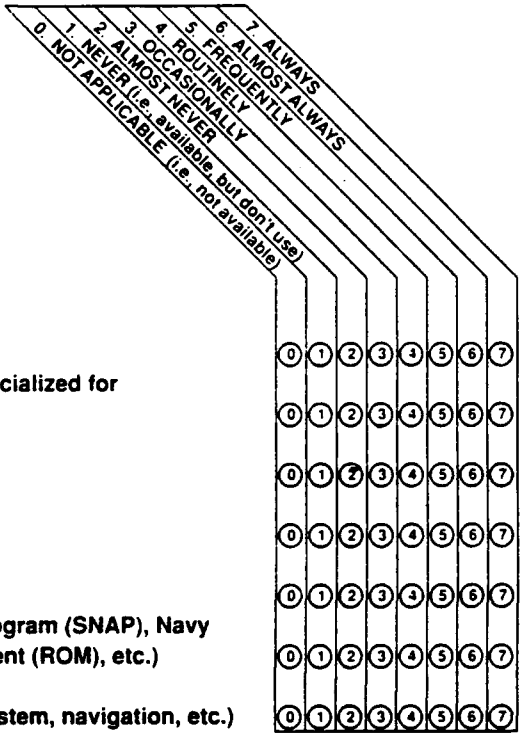
ON

NEXT PAGE

SECTION E: CURRENT COMPUTER USAGE

This section asks questions about the types of computer hardware and software you use in your CURRENT JOB, the functions you perform on these systems and the functional fields your computer-related work supports. These questions refer to ANY size or type of computer system.

13. **Thinking about YOUR JOB AS A WHOLE (not just the computer-related portion),** how frequently do you use (i.e., physically work with) the following types of computers in your current job?



1. Microcomputers (e.g., PC, MacIntosh, Zenith, laptop, etc.) 0 1 2 3 4 5 6 7
2. Technical workstations (i.e., a high-performance micro or mini specialized for graphics, design, etc.) 0 1 2 3 4 5 6 7
3. Minicomputers 0 1 2 3 4 5 6 7
4. Mainframes 0 1 2 3 4 5 6 7
5. Supercomputers 0 1 2 3 4 5 6 7
6. Integrated real-time systems (e.g., Shipboard Non-tactical ADP Program (SNAP), Navy Intelligence Processing System (NIPS), Retail Operation Management (ROM), etc.) 0 1 2 3 4 5 6 7
7. Technical/tactical systems (e.g., fire control, patient monitoring system, navigation, etc.) 0 1 2 3 4 5 6 7

14. How many people under your supervision use ANY TYPE OF COMPUTER in their jobs? If you do not supervise anyone, or if the people you supervise do not use computers, enter "00" in each block.

OFFICER	ENLISTED	CIVILIAN
00	00	00
11	11	11
22	22	22
33	33	33
44	44	44
55	55	55
66	66	66
77	77	77
88	88	88
99	99	99

15. **Indicate the type of computer** on which YOU PERFORM the following applications in your current job. Be sure that you DO NOT include work that your subordinates perform for you. If you do not perform a function, mark "not applicable." Mark **one source only** for each application. If you use more than one type of computer for a given application, mark the type you use most often.

		0. NOT APPLICABLE	1. INTEGRATED SYSTEM	2. MAINFRAME	3. MICROCOMPUTER	4. MINICOMPUTER	5. SUPERCOMPUTER	6. TECHNICAL/TACTICAL SYSTEM	7. TECHNICAL WORKSTATION
a.	Accounting/finance/budgeting	⓪	①	②	③	④	⑤	⑥	⑦
b.	Administration	⓪	①	②	③	④	⑤	⑥	⑦
c.	Artificial intelligence/expert systems	⓪	①	②	③	④	⑤	⑥	⑦
d.	Automated message handling/distribution	⓪	①	②	③	④	⑤	⑥	⑦
e.	Computer aided design/computer aided engineering (CAD/CAE)	⓪	①	②	③	④	⑤	⑥	⑦
f.	Computer aided software engineering (CASE)	⓪	①	②	③	④	⑤	⑥	⑦
g.	Command/control/communication/intelligence (C^3I)	⓪	①	②	③	④	⑤	⑥	⑦
h.	Communications	⓪	①	②	③	④	⑤	⑥	⑦
i.	Damage control	⓪	①	②	③	④	⑤	⑥	⑦
j.	Data analysis	⓪	①	②	③	④	⑤	⑥	⑦
k.	Database management	⓪	①	②	③	④	⑤	⑥	⑦
l.	Desktop publishing	⓪	①	②	③	④	⑤	⑥	⑦
m.	Electronic mail	⓪	①	②	③	④	⑤	⑥	⑦
n.	File/records management	⓪	①	②	③	④	⑤	⑥	⑦
o.	Flight planning	⓪	①	②	③	④	⑤	⑥	⑦
p.	Flight simulation	⓪	①	②	③	④	⑤	⑥	⑦
q.	Graphics	⓪	①	②	③	④	⑤	⑥	⑦
r.	Image processing	⓪	①	②	③	④	⑤	⑥	⑦
s.	Inventory control	⓪	①	②	③	④	⑤	⑥	⑦
t.	Medical diagnosis	⓪	①	②	③	④	⑤	⑥	⑦
u.	Mission briefing	⓪	①	②	③	④	⑤	⑥	⑦
v.	Mission debriefing	⓪	①	②	③	④	⑤	⑥	⑦
w.	Mission planning	⓪	①	②	③	④	⑤	⑥	⑦
x.	Modeling	⓪	①	②	③	④	⑤	⑥	⑦
y.	Navigation	⓪	①	②	③	④	⑤	⑥	⑦
z.	Personnel/manpower management	⓪	①	②	③	④	⑤	⑥	⑦
aa.	Pharmacology	⓪	①	②	③	④	⑤	⑥	⑦
bb.	Procurement	⓪	①	②	③	④	⑤	⑥	⑦
cc.	Programming	⓪	①	②	③	④	⑤	⑥	⑦
dd.	Project management	⓪	①	②	③	④	⑤	⑥	⑦
ee.	Realtime data acquisition	⓪	①	②	③	④	⑤	⑥	⑦
ff.	Scientific/engineering/research applications	⓪	①	②	③	④	⑤	⑥	⑦
gg.	Spreadsheets	⓪	①	②	③	④	⑤	⑥	⑦
hh.	Statistical analysis	⓪	①	②	③	④	⑤	⑥	⑦
ii.	Tactical evaluation	⓪	①	②	③	④	⑤	⑥	⑦
jj.	3M	⓪	①	②	③	④	⑤	⑥	⑦
kk.	Wargaming	⓪	①	②	③	④	⑤	⑥	⑦
ll.	Word processing	⓪	①	②	③	④	⑤	⑥	⑦
mm.	Other (specify on last page)	⓪	①	②	③	④	⑤	⑥	⑦

16. Which of the following functional fields are you involved in when you use a computer? MARK ALL THAT APPLY. (e.g., if you are in an aviation squadron, you might use a microcomputer for aviation logistics and an embedded computer in your aircraft for tactical air warfare).

ADMINISTRATIVE/MANAGEMENT/LOGISTICS SUPPORT

- a. Accounting (1)
- b. Aviation logistics (2)
- c. Budgeting (3)
- d. Dental services (4)
- e. Facilities construction (5)
- f. Information resource management (6)
- g. Inspector general (7)
- h. Legal functions (8)
- i. Maintenance (9)
- j. Manpower, personnel and training (10)
- k. Medical services (11)
- l. Occupational safety and health (12)
- m. Operational safety (13)
- n. Other logistics (14)
- o. Payroll (15)
- p. Plans and policies (16)
- q. Platform construction, overhaul, modernization (17)
- r. Procurement (18)
- s. Religious services (19)
- t. Resource programming (20)
- u. Security assistance, technology transfer (21)
- v. Station support (22)
- w. Supply (23)
- x. Transportation (24)
- y. Other (specify on last page) (25)

STRATEGIC/TACTICAL/OPERATIONAL SUPPORT

- a. Calibration of weapons (42)
- b. Communications (43)
- c. Cryptology (44)
- d. Diagnostic testing and maintenance (45)
- e. Fire control (46)
- f. Intelligence (47)
- g. Mapping, charting, geodosy (48)
- h. Meteorology (49)
- i. Oceanography (50)
- j. Reconnaissance (51)
- k. Simulation (52)
- l. Space technology (53)
- m. Strategic planning (54)
- n. Strike planning (55)
- o. Surveillance (56)
- p. Tactical training (57)
- q. War gaming (58)
- r. War planning (59)
- s. Warning (60)
- t. Weapon system training (61)
- u. Other (specify on last page) (62)

WARFARE MISSION AREAS

- a. Air anti-submarine warfare (26)
- b. Amphibious warfare (27)
- c. Anti-air warfare (28)
- d. Anti-surface warfare (29)
- e. Chemical warfare (30)
- f. Command and control/C^3I (31)
- g. Direct fleet support (32)
- h. Electronic warfare (33)
- i. Mine warfare (34)
- j. Space warfare (35)
- k. Special warfare (36)
- l. Strategic warfare (37)
- m. Strike air warfare (38)
- n. Submarine anti-submarine warfare (39)
- o. Surface anti-submarine warfare (40)
- p. Other (specify on last page) (41)

OTHER

- a. Disaster relief coordination/planning (63)
- b. Research, development, testing, evaluation (64)
- c. Other (specify on last page) (65)

17. **Thinking about YOUR JOB AS A WHOLE (not just the computer-related portion),** how frequently do you use the following brands of programming languages, language processors, operating systems or software applications in your current job?

	0. NOT APPLICABLE (i.e., not available)	1. NEVER (i.e., available, but don't use)	2. ALMOST NEVER	3. OCCASIONALLY	4. SOMETIMES	5. FREQUENTLY	6. ALMOST ALWAYS	7. ALWAYS
PROGRAMMING LANGUAGES								
a. ADA	0	1	2	3	4	5	6	7
b. BASIC	0	1	2	3	4	5	6	7
c. C	0	1	2	3	4	5	6	7
d. COBOL	0	1	2	3	4	5	6	7
e. FORTRAN	0	1	2	3	4	5	6	7
f. LISP	0	1	2	3	4	5	6	7
g. Pascal	0	1	2	3	4	5	6	7
h. SQL	0	1	2	3	4	5	6	7
i. Other programming languages (specify on last page)	0	1	2	3	4	5	6	7
LANGUAGE PROCESSORS								
a. Assembler	0	1	2	3	4	5	6	7
b. Compiler	0	1	2	3	4	5	6	7
c. Interpreter	0	1	2	3	4	5	6	7
d. Other language processors (specify on last page)	0	1	2	3	4	5	6	7
OPERATING SYSTEMS								
a. Apple	0	1	2	3	4	5	6	7
b. CPM	0	1	2	3	4	5	6	7
c. Macintosh	0	1	2	3	4	5	6	7
d. MS-DOS	0	1	2	3	4	5	6	7
e. MVS	0	1	2	3	4	5	6	7
f. OS/2	0	1	2	3	4	5	6	7
g. UNIX	0	1	2	3	4	5	6	7
h. VAX/VMS	0	1	2	3	4	5	6	7
i. VM	0	1	2	3	4	5	6	7
j. WANG	0	1	2	3	4	5	6	7
k. Other operating systems (specify on last page)	0	1	2	3	4	5	6	7
SOFTWARE PACKAGES AND PACKAGE TYPES (other than word processing)								
a. Desktop publishing packages	0	1	2	3	4	5	6	7
b. Enable graphics	0	1	2	3	4	5	6	7
c. Harvard graphics	0	1	2	3	4	5	6	7
d. Other graphics packages (specify on last page)	0	1	2	3	4	5	6	7
e. Enable spreadsheet	0	1	2	3	4	5	6	7
f. Lotus 1-2-3	0	1	2	3	4	5	6	7
g. Other spreadsheet packages (specify on last page)	0	1	2	3	4	5	6	7

0. NOT APPLICABLE (i.e., not available)
1. NEVER (i.e., available, but don't use)
2. ALMOST NEVER
3. OCCASIONALLY
4. SOMETIMES
5. FREQUENTLY
6. ALMOST ALWAYS
7. ALWAYS

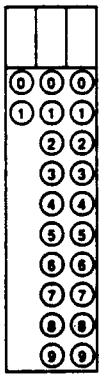
SOFTWARE PACKAGES AND PACKAGE TYPES (continued)

h.	DESQview	0 1 2 3 4 5 6 7
i.	Windows	0 1 2 3 4 5 6 7
j.	Other interface packages (specify on last page)	0 1 2 3 4 5 6 7
k.	SPSSx	0 1 2 3 4 5 6 7
l.	SAS	0 1 2 3 4 5 6 7
m.	Other statistical packages (specify on last page)	0 1 2 3 4 5 6 7
n.	dBase	0 1 2 3 4 5 6 7
o.	Enable DBMS	0 1 2 3 4 5 6 7
p.	ORACLE	0 1 2 3 4 5 6 7
q.	RBase	0 1 2 3 4 5 6 7
r.	FOCUS	0 1 2 3 4 5 6 7
s.	Other database management systems (specify on last page)	0 1 2 3 4 5 6 7
t.	BITCOM	0 1 2 3 4 5 6 7
u.	CROSSTALK	0 1 2 3 4 5 6 7
v.	Enable communications	0 1 2 3 4 5 6 7
w.	PROCOMM	0 1 2 3 4 5 6 7
x.	Other communications packages (specify on last page)	0 1 2 3 4 5 6 7
y.	Norton Utilities	0 1 2 3 4 5 6 7
z.	PC Tools	0 1 2 3 4 5 6 7
aa.	Other utilities (specify on last page)	0 1 2 3 4 5 6 7
bb.	"Canned" Navy applications (e.g., programs for tracking qualifications, conducting inventory, etc.)	0 1 2 3 4 5 6 7
cc.	Other applications (specify on last page)	0 1 2 3 4 5 6 7

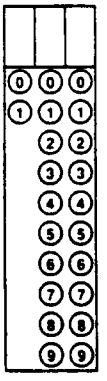
18. Do you use any personally-owned software on your government-owned computer to perform your job?

