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REPORT BY THE U.S.

# General Accounting Office

## The Navy's Shore Requirements, Standards, And Manpower Planning System (Shorstamps) -- Does The Navy Really Want It?

The Navy needs over half its personnel for its shore establishments, yet it has not had a manpower planning program which has been acceptable to the Congress.

A system to meet this need is underway, but unless additional funds and people are used, it is unlikely that it will be implemented before 1992. On October 22, 1979, the Navy provided the Congress with a plan of action and said that important corrective actions had been made.

Past performance on the program indicates that the Navy may not really want it.



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UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D.C. 20548

FEDERAL PERSONNEL AND  
COMPENSATION DIVISION

B-197077

The Honorable Harold Brown  
The Secretary of Defense

Dear Mr. Secretary:

This report assesses the Department of the Navy's progress in developing and implementing its Shore Requirements, Standards, and Manpower Planning System (SHORSTAMPS). It also highlights the deficiencies in manpower and personnel manager professionalism we reported in February 1979 (FPCD-79-1) and reiterated in our January 8, 1980, letter to the Principal Deputy Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics). We have discussed the contents of this report with members of your staff.

This report contains recommendations to you on page 32. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Director, Office of Management and Budget; the Chairmen, House and Senate Committees on Armed Services and Appropriations, House Committee on Government Operations, and Senate Committee on Governmental Affairs; and to the Secretary of the Navy.

We wish to acknowledge the courtesy and cooperation your staff extended to our representatives during the review.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "H. L. Krieger".

H. L. Krieger  
Director

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GENERAL ACCOUNTING OFFICE  
REPORT TO THE SECRETARY  
OF DEFENSE

THE NAVY'S SHORE REQUIRE-  
MENTS, STANDARDS, AND  
MANPOWER PLANNING SYSTEM  
(SHORSTAMPS)--DOES THE  
NAVY REALLY WANT IT?

D I G E S T

Congressional committees have criticized the Navy for its lack of an acceptable manpower planning program for shore establishments which use over half the Navy's personnel. The Navy recognized the need and in 1972 began work on a new system called SHORSTAMPS (Shore Requirements, Standards, and Manpower Planning System).

SHORSTAMPS is a functional and comprehensive system for determining shore establishments' manpower needs. It incorporates proven industrial engineering and statistical work measurement techniques. Although simple in concept, it is technical and complex in execution. But does the Navy really want it? Lack of commitment to the program indicates that it may not.

The Navy does not anticipate having staffing standards for most of its shore establishment positions until 1987, and even this target date is contingent on a significant increase in resources. If the additional resources are not provided, it is unlikely that SHORSTAMPS standards development and implementation will be completed before 1992.

In May 1979 the House Armed Services Committee directed the Navy to present a plan by September 30, 1979, which would substantially comply with its earlier commitments. On October 22, 1979, the Navy reported on SHORSTAMPS and said that important corrective actions had been completed and other critical improvements were underway.

FPCD-80-29

Tear Sheet. Upon removal, the report cover date should be noted hereon.

SHORSTAMPS' slow progress is indicative primarily of one basic problem--lack of top Navy management commitment. This lack of commitment is most apparent by the Navy's failure to develop and approve a comprehensive plan for administering and integrating SHORSTAMPS into Navy practice. Moreover, continuity of effort and program accountability are burdened by obstructions to manpower and personnel manager professionalism caused by Navy's military personnel rotation practices and deficiencies in its civilian career management program. Consequently, SHORSTAMPS has been beset by critical problems that have hindered its development and implementation:

- Inadequate program accountability and decisionmaking stability.
- Insufficient funds and people.
- High turnover of trained and experienced personnel.
- Major problems in the shore-required operational capability subsystem.
- Inadequate training and assistance for users.
- Lack of tested and approved implementation procedures.

The key to SHORSTAMPS' implementation is the development and approval of a comprehensive plan. Such a plan should aid Navy headquarters and the Congress in (1) defining clearly SHORSTAMPS' short-term and long-term goals and the resources needed to achieve them, (2) identifying the magnitude and priorities of program activities, (3) measuring the program's progress, (4) identifying problem areas early and taking appropriate actions to resolve them, (5) establishing accountability at all levels of management, and (6) evaluating the program's effectiveness.

Navy headquarters also needs to establish more effective controls, including systematic information feedback on program goals and achievements, to assure that standards are uniformly applied throughout shore establishments, consistent with Navy policy.

#### RECOMMENDATIONS

In view of the Navy's past performance on the SHORSTAMPS program, the Secretary of Defense, with the Secretary of the Navy's assistance, should complete the development, approval, and execution of a comprehensive plan that includes:

- Clearly defined short-term and long-term objectives and responsibilities and realistic estimates of the resources necessary to achieve them.
- Identification of the magnitude and priorities of program activities, including the standards reports to be developed and implemented and approved procedures to be used in (1) maintaining valid data on shore-required operational capability data, (2) developing and implementing the standards, and (3) establishing accountability at all levels of management.
- Provisions for realistically measuring program progress; recruiting, training, and retaining SHORSTAMPS personnel; and assessing program effectiveness.

To retain SHORSTAMPS institutional expertise and to establish and facilitate accountability for implementing staffing standards, the Secretary of Defense should require the Navy to:

- Establish both manpower and personnel management career fields for military personnel, with defined standards of background, education, training, experience, and tenure for positions, and establish viable and complete career management systems for civilians in both the manpower and personnel functions.

- Consolidate all manpower management functions and responsibilities for military and civilian personnel Navy-wide and assign one office the authority to redistribute resources to reflect staffing standards requirements.
  
- Develop and use a control system which defines the responsibilities of headquarters officials and commanders at local shore establishments and provides for a common data base, through information feedback on program goals and achievements, that can be used to meet the manpower and budgeting needs of managers at all levels.

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## ABBREVIATIONS

CNO	Chief of Naval Operations
DCNO	Deputy Chief of Naval Operations
GAO	General Accounting Office
GS	General Schedule
NAVMAACLANT	Navy Manpower and Material Analysis Center, Atlantic
NMRS	Navy Manpower Requirements System
OPNAV	Office of the Chief of Naval Operations
OSD	Office of the Secretary of Defense
SHOROC	Shore Required Operational Capability
SHORSTAMPS	Shore Requirements, Standards, and Manpower Planning System
VCNO	Vice Chief of Naval Operations

## CHAPTER 1

### INTRODUCTION

The Congress has requested the Navy to provide credible estimates of the manpower its shore establishments need to accomplish their tasks. In view of increasing manpower costs, the Congress wants assurance that these needs are based on reliable analytical techniques. It is reluctant to accept estimates based on Navy officials' experience, judgment, and assumptions.

For about the last 15 years, the Navy has used formal programs to determine manpower requirements for about 15 percent of its shore establishments. Initial programs provided only "snapshots" of manpower needs which quickly became obsolete as missions and functions changed. Moreover, they were not versatile enough to adjust manpower needs to variations in the kind and amount of work to be done.