NO ①
YES ②

19. On average, what PERCENTAGE of your work day is spent working at the keyboard of a computer? (Example: If you spend 25 percent of your work day at a computer keyboard, enter"025" in the block). If you do not work at a computer keyboard, enter "000."



20. On average, what PERCENTAGE of your work day involves computers, whether directly or indirectly? (e.g., computer security, management, programming, acquisition, data entry, analyzing information from computer printouts, providing training, etc.) (Example: If 50 percent of your work day involves computers, enter "050" in the block.) If you are not involved with computers in any way, enter "000."



SECTION F: MICROCOMPUTERS

This section asks questions about issues related to microcomputers, to include office automation and information management. A microcomputer may be thought of as a personal computer (e.g., IBM, IBM-compatible, Apple/Macintosh series, Zenith or any other personal computer.) Laptops should also be included in your responses.

21. Which statement best describes your command/unit/activity with respect to microcomputers?

- HAS NO MICROCOMPUTERS AND REQUIRES NONE (1)
- HAS NO MICROCOMPUTERS, BUT THE NEED HAS BEEN IDENTIFIED (2)
- HAS SOME MICROCOMPUTERS (3)
- HAS MANY MICROCOMPUTERS (4)

22. Do you feel that your command/unit/activity has the RIGHT NUMBER of microcomputers?

- NO, WE DON'T NEED ALL OF THE MICROCOMPUTERS WE HAVE (1)
- NO, WE NEED MORE (2)
- YES, WE HAVE JUST THE RIGHT NUMBER (3)

23. Do you have a government-provided microcomputer available?

- NO (SKIP TO QUESTION #39) (1)
- YES (2)

24. How frequently do you use it?

- NEVER (1)
- ALMOST NEVER (2)
- OCCASIONALLY (3)
- SOMETIMES (4)
- FREQUENTLY (5)
- ALMOST ALWAYS (6)
- ALWAYS (7)

25. Is your microcomputer part of a local area network (LAN)?

- DON'T KNOW (0)
- NO (1)
- YES (SKIP TO QUESTION #27) (2)

26. Is a LAN currently planned for your microcomputer?

- DON'T KNOW (0)
- NO (SKIP TO QUESTION #28) (1)
- YES (2)

27. Do you use a LAN to electronically route correspondence for chop, or to submit reports or information?

- NEVER (1)
- SOMETIMES (2)
- ALWAYS (3)

28. How has having a microcomputer affected the amount of PURELY ADMINISTRATIVE work you do?

- DON'T KNOW (0)
- NO CHANGE (1)
- DECREASED IT (2)
- INCREASED IT (3)

29. How has having a microcomputer affected your DAILY ROUTINE?

- DON'T KNOW (0)
- NO CHANGE (1)
- MADE IT MORE CUMBERSOME (2)
- MADE IT EASIER (3)

30. How has having a microcomputer affected your OVERALL PRODUCTIVITY?

- DON'T KNOW (0)
- NO CHANGE (1)
- DECREASED PRODUCTIVITY (2)
- INCREASED PRODUCTIVITY (3)

31. How has having a microcomputer affected the NUMBER OR TYPES OF REPORTS that you are required to submit in your current job?

- DON'T KNOW (0)
- NO CHANGE (1)
- I NOW SUBMIT MORE, MORE COMPLEX REPORTS (2)
- I NOW SUBMIT MORE, LESS COMPLEX REPORTS (3)
- I NOW SUBMIT FEWER, MORE COMPLEX REPORTS (4)
- I NOW SUBMIT FEWER, LESS COMPLEX REPORTS (5)

32. Are you required to submit reports or information on a data storage device? (e.g., floppy disks, tapes, etc.)

- NEVER (1)
- SOMETIMES (2)
- ALWAYS (3)

33. Have you received any formal training on your current microcomputer system?

- NO (SKIP TO QUESTION #36) (1)
- YES (2)

SECTION F: MICROCOMPUTERS (continued)

34. How much time elapsed between your arrival in your current job and receiving your formal training?

LESS THAN 6 MONTHS ①
6 MONTHS TO 1 YEAR ②
1 TO 2 YEARS ③
MORE THAN 2 YEARS ④

35. How effective was this formal training in helping you use your microcomputer?

NOT APPLICABLE: I WAS ALREADY SKILLED IN USING MY MICROCOMPUTER ⓪
VERY INEFFECTIVE ①
NEITHER EFFECTIVE NOR INEFFECTIVE ②
VERY EFFECTIVE ③

36. Did you have to learn to use your current microcomputer system on-the-job?

NO, I WAS ALREADY SKILLED IN USING MY MICROCOMPUTER SYSTEM ①
NO, FORMAL TRAINING WAS COMPREHENSIVE ENOUGH THAT I DID NOT NEED ADDITIONAL ON-THE-JOB TRAINING ②
YES, IN CONJUNCTION WITH FORMAL TRAINING ③
YES, COMPLETELY ON-THE-JOB ④

37. Do you feel that you need more training on your current microcomputer to effectively do your job?

DON'T KNOW (SKIP TO QUESTION #40) ⓪
NO (SKIP TO QUESTION #40) ①
YES ②

38. Do you feel that such training would be cost effective (i.e., would the benefits outweigh the costs)?

DON'T KNOW ⓪
NO ①
YES ②

39. If you do not have a government-provided microcomputer, to what degree would having one enhance your ability to perform your current job?

NOT APPLICABLE; HAVE A GOVERNMENT-PROVIDED MICROCOMPUTER ⓪
DON'T KNOW ①
NOT AT ALL ②
SOMEWHAT ③
SIGNIFICANTLY ④

40. How many people under your direct supervision use MICROCOMPUTERS in their jobs? If you do not supervise anyone in a category, or if the people you supervise do not use microcomputers, enter "00" in the scale.

OFFICER	ENLISTED	CIVILIAN
⓪⓪	⓪⓪	⓪⓪
①①	①①	①①
②②	②②	②②
③③	③③	③③
④④	④④	④④
⑤⑤	⑤⑤	⑤⑤
⑥⑥	⑥⑥	⑥⑥
⑦⑦	⑦⑦	⑦⑦
⑧⑧	⑧⑧	⑧⑧
⑨⑨	⑨⑨	⑨⑨

41. Is your command/unit/activity involved in a "paperless office/ship" program?

DON'T KNOW ⓪
NO ①
YES ②

42. Is your command/unit/activity part of a software-sharing network? (e.g., bulletin board, inter-command sharing, etc.)

DON'T KNOW ⓪
NO ①
YES ②

43. To what degree has lack of computer HARDWARE COMPATIBILITY in the Navy hindered your ability to use data from other commands/units/activities or to provide data for others' use?

DON'T KNOW ⓪
NOT AT ALL ①
SOMEWHAT ②
SIGNIFICANTLY ③

44. To what degree has lack of computer HARDWARE AVAILABILITY in the Navy hindered your ability to use data from other commands/units/activities or to provide data for others' use?

DON'T KNOW ⓪
NOT AT ALL ①
SOMEWHAT ②
SIGNIFICANTLY ③

45. To what degree has lack of computer SOFTWARE COMPATIBILITY in the Navy hindered your ability to use data from other commands/units/activities or to provide data for others' use?

DON'T KNOW (0)
NOT AT ALL (1)
SOMEWHAT (2)
SIGNIFICANTLY (3)

46. To what degree has lack of system standardization resulted in redundant data bases and/or reporting requirements?

DON'T KNOW (0)
NOT AT ALL (1)
SOMEWHAT (2)
SIGNIFICANTLY (3)

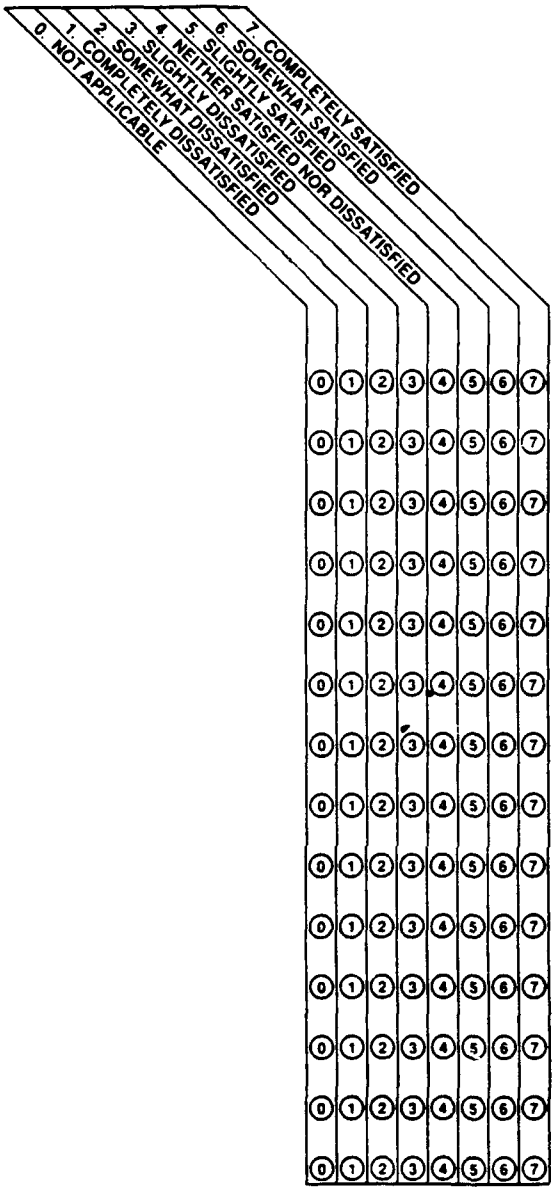
47. With respect to microcomputers, how would you rate the degree of central planning and development of information systems in the Navy?

DON'T KNOW (0)
INADEQUATE (1)
ADEQUATE (2)
EXCESSIVE (3)

48. Thinking about YOUR JOB AS A WHOLE (not just the computer-related portion), how frequently do you use the following brands of word processing software with your microcomputer system in your current job?

	0. NOT APPLICABLE (i.e., not available)	1. NEVER (i.e., available, but don't use)	2. ALMOST NEVER	3. OCCASIONALLY	4. SOMETIMES	5. FREQUENTLY	6. ALMOST ALWAYS	7. ALWAYS
a. Appleworks	0	1	2	3	4	5	6	7
b. Display Write series	0	1	2	3	4	5	6	7
c. Enable	0	1	2	3	4	5	6	7
d. Machine specific (e.g., WANG, XEROX, etc.)	0	1	2	3	4	5	6	7
e. MacWrite	0	1	2	3	4	5	6	7
f. Word	0	1	2	3	4	5	6	7
g. MultiMate	0	1	2	3	4	5	6	7
h. Office Writer	0	1	2	3	4	5	6	7
i. Peachtext	0	1	2	3	4	5	6	7
j. PFS: Write	0	1	2	3	4	5	6	7
k. Sprint	0	1	2	3	4	5	6	7
l. WordStar	0	1	2	3	4	5	6	7
m. WordPerfect	0	1	2	3	4	5	6	7
n. Other (specify on last page)	0	1	2	3	4	5	6	7

49. How satisfied are you with the brand(s) of word processing software that you use in your current job? If you do not use a given software package, mark "not applicable."



a. Appleworks
b. Display Write series
c. Enable
d. Machine specific (e.g., WANG, ZEROX, etc.)
e. MacWrite
f. Word
g. MultiMate
h. Office Writer
i. Peachtext
j. PFS: Write
k. Sprint
l. WordStar
m. WordPerfect
n. Other (specify on last page)

50. Do you have a microcomputer at home?

NO (SKIP TO SECTION G) ①
YES ②

51. Do you use your personally-owned *microcomputer* in direct performance of your assigned duties?

NO ①
YES ②

52. Do you have access to your work-site *microcomputer* from home or other remote site via communication link?

DOES NOT APPLY; DO NOT HAVE A MICROCOMPUTER AT WORK ⓪
NO ①
YES ②

PLEASE TURN

TO PAGE 30

AND CONTINUE

WITH THE SURVEY

The purpose of this section is to identify tasks, performed by naval officers, which are associated in some way with computers. Some tasks are directed at computer "experts" (e.g., "Develop computer architectural comcepts"), while other tasks are directed at officers involved with other computer areas. such as justifying funding for computers, managing computer security or just copying diskettes on a microcomputer.

Unless otherwise noted, and as applicable, please include all types of computers, from microcomputers to mainframes and tactical systems with embedded computers (and everything in between), in determining your response to each task.

- In completing the task inventory, **PLEASE RESPOND IN TERMS OF ALL WORK THAT YOU DO IN YOUR PRESENT REGULAR JOB,** including collateral duties. Do not include work done by subordinates or others in your command.

- **READ AND RESPOND TO EACH TASK STATEMENT**

- **IF THE TASK IS NOT A PART OF YOUR PRESENT JOB,** blacken the circle in the "no involvement" column.

- **IF YOU PERFORM THE TASK,** decide how much time you spend performing it, relative to all other tasks you perform in your job (i.e., **answer each task relative to your whole job, not just the computer-related portion.**) If you perform a task both when deployed and when not deployed, indicate an average amount of time spent on that task. Assign a value between 1 and 7 to each task you perform.

Time spent compared to whole job

0 – No involvement
1 – Very little
2 – Little
3 – Below average
4 – Average
5 – Above average
6 – Much
7 – Very much

MARKING INSTRUCTIONS

USE NO. 2 PENCIL ONLY

INCORRECT MARKS: ⊗ ✓ ◪ ⊖
CORRECT MARK: ○ ● ○ ○

- Make black marks that completely fill the circle.
- Erase cleanly and completely any changes you make.
- Do not make stray marks in this booklet.

- **Read and respond to each task statement.**
- **Assign a value between 1 and 7 for each task that you perform.**
- ***If you do not perform* the task, blacken the circle in the "NO INVOLVEMENT" column.**

	TIME SPENT COMPARED TO WHOLE JOB							
	0. NO INVOLVEMENT	1. VERY LITTLE	2. LITTLE	3. BELOW AVERAGE	4. AVERAGE	5. ABOVE AVERAGE	6. MUCH	7. VERY MUCH
1. FORMAT DISKS OR TAPES	0	1	2	3	4	5	6	7
2. COPY DISK PACKS, DISKETTES OR TAPES	0	1	2	3	4	5	6	7
3. ENTER/EXTRACT DATA INTO/FROM COMPUTERS	0	1	2	3	4	5	6	7
4. DOWNLOAD/UPLOAD DATA	0	1	2	3	4	5	6	7
5. PROVIDE COMPUTER OUTPUT TO USERS (E.G., REPORTS, STATISTICS, ETC.)	0	1	2	3	4	5	6	7
6. ANALYZE OUTPUT DATA (I.E., COMPUTER PRINTOUTS, ETC.)	0	1	2	3	4	5	6	7
7. ANALYZE DATA WITH COMPUTER STATISTICAL PACKAGES	0	1	2	3	4	5	6	7
8. BUILD/MAINTAIN SPREADSHEETS	0	1	2	3	4	5	6	7
9. PRODUCE COMPUTER GRAPHICS	0	1	2	3	4	5	6	7
10. BUILD/MAINTAIN DATABASES	0	1	2	3	4	5	6	7
11. TYPE CORRESPONDENCE (I.E., MEMORANDA, REPORTS, ETC.) ON COMPUTERS	0	1	2	3	4	5	6	7
12. DESIGN REPORT FORMATS	0	1	2	3	4	5	6	7
13. MAINTAIN TAPE/DISK LIBRARY	0	1	2	3	4	5	6	7
14. SEND/RECEIVE ELECTRONIC MAIL	0	1	2	3	4	5	6	7
15. DESIGN COMPUTER PROGRAMS (E.G., USING FLOW CHARTS, PSEUDO CODE, ETC.)	0	1	2	3	4	5	6	7
16. WRITE COMPUTER PROGRAMS	0	1	2	3	4	5	6	7
17. ASSIST OTHERS IN WRITING COMPUTER PROGRAMS	0	1	2	3	4	5	6	7
18. DEBUG COMPUTER PROGRAMS	0	1	2	3	4	5	6	7
19. APPROVE COMPUTER PROGRAMS	0	1	2	3	4	5	6	7
20. MAINTAIN/UPDATE COMPUTER PROGRAMS	0	1	2	3	4	5	6	7
21. RUN COMPUTER PROGRAMS OR MODELS	0	1	2	3	4	5	6	7
22. USE DECISION SUPPORT SYSTEMS	0	1	2	3	4	5	6	7
23. EXECUTE COMPUTER DIAGNOSTICS/FAULT LOCALIZATION PROCEDURES	0	1	2	3	4	5	6	7
24. INTEGRATE COMPUTER SYSTEMS INTO DESIGN OF OPERATIONAL SYSTEMS (E.G., WEAPONS, RADARS, FLIGHT, ETC.)	0	1	2	3	4	5	6	7
25. DETERMINE WARTIME COMPUTER REQUIREMENTS FOR MOBILIZATION PLANNING	0	1	2	3	4	5	6	7
26. PLAN COMMAND TACTICAL INFORMATION SYSTEMS	0	1	2	3	4	5	6	7
27. PLAN/COORDINATE SHIP/AIRCRAFT/SUBMARINE COMPUTER INSTALLATION	0	1	2	3	4	5	6	7
28. INSPECT SHIPBOARD/AIRBORNE/SUBMARINE COMPUTER SYSTEMS	0	1	2	3	4	5	6	7
29. INTEGRATE AUTOMATION PLANS WITH TACTICAL OPERATIONS	0	1	2	3	4	5	6	7
30. DEVELOP COMPUTER WAR GAMES/SIMULATIONS/MODELS	0	1	2	3	4	5	6	7
31. USE COMPUTERS FOR WAR GAMING	0	1	2	3	4	5	6	7
32. OPERATE SIMULATORS	0	1	2	3	4	5	6	7
33. USE COMPUTERS TO DEPLOY ARMAMENTS	0	1	2	3	4	5	6	7
34. USE COMPUTERS FOR NAVIGATION	0	1	2	3	4	5	6	7
35. EVALUATE COMPUTER EQUIPMENT DURING EXERCISES/DEPLOYMENTS	0	1	2	3	4	5	6	7
36. DIRECT THE INFORMATION RESOURCE MANAGEMENT (IRM) PROGRAM WITHIN AN ACTIVITY, ORGANIZATION OR DEPARTMENT	0	1	2	3	4	5	6	7
37. DIRECT THE COMPUTER SYSTEMS WITHIN AN ACTIVITY, ORGANIZATION OR DEPARTMENT	0	1	2	3	4	5	6	7
38. DEVELOP/UPDATE COMPUTER SYSTEM OPERATING PROCEDURES	0	1	2	3	4	5	6	7

MARKING INSTRUCTIONS

USE NO. 2 PENCIL ONLY

INCORRECT MARKS: ⊗ ✓ ◪ ⓪
CORRECT MARK: ○ ● ○ ○

- Make black marks that completely fill the circle.
- Erase cleanly and completely any changes you make.
- Do not make stray marks in this booklet.

- **Read and respond to each task statement.**
- **Assign a value between 1 and 7 for each task that you perform.**
- **If you do not perform the task, blacken the circle in the "NO INVOLVEMENT" column.**

	TIME SPENT COMPARED TO WHOLE JOB							
	0. NO INVOLVEMENT	1. VERY LITTLE	2. LITTLE	3. BELOW AVERAGE	4. AVERAGE	5. ABOVE AVERAGE	6. MUCH	7. VERY MUCH
39. DEVELOP PROCEDURES FOR PROVIDING COMPUTER SERVICES	⓪	①	②	③	④	⑤	⑥	⑦
40. DEVELOP COMPUTER EMERGENCY/CONTINGENCY ACTION PLANS	⓪	①	②	③	④	⑤	⑥	⑦
41. TEST COMPUTER EMERGENCY/CONTINGENCY ACTION PLANS	⓪	①	②	③	④	⑤	⑥	⑦
42. DEVELOP COMPUTER SURVIVABILITY PLANS	⓪	①	②	③	④	⑤	⑥	⑦
43. PERFORM/DIRECT COMPUTER DISASTER RECOVERY OPERATIONS	⓪	①	②	③	④	⑤	⑥	⑦
44. TRACK SYSTEM OR HARDWARE FAILURE TRENDS	⓪	①	②	③	④	⑤	⑥	⑦
45. PROVIDE GUIDANCE ON COMPUTER SYSTEM CAPABILITIES	⓪	①	②	③	④	⑤	⑥	⑦
46. COORDINATE WITH USERS OR CUSTOMERS TO RESOLVE COMPUTER PROBLEMS	⓪	①	②	③	④	⑤	⑥	⑦
47. DEVELOP COMPUTER BUDGETS	⓪	①	②	③	④	⑤	⑥	⑦
48. JUSTIFY COMPUTER BUDGETS	⓪	①	②	③	④	⑤	⑥	⑦
49. REVIEW COMPUTER BUDGETS	⓪	①	②	③	④	⑤	⑥	⑦
50. INSPECT/ACCEPT NEW COMPUTER EQUIPMENT	⓪	①	②	③	④	⑤	⑥	⑦
51. DIRECT INSTALLATION OF COMPUTER SYSTEMS	⓪	①	②	③	④	⑤	⑥	⑦
52. TRACK SYSTEM UTILIZATION RATES	⓪	①	②	③	④	⑤	⑥	⑦
53. ANALYZE NETWORK RELIABILITY/TRAFFIC FLOW	⓪	①	②	③	④	⑤	⑥	⑦
54. INSPECT COMPUTER FACILITIES	⓪	①	②	③	④	⑤	⑥	⑦
55. CONDUCT ON-SITE COMPUTER SYSTEM AUDITS	⓪	①	②	③	④	⑤	⑥	⑦
56. DEVELOP QUALITY CONTROL PLANS FOR COMPUTER SYSTEMS OR SERVICES	⓪	①	②	③	④	⑤	⑥	⑦
57. PERFORM QUALITY ASSURANCE OF COMPUTER SYSTEMS OR SERVICES	⓪	①	②	③	④	⑤	⑥	⑦
58. COORDINATE OFFICE AUTOMATION FUNCTIONS	⓪	①	②	③	④	⑤	⑥	⑦
59. DIRECT LOCAL AREA NETWORKS	⓪	①	②	③	④	⑤	⑥	⑦
60. ATTEND USERS GROUPS	⓪	①	②	③	④	⑤	⑥	⑦
61. REVIEW/UPDATE COMPUTER SITE ACCREDITATION PLAN	⓪	①	②	③	④	⑤	⑥	⑦
62. IDENTIFY NEED FOR ADDITIONAL MICROCOMPUTERS	⓪	①	②	③	④	⑤	⑥	⑦
63. DETERMINE MICROCOMPUTER VS. MAINFRAME USAGE FOR COMPUTER PROJECTS	⓪	①	②	③	④	⑤	⑥	⑦
64. EVALUATE PROPOSED SYSTEM MODIFICATIONS	⓪	①	②	③	④	⑤	⑥	⑦
65. DETERMINE/DEVELOP PROCEDURES FOR PURCHASING COMPUTERS AND COMPUTER EQUIPMENT	⓪	①	②	③	④	⑤	⑥	⑦
66. RECOMMEND COMPUTERS FOR PURCHASE	⓪	①	②	③	④	⑤	⑥	⑦
67. REVIEW REQUESTS FOR COMPUTERS	⓪	①	②	③	④	⑤	⑥	⑦
68. SELECT APPROVE/COMPUTERS FOR PURCHASE	⓪	①	②	③	④	⑤	⑥	⑦
69. RECOMMEND COMPUTER PERIPHERAL EQUIPMENT FOR PURCHASE	⓪	①	②	③	④	⑤	⑥	⑦
70. REVIEW REQUESTS FOR COMPUTER PERIPHERAL EQUIPMENT	⓪	①	②	③	④	⑤	⑥	⑦
71. SELECT/APPROVE COMPUTER PERIPHERAL EQUIPMENT FOR PURCHASE	⓪	①	②	③	④	⑤	⑥	⑦
72. RECOMMEND SOFTWARE PACKAGES FOR PURCHASE	⓪	①	②	③	④	⑤	⑥	⑦
73. REVIEW REQUESTS FOR SOFTWARE PACKAGES	⓪	①	②	③	④	⑤	⑥	⑦
74. SELECT/APPROVE SOFTWARE PACKAGES FOR PURCHASE	⓪	①	②	③	④	⑤	⑥	⑦
75. PRIORITIZE COMPUTER RESOURCES REQUESTS	⓪	①	②	③	④	⑤	⑥	⑦
76. EXPEND COMPUTER RESOURCES FUNDS	⓪	①	②	③	④	⑤	⑥	⑦
77. COORDINATE COMPUTER CONTRACT ADMINISTRATION	⓪	①	②	③	④	⑤	⑥	⑦
78. EVALUATE CONTRACTOR SYSTEM SPECIFICATIONS	⓪	①	②	③	④	⑤	⑥	⑦

MARKING INSTRUCTIONS

USE NO. 2 PENCIL ONLY

INCORRECT MARKS: ⊗ ✓ ◐ ①
CORRECT MARK: ○ ● ○ ○

- Make black marks that completely fill the circle.
- Erase cleanly and completely any changes you make.
- Do not make stray marks in this booklet.