In 1972 the Navy developed the framework for its new Shore Requirements, Standards, and Manpower Planning System (SHORSTAMPS) for determining manpower requirements. This program represented a major evolution from earlier manpower validation and survey programs. A September 1979 Navy report noted that, "although SHORSTAMPS is simple in concept, it is technical and complex in execution."

The purpose of SHORSTAMPS is to determine the minimum quantity and quality of positions--military, civilian, and contractor--each shore activity needs to accomplish its assigned mission. SHORSTAMPS has four specific objectives:

- Determine, document, and maintain quantitative and qualitative manpower requirements necessary to perform Navy support missions ashore.
- Relate manpower requirements with a high degree of credibility.
- Redistribute manpower resources according to variations in the kind and amount of work to be done.
- Provide management capability to assist major users of manpower (claimants 1/) in their planning and programming.

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1/Major commanders or bureaus which are authorized manpower resources directly by the Chief of Naval Operations for accomplishing assigned missions.

SHORSTAMPS comprises two subsystems: (1) shore-required operational capability (SHOROC) tasking statements and (2) staffing standards. SHOROC tasking statements describe by mission and function the kind and amount of work individual shore establishments do. Using these SHOROC tasking statements, staffing standards determine the minimum quantity and quality of manpower a given work center needs to accomplish its assigned tasks.

The Chief of Naval Operations (CNO) is responsible for the overall direction, guidance, and monitoring of the SHORSTAMPS program and for enforcing the staffing standards implementation. Two major field activities--the Navy Manpower and Material Analysis Center, Atlantic (NAVMMACLANT), in Norfolk, Virginia, and its Pacific center in San Diego, California--are responsible for developing and maintaining SHORSTAMPS staffing standards for determining Navy-wide manpower requirements (excluding the Marine Corps) and most quality control aspects of the program. The centers also are responsible for assisting all shore establishment commands, bureaus, and offices in applying the SHORSTAMPS program. These responsibilities include conducting SHOROC workshops; identifying new functional areas; refining SHOROC tasking information; and training major manpower users on SHORSTAMPS standards development, application, and implementation.

In June 1976 the House and Senate Armed Services Committees directed the Navy to accelerate its program of defining shore requirements and standards and to establish an adequate manpower planning system within 2 years. After obtaining a 1-year extension, the Navy set June 1979 as the completion date for developing staffing standards.

In May 1979 the House Armed Services Committee directed the Navy to present a plan by September 30, 1979, which would substantially comply with its earlier commitments. The Navy sent its plan to the Committee on October 22, 1979.

#### SCOPE OF REVIEW

In the course of another review we found that the Navy would not meet the June 1979 completion date. We decided to trace the development of the program, assess the progress made in developing standards and implementing the program, identify any problems impeding timely implementation, and suggest corrective actions.

We performed our work at the Office of the Assistant Secretary of the Navy (Manpower, Reserve Affairs and Logistics); the Office of the Chief of Naval Operations (OPNAV); the

- Navy Manpower and Material Analysis Center, Atlantic (NAVMMACLANT), Norfolk, Virginia;
- Office of the Commander-in-Chief, Atlantic Fleet, Norfolk, Virginia;
- Office of the Commander, Naval Air Force, Atlantic Fleet, Norfolk, Virginia;
- Oceana Naval Air Station, Virginia Beach, Virginia; and the
- Bureau of Medicine and Surgery, Washington, D.C.

We also reviewed Navy directives and documents on the SHORSTAMPS program and interviewed various persons.

## CHAPTER 2

### THE NAVY NEEDS A CREDIBLE STANDARDS PROGRAM, BUT ITS PROGRESS HAS BEEN SLOW

Congressional committees have expressed continuing interest in military departments' use of staffing standards to provide more credible Defense manpower budget requests. The Navy, in particular, has been criticized for its lack of an acceptable manpower planning program for shore establishments which use over half the Navy's personnel. The Navy recognized the need for such a program and in 1972 began work on SHORSTAMPS, but it has been slow in developing it.

#### THE NAVY NEEDS A CREDIBLE STAFFING STANDARDS PROGRAM

In recent years the Navy has had difficulty justifying its manpower budget requests to the Congress. Past Navy manpower budgets have been based on officials' experience, judgment, and assumptions about tasks that may be performed. To a large extent, the Navy still uses this rationale in justifying its estimated manpower needs. Budget review authorities and the Congress have arbitrarily cut Navy budget requests primarily because the Navy could not adequately demonstrate the reasonableness of the estimates. Such cuts will likely continue until the Navy makes greater progress in bringing its shore establishments under valid staffing standards.

The Congress has continually expressed its interest in SHORSTAMPS. A March 1976 House Armed Services Committee report endorsed SHORSTAMPS and suggested it receive priority attention in the allocation of fiscal and human resources. In June 1976 the House and Senate Armed Services Committees directed the Navy to accelerate the program and report on its progress periodically.

Recently, the Congress has expressed concern over the slow progress of SHORSTAMPS:

--In March 1979 the Subcommittee on Defense, Senate Committee on Appropriations, questioned the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) extensively about the program, particularly its progress, its problems, and the Navy's commitment to it.

- On March 28, 1979, the House Armed Services Committee intensively questioned Navy officials about SHORSTAMPS. One Committee member remarked that the Navy had received many millions of dollars to develop the system, yet very little progress had been made.
- A May 15, 1979, House Armed Services Committee report, noting that the Committee had actively encouraged the Navy to move forward with SHORSTAMPS, stated that the present rate of progress was not acceptable. The Committee directed the Navy to present a plan by September 30, 1979, which would substantially comply with its earlier commitments.

THE NAVY RECOGNIZES ITS NEED FOR A  
CREDIBLE STAFFING STANDARDS PROGRAM

In a September 1973 memorandum, the Deputy Chief of Naval Operations (DCNO) (Manpower) informed the Vice Chief of Naval Operations (VCNO) of the SHORSTAMPS concept, its benefits, and the estimated level of resources needed to develop Navy-wide staffing standards by the end of fiscal year 1978. Writing of the need for SHORSTAMPS, he stated:

"\* \* \* the effort to get a firm handle on our manpower requirements ashore is long overdue. The shore establishment consumes over half the Navy's total manpower and we must exercise better control over this resource. The previous shore survey effort brought us a total coverage of only 12 percent of the shore establishment throughout its entire history. We must clearly do better than that. SHORSTAMPS promises 100 percent coverage at the end of five years if supported at the requested level."

The greatest benefit of implementing SHORSTAMPS, according to the DCNO, would be improved management of shore manpower, including:

- More precise tasking of individual shore establishments.
- More credible estimates of shore manpower requirements in relation to operational capabilities.
- Better manpower planning and programming by assessing the impact and alternatives of tasking changes.
- More efficient management of resources to insure support of higher priority functions.

Other anticipated benefits included manpower savings and identification of redundant functions at individual shore activities.

SHORSTAMPS: A COMPREHENSIVE, FUNCTIONAL  
APPROACH FOR DETERMINING MANPOWER NEEDS

SHORSTAMPS is a functional and comprehensive approach for determining military and civilian work force requirements. It applies proven industrial engineering and statistical principles and encompasses the various Navy missions and functions at approximately 2,000 shore establishments. SHORSTAMPS has two parts--a SHOROC component and a staffing standards subsystem. (See p. 2.) The Navy Manpower Requirements System provides the necessary data processing to integrate the two components and computes minimum manpower requirements. A more detailed explanation of these subsystems is in the appendix.

SHORSTAMPS PROGRESS HAS BEEN SLOW

The SHORSTAMPS concept was developed during the summer of 1972. In October 1973 the VCNO approved a pilot program to test the development of staffing standards for positions involving recruit training, general training, and bachelor enlisted quarters. The pilot program was expected to be completed in December 1974, and if adequate resources were applied, development of staffing standards for the entire shore establishment was expected to be completed by 1978.

In March 1976 the VCNO adopted SHORSTAMPS as the Navy system for determining shore manpower requirements. At that time maximum coverage of the shore establishment was projected for June 1981. Six months after adopting SHORSTAMPS, the Assistant Secretary of Defense (Manpower and Reserve Affairs) expressed concern about the program's progress. In a memorandum to the Assistant Secretary of the Navy (Manpower and Reserve Affairs) he stated:

"I am concerned about the lack of progress in the SHORSTAMPS program. After three years of effort, only 0.4% of Navy's support manpower is covered with implemented staffing standards.  
\* \* \*

"Original SHORSTAMPS milestones projected 74% coverage by end FY 81 with 10% coverage by end FY 76. Current milestones project 70% coverage by end FY 81 with 2% coverage by end FY 76. At the current rate of progress, the completion date does not seem very realistic. \* \* \*"

In response to this memorandum, in October 1976 the Assistant Secretary of the Navy (Manpower and Reserve Affairs) expressed similar misgivings about the pace of SHORSTAMPS development. However, he felt that the program was receiving the attention it needed at that time.

As a result of the congressional directive to accelerate the SHORSTAMPS program (see p. 5), the Navy established a new time schedule. In the first SHORSTAMPS report to the House Armed Services Committee on December 30, 1976, the Navy stated that it had developed standards for training recruits and Naval Reserve officers and for aircraft maintenance. The Assistant Secretary estimated that standards would be completed by June 1979 for a shore population of about 436,000 persons.

Later, in its June 1978 report to the Senate Armed Services Committee, the Navy estimated that 15 standards covering about 60,000 spaces should be ready for implementation by December 1978, but none of the 15 was developed by that date.

As of April 1979, only seven staffing standards reports 1/ had been applied and approved for implementation. These reports covered only 6,347 shore manpower positions, less than 2 percent of the total SHORSTAMPS target population of 393,227 reported in May 1979. An additional 16 standards reports were being applied. These 16 reports would expand the coverage of SHORSTAMPS to approximately 95,000 positions. By April 30, 1979, an additional 61 reports were in other stages of processing. As shown in the table on page 8, these reports would expand the coverage to 352,000 people.

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1/A standards report may cover one or more standard equations or algorithms for tasks that are reasonably alike. Such tasks are normally grouped into a "work center," and an equation is developed for each work center. (See the appendix.)

Status of Standards Reports  
April 1979

<u>Processing stage</u>	<u>Number of standards reports</u>	<u>Reported population coverage</u>
Completed application (in implementation phase)	7	6,347
Application/claimant (major user) review	16	88,817
Quality control (standards report)	9	75,042
Computation	22	50,693
Measurement	13	30,316
Field test/claimant review (measurement plan)	4	18,479
Quality control (measurement plan)	2	4,205
Preliminary phase	<u>11</u>	<u>77,749</u>
Total	<u>84</u>	<u>351,648</u>

In its September 1979 report to the House Armed Services Committee, the Navy said that it had implemented eight staffing standards reports and would have six more ready for implementation within 6 months. It estimated that 70 percent of the shore population would be under SHORSTAMPS standards by the end of fiscal year 1987.

NONAPPLICABILITY OF EXISTING STANDARDS HAS SET BACK SHORSTAMPS MILESTONES

When the Navy made its original SHORSTAMPS projections, it had expected to use standards developed by the Air Force and other organizations whenever possible. A November 13, 1973, SHORSTAMPS pilot program document stated:

"Navy Manpower and Material Analysis Center, Atlantic, will undertake a detailed review of existing standards to determine if these standards can be adopted intact or subject to modification for use in the Navy. Existing standards will be reviewed in the following order: Air Force standards, Navy Staffing Criteria Manual, \* \* \* Army standards, any other standards. \* \* \*"

These standards did not prove as useful as expected, and this setback disrupted the Navy's milestones. In his

June 1977 SHORSTAMPS report to the Senate Armed Services Committee, the Assistant Secretary of the Navy (Manpower, Reserve Affairs and Logistics) stated:

"My last report advised you that we would make maximum possible use of manpower standards already developed by the Air Force. Unfortunately, extensive use of Air Force-developed staffing standards in our current effort does not appear feasible. The standards we reviewed are either being updated, or were developed for one Air Force major command \* \* \*."

The next chapter discusses how other serious problems, controllable by the Navy, have also impeded the development and implementation of staffing standards.

### CHAPTER 3

#### THE NAVY'S COMMITMENT IS NEEDED TO COMPLETE THE SHORSTAMPS PROGRAM

The Navy's lack of commitment in completing SHORSTAMPS has impeded progress in using realistic staffing standards to develop credible manpower budgets. It needs to develop an approved, comprehensive plan for administering and integrating SHORSTAMPS into Navy practice and establish program continuity and accountability. But first it must overcome the critical problems that have hindered SHORSTAMPS' development:

- Inadequate program accountability and decisionmaking stability.
- Insufficient funds and people.
- High turnover of trained and experienced personnel.
- Major problems in the SHOROC subsystem.
- Inadequate training and assistance for users.
- Lack of tested and approved implementation procedures.

In May 1979 the House Armed Services Committee instructed the Navy to present a plan by September 30, 1979, which would substantially comply with its earlier SHORSTAMPS commitments. On October 22, 1979, the Assistant Secretary of the Navy (Manpower, Reserve Affairs and Logistics), who now is the Secretary of the Navy, sent the September 1979 report to the Committee. He said that the Navy had taken steps to correct major obstacles to progress: insufficient resources, excessive centralization, and inadequate training.

OPNAV issued an assortment of documents to provide SHORSTAMPS guidance. These documents consisted of notices and instructions, including the SHOROC dictionary, procedures for developing and documenting staffing standards, and various memoranda addressing important problems.

It appears that the Navy has never been sufficiently committed to the program to anticipate the problems and needs of SHORSTAMPS even though some were pointed out by a private contractor in 1973 and by the Navy's pilot program report in 1975. Lacking an overall plan to deal with problems as they occur or adjust for them, the Navy has made piecemeal and often sluggish responses.