- **Read and respond to each task statement.**
- **Assign a value between 1 and 7 for each task that you perform.**
- **If you do not perform the task, blacken the circle in the "NO INVOLVEMENT" column.**

	TIME SPENT COMPARED TO WHOLE JOB							
	0. NO INVOLVEMENT	1. VERY LITTLE	2. LITTLE	3. BELOW AVERAGE	4. AVERAGE	5. ABOVE AVERAGE	6. MUCH	7. VERY MUCH
79. PROVIDE TECHNICAL EXPERTISE FOR COMPUTER SYSTEM CONTRACT NEGOTIATIONS/SPECIFICATIONS	○	①	②	③	④	⑤	⑥	⑦
80. ADMINISTER CONTRACTS FOR COMPUTER EQUIPMENT	○	①	②	③	④	⑤	⑥	⑦
81. MONITOR COMPUTER-RELATED ENGINEERING CHANGE PROPOSALS (ECP) OR UPGRADES	○	①	②	③	④	⑤	⑥	⑦
82. CONDUCT COST/BENEFIT ANALYSES OF COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
83. PERFORM LIFE CYCLE COST ANALYSIS OF COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
84. DEVELOP STATEMENTS OF WORK (SOW) FOR COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
85. DEVELOP REQUESTS FOR PROPOSALS (RFP) FOR COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
86. PREPARE MISSION ELEMENTS NEEDS (MENS) STATEMENTS FOR COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
87. PREPARE SYSTEM DECISION PAPERS (SDP) FOR COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
88. PREPARE OPERATIONAL REQUIREMENT (OR) DOCUMENTS FOR COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
89. PREPARE DECISION COORDINATING PAPERS (DCP) FOR COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
90. REVIEW PROCUREMENT PACKAGES	○	①	②	③	④	⑤	⑥	⑦
91. MONITOR COMMERCIAL VENDOR SERVICES	○	①	②	③	④	⑤	⑥	⑦
92. DEVELOP IRM SECURITY PLANS/POLICIES	○	①	②	③	④	⑤	⑥	⑦
93. DEVELOP IRM SECURITY PROGRAMS/PROCEDURES	○	①	②	③	④	⑤	⑥	⑦
94. DIRECT/COORDINATE IRM SECURITY PROGRAMS	○	①	②	③	④	⑤	⑥	⑦
95. COORDINATE PHYSICAL SECURITY REQUIREMENTS FOR COMPUTER FACILITIES	○	①	②	③	④	⑤	⑥	⑦
96. INVESTIGATE COMPUTER-RELATED SECURITY VIOLATIONS	○	①	②	③	④	⑤	⑥	⑦
97. PREPARE/REVIEW IRM SECURITY INCIDENT REPORTS	○	①	②	③	④	⑤	⑥	⑦
98. CONTROL ACCESS TO COMPUTER SYSTEMS OR NETWORKS	○	①	②	③	④	⑤	⑥	⑦
99. ENSURE COMPLIANCE WITH COMMUNICATIONS SECURITY (COMSEC)/OPERATIONS SECURITY (OPSEC) REQUIREMENTS	○	①	②	③	④	⑤	⑥	⑦
100. CONDUCT THREAT/VULNERABILITY ASSESSMENTS OF COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
101. CONDUCT THREAT/VULNERABILITY ASSESSMENTS OF COMPUTER FACILITIES	○	①	②	③	④	⑤	⑥	⑦
102. DEVELOP PHYSICAL SECURITY PLANS/POLICIES FOR COMPUTER FACILITIES	○	①	②	③	④	⑤	⑥	⑦
103. DEVELOP PHYSICAL SECURITY PROGRAMS/PROCEDURES FOR COMPUTER FACILITIES	○	①	②	③	④	⑤	⑥	⑦
104. DIRECT/COORDINATE PHYSICAL SECURITY PROGRAM FOR COMPUTER FACILITIES	○	①	②	③	④	⑤	⑥	⑦
105. PLAN TEMPEST HAZARD SAFEGUARDS	○	①	②	③	④	⑤	⑥	⑦
106. CONDUCT TEMPEST EVAL TIONS/INSPECTIONS	○	①	②	③	④	⑤	⑥	⑦
107. COORDINATE COMPUTER EQUIPMENT MAINTENANCE/REPAIR	○	①	②	③	④	⑤	⑥	⑦
108. COORDINATE COMPUTER EQUIPMENT OVERHAUL/REPLACEMENT	○	①	②	③	④	⑤	⑥	⑦
109. PERFORM EQUIPMENT MAINTENANCE	○	①	②	③	④	⑤	⑥	⑦
110. COORDINATE/MONITOR MAINTENANCE CONTRACTS FOR COMPUTERS	○	①	②	③	④	⑤	⑥	⑦

MARKING INSTRUCTIONS

USE NO. 2 PENCIL ONLY

INCORRECT MARKS: ⊗ ✓ ◪ ①

CORRECT MARK: ○ ● ○ ○

- Make black marks that completely fill the circle.
- Erase cleanly and completely any changes you make.
- Do not make stray marks in this booklet.

- **Read and respond to each task statement.**
- **Assign a value between 1 and 7 for each task that you perform.**
- **If you do not perform the task, blacken the circle in the "NO INVOLVEMENT" column.**

	TIME SPENT COMPARED TO WHOLE JOB							
	0. NO INVOLVEMENT	1. VERY LITTLE	2. LITTLE	3. BELOW AVERAGE	4. AVERAGE	5. ABOVE AVERAGE	6. MUCH	7. VERY MUCH
111. DIRECT THE COMPUTER TRAINING PROGRAM WITHIN AN ACTIVITY, ORGANIZATION OR DEPARTMENT	○	①	②	③	④	⑤	⑥	⑦
112. DEVELOP COMPUTER TRAINING PLANS (OTHER THAN ON-THE-JOB TRAINING (OJT))	○	①	②	③	④	⑤	⑥	⑦
113. CONDUCT COMPUTER TRAINING (OTHER THAN OJT)	○	①	②	③	④	⑤	⑥	⑦
114. DEVELOP ON-THE-JOB COMPUTER TRAINING PLANS	○	①	②	③	④	⑤	⑥	⑦
115. CONDUCT ON-THE-JOB COMPUTER TRAINING	○	①	②	③	④	⑤	⑥	⑦
116. DEVELOP COMPUTER SECURITY TRAINING PLANS	○	①	②	③	④	⑤	⑥	⑦
117. CONDUCT COMPUTER SECURITY TRAINING	○	①	②	③	④	⑤	⑥	⑦
118. DEVELOP COMPUTER-AIDED INSTRUCTION (CAI)	○	①	②	③	④	⑤	⑥	⑦
119. IDENTIFY REQUIREMENTS FOR COMPUTER SYSTEM MODIFICATIONS OR NEW TECHNOLOGY	○	①	②	③	④	⑤	⑥	⑦
120. PLAN/COORDINATE COMPUTER SYSTEMS UPGRADES, REPLACEMENTS, INTEGRATION	○	①	②	③	④	⑤	⑥	⑦
121. DESIGN COMPUTER EQUIPMENT MODIFICATIONS	○	①	②	③	④	⑤	⑥	⑦
122. PERFORM OPERATING SYSTEM CONVERSIONS	○	①	②	③	④	⑤	⑥	⑦
123. PERFORM COMPUTER CONFIGURATION CHANGES	○	①	②	③	④	⑤	⑥	⑦
124. COORDINATE LONG-RANGE COMPUTER SYSTEMS PLANNING	○	①	②	③	④	⑤	⑥	⑦
125. PLAN EXPERT SYSTEMS OR ARTIFICIAL INTELLIGENCE DEVELOPMENT	○	①	②	③	④	⑤	⑥	⑦
126. DESIGN EXPERT SYSTEMS OR ARTIFICIAL INTELLIGENCE	○	①	②	③	④	⑤	⑥	⑦
127. BUILD/PROGRAM EXPERT SYSTEMS OR ARTIFICIAL INTELLIGENCE	○	①	②	③	④	⑤	⑥	⑦
128. EVALUATE EXPERT SYSTEMS OR ARTIFICIAL INTELLIGENCE	○	①	②	③	④	⑤	⑥	⑦
129. USE EXPERT SYSTEMS OR ARTIFICIAL INTELLIGENCE	○	①	②	③	④	⑤	⑥	⑦
130. PLAN CONSTRUCTION/MODIFICATION/REPAIR OF COMPUTER FACILITIES	○	①	②	③	④	⑤	⑥	⑦
131. CONDUCT ENGINEERING SITE SURVEYS	○	①	②	③	④	⑤	⑥	⑦
132. REVIEW COMPUTER FACILITY DESIGNS	○	①	②	③	④	⑤	⑥	⑦
133. APPROVE/DISAPPROVE COMPUTER FACILITY DESIGNS	○	①	②	③	④	⑤	⑥	⑦
134. COORDINATE COMPUTER FACILITY CONSTRUCTION PROJECTS WITH ENGINEERS/CONTRACTORS	○	①	②	③	④	⑤	⑥	⑦
135. PROVIDE ON-SITE ENGINEERING TECHNICAL ASSISTANCE FOR COMPUTER FACILITY CONSTRUCTION	○	①	②	③	④	⑤	⑥	⑦
136. WRITE FUNCTIONAL DESCRIPTIONS OR REQUIREMENTS DOCUMENTS FOR COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
137. REVIEW FUNCTIONAL DESCRIPTIONS OR REQUIREMENTS DOCUMENTS FOR COMPUTER SYSTEMS	○	①	②	③	④	⑤	⑥	⑦
138. DETERMINE OPERATING SYSTEM REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	○	①	②	③	④	⑤	⑥	⑦
139. DETERMINE DATABASE MANAGEMENT SYSTEM REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	○	①	②	③	④	⑤	⑥	⑦
140. DETERMINE DATA COMMUNICATIONS REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	○	①	②	③	④	⑤	⑥	⑦
141. DETERMINE COMPUTER GRAPHICS REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	○	①	②	③	④	⑤	⑥	⑦
142. DETERMINE WORD PROCESSING REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	○	①	②	③	④	⑤	⑥	⑦

MARKING INSTRUCTIONS

USE NO. 2 PENCIL ONLY

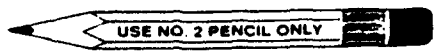
INCORRECT MARKS: ⊗ ✓ ◪ ⓘ
CORRECT MARK: ○ ● ○ ○

- Make black marks that completely fill the circle.
- Erase cleanly and completely any changes you make.
- Do not make stray marks in this booklet.

- **Read and respond to each task statement.**
- **Assign a value between 1 and 7 for each task that you perform.**
- **If you do not perform the task, blacken the circle in the "NO INVOLVEMENT" column.**

	TIME SPENT COMPARED TO WHOLE JOB							
	0. NO INVOLVEMENT	1. VERY LITTLE	2. LITTLE	3. BELOW AVERAGE	4. AVERAGE	5. ABOVE AVERAGE	6. MUCH	7. VERY MUCH
143. DETERMINE SPREADSHEET REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	⓪	①	②	③	④	⑤	⑥	⑦
144. DETERMINE STATISTICAL REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	⓪	①	②	③	④	⑤	⑥	⑦
145. DETERMINE COMPUTER PROGRAMMING REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	⓪	①	②	③	④	⑤	⑥	⑦
146. DETERMINE SYSTEM INPUT/OUTPUT REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	⓪	①	②	③	④	⑤	⑥	⑦
147. DETERMINE INTEROPERABILITY REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	⓪	①	②	③	④	⑤	⑥	⑦
148. DETERMINE SOFTWARE/HARDWARE INTERFACE REQUIREMENTS FOR AN ACTIVITY, ORGANIZATION OR DEPARTMENT	⓪	①	②	③	④	⑤	⑥	⑦
149. EVALUATE/SELECT OPERATING SYSTEMS TO MEET REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
150. EVALUATE/SELECT DATABASE MANAGEMENT SYSTEMS TO MEET REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
151. EVALUATE/SELECT DATA COMMUNICATIONS PROGRAMS TO MEET REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
152. EVALUATE/SELECT COMPUTER GRAPHICS PACKAGES TO MEET REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
153. EVALUATE/SELECT WORD PROCESSING PACKAGES TO MEET REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
154. EVALUATE/SELECT SPREADSHEET PACKAGES TO MEET REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
155. EVALUATE/SELECT STATISTICAL PACKAGES TO MEET REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
156. EVALUATE/SELECT COMPUTER LANGUAGE(S) TO MEET REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
157. DESIGN COMPUTER SYSTEM TO MEET INPUT/OUTPUT, INTEROPERABILITY AND SOFTWARE/HARDWARE INTERFACE REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
158. DETERMINE COMPUTER SECURITY REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
159. DETERMINE COMPUTER INSTALLATION REQUIREMENTS	⓪	①	②	③	④	⑤	⑥	⑦
160. READ/ANALYZE TECHNICAL PUBLICATIONS ABOUT COMPUTER SYSTEMS	⓪	①	②	③	④	⑤	⑥	⑦
161. DESIGN HARDWARE SYSTEMS	⓪	①	②	③	④	⑤	⑥	⑦
162. DESIGN OPERATING SYSTEMS	⓪	①	②	③	④	⑤	⑥	⑦
163. DETERMINE PHYSICAL LAYOUT OF COMPUTER CENTER	⓪	①	②	③	④	⑤	⑥	⑦
164. DESIGN COMPUTER NETWORKS (E.G., LANS, MAINFRAME COMMUNICATION LINKS, ETC.)	⓪	①	②	③	④	⑤	⑥	⑦
165. DEVELOP COMPUTER SYSTEM IMPLEMENTATION PLANS	⓪	①	②	③	④	⑤	⑥	⑦
166. WRITE COMPUTER PROGRAM DOCUMENTATION	⓪	①	②	③	④	⑤	⑥	⑦
167. WRITE COMPUTER SYSTEMS MAINTENANCE MANUALS	⓪	①	②	③	④	⑤	⑥	⑦
168. WRITE CONFIGURATION MANAGEMENT PLANS	⓪	①	②	③	④	⑤	⑥	⑦
169. DETERMINE COMPATIBILITY OF COMPUTER SYSTEMS FOR IMPLEMENTATION	⓪	①	②	③	④	⑤	⑥	⑦
170. DEVELOP SYSTEM LOGIC	⓪	①	②	③	④	⑤	⑥	⑦
171. DEVELOP/EVALUATE COMPUTER GRAPHICS SOFTWARE SYSTEMS	⓪	①	②	③	④	⑤	⑥	⑦
172. DEVELOP/EVALUATE DATA COMMUNICATIONS PROGRAMS	⓪	①	②	③	④	⑤	⑥	⑦
173. EVALUATE COMPUTER-AIDED SOFTWARE ENGINEERING (CASE) TOOLS	⓪	①	②	③	④	⑤	⑥	⑦
174. DEVELOP SYSTEM INTEGRATION/OFFICE AUTOMATION PLANS	⓪	①	②	③	④	⑤	⑥	⑦

MARKING INSTRUCTIONS



INCORRECT MARKS: ⊗ ✓ ◪ ⓘ
CORRECT MARK: ○ ● ○ ○

- Make black marks that completely fill the circle.
- Erase cleanly and completely any changes you make.
- *Do not make stray marks in this booklet.*

- **Read and respond to each task statement.**
- **Assign a value between 1 and 7 for each task that you perform.**
- **If you do not perform the task, blacken the circle in the "NO INVOLVEMENT" column.**

	TIME SPENT COMPARED TO WHOLE JOB							
	0 NO INVOLVEMENT	1 VERY LITTLE	2 LITTLE	3 BELOW AVERAGE	4 AVERAGE	5 ABOVE AVERAGE	6 MUCH	7 VERY MUCH
175. DEVELOP COMPUTER SYSTEM TESTS/SIMULATIONS	⓪	①	②	③	④	⑤	⑥	⑦
176. CONDUCT COMPUTER SYSTEM DEVELOPMENTAL TESTS	⓪	①	②	③	④	⑤	⑥	⑦
177. CONDUCT COMPUTER SYSTEM OPERATIONAL TESTS	⓪	①	②	③	④	⑤	⑥	⑦
178. ANALYZE/EVALUATE COMPUTER SYSTEM TEST DATA	⓪	①	②	③	④	⑤	⑥	⑦

PLEASE TURN

TO PAGE 39

TO ENTER

ADDITIONAL ITEMS

OR COMMENTS

This page cannot be optically scanned. To preserve comment confidentiality, it will be separated from the booklet as the booklet is processed by the optical scanner.