Navy authorities could provide us no official evidence that they had made any comprehensive effort, before preparing the September 1979 report to the House Armed Services Committee, to establish realistic goals for developing and implementing SHORSTAMPS, nor any means of reaching those goals to assure program continuity and accountability. For instance, the Navy had not officially determined the resources this program requires, nor had it made any advance effort to prepare its users, identify or avoid the difficulties that key personnel rotation and lack of relevant career paths would create, or devise procedures by which SHORSTAMPS would be implemented.

#### INADEQUATE PROGRAM ACCOUNTABILITY AND DECISIONMAKING STABILITY

Since SHORSTAMPS was started there has been a consistent turnover of Navy's decisionmakers at the senior officer and key program manager levels. This turnover, caused by frequent reassignment, disrupts program continuity and commitment. Under these circumstances, accountability for improved program management and results is impossible to achieve.

Improved stability can provide important benefits to SHORSTAMPS and any other long-term program. Fewer reassignments can improve program continuity, decisionmaking, and individual performance and accountability. At the senior officer or key program manager level, the important advantages of stability are sustained high management attention, program support, and protection from resource constraints. We believe continuity of effort, in the longrun, far outweighs the benefits of rotation. Fewer reassignments mean fewer adjustments in program priority; they also mean program managers spend less time adjusting to new leadership styles and concepts.

In addition to increasing organizational and program continuity, longer tenure can help improve accountability for decisions. When decisionmakers remain in positions long enough to experience the consequences of their actions, they are more sensitive to long-term results. Fewer reassignments can also benefit an individual's performance. When individuals remain in their jobs for longer periods, their overall experience level increases, resulting in improved performance.

In March 1978 we reported 1/that excessive job assignment changes at the senior officer level cause discontinuity of effort and that the Office of the Secretary of Defense and the services need to develop specific assignment policies for senior officers. We recommended that the services review the factors involved in reassignment and the issues affecting senior officer turbulence.

#### INSUFFICIENT FUNDS AND PEOPLE

In March 1979 hearings before the Subcommittee on Defense, Senate Committee on Appropriations, the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) stated that:

"\* \* \* We are committing additional resources in FY 1980 and in FY 1981 to bolster the SHORSTAMPS effort."

\* \* \* \* \*

"\* \* \* we simply underestimated the resources required Navy-wide to handle the SHORSTAMPS workload and therefore overestimated our capabilities. \* \* \* Further increases in program assets may be needed to eventually equate Navy's level of effort to that of the Air Force. \* \* \*"

At first the Navy may not have realized the full size and impact of the program, nor how time-consuming the process of developing standards can be. However, even before it started the pilot program it quickly got an insight into the amount of resources SHORSTAMPS would need. Shortly after the Navy projected its first resource estimates, a feasibility study of SHORSTAMPS by Mathematica Inc., a private contractor, advised Navy officials in 1973 that the Air Force had committed a greater level of effort to its project and recommended the Navy increase its resources as the program developed.

Since that time, several top Navy officials have been apprised of the disparity between the Navy and Air Force program resources and the need for more funds and staff. Yet, the Navy chose to try to develop and implement SHORSTAMPS

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1/"Reassignment of Senior Military Officers Can Be Managed Better" (FPCD-78-28, Mar. 21, 1978).

with available resources, providing additional funding only when SHORSTAMPS could point to savings. During the first 3 years of the program, SHORSTAMPS did not even receive the level of funding originally projected by the Navy.

Navy's early insight into resources needed for SHORSTAMPS

In September 1973 the DCNO (Manpower) informed the VCNO that the program would require an estimated 985 man-years of effort and \$18 million during the 5-year period ending in fiscal year 1978. As shown, this estimate assumed that the remaining resources authorized in fiscal year 1974 (86 man-years and about \$2 million) would be applied to each fiscal year 1974 through 1978 and that yearly additions to that amount would also be required.

Projected Application of SHORSTAMPS Resources, September 1973

<u>FY</u>	<u>Man-years</u>			<u>Funding</u>		
	<u>Base</u>	<u>Additional increment</u>	<u>Total</u>	<u>Base</u>	<u>Additional increment</u>	<u>Total</u>
				----- (millions) -----		
1974	86	67	153	\$ 2.0	\$0.8	\$ 2.8
1975	86	91	177	2.0	1.3	3.3
1976	86	117	203	2.0	1.7	3.7
1977	86	140	226	2.0	2.1	4.1
1978	86	140	226	2.0	2.1	4.1
Total	<u>430</u>	<u>555</u>	<u>985</u>	<u>\$10.0</u>	<u>\$8.0</u>	<u>\$18.0</u>

In summarizing the need for resources, the DCNO wrote:

"Additional resources are required to further develop the SHORSTAMPS system within an acceptable time frame. These resources are primarily civilian and military manpower and associated travel, administrative and ADP funding. The resources would be employed \* \* \* to create teams of analysts, data gatherers, and technicians for development of Navy-wide staffing standards. The peak manpower would be achieved in FY 77 and would remain level for FY 78.

\* \* \* Even at the peak this magnitude of manpower is modest when compared with that of certain other services."

His memorandum implied that the Navy could achieve the level of resources outlined above by reducing the number of positions. Even with the limited application of SHORSTAMPS methodology available then, an estimated 6.5-percent manpower reduction, involving 149 excess positions, had been validated. Should such savings continue throughout the 5-year program, some 32,000 positions could be eliminated. The DCNO also stated that a study would be conducted to assess the feasibility of meeting SHORSTAMPS milestones and to establish the appropriate level of program support.

The VCNO approved the SHORSTAMPS pilot program on October 17, 1973. He stipulated that the program's continued support must be based on achieved rather than projected savings; commitment of additional funds in fiscal years 1974 and 1975 would depend on the results of the feasibility study.

The feasibility study, completed October 23, 1973, by Mathematica Inc. (see p. 11), fully supported the Navy's program, and it recommended approving DCNO's proposed resources. The study advised, however, that a careful evaluation of SHORSTAMPS after a year or two would likely support a significant expansion of the proposed resources. It observed that:

"\* \* \* The cost savings thus far with 149 billets identified as excess during the limited experience with SHORSTAMPS is more than enough to justify the level of effort. It has been suggested that if the observed SHORSTAMPS manpower reduction rate of 6.5% continues through the program, there will be an overall reduction of 32,000 billets. It is likely that this is overstated as the earliest programs surveyed were probably selected as the most promising candidates for reduction. Nevertheless, the cost savings are likely to be impressive. For example, if only 10,000 billets are eliminated under the requested five year SHORSTAMPS finding [sic] of \$18 million, the SHORSTAMPS cost per billet eliminated is \$1,800, substantially below the billet cost."

The study warned against gauging the program's success merely by its savings:

"\* \* \* Even though SHORSTAMPS should eliminate some billets, it is important to consider the gains in effectiveness as well. By properly engineering standards for each job it should be possible to better match men to jobs. Thus, it would be inappropriate to measure the success of SHORSTAMPS solely on the basis of cost savings."

Concerning the level of manning proposed for SHORSTAMPS, the report asked, "Is it adequate to do the job?" The Navy proposed to assign far fewer people than the Air Force had done to a program covering a great many positions. As of October 1973 the Air Force had 3,000 persons assigned to its manpower requirements program; at its peak in 1968 it had over 4,300 people assigned. By contrast, under the DCNO's 1973 proposal, no more than 226 people would have been assigned to SHORSTAMPS in any one fiscal year.

This feasibility study was only one of several instances in which the Navy was advised of substantial differences between its resource allocation and the Air Force's allocation to a staffing standards program. Since October 1973, several top Navy officials, including the Chief of Naval Operations, have been informed of these differences. The Navy chose to try to complete SHORSTAMPS using only available resources, providing additional funding only when the program could point to savings.

This Navy decision prompted the Office of the Secretary of Defense (OSD), in November 1973, to delete all SHORSTAMPS funding for fiscal year 1975, comprising a reduction of \$0.9 million and 83 positions. In OSD's view the Navy's fiscal year 1975 funding request would not support a viable program, indicating a lack of Navy commitment without which the program would be meaningless.

In December 1973 the Assistant Deputy Chief of Naval Operations (Manpower, Planning, and Programing) distributed an issue paper to 14 top CNO officials discussing (1) the general background of the SHORSTAMPS program, (2) the results of the Navy's earlier shore survey program, (3) the key points of the October 1973 feasibility study, and (4) OSD's November 1973 decision to eliminate the 1975 fiscal year funding of SHORSTAMPS.

The central issue of this paper concerned commitment and allocation: "How soon do we want Navy-wide coverage by the system and shall we minimize initial outlays or overall cost-to-complete?"

The Assistant Deputy Chief presented three alternatives for achieving Navy-wide SHORSTAMPS coverage: (1) use the earlier survey program's assets to achieve coverage in fiscal year 1988 at a cost of \$24 million, (2) add 67 positions to reach coverage by 1983 for \$22.4 million, or (3) build up manpower over a 4-year period, as recommended by the feasibility study, to meet coverage by 1979 for \$18 million.

The following table shows the funding levels the Navy budgeted for fiscal years 1974-78 compared with the 1973 projections.

FY	Funding levels				Difference between budget and projection
	Projected		Budget		
	FY amount	Cumulative amount	FY amount	Cumulative amount	
------(millions)-----					
1974	\$ 2.8	2.8	\$ 1.2	\$ 1.2	\$-1.6
1975	3.3	6.1	2.0	3.2	-1.3
1976	3.7	9.8	2.4	5.6	-1.3
1977	4.1	13.9	4.4	10.0	0.3
1978	<u>4.1</u>	18.0	<u>6.7</u>	16.7	<u>2.6</u>
Total	<u>\$18.0</u>		<u>\$16.7</u>		<u>\$-1.3</u>

Note: The Navy's SHORSTAMPS budget for fiscal year 1979 totaled \$7.4 million, increasing the total amount budgeted for the program to \$24.1 million.

As of May 23, 1979, the Navy had authorized a total of only 211 manpower spaces, 15 less than the peak level projected for fiscal year 1977, to do the program's work at CNO headquarters and the Navy manpower and material analysis centers. Of this number, 201 spaces were actually filled. It was not until fiscal year 1979 that the Navy's cumulative budget for SHORSTAMPS actually exceeded the level of funding considered necessary in late 1973.

Until recently the Navy apparently intended to continue its piecemeal commitment to its program. In March 1979 a SHORSTAMPS official briefed the CNO, VCNO, and other top Navy officials on the current status of SHORSTAMPS and its need for additional resources. The briefing presented alternatives aimed at having 70 to 75 percent of the shore support personnel under standards by fiscal years 1985, 1987, 1989, and 1992. The briefing recommended the 1987 alternative, requiring an estimated 1,410 persons Navy-wide at an estimated cost of \$159.2 million. Increases in the manning level needed to achieve this objective are summarized as follows.

Programed manning level FY 1980	Number of positions reprogramed FY 1980	Total FY 1980 manning	Manning level increases						
			FY 81	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
408	142	550	660	790	950	1,140	1,368	1,410	1,410

A SHORSTAMPS official said the estimated 1,410 persons was based on the Air Force level of effort and the Navy's experience with its SHORSTAMPS program. He said that the CNO had informally approved reprograming available assets in fiscal years 1980 and 1981 but had not formally approved the 1987 alternative; moreover, the assets for fiscal years 1980 and 1981 had not been provided despite the CNO's informal approval.

In the September 1979 report to the House Armed Services Committee, the Assistant Secretary of the Navy (Manpower, Reserve Affairs and Logistics) said that "\* \* \* This growth in SHORSTAMPS is as rapidly phased as is managerially feasible."

We understand that the Fiscal Management Division, which administers civilian manpower controls for the CNO, could not reprogram 67 civilian positions for fiscal year 1980 because of personnel ceilings and the lack of standards for the number of positions requested. Consequently, the DCNO reprogramed into fiscal year 1980 all 133 military positions which had been intended for fiscal years 1980 and 1981.

Resources and Navy tradition have hindered development of accurate staffing standards

The level of resources which the Navy has committed to its SHORSTAMPS program has not fostered development of accurate staffing standards. Resources have not been available for verifying baseline data and making work method studies--essential features of a sound standards development program.

Although SHORSTAMPS officials acknowledged the importance of both features, limited funds, people, and time have precluded verifying data upon which some staffing standards are based. The absence of verification, at least on a test basis, undermines confidence in the data, particularly when the data is provided by the activities for which standards are being set.

For example, a SHORSTAMPS official said the standards developed for depot and intermediate level aircraft maintenance were based on unverified data provided by the Navy's

air rework facilities and aircraft intermediate maintenance departments. Standards developed in the facilities maintenance and ship repair mission areas were also based on unverified data. One official commented that even if the data base is only 75 to 80 percent valid, the standard is better than no standard at all.

The benefits of making work method studies before establishing standards have long been recognized. Method studies identify nonessential and duplicate operations. Standards developed without these studies may have historical inefficiencies built into them. The Navy's September 1979 report to the House Armed Services Committee said that lack of standardization of methods or procedures within the various mission and functional areas compounded the difficulty in developing staffing standards.

Although officials recognize the importance of such studies, they also recognize that it would be very costly to make them before SHORSTAMPS staffing standards are developed. In July 1979 the CNO directed the reprogramming of about 75 NAVMMAC management engineering personnel to augment the SHORSTAMPS effort. Should the Navy approve the level of resources in the 1987 alternative proposal, 100 positions could be devoted to develop the capability of making work method studies to determine causes of significant variations from standards which have been developed.

Lack of resources is not the only obstacle to work-method studies. SHORSTAMPS officials said that such studies are not made because Navy support organizations differ. Also, these studies would require reorganization of Navy activities. Commanding officers can organize their activities any way they wish; consequently, there is little standard organization in Navy shore establishments. Some officials perceive such changes as encroaching upon the traditional command prerogative, and they believe resistance to such change would be so great that it would be nearly impossible to get the Navy under manpower requirements standards. These officials felt that such changes could not be forced upon commanding officers even though the development of SHORSTAMPS standards would organize the Navy functionally by identifying work centers.