Your recommendations and comments on the survey are welcomed. Please, DO NOT ENTER CLASSIFIED INFORMATION ON THIS PAGE.

In order to relate comments to job classifications, please provide the following demographic information.

Grade: _____ Job Title: _____

Designator: _____ Type of Command (ship, squadron, etc.): _____

_____

RECOMMENDED DATA

(If you have additional items from other sections to include, please write them below, next to their corresponding number.)

15 _____

16 _____

17 _____

48 _____

49 _____

COMMENTS

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

If needed, DO NOT staple additional sheets to this booklet.

THANK YOU FOR COMPLETING THIS SURVEY.

Please give the booklet to your command representative coordinating the survey administration.

Appendix B: Findings on 35 Officer Communities
Information for Reading the Listings

1. The 35 Navy officer communities are listed with the designators included in each community. The groupings are based on The Manual of Navy Officer Manpower and Personnel Classifications, Volume I, Major Code Structures (NAVPERS 15839G) March 1990.

2. Each community listing includes the following groups of findings:

Population

Mail Sample

Return Sample

Response Rate

Sample of officers with more than 3 months in their jobs

Number of Computer Users

- Percentage of computer users for each type of hardware (Percentages do not total to 100 due to the number of officers who either did not respond or responded they did not have access to the type of computer.)

- Average responses to "how often used" for each type of hardware (based on summing the responses to the scale from (2) Almost Never to (7) Always for each type of computer hardware and dividing by the number of respondents)

- Percentage of officers directly or indirectly involved with computers (Percentages will not always add to 100 due to differences in the number of computer users for each designator community.)

- Percentage of officers who used each type of software

- Top software brand name

- Functional areas where computers were used

NAVY OFFICER COMMUNITIES

GENERAL UNRESTRICTED LINE	DESIGNATORS
General Unrestricted Line Officer	110X
Surface Warfare Officer	111X, 116X
Submarine Warfare Officer	112X, 117X
Special Warfare Officer (SPECWAR)	113X, 118X
Special Operations Officer (SPECOPS)	114X, 119X
Materiel Professional Officer (MP)	12XX and all designators ending in "4"
Aviation Warfare Officer - General	130X
Aviation Warfare Officer - Pilot	131X, 139X
Aviation Warfare Officer - Naval Flight Officer	132X, 137X
RESTRICTED LINE	
Engineering Duty Officer	141X, 144X, 146X
Aerospace Engineering Duty Officer	150X, 151X
Aerospace Maintenance Duty Officer	152X
Aviation Duty Officer	154X,
Special Duty Officer - Cryptology	161X
Special Duty Officer - Intelligence	163X
Special Duty Officer - Public Affairs Officer	165X
Special Duty Officer - Oceanography	180X
STAFF CORPS	
Medical Corps Officer	210X
Dental Corps Officer	220X
Medical Service Corps Officer	230X
Judge Advocate General Corps Officer	250X
Nurse Corps Officer	290X
Supply Corps Officer	310X
Chaplain Corps Officer	410X
Civil Engineering Corps Officer	510X
LIMITED DUTY OFFICER/WARRANT OFFICER	
Limited Duty Officer - Surface	61XX
Limited Duty Officer - Submarine	62XX
Limited Duty Officer - Aviation	63XX
Limited Duty Officer - General	64XX
Limited Duty Officer - Staff Corps	65XX
Chief Warrant Officer - Surface	71XX
Chief Warrant Officer - Submarine	72XX
Chief Warrant Officer - Aviation	73XX
Chief Warrant Officer - General	74XX
Chief Warrant Officer - Staff	75XX

General Unrestricted Line (110X)

Population: 2695 Mailed: 401 Sample: 264 Response rate: 65.8%
Sample of officers with more than 3 months in their jobs: 240

****

COMPUTER USERS

Of the 240 officers with more than 3 months in their jobs, 86.6 percent (207) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	84.4%	Frequently (5.2)	8.4%
Technical work-station	19.7%	Routinely (3.9)	14.2%
Mainframes	19.4%	Routinely to frequently (4.5)	16.0%
Minicomputer	16.5%	Occasionally to routinely (3.6)	15.3%
Integrated real-time systems	9.4%	Routinely to frequently (4.4)	9.8%
Tactical systems	2.1%	Occasionally to routinely (3.6)	10.1%
Supercomputers	1.3%	Frequently (5.0)	7.7%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
21.4%	65.3%	9.6%	41%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 207 computer users:

Type software	% of 207 using	Top brand used
Word processing	92.8%	Wordperfect
Databases	50.2%	DBASE
Graphics	49.3%	Harvard graphics
Spreadsheets	43.0%	Lotus 123
Utilities	27.1%	Norton Utilities
Communications	20.8%	PROCOMM
Interfaces	15.5%	Windows
Statistics	1.4%	SPSSx

***

FUNCTIONAL AREAS

The 207 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	83.1%	13.5%	18.4%	9.7%

Surface Warfare (111X, 116X)

Population: 10226 Mailed: 409 Sample: 279 Response rate: 68.2%
Sample of officers with more than 3 months in their jobs: 252

****

COMPUTER USERS

Of the 252 officers with more than 3 months in their jobs, 96.0 percent (242) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	92.9%	Frequently (5.1)	4.8%
Integrated real-time systems	45.2%	Routinely to frequently (4.4)	8.0%
Tactical systems	41.7%	Routinely to frequently (4.4)	8.3%
Minicomputer	23.0%	Routinely (4.1)	12.7%
Technical work-station	20.5%	Occasionally to routinely (3.7)	14.9%
Mainframes	17.1%	Routinely (4.1)	11.5%
Supercomputers	2.0%	Occasionally (3.0)	7.2%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
15.1%	81.0%	4.0%	28%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 242 computer users:

Type software	% of 242 using	Top brand used
Word processing	90.9%	Wordperfect
Graphics	51.7%	Desktop Publishing
Databases	49.2%	DBASE
Utilities	42.1%	PC Tools
Spreadsheets	33.9%	Lotus 123
Interfaces	19.4%	Windows
COmmunications	10.3%	PROCOMM
Statistics	2.9%	SAS

***

FUNCTIONAL AREAS

The 242 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	81.4%	48.8%	44.6%	6.6%

Submarine Warfare (112X, 117X)

Population: 3950 Mailed: 390 Sample: 254 Response rate: 65.1%
Sample of officers with more than 3 months in their jobs: 221

****

COMPUTER USERS

Of the 221 officers with more than 3 months in their jobs, 96.4 percent (212) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	90.5%	Routinely to frequently (4.4)	7.3%
Tactical systems	64.8%	Routinely to frequently (4.6)	3.2%
Technical workstation	24.7%	Occasionally to routinely (3.4)	11.9%
Minicomputer	21.9%	Occasionally to routinely (3.5)	10.5%
Mainframes	20.5%	Routinely (4.1)	10.0%
Integrated real-time systems	19.8%	Occasionally to routinely (3.6)	10.6%
Supercomputers	.9%	Almost never to occasionally (2.5)	5.0%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
15.0%	81.4%	2.3%	21%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 212 computer users:

Type software	% of 212 using	Top brand used
Word processing	91.5%	Wordperfect
Graphics	50.5%	Harvard Graphics
Databases	47.2%	DBASE
Utilities	39.2%	Norton Utilities
Spreadsheets	38.7%	Lotus 123
Communications	12.3%	PROCOMM
Interfaces	10.8%	Windows
Statistics	.5%	SPSSx

***

FUNCTIONAL AREAS

The 212 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	70.8%	65.1%	64.2%	4.7%

Special Warfare Officers (113X, 118X)

Population: 405 Mailed: 253 Sample: 114 Response rate: 45.1%
Sample of officers with more than 3 months in their jobs: 96

****

COMPUTER USERS

Of the 96 officers with more than 3 months in their jobs, 82.3 percent (79) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	82.3%	Frequently (4.8)	12.5%
Technical work-stations	20.2%	Occasionally (3.2)	22.3%
Minicomputers	15.8%	Occasionally to routinely (3.7)	16.8%
Integrated real-time systems	9.5%	Occasionally to routinely (3.3)	11.6%
Mainframes	7.4%	Routinely to frequently (4.6)	11.6%
Tactical systems	6.4%	Occasionally to routinely (3.5)	13.8%
Supercomputers	2.1%	Almost never to occasionally (2.5)	12.6%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
25.0%	57.3%	9.4%	25%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 79 computer users:

Type software	% of 79 using	Top brand used
Word processing	94.9%	Wordperfect
Graphics	60.8%	Harvard Graphics
Databases	34.2%	DBASE
Spreadsheets	30.4%	Lotus 123
Utilities	27.8%	Norton Utilities
Interfaces	13.9%	Windows
Communications	7.6%	PROCOMM
Statistics	1.3%	SAS

***

FUNCTIONAL AREAS

The 79 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	70.9%	74.7%	39.2%	11.4%

Special Operations Officers (114X, 119X)

Population: 399 Mailed: 260 Sample: 168 Response rate: 64.6%
Sample of officers with more than 3 months in their jobs: 141

****

COMPUTER USERS

Of the 141 officers with more than 3 months in their jobs, 92.8 percent (129) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	88.6%	Frequently (5.0)	6.4%
Minicomputers	19.0%	Routinely (4.1)	13.9%
Technical work-stations	16.3%	Occasionally to routinely (3.6)	15.6%
Tactical systems	13.9%	Occasionally to routinely (3.5)	11.7%
Mainframes	7.3%	Occasionally to routinely (3.5)	13.1%
Integrated real-time systems	2.9%	Occasionally (2.8)	14.6%
Supercomputers	1.5%	Almost never to occasionally (2.5)	11.7%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
10.1%	82.7%	6.4%	24%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 129 computer users:

Type software	% of 129 using	Top brand used
Word processing	96.1%	Wordperfect
Graphics	57.4%	Desktop Publishing
Databases	48.1%	DBASE
Spreadsheets	38.0%	Lotus 123
Utilities	26.4%	Norton Utilities
Communications	18.6%	PROCOMM
Interfaces	17.1%	Windows
Statistics	0.8%	SPSSx/SAS

***

FUNCTIONAL AREAS

The 129 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	83.7%	38.8%	20.9%	12.4%

Materiel Professionals (12XX, XXX4)

Population: 885 Mailed: 317 Sample: 148 Response rate: 46.7%
Sample of officers with more than 3 months in their jobs: 129

****

COMPUTER USERS

Of the 129 officers with more than 3 months in their jobs, 87.5 percent (112) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	84.5%	Frequently (4.9)	9.3%
Minicomputers	33.1%	Routinely (3.8)	22.8%
Technical work-stations	25.0%	Occasionally to routinely (3.6)	26.6%
Mainframes	24.0%	Routinely (3.8)	26.4%
Tactical systems	13.2%	Routinely to frequently (4.3)	11.6%
Integrated real-time systems	10.2%	Occasionally to routinely (3.6)	17.2%
Supercomputers	1.6%	Almost never to occasionally (2.5)	17.1%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
3.1%	84.4%	10.1%	22.4%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 112 computer users:

Type software	% of 112 using	Top brand used
Word processing	87.5%	Wordperfect
Graphics	65.2%	Harvard graphics
Spreadsheets	63.4%	Lotus 123
Databases	41.1%	DBASE
Utilities	25.9%	Norton Utilities
Communications	21.4%	PROCOMM
Interfaces	21.4%	Windows
Statistics	0.9%	SPSSx/SAS

***

FUNCTIONAL AREAS

The 112 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	88.4%	32.1%	15.2%	21.4%

General Aeronautical Officers (130X)

Population: 189 Mailed: 175 Sample: 88 Response rate: 50.3%
Sample of officers with more than 3 months in their jobs: 81