The philosophy behind the SHORSTAMPS program is to get much of the Navy shore establishment under staffing standards as soon as possible and work toward eliminating existing flaws during the maintenance of standards.

Insufficient resources may cause  
the Navy to depend on contractors  
for maintaining standards

Maintaining or updating standards once they are developed is crucial to a permanent program, since the estimated life span of a staffing standard is 2 to 5 years. Consequently, the credibility and usefulness of standards depend greatly on updating them as missions and functions change. The Navy recognizes that standards development is not a one-time effort; a CNO instruction for preparing SHORSTAMPS standards states:

"\* \* \* Maintenance efforts begin with the development of a new standard or guide and continues [sic] throughout the life of the standard. Standards development studies must be designed so that the resulting standards can be revised easily. \* \* \* Procedures must be designed to identify any minor or major revisions that are needed as mission and functions change. Depending on the type of change, it may be necessary to measure part or all of the function again, to keep the standard current."

Faced with an insufficient number of personnel and the June 1976 congressional directive to accelerate the program, in 1977 the Navy began using contractors to develop standards. This may cause the Navy to become partially dependent on contractors for maintaining standards.

The Navy had obligated about \$6.2 million in contract funds to develop various aspects of staffing standards for several mission areas, including automatic data processing, ship repair, environmental support, and supply. About \$4.2 million of these funds had been obligated under indefinite quantity contracts, that is, contracts in which the Navy had not specified the standards development tasks to be accomplished. As the Navy identified tasks, it notified the contractor which did the work on an hourly basis.

The Navy's September 1979 report to the House Armed Services Committee said that:

"Recent, although limited, experience has indicated that development of staffing standards by contractor personnel is excessively costly and thus far has not produced desired results. Considerable time is spent by experienced

SHORSTAMPS supervisory and technical personnel in the review of contract proposals, writing of tasking statements and evaluation of completed contract work which results in high overhead costs."

In October 1977 we reported 1/ that the Air Force, with its years of standards experience, argued against contracting for standards development because its industrial and management engineers not only develop staffing standards but also apply them at the various levels of organization. The Air Force believes that contracting does not offer the continual expertise provided by an in-house work force of military and civilian management engineers.

The Deputy Assistant Secretary of the Navy (Manpower) and SHORSTAMPS officials expressed similar concerns about using contractors to develop standards. Their concern was about problems that might result from the loss of in-house comparability and dependence on contractors to maintain standards. They advised top Navy officials, including the CNO, of the possible consequences of contracting. Should the Navy provide the planned funds in its 5-year defense plan for fiscal years 1981 through 1985, about 45 percent of these SHORSTAMPS resources a year would be earmarked for contracting staffing standards work.

HIGH TURNOVER OF TRAINED  
AND EXPERIENCED PERSONNEL

The Navy has had problems retaining trained analysts to develop SHORSTAMPS standards. Also, it has not established a career field in the area of manpower management. This has contributed to the loss of program production time and loss of work force continuity and increases the need to train new personnel who enter the program.

The Navy cannot keep its trained analysts

The Navy makes a considerable investment in training analysts to develop SHORSTAMPS standards. However, it has not taken steps to protect and capitalize on this investment.

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1/"Development And Use Of Military Services' Staffing Standards: More Direction, Emphasis, And Consistency Needed" (FPCD-77-72, Oct. 18, 1977).

Difficulty in retaining trained personnel was apparent early in the program. The October 1975 pilot program report pointed out the need to insure program continuity by retaining experienced personnel. It recognized that SHORSTAMPS development would be slowed as personnel turnover increased because it takes about 3 to 6 months to train new persons in the standards analyst position.

According to NAVMACLANT officials, analysts receive 6 to 8 months of training before they are considered knowledgeable enough to assume responsibility for developing major standards. Initial training consists of an 8-week NAVMACLANT management engineering and work study course which emphasizes techniques of method study, work measurement, statistical analysis, operational audit, and organizational and systems analysis. Following this course, the analysts join standards development teams where they receive 4 to 6 months of on-the-job training. They also receive continued in-house departmental training in such subjects as basic and advanced statistics, regression analysis, and computers.

The SHORSTAMPS program has lost a substantial number of trained analysts. As of March 1, 1977, 91 persons--57 civilians and 34 military--were assigned to SHORSTAMPS at NAVMACLANT. By May 29, 1979, 37 (19 civilian and 18 military) of these had left. These losses represent military and civilian personnel turnover rates of 33 percent and 53 percent, respectively.

Civilian analysts have left the program primarily because of limited career opportunities. SHORSTAMPS officials said most civilian analysts are in great demand at other Government agencies. Journeyman level for civilian analysts is General Schedule (GS)-11, making it difficult to retain experienced analysts since they can obtain promotions and opportunities for professional growth by transferring to other activities. Of the 19 civilians who had left NAVMACLANT by June 1979, 10 had received promotions at other activities, 8 had transferred at the same grade to other activities, and 1 had retired. Seven of these had transferred to other Navy activities and 11 had transferred to other Government agencies.

Military analysts, officer and enlisted, have left or will leave the program primarily because of the Navy's sea/shore rotation policy. A SHORSTAMPS official at NAVMACLANT said that military personnel assigned to SHORSTAMPS are generally rotated out of the program every 3 years and the program loses their training and expertise. From June 1973 to

June 1979, 16 officers and 62 enlisted personnel were assigned to SHORSTAMPS at NAVMACLANT. On the basis of projected rotation dates and/or actual detachment dates, officer and enlisted personnel will have served an average of 30 and 43 months, respectively, in the SHORSTAMPS program.

Such a high turnover of personnel has substantially contributed to NAVMACLANT's loss of in-house expertise and work force continuity in producing SHORSTAMPS staffing standards.

The Navy has not established a career field in manpower management

In view of the cost of manpower resources and the complexity of manpower management functions, it is important that trained and experienced career specialists manage them. Yet the Navy had not established a full-fledged career field for the managers of its manpower resources. The Deputy Assistant Secretary of the Navy (Manpower) and SHORSTAMPS officials agree that a career field in manpower is needed.

The April 1977 House report on fiscal year 1978 defense appropriations noted that:

"\* \* \* the Navy would benefit by creating a definite career pattern for personnel to pursue in the manpower area which would of itself be career enhancing."

The Navy has long known that a major factor in the success of the Air Force's program was its decision to create a staff dedicated to manpower management. In October 1977 we reported (see p. 20) that a major feature of the Air Force program appeared to be its career field in management engineering, which promotes more extensive training and advancement opportunities for its personnel. We also pointed out that the Air Force was the only service which had established a career field in manpower management.

In April 1978 the Navy established a subspecialty for officers in manpower management, but this subspecialty is secondary to combat or operational specialties. From June 1973 to January 1979, only 5 of the 16 officers assigned to the SHORSTAMPS program at NAVMACLANT had subspecialties in either manpower/personnel management or operations analysis; 7 had no subspecialty; the remaining 4 had subspecialties in other fields (public affairs, naval/mechanical engineering material support, psychiatry, and communications systems technology). Navy officials said that even those officers with the manpower subspecialty seldom serve more than one tour in the manpower area.

Enlisted personnel assigned to NAVMACLANT's SHORSTAMPS program also had primary specialties in areas other than manpower. During a similar period 62 enlisted personnel assigned to SHORSTAMPS had specialties in 22 different areas, none in manpower. Forty-seven of these were senior personnel in enlisted grades E-7 through E-9, reducing the probability that they would serve additional tours in the manpower area.

Navy officers perceive that working in manpower management is not the way to get ahead in the Navy. They believe line officers have to go through certain "hoops" to get promoted. Assignment to manpower management is not one of these hoops, and such an assignment is usually damaging to one's career. Many military officers who have worked in manpower and personnel functions are concerned about problems associated with rotation (personnel turnover), the lack of formal career fields, and the perception that manpower and personnel assignments are damaging to their careers.

In February 1979 we reported 1/ that the military services needed to strengthen not only their military, but also their civilian, manpower, and personnel career programs. We cited a number of other Department of Defense studies, including Navy studies and non-Government studies which address some of the same problems. We recommended that the Secretary of Defense insure that the services establish (1) both manpower and personnel management career fields for military personnel, with defined standards of background, education, training, experience, and tenure for all manpower and personnel management positions, and (2) viable and complete career management systems for civilians in both the manpower and personnel functions.

#### MAJOR PROBLEMS IN THE SHOROC SUBSYSTEM

Major problems with the SHOROC subsystem were evident as early as October 1975, but the Navy took no action to correct these problems for about 2 years, and some of the problems still exist. This demonstrates the low priority the Navy has assigned to the SHORSTAMPS program.

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1/"Military And Civilian Managers Of Defense Manpower: Improvements Possible In Their Experience, Training, and Rewards "(FPCD-79-1, Feb. 16, 1979).

The SHOROC subsystem identifies the specific types of tasks and how much of each type is done at individual shore establishments. (See appendix.) This data provides the basis for developing staffing standards and ultimately for determining the minimum manpower required to do specific jobs.

The original SHOROC dictionary, published in February 1974, was developed by OPNAV and the Manpower and Material Analysis Centers. The Navy made arrangements with the Navy Regional Data Automation Center, Washington, D.C., to automate SHOROC. This center was to develop a SHOROC master activity file identifying all Navy shore activities that were to be included under SHORSTAMPS. The activity file was developed from the unit identification application file, part of the World-Wide Military Command and Control System.

The unit identification application file was not current. It contained data on Navy organizations which had been disestablished, and it omitted data on new organizations. The October 1975 SHORSTAMPS pilot program report noted the incompleteness of this file and stated that the SHOROC subsystem would be limited in its ability to accept activity tasking statements or workload data until the file was corrected.

According to a SHOROC official, a similar problem still exists. In January 1979 the Navy began using the Manpower and Personnel Management Information System to identify shore establishments. This information system is based on Navy unit identification codes which do not necessarily correspond with Navy organizational entities. Although efforts are underway to purify the data in the system, the Navy still has not identified all of its shore activities to be covered by SHORSTAMPS.

A closely related problem developed when the standard Navy distribution list for shore activities was used to mail the original SHOROC dictionary. This list did not match the SHOROC master activity file or contain all the activities to which SHOROC would apply, but it did contain some activities to which SHOROC would not apply. As a result, some activities which should have submitted SHOROC tasking information did not, and some activities submitted SHOROC data which could not be entered into the system because they did not appear on the master activity file. Some shore activities did not respond with any tasking information. In all, about 10 percent of reporting activities were not in the SHOROC data base.

Additional problems have plagued the SHOROC subsystem:

- Many activities reported incorrect tasking and parameter information (quantity, frequency, and duration of work done) because they misunderstood the program and did not know how to gather the data. More than 50 percent of the activities were estimated to have reported in error.
- Reported tasking information was keypunched and entered into the SHOROC subsystem with an estimated 10-percent error rate.
- An estimated 80 percent of the reporting activities did not receive the SHOROC report to verify their SHOROC data.

According to Navy officials, all of these SHOROC problems had been known since about March 1976. It was not until almost 2 years later that NAVMACLANT was given the responsibility for SHOROC automation and began resolving some of these problems.

According to Navy officials, these SHOROC problems existed for so long because at that time OPNAV had only four people responsible for handling the SHOROC workload in addition to their other duties. The amount of the work was too great for them to handle expeditiously. A November 1977 CNO message stated that responsibility for SHOROC data was being transferred to NAVMACLANT to enhance administrative handling and provide quicker response to users.

According to a SHOROC official, NAVMACLANT has greatly improved SHOROC. New dictionaries have been sent to all activities listed in the master activity file. All presently identified shore activities have provided tasking information. Key punching is done at Norfolk, and verification has eliminated most errors. In addition, over 800 SHOROC reports were mailed to activities in a recent 12-month period.

A continuing SHOROC problem is that of insuring the validity of tasking and parameter data for the shore activities. According to a headquarters SHOROC official, the major manpower claimants are now responsible for verifying SHOROC data. But SHORSTAMPS officials acknowledged that claimants lack the personnel to verify SHOROC data submitted by their subordinate shore activities. One official felt that responsibility for the accuracy of this data should rest with the shore activities' resource sponsors; the manpower and material analysis centers are best equipped to verify this data, but they haven't enough personnel to do so.

## INADEQUATE TRAINING AND ASSISTANCE FOR USERS

In the early stages of SHORSTAMPS development, the Navy knew that its manpower users (major commands and activities) did not understand the program's confusing and complex procedures. However, the Navy's reluctance to officially recognize the problem and its slowness in training users in SHORSTAMPS procedures have seriously hindered implementation of the entire program. This prolonged response to a basic need is another indication of the Navy's lack of commitment to provide the Congress with a credible manpower budget request.

Early in February 1974, with distribution of the SHOROC dictionary, the Navy recognized the pivotal role that its major commands and activities must play in developing and implementing SHORSTAMPS. Over 2,000 shore establishments must provide the base data essential to determining their manpower requirements. They must gather, review, and revise information on the type and quantity of all work performed. They must also appraise proposed SHORSTAMPS methods of ascertaining manpower requirements for their tasks and evaluate the validity of the resultant staffing standards.

Yet, until quite recently the Navy has made no concerted, realistic effort to insure that these users, whose accurate input is indispensable to a successful SHORSTAMPS, understand the program, their roles, and the procedures they must follow. The only guidance for most users has been the SHOROC dictionary, a highly abstract document in programming language. Occasional short workshops on document preparation aided a few commands and activities in 1975, 1977, and 1978, but no formal, consistent training or assistance was available to all SHORSTAMPS users during the first 5 years after the SHOROC dictionary was distributed.