****

COMPUTER USERS

Of the 81 officers with more than 3 months in their jobs, 91.3 percent (73) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	86.4%	Almost always to frequently (5.3)	7.4%
Integrated real-time systems	23.5%	Routinely (3.9)	8.6%
Minicomputers	21.0%	Routinely to frequently (4.5)	8.6%
Mainframes	20.0%	Routinely to frequently (4.3)	5.0%
Technical work-stations	19.0%	Occasionally to routinely (3.7)	10.1%
Tactical systems	11.2%	Routinely (3.8)	6.3%
Supercomputers	2.5%	Occasionally (3.0)	5.0%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
20.0%	71.2%	6.3%	36%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 73 computer users:

Type software	% of 73 using	Top brand used
Word processing	94.5%	Wordperfect
Databases	63.0%	DBASE
Graphics	56.2%	Harvard graphics
Spreadsheets	47.9%	Lotus 123
Utilities	43.8%	PC Tools
Communications	27.4%	PROCOMM
Interfaces	26.0%	Windows
Statistics	6.8%	Other statistical packages

***

FUNCTIONAL AREAS

The 73 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	86.3%	24.7%	24.7%	11.0%

Pilots (131X, 132X)

Population: 8500 Mailed: 425 Sample: 283 Response rate: 66.6%
Sample of officers with more than 3 months in their jobs: 258

****

COMPUTER USERS

Of the 258 officers with more than 3 months in their jobs, 87.6 percent (226) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	78.7%	Routinely to frequently (4.6)	13.2%
Tactical systems	40.6%	Frequently (5.2)	7.0%
Minicomputers	22.4%	Occasionally to routinely (3.5)	13.0%
Technical work-stations	16.4%	Occasionally to routinely (3.3)	18.0%
Mainframes	15.7%	Occasionally to routinely (3.3)	13.3%
Integrated real-time systems	11.1%	Occasionally (3.1)	8.3%
Supercomputers	2.0%	Almost never (2.2)	10.5%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
25.6%	62.0%	5.8%	23%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 226 computer users:

Type software	% of 226 using	Top brand used
Word processing	88.1%	Wordperfect
Graphics	55.3%	Desktop Publishing
Databases	41.2%	DBASE
Spreadsheets	36.7%	Lotus 123
Utilities	27.0%	PC Tools
Interfaces	12.8%	Windows
Communications	11.9%	Enable Communications
Statistics	1.3%	SAS

***

FUNCTIONAL AREAS

The 226 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	65.0%	60.6%	51.8%	9.7%

Naval Flight Officers (132X, 137X)

Population: 5040 Mailed: 435 Sample: 288 Response rate: 66.2%
Sample of officers with more than 3 months in their jobs: 267

****

COMPUTER USERS

Of the 267 officers with more than 3 months in their jobs, 92.1 percent (246) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	87.3%	Frequently (4.9)	6.4%
Tactical systems	50.0%	Frequently to almost always (5.5)	6.4%
Technical work-stations	28.4%	Routinely (3.9)	16.3%
Minicomputers	25.6%	Occasionally to routinely (3.6)	13.9%
Mainframes	20.4%	Routinely (3.9)	13.6%
Integrated real-time systems	14.4%	Routinely (4.0)	13.6%
Supercomputers	1.9%	Occasionally (2.8)	13.2%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
27.3%	64.8%	4.1%	33%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 246 computer users:

Type software	% of 246 using	Top brand used
Word processing	91.1%	Wordperfect
Graphics	60.2%	Harvard Graphics
Databases	45.5%	DBASE
Spreadsheets	39.8%	Lotus 123
Utilities	36.2%	PC Tools
Interfaces	22.8%	Windows
Communications	14.2%	PROCOMM
Statistics	3.7%	SPSSx

***

FUNCTIONAL AREAS

The 246 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	65.9%	70.3%	65.4%	11.8%

Engineering Duty Officers (141X, 144X, 146X)

Population: 883 Mailed: 328 Sample: 213 Response rate: 64.9%
Sample of officers with more than 3 months in their jobs: 192

****

COMPUTER USERS

Of the 192 officers with more than 3 months in their jobs, 93.8 percent (180) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	91.1%	Frequently to almost always (5.3)	3.6%
Mainframes	31.6%	Routinely (3.9)	18.9%
Minicomputers	26.7%	Occasionally to routinely (3.6)	22.0%
Technical work-stations	24.3%	Occasionally (3.2)	23.3%
Integrated real-time systems	12.6%	Routinely (3.9)	12.6%
Tactical systems	12.6%	Routinely (4.2)	11.5%
Supercomputers	3.2%	Occasionally (2.8)	12.8%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
26.0%	67.7%	3.7%	29%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 180 computer users:

Type software	% of 180 using	Top brand used
Word processing	94.4%	Wordperfect
Spreadsheets	66.7%	Lotus 123
Graphics	63.3%	Harvard graphics
Databases	58.3%	DBASE
Utilities	41.1%	PC Tools
Communications	36.1%	PROCOMM
Interfaces	28.9%	Windows
Statistics	2.2%	Other statistical packages

***

FUNCTIONAL AREAS

The 180 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	87.2%	25.6%	16.7%	25.5%

Aerospace Engineering Duty Officers (150X, 151X)

Population: 270 Mailed: 208 Sample: 107 Response rate: 51.4%
Sample of officers with more than 3 months in their jobs: 95

****

COMPUTER USERS

Of the 95 officers with more than 3 months in their jobs, 97.9 percent (93) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	97.9%	Frequently to almost always (5.4)	1.1%
Technical work-stations	36.2%	Occasionally to routinely (3.3)	19.1%
Tactical systems	34.7%	Routinely to frequently (4.4)	6.3%
Minicomputers	31.6%	Occasionally (2.9)	26.3%
Mainframes	27.4%	Occasionally to routinely (3.3)	20.0%
Integrated real-time systems	8.4%	Occasionally to routinely (3.6)	7.4%
Supercomputers	4.3%	Almost never to occasionally (2.5)	11.7%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
21.1%	76.8%	2.2%	31%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 93 computer users:

Type software	% of 93 using	Top brand used
Word processing	95.7%	Wordperfect
Graphics	77.4%	Harvard graphics
Spreadsheets	63.4%	Lotus 123
Databases	44.1%	DBASE
Utilities	31.2%	Norton Utilities
Communications	29.0%	PROCOMM
Interfaces	22.6%	Windows
Statistics	3.2%	Other statistical packages

***

FUNCTIONAL AREAS

The 93 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	79.6%	43.0%	26.9%	31.2%

Aerospace Engineering Duty Officer (Aviation Maintenance)(152X)

Population: 585 Mailed: 291 Sample: 204 Response rate: 70.1%
Sample of officers with more than 3 months in their jobs: 181

****

COMPUTER USERS

Of the 181 officers with more than 3 months in their jobs, 92.8 percent (167) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	89.4%	Routinely to frequently (4.7)	6.7%
Integrated real-time systems	30.2%	Routinely to frequently (4.5)	12.3%
Minicomputer	25.4%	Routinely (3.8)	15.3%
Technical work-station	18.6%	Routinely to frequently (4.3)	16.9%
Mainframes	18.4%	Routinely (3.8)	15.6%
Tactical systems	5.1%	Routinely to frequently (4.3)	9.6%
Supercomputers	1.7%	Occasionally (3.0)	9.1%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
7.8%	85.0%	6.1%	32%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 167 computer users:

Type software	% of 167 using	Top brand used
Word processing	94.0%	Wordperfect
Graphics	64.1%	Harvard Graphics
Spreadsheets	62.9%	Lotus 123
Databases	62.3%	DBASE
Utilities	43.7%	PC Tools
Interfaces	19.8%	Windows
Communications	19.2%	PROCOMM
Statistics	3.0%	SAS

***

FUNCTIONAL AREAS

The 167 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	89.8%	7.8%	11.4%	3.0%

Aviation Duty Officer (154X)

Population: 184 Mailed: 171 Sample: 73 Response rate: 42.7%
Sample of officers with more than 3 months in their jobs: 66

****

COMPUTER USERS

Of the 66 officers with more than 3 months in their jobs, 79.7 percent (51) are using computers. The following types of computers are being used:

	Use	How often used	Available, don't use
Microcomputer	74.2%	Routinely (4.2)	15.2%
Tactical systems	21.9%	Routinely to frequently (4.6)	4.7%
Minicomputer	10.9%	Occasionally (3.1)	12.5%
Mainframes	4.6%	Occasionally to routinely (3.7)	12.3%
Integrated real-time systems	3.1%	Routinely (4.0)	9.2%
Technical workstations	3.1%	Occasionally to routinely (3.5)	16.9%
Supercomputers	0.0%		7.7%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
15.7%	64.1%	15.7%	17%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 51 computer users:

Type software	% of 51 using	Top brand used
Word processing	88.2%	Wordperfect
Databases	47.1%	DBASE
Graphics	41.2%	Desktop Publishing Packages
Spreadsheets	37.3%	Lotus 123
Utilities	33.3%	PC Tools
Communications	21.6%	PROCOMM
Interfaces	5.9%	Windows
Statistics	0.0%	

***

FUNCTIONAL AREAS

The 51 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	68.6%	11.8%	11.8%	11.8%

Special Duty Officers (Cryptology)(161X)

Population: 706 Mailed: 306 Sample: 172 Response rate: 56.2%
Sample of officers with more than 3 months in their jobs: 143

****

COMPUTER USERS

Of the 143 officers with more than 3 months in their jobs, 95.1 percent (136) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	93.7%	Frequently to almost always (5.5)	3.5%
Technical workstations	40.8%	Routinely to frequently (4.3)	18.3%
Minicomputer	37.1%	Routinely to frequently (4.4)	18.9%
Mainframes	32.2%	Frequently (4.9)	21.0%
Integrated real-time systems	21.8%	Routinely (3.8)	10.6%
Tactical systems stations	17.7%	Occasionally to routinely (3.7)	9.9%
Supercomputers	2.9%	Occasionally (3.0)	13.6%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
11.2%	83.2%	4.2%	48%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 136 computer users:

Type software	% of 136 using	Top brand used
Word processing	96.3%	Office Writer
Databases	55.1%	DBASE
Graphics	44.1%	Desktop Publishing Packages
Utilities	40.4%	Norton Utilities
Spreadsheets	30.9%	Lotus 123
Communications	15.4%	Other Communications Packages
Interfaces	13.2%	Windows
Statistics	1.5%	SAS

***

FUNCTIONAL AREAS

The 136 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	78.7%	47.1%	79.4%	12.5%

Special Duty Officers (Intelligence) (163X)

Population: 1174 Mailed: 339 Sample: 211 Response rate: 62.2%
Sample of officers with more than 3 months in their jobs: 185

****

COMPUTER USERS

Of the 185 officers with more than 3 months in their jobs, 97.3 percent (180) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	93.0%	Frequently to almost always (5.3)	3.2%
Technical work-stations	53.0%	Routinely to frequently (4.6)	8.3%
Integrated real-time systems	43.7%	Routinely to frequently (4.6)	5.5%
Minicomputer	33.9%	Routinely to frequently (4.4)	10.4%
Mainframes	28.3%	Routinely to frequently (4.5)	13.0%
Tactical systems	14.2%	Routinely (3.9)	6.0%
Supercomputers	1.6%	Routinely to frequently (4.7)	8.2%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
25.9%	71.4%	2.7%	42%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 180 computer users:

Type software	% of 180 using	Top brand used
Word processing	95.0%	Wordperfect
Graphics	65.0%	Harvard Graphics
Databases	45.0%	DBASE
Utilities	27.8%	Norton Utilities
Spreadsheets	23.3%	Lotus 123
Interfaces	18.9%	Windows
Communications	9.4%	PROCOMM
Statistics	.6%	SPSSx

***

FUNCTIONAL AREAS

The 180 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	65.0%	57.2%	88.3%	8.3%

Special Duty Officers (Public Affairs) (165X)

Population: 195 Mailed: 176 Sample: 92 Response rate: 52.2%
Sample of officers with more than 3 months in their jobs: 83

****

COMPUTER USERS

Of the 83 officers with more than 3 months in their jobs, 94.0 percent (78) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	88.0%	Almost always (5.9)	6.0%
Technical work-stations	32.9%	Routinely (4.2)	19.5%
Minicomputer	13.4%	Routinely (3.9)	14.6%
Mainframes	9.8%	Routinely (3.9)	13.4%
Integrated real-time systems	7.4%	Occasionally (2.8)	13.6%
Tactical systems	1.2%	Occasionally (3.0)	12.2%
Supercomputers	1.2%	Occasionally (3.0)	12.2%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
10.8%	83.1%	4.8%	33%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 78 computer users:

Type software	% of 78 using	Top brand used
Word processing	100.0%	Wordperfect
Graphics	51.3%	Desktop Publishing Packages
Databases	30.8%	DBASE
Interfaces	26.9%	Windows
Communications	25.6%	PROCOMM
Utilities	21.8%	PC Tools
Spreadsheets	19.2%	Other Spreadsheet Packages
Statistics	1.3%	SPSSx

***

FUNCTIONAL AREAS

The 78 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	85.9%	9.0%	10.3%	10.3%

Special Duty Officers (Oceanography) (180X)

Population: 390 Mailed: 271 Sample: 201 Response rate: 74.2%
Sample of officers with more than 3 months in their jobs: 180

****

COMPUTER USERS

Of the 180 officers with more than 3 months in their jobs, 97.8 percent (175) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	97.2%	Frequently to almost always (5.5)	2.2%
Technical work-stations	48.9%	Routinely to frequently (4.4)	21.0%
Minicomputer	39.0%	Routinely (4.1)	22.0%
Mainframes	32.8%	Routinely (4.1)	17.5%
Integrated real-time systems	22.6%	Routinely to frequently (4.4)	7.9%
Tactical systems	21.5%	Routinely (4.1)	6.2%
Supercomputers	14.8%	Routinely (4.1)	14.8%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
20.1%	77.7%	1.7%	51%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 175 computer users:

Type software	% of 175 using	Top brand used
Word processing	96.6%	Wordstar
Graphics	61.7%	Harvard Graphics
Databases	50.3%	DBASE
Communications	45.7%	PROCOMM
Utilities	36.6%	Norton Utilities
Spreadsheets	35.4%	Lotus 123
Interfaces	25.1%	Windows
Statistics	.6%	Other Statistical Packages

***

FUNCTIONAL AREAS

The 175 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	70.9%	53.1%	84.6%	24.0%

Medical Corps Officers (210X)

Population: 3686 Mailed: 385 Sample: 121 Response rate: 31.4%
Sample of officers with more than 3 months in their jobs: 108

****

COMPUTER USERS

Of the 108 officers with more than 3 months in their jobs, 69.5 percent (73) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	60.4%	Routinely to frequently (4.3)	15.1%
Mainframes	11.9%	Routinely (4.0)	14.9%
Tactical systems	10.8%	Occasionally to routinely (3.6)	6.9%
Technical work-stations	9.8%	Occasionally to routinely (3.7)	17.6%
Minicomputer	8.7%	Routinely (4.1)	19.4%
Integrated real-time systems	7.8%	Occasionally to routinely (3.5)	7.8%
Supercomputers	1.0%	Routinely (4.0)	8.7%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
18.1%	51.4%	14.3%	16%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 73 computer users:

Type software	% of 73 using	Top brand used
Word processing	79.5%	Wordperfect
Graphics	52.1%	Desktop Publishing Packages
Databases	46.6%	DBASE
Utilities	31.5%	PC Tools
Spreadsheets	27.4%	Other Spreadsheet Packages
Communications	19.2%	PROCOMM
Interfaces	16.4%	Windows
Statistics	9.6%	SAS

***

FUNCTIONAL AREAS

The 73 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	83.6%	5.5%	1.4%	19.2%

Dental Corps Officers (220X)

Population: 1604 Mailed: 355 Sample: 241 Response rate: 67.9%
Sample of officers with more than 3 months in their jobs: 225

****

COMPUTER USERS

Of the 225 officers with more than 3 months in their jobs, 71.1 percent (160) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	68.3%	Routinely (4.2)	12.9%
Minicomputer	8.5%	Routinely (3.8)	12.1%
Technical work-stations	6.3%	Occasionally to routinely (3.4)	12.6%
Integrated real-systems	4.9%	Occasionally (3.1)	8.5%
Tactical systems	4.0%	Routinely to frequently (4.4)	10.3%
Mainframes	3.1%	Routinely to frequently (4.3)	11.7%
Supercomputers	.9%	Almost never (2.0)	7.6%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
25.3%	45.8%	8.5%	13%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 160 computer users:

Type software	% of 160 using	Top brand used
Word processing	92.5%	Wordperfect
Databases	60.0%	DBASE
Graphics	48.7%	Desktop Publishing Packages
Spreadsheets	30.0%	Enable Spreadsheet
Utilities	25.6%	PC Tools
Communications	15.0%	PROCOMM
Interfaces	15.0%	Windows
Statistics	1.9%	Other Statistical Packages

***

FUNCTIONAL AREAS

The 160 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	86.9%	.6%	1.9%	6.2%

Medical Service Corps Officers (230X)

Population: 2582 Mailed: 385 Sample: 263 Response rate: 68.3%
Sample of officers with more than 3 months in their jobs: 242

****

COMPUTER USERS

Of the 242 officers with more than 3 months in their jobs, 88.8 percent (215) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	87.1%	Frequently (5.2)	4.6%
Technical work-stations	22.9%	Occasionally to routinely (3.4)	15.4%
Minicomputer	22.7%	Routinely (3.9)	12.8%
Mainframes	22.1%	Routinely to frequently (4.3)	14.2%
Tactical systems	9.9%	Routinely (4.2)	9.9%
Integrated real-time systems	5.0%	Routinely to frequently (4.3)	10.1%
Supercomputers	.8%	Routinely to frequently (4.5)	9.9%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
11.9%	76.9%	6.2%	36%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 215 computer users:

Type software	% of 215 using	Top brand used
Word processing	91.2%	Wordperfect
Databases	69.8%	DBASE
Graphics	64.2%	Harvard Graphics
Spreadsheets	60.9%	Lotus 123
Utilities	39.1%	PC Tools
Communications	38.1%	PROCOMM
Interfaces	19.1%	Windows
Statistics	11.6%	SPSSx

***

FUNCTIONAL AREAS

The 215 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	91.2%	4.6%	3.3%	14.9%

Judge Advocate General Corps Officers (250X)

Population: 907 Mailed: 332 Sample: 240 Response rate: 72.3%
Sample of officers with more than 3 months in their jobs: 201

****

COMPUTER USERS

Of the 201 officers with more than 3 months in their jobs, 85.9 percent (170) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	81.6%	Frequently (5.2)	7.0%
Minicomputer	9.1%	Routinely (3.8)	11.7%
Technical work-stations	7.1%	Occasionally to routinely (3.5)	12.6%
Mainframes	6.5%	Routinely (4.1)	9.5%
Integrated real-time systems	3.6%	Occasionally to routinely (3.3)	8.1%
Tactical systems	1.5%	Routinely to frequently (4.7)	8.7%
Supercomputers	.5%	Almost never (2.0)	6.5%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
25.3%	60.6%	9.6%	29%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 170 computer users:

Type software	% of 170 using	Top brand used
Word processing	98.2%	Wordperfect
Databases	34.7%	RBASE
Graphics	30.6%	Desktop Publishing Packages
Communications	27.6%	PROCOMM
Utilities	23.5%	Norton Utilities
Spreadsheets	11.8%	Lotus 123
Interfaces	4.7%	Windows
Statistics	0.0%	

***

FUNCTIONAL AREAS

The 170 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	97.6%	2.4%	3.5%	1.2%

Nurse Corps Officers (290X)

Population: 2782 Mailed: 399 Sample: 193 Response rate: 48.4%
Sample of officers with more than 3 months in their jobs: 175

****

COMPUTER USERS

Of the 175 officers with more than 3 months in their jobs, 65.7 percent (116) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	57.8%	Routinely to frequently (4.3)	16.8%
Tactical systems	14.5%	Frequently (5.2)	8.1%
Minicomputer	11.8%	Occasionally to routinely (3.5)	11.8%
Technical work-stations	11.0%	Occasionally (3.2)	13.4%
Mainframes	5.2%	Routinely to frequently (4.7)	12.6%
Integrated real-time systems	2.3%	Occasionally to routinely (3.3)	5.8%
Supercomputers	.6%	Almost never (2.0)	7.5%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
20.7%	45.0%	13.9%	19%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 116 computer users:

Type software	% of 116 using	Top brand used
Word processing	75.0%	Wordperfect
Databases	45.7%	DBASE
Graphics	44.0%	Desktop Publishing Packages
Spreadsheets	32.8%	Enable Spreadsheet
Utilities	18.1%	PC Tools
Communications	12.9%	Enable Communications
Interfaces	12.9%	Windows
Statistics	3.4%	SPSSx/Other Statistical Packages

***

FUNCTIONAL AREAS

The 116 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	75.9%	0%	3.4%	7.8%

Supply Corps Officers (310X)

Population: 3434 Mailed: 394 Sample: 293 Response rate: 74.4%
Sample of officers with more than 3 months in their jobs: 258

****

COMPUTER USERS

Of the 258 officers with more than 3 months in their jobs, 96.5 percent (248) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	94.9%	Frequently to almost always (5.3)	2.3%
Integrated real-time systems	44.7%	Frequently (5.2)	5.9%
Mainframes	37.8%	Routinely to frequently (4.4)	11.0%
Minicomputer	28.2%	Routinely (4.1)	11.9%
Technical work-stations	27.9%	Occasionally to routinely (3.6)	14.3%
Tactical systems	7.1%	Occasionally to routinely (3.4)	8.7%
Supercomputers	2.4%	Occasionally to routinely (3.7)	7.5%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
10.5%	86.0%	2.4%	44%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 248 computer users:

Type software	% of 248 using	Top brand used
Word processing	93.5%	Wordperfect
Spreadsheets	73.4%	Lotus 123
Databases	64.9%	DBASE
Graphics	62.1%	Harvard graphics
Utilities	30.6%	PC Tools
Interfaces	23.8%	Windows
Communications	16.5%	PROCOMM
Statistics	2.4%	SPSSx

***

FUNCTIONAL AREAS

The 248 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	97.6%	11.3%	8.5%	4.4%

Chaplain Corps Officers (410X)

Population: 1120 Mailed: 352 Sample: 199 Response rate: 56.5%
Sample of officers with more than 3 months in their jobs: 178

****

COMPUTER USERS

Of the 178 officers with more than 3 months in their jobs, 74.9 percent (131) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	72.9%	Frequently (4.8)	9.6%
Technical work-stations	20.7%	Occasionally to routinely (3.7)	14.9%
Minicomputers	10.9%	Occasionally to routinely (3.4)	16.1%
Integrated real-time systems	8.6%	Occasionally to routinely (3.5)	8.6%
Mainframes	5.2%	Occasionally (2.8)	13.2%
Supercomputers	1.1%	Almost never (2.0)	9.7%
Tactical systems	.6%	Occasionally (3.0)	8.0%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
11.5%	63.4%	16.0%	25%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 131 computer users:

Type software	% of 131 using	Top brand used
Word processing	92.4%	Wordstar
Graphics	64.9%	Desktop Publishing
Databases	48.1%	DBASE
Spreadsheets	48.1%	Enable spreadsheet
Utilities	36.6%	PC Tools
Interfaces	24.4%	Windows
Communications	10.7%	Enable Communications
Statistics	.8%	SPSSx/SAS/Other statistical packages

***

FUNCTIONAL AREAS

The 131 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	97.7%	0	6.1%	13.8%

Civil Engineering Corps (510X)

Population: 1377 Mailed: 348 Sample: 267 Response rate: 76.7%
Sample of officers with more than 3 months in their jobs: 240

****

COMPUTER USERS

Of the 240 officers with more than 3 months in their jobs, 96.3 percent (231) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	95.8%	Frequently (5.1)	3.3%
Technical work-stations	21.5%	Occasionally (3.0)	15.6%
Minicomputers	19.7%	Occasionally (3.2)	13.4%
Mainframes	10.4%	Occasionally to routinely (3.3)	14.2%
Integrated real-time systems	2.9%	Routinely to frequently (4.4)	7.1%
Tactical systems	1.2%	Almost never (2.0)	5.0%
Supercomputers	.4%	Almost never (2.0)	8.3%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
23.8%	72.5%	3.3%	27%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 231 computer users:

Type software	% of 231 using	Top brand used
Word processing	96.5%	Wordperfect
Spreadsheets	84.8%	Lotus 123
Graphics	69.3%	Harvard graphics
Databases	67.1%	DBASE
Utilities	36.8%	Norton Utilities
Interfaces	25.1%	Windows
Communications	21.6%	PROCOMM
Statistics	.9%	Other statistical packages

***

FUNCTIONAL AREAS

The 231 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	93.5%	5.2%	3.5%	12.6%

Limited Duty Officer-Line (Surface) (61XX)

Population: 1379 Mailed: 365 Sample: 235 Response rate: 64.4%
Sample of officers with more than 3 months in their jobs: 211

****

COMPUTER USERS

Of the 211 officers with more than 3 months in their jobs, 90.9 ercent (190) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	86.2%	Frequently (4.9)	7.1%
Integrated real-time systems	40.9%	Routinely to frequently (4.4)	9.1%
Tactical systems	30.3%	Routinely (4.1)	10.1%
Minicomputers	26.9%	Routinely (4.0)	13.5%
Mainframes	22.7%	Routinely (4.0)	13.0%
Technical work-stations	22.3%	Occasionally to routinely (3.4)	14.6%
Supercomputers	2.9%	Occasionally (2.8)	9.7%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
6.2%	84.7%	6.2%	36%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 190 computer users:

Type software	% of 190 using	Top brand used
Word processing	90.0%	Wordperfect
Databases	60.0%	DBASE 123
Graphics	48.4%	Desktop Publishing
Utilities	42.6%	PC Tools
Spreadsheets	41.6%	Lotus 123
Interfaces	25.3%	Windows
Communications	22.6%	PROCOMM
Statistics	2.6%	SPSSx/SAS

***

FUNCTIONAL AREAS

The 190 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	88.4%	36.3%	40.0%	6.3%

Limited Duty Officer-Line (Submarine) (62XX)

Population: 537 Mailed: 297 Sample: 197 Response rate: 66.3%
Sample of officers with more than 3 months in their jobs: 182

****

COMPUTER USERS

Of the 182 officers with more than 3 months in their jobs, 86.6 percent (155) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	81.6%	Frequently (4.8)	11.2%
Tactical systems	30.7%	Routinely (3.8)	8.4%
Integrated real-time systems	25.7%	Occasionally to routinely (3.3)	10.6%
Minicomputers	20.1%	Routinely (3.9)	16.2%
Technical work-stations	20.0%	Occasionally (3.1)	15.4%
Mainframes	17.9%	Occasionally to routinely (3.7)	13.4%
Supercomputers	2.3%	Occasionally to routinely (3.3)	10.2%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
7.8%	78.8%	11.7%	26%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 155 computer users:

Type software	% of 155 using	Top brand used
Word processing	92.3%	Wordperfect
Databases	54.2%	DBASE
Graphics	45.2%	Desktop Publishing
Utilities	41.9%	PC Tools
Spreadsheets	38.7%	Lotus 123
Communications	18.7%	PROCOMM
Interfaces	14.8%	Windows
Statistics	-	-

***

FUNCTIONAL AREAS

The 155 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	74.8%	30.3%	35.4%	7.7%

Limited Duty Officer-Line (Aviation) (63XX)

Population: 944 Mailed: 332 Sample: 213 Response rate: 64.1%
Sample of officers with more than 3 months in their jobs: 198

****

COMPUTER USERS

Of the 198 officers with more than 3 months in their jobs, 78.3 percent (155) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	74.7%	Routinely to frequently (4.4)	17.2%
Minicomputers	18.8%	Occasionally to routinely (3.4)	17.3%
Technical work-stations	18.1%	Occasionally (3.2)	16.6%
Integrated real-time systems	17.3%	Occasionally to routinely (3.7)	10.2%
Mainframes	11.7%	Occasionally to routinely (3.4)	17.9%
Tactical systems	11.2%	Routinely (4.1)	9.2%
Supercomputers	2.6%	Occasionally to routinely (3.6)	11.7%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
4.5	73.7%	19.7%	27%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 155 computer users:

Type software	% of 155 using	Top brand used
Word processing	92.3%	Wordperfect
Databases	62.2%	DBASE
Spreadsheets	56.8%	Lotus 123
Graphics	54.2%	Harvard graphics/Enable/Desktop
Utilities	32.3%	PC Tools
Interfaces	22.6%	Windows
Communications	12.3%	Enable Communications
Statistics	-	-

***

FUNCTIONAL AREAS

The 155 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	90.3%	19.4%	18.1%	3.9%

Limited Duty Officer - Line (General) (64XX)

Population: 1119 Mailed: 351 Sample: 222 Response rate: 63.2%
Sample of officers with more than 3 months in their jobs: 201

****

COMPUTER USERS

Of the 201 officers with more than 3 months in their jobs, 87.9 percent (175) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	84.4%	Frequently (4.9)	10.1%
Integrated real-time systems	30.3%	Routinely (3.8)	12.6%
Technical workstations	24.7%	Occasionally to routinely (3.5)	21.2%
Minicomputer	23.5%	Occasionally to routinely (3.5)	19.9%
Mainframes	21.7%	Routinely to frequently (4.3)	18.7%
Tactical systems	9.6%	Occasionally (2.8)	10.7%
Supercomputers	3.0%	Occasionally to routinely (3.7)	12.2%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
13.1%	74.9%	9.0%	35%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 175 computer users:

Type software	% of 175 using	Top brand used
Word processing	90.9%	Wordperfect
Databases	60.0%	DBASE
Graphics	50.8%	Harvard Graphics
Spreadsheets	44.0%	Lotus 123
Utilities	38.3%	PC Tools
Interfaces	20.0%	Windows
Communications	18.9%	PROCOMM
Statistics	0.0%	

***

FUNCTIONAL AREAS

The 175 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	85.7%	15.4%	21.1%	6.3%

Limited Duty Officer - Staff Corps (65XX)

Population: 275 Mailed: 218 Sample: 123 Response rate: 56.4%
Sample of officers with more than 3 months in their jobs: 119

****

COMPUTER USERS

Of the 119 officers with more than 3 months in their jobs, 94.1 percent (112) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	92.4%	Frequently (5.0)	2.5%
Integrated real-time systems	42.2%	Routinely to frequently (4.7)	4.3%
Technical work-stations	32.2%	Occasionally to routinely (3.3)	12.2%
Minicomputer	31.6%	Routinely to frequently (4.4)	13.7%
Mainframes	29.9%	Routinely (4.2)	12.8%
Supercomputers	1.7%	Frequently (5.0)	9.4%
Tactical systems	.9%	Almost never (2.0)	6.8%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
8.4%	85.7%	5.1%	41%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 112 computer users:

Type software	% of 112 using	Top brand used
Word processing	92.9%	Wordperfect
Databases	63.4%	DBASE
Spreadsheets	56.3%	Lotus 123
Graphics	53.6%	Desktop Publishing Packages
Utilities	33.0%	PC Tools
Communications	20.5%	PROCOMM
Interfaces	17.0%	Windows
Statistics	.9%	SPSSx/SAS

***

FUNCTIONAL AREAS

The 112 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	94.6%	1.8%	.9%	2.7%

Chief Warrant Officer - Line (Surface) (71XX)

Population: 1025 Mailed: 328 Sample: 213 Response rate: 64.9%
Sample of officers with more than 3 months in their jobs: 192

****

COMPUTER USERS

Of the 192 officers with more than 3 months in their jobs, 83.2 percent (158) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	75.9%	Routinely to frequently (4.7)	11.5%
Integrated real-time systems	43.6%	Routinely to frequently (4.3)	6.4%
Tactical systems	23.8%	Routinely to frequently (4.3)	11.6%
Technical work-stations	19.8%	Occasionally to routinely (3.4)	18.2%
Minicomputer	18.5%	Routinely (3.9)	13.8%
Mainframes	18.0%	Occasionally to routinely (3.7)	11.1%
Supercomputers	3.2%	Almost never to occasionally (2.7)	9.1%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
8.9%	74.2%	12.1%	28%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 158 computer users:

Type software	% of 158 using	Top brand used
Word processing	84.8%	Wordperfect
Databases	53.8%	DBASE
Graphics	38.6%	Desktop Publishing Packages
Utilities	38.6%	PC Tools
Spreadsheets	28.5%	Lotus 123
Interfaces	16.5%	Windows
Communications	12.7%	PROCOMM
Statistics	1.3%	SPSSx/SAS

***

FUNCTIONAL AREAS

The 158 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	84.5%	30.4%	30.4%	3.2%

Chief Warrant Officer - Line (Submarine) (72XX)

Population: 185 Mailed: 168 Sample: 112 Response rate: 66.7%
Sample of officers with more than 3 months in their jobs: 104

****

COMPUTER USERS

Of the 104 officers with more than 3 months in their jobs, 83.7 percent (87) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	81.7%	Routinely to frequently (4.7)	11.5%
Integrated real-time systems	26.2%	Occasionally to routinely (3.6)	14.6%
Mainframes	18.6%	Occasionally to routinely (3.7)	17.6%
Tactical systems	16.5%	Occasionally (2.9)	14.6%
Technical work-stations	13.9%	Occasionally (3.2)	22.8%
Minicomputer	13.5%	Routinely (3.9)	23.1%
Supercomputers	2.9%	Almost never (2.0)	14.6%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
8.7%	75.0%	10.6%	30%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 87 computer users:

Type software	% of 87 using	Top brand used
Word processing	86.2%	Wordperfect
Databases	60.7%	DBASE
Utilities	42.5%	PC Tools
Spreadsheets	40.2%	Lotus 123
Graphics	33.3%	Desktop Publishing Packages
Interfaces	18.4%	Windows
Communications	12.6%	PROCOMM/Other Packages
Statistics	1.1%	SPSSx/SAS/Other Packages

***

FUNCTIONAL AREAS

The 87 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	85.1%	13.8%	21.8%	5.7%

Chief Warrant Officer-Line (Aviation) (73XX)

Population: 534 Mailed: 275 Sample: 178 Response rate: 64.7%
Sample of officers with more than 3 months in their jobs: 165

****

COMPUTER USERS

Of the 165 officers with more than 3 months in their jobs, 75.2 percent (124) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	71.3%	Routinely to frequently (4.5)	19.5%
Integrated real-time systems	20.9%	Routinely (4.2)	15.3%
Minicomputers	17.2%	Occasionally to routinely (3.4)	18.4%
Technical work-station	14.7%	Occasionally (2.9)	19.0%
Mainframes	13.5%	Occasionally to routinely (3.5)	16.6%
Tactical systems	12.8%	Routinely (4.0)	13.4%
Supercomputers	3.1%	Almost never (2.2)	14.4%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
4.8%	70.3%	21.3	27%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 124 computer users:

Type software	% of 124 using	Top brand used
Word processing	92.7%	Wordstar
Databases	66.1%	DBASE
Spreadsheets	58.9%	Lotus 123
Graphics	58.1%	Enable Graphics
Utilities	50.8%	PC Tools
Interfaces	26.6%	Windows
Communications	20.2%	PROCOMM
Statistics	0.8%	Other statistical packages

***

FUNCTIONAL AREAS

The 124 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	86.3%	21.8%	22.6%	4.0%

Chief Warrant Officer-Line (General) (74XX)

Population: 564 Mailed: 280 Sample: 190 Response rate: 67.9%
Sample of officers with more than 3 months in their jobs: 174

****

COMPUTER USERS

Of the 174 officers with more than 3 months in their jobs, 92.5 percent (161) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	89.7%	Frequently to almost always (5.3)	6.3%
Minicomputer	29.8%	Routinely to frequently (4.3)	11.7%
Technical workstation	29.2%	Occasionally to routinely (3.5)	14.0%
Integrated real-time systems	28.5%	Frequently (4.8)	9.3%
Mainframes	28.1%	Routinely to frequently (4.3)	14.0%
Tactical systems	10.5%	Occasionally to routinely (3.4)	7.0%
Supercomputers	1.8%	Almost never to occasionally (2.3)	8.8%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
9.7%	82.8%	6.3	43%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 161 computer users:

Type software	% of 161 using	Top brand used
Word processing	91.3%	Wordperfect
Databases	65.2%	DBASE
Graphics	46.6%	Desktop Publishing
Utilities	44.1%	PC Tools
Spreadsheets	36.6%	Lotus 123
Interfaces	30.4%	Windows
Communications	16.1%	PROCOMM
Statistics	-	-

***

FUNCTIONAL AREAS

The 161 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	91.3%	21.1%	31.1%	9.3%

Chief Warrant Officer-Staff Corps (75XX)

Population: 265 Mailed: 204 Sample: 105 Response rate: 51.5%
Sample of officers with more than 3 months in their jobs: 100

****

COMPUTER USERS

Of the 100 officers with more than 3 months in their jobs, 76.8 percent (76) are using computers. The following types of computers are being used:

	USE	How often used	Available, don't use
Microcomputer	72.7%	Frequently (4.9)	9.1%
Minicomputer	29.2%	Routinely (3.9)	9.4%
Technical work-station	28.1%	Occasionally to routinely (3.3)	9.4%
Integrated real-time systems	26.8%	Frequently to almost always (5.7)	6.2%
Mainframes	16.5%	Routinely to frequently (4.6)	14.4%
Tactical systems	4.2%	Frequently (5.0)	10.4%
Supercomputers	3.1%	Routinely to frequently (4.3)	12.4%

***

PERCENTAGE OF OFFICERS DIRECTLY OR INDIRECTLY INVOLVED WITH COMPUTERS:

Uses Only	Uses and Supervises	Supervise Only	Average percent of day involved in computers
11.1%	65.7%	8.1%	34%

***

SOFTWARE BEING USED

The following types and brands of software are being used by the 76 computer users:

Type software	% of 76 using	Top brand used
Word processing	84.2%	Wordperfect
Databases	56.6%	DBASE
Spreadsheets	46.1%	Lotus 123
Graphics	42.1%	Desktop Publishing
Utilities	28.9%	PC Tools
Interfaces	23.7%	Windows
Communications	10.5%	Enable Communications
Statistics	-	-

***

FUNCTIONAL AREAS

The 76 computer users use their computers in the following functional categories:

	ADMIN	WARFARE	STRATEGIC	OTHER
% of users	86.8%	0	2.6%	7.9%

Appendix C: List of Functional Areas and Fields

1. ADMINISTRATIVE/MANAGEMENT/LOGISTICS SUPPORT

a. Accounting
b. Aviation logistics
c. Budgeting
d. Dental services
e. Facilities construction
f. Information resource management
g. Inspector general
h. Legal functions
i. Maintenance
j. Manpower, personnel, and training
k. Medical services
l. Occupational safety and health
m. Operational safety
n. Other logistics
o. Payroll
p. Plans and policies
q. Platform construction, overhaul, modernization
r. Procurement
s. Religious services
t. Resource programming
u. Security assistance, technology transfer
v. Station support
w. Supply
x. Transportation
y. Other

2. WARFARE MISSION AREAS

a. Anti-submarine warfare
b. Amphibious warfare
c. Anti-air warfare
d. Anti-surface warfare
e. Chemical warfare
f. Command and control/C^3I
g. Direct fleet support
h. Electronic warfare
i. Mine warfare
j. Space warfare
k. Special warfare
l. Strategic warfare
m. Strike air warfare
n. Submarine anti-submarine warfare
o. Surface anti-submarine warfare
p. Other

3. STRATEGIC/TACTICAL/OPERATIONAL SUPPORT

a. Calibration of weapons
b. Communications
c. Cryptology
d. Diagnostic testing and maintenance
e. Fire control
f. Intelligence
g. Mapping, charting, geodosy
h. Meteorology
i. Oceanography
j. Reconnaissance
k. Simulation
l. Space technology
m. Strategic planning
n. Strike planning
o. Surveillance
p. Tactical training
q. War gaming
r. War planning
s. Warning
t. Weapon system training
u. Other

4. OTHER

a. Disaster relief coordination/planning
b. Research, development, testing, evaluation
c. Other