SHORSTAMPS administrators soon found that most SHOROC users did not understand the complicated program requirements. By March 1976 over half the participants had submitted inaccurate tasking and parameter information, indicating significant confusion among SHORSTAMPS users. Also, many users were taking more than 60 days to evaluate data submissions subject to their review.

Aware of the pressing need to instruct users, SHORSTAMPS personnel tried unsuccessfully in 1977 and 1978 to brief the CNO on the SHORSTAMPS status, including the users' lack of program expertise. Not until August 1978, more than 2 years after the problem was recognized, did the

CNO establish "assist teams" to train and aid users. Yet another year passed before SHORSTAMPS analysts actually began helping users in March 1979.

The Navy is developing a school to train primarily officers and civilians, GS-11 and above, involved in SHORSTAMPS. Classes, scheduled to begin November 1979, will offer formal, uniform, continuous assistance to program users.

Lack of effective training and assistance have significantly retarded progress and implementation of SHORSTAMPS and has contributed to widespread confusion. Officials and users we interviewed cited lack of training in SHORSTAMPS as a major hindrance to full and effective participation in the program. The DCNO (Manpower, Personnel and Training) has recognized the delay this confusion has cost the program. In a March 1979 message to various major commands he stated:

"Our slow progress is largely [sic] attributable to the fact that we did not anticipate nor prepare claimants and activities \* \* \* to properly review and validate developmental work \* \* \*. Essentially this is where the program is [now] bogged down. \* \* \*"

The Commander in Chief, Pacific Fleet, agreed:

"\* \* \* claimants, type commanders, and activities were not fully prepared to execute their role due to lack of complete understanding and sufficient manpower."

Other commanders voiced similar conclusions. In testifying on behalf of the Navy before the Subcommittee on Defense, Senate Committee on Appropriations, the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) identified the need for training as one of the major impediments confronting SHORSTAMPS: "\* \* \* half of the training problem is the education of [users] in SHORSTAMPS procedures." The other half of the education problem concerns SHORSTAMPS analysts assigned to the assist teams. Besides additional training in developing and maintaining the program, the Navy has decided that these analysts need training in users' procedures for applying and implementing SHORSTAMPS so that they can help participants develop, review, and implement staffing standards.

LACK OF TESTED AND APPROVED  
IMPLEMENTATION PROCEDURES

Early in the SHORSTAMPS program the Navy recognized that it would need formal procedures to enforce compliance with the new SHORSTAMPS staffing standards. Yet, the Navy still has no tested and approved implementation process.

In March 1979 the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) told the Subcommittee on Defense, Senate Committee on Appropriations, that implementation of developed standards was the number one priority of the SHORSTAMPS program at the time. In its September 1979 report to the House Armed Services Committee, the Navy described an implementation process, but this process still has not been tested or approved.

SHORSTAMPS staffing standards are designed to reflect manpower requirements according to function rather than activity. These requirements will generally apply to several claimants and activities. Implementing or applying a standard will create different situations among the relevant claimants or activities; the manpower authorizations of some will increase, some will decrease, others will remain unchanged. The Navy can make short-term changes by reprogramming or redistributing positions, and long-term changes through the budgeting process.

In the 1975 SHORSTAMPS pilot program report, the Navy recognized that this situation would require formal implementation procedures to economically redistribute resources. Nearly 3 years later no procedures had been developed, but this need was reaffirmed in a March 1978 memorandum for the record which said, "A policy statement \* \* \* establishing the steps to be taken by the [users] during the implementation process is most desirable."

Three months later a steering committee was established to "[define] procedures and responsibilities for the implementation of SHORSTAMPS manpower requirements."

As of May 1979, according to one of its members, the Committee had developed tentative procedures for testing, but none had been officially approved by the Navy. The Navy told the House Armed Services Committee in its September 1979 report that it planned to promulgate firm procedures by May 1980.

The Navy's procrastination in meeting this evident need is further complicated by lack of a single, centralized authority for all manpower management functions:

- The DCNO (Manpower, Personnel and Training) is responsible for planning and programing all military and civilian personnel.
- The Fiscal Management Division (within the Office of the Director of Navy Program Planning) administers civilian manpower controls Navy-wide.
- The DCNO (Logistics) has responsibility for programing contract personnel.

Any short-term redistribution of resources among claimants and activities must be negotiated among these three offices--a process likely to slow down SHORSTAMPS implementation. Also, SHORSTAMPS officials said that most claimants' organizational structures reflect this division of manpower responsibility.

This division of responsibility was noted in the 1975 pilot program report as a likely hindrance to implementation. A solution would be to streamline the system by consolidating all manpower responsibility and authority in a single office, as suggested in the 1973 Mathematica report. A SHORSTAMPS official said this consolidation has also been urged by an Inspector General report to the Commander in Chief, Atlantic Fleet. Program officials would welcome such a move as a means of easing the implementation process.

In June 1979 the VCNO assigned the DCNO (Manpower, Personnel and Training) responsibility for total force management, including:

"\* \* \* all manpower/personnel planning and programing functions for the civilian work force \* \* \* [including] requirements determination tradeoff analysis with military personnel and/or contractors \* \* \*."

Yet, in the same document the VCNO assigned the Fiscal Management Division lead responsibility for manpower budgeting and budget execution relative to civilian positions. He assigned the DCNO (Logistics) similar responsibility for contract personnel. Little has changed concerning manpower responsibility. The question asked in 1975 by the pilot program report still remains: "How are authorizations to be reprogrammed when excesses are identified in one claimancy and shortfalls in another?"

Control and accountability are  
inadequate for program compliance

Effective control and accountability are essential for an effective standards program. The DCNO (Manpower, Personnel and Training) has no control over the way local commanders organize or implement standards. Although local commanders should have flexibility to manage their manpower programs, we believe that Navy headquarters has responsibility to assure that such programs and practices are effective, uniformly applied, and consistent with overall Navy policy.

Decentralized management of standards programs generally requires more monitoring and control than centrally directed efforts. Hence, a greater degree of monitoring and control will generally be required to insure sound program management and compliance with official SHORSTAMPS policy. This requires a coordinated approach to manpower management with DCNO (Manpower, Personnel and Training) establishing policy and receiving systematic feedback of information on the application of that policy among the commands. 1/

A control and feedback system which provides Navy headquarters oversight of SHORSTAMPS activities and accountability at all levels of management must be established, in our opinion. Without such a system, standards development will result only in meaningless and costly documents.

The DCNO (Manpower, Personnel and Training) needs to obtain top-level support to make improvements and integrate manpower management at all levels. In spite of recent significant reorganization of Navy manpower, personnel, and training functions, responsibility remains fragmented. In addition, this DCNO has little or no control over the organizational efficiency and effectiveness of shore activities. This lack of control and accountability raises doubts concerning the probability that the Navy can implement an effective SHORSTAMPS program.

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1/Earlier GAO reports have discussed the importance of a coordinated approach in manpower and personnel management. For example, in "Total Force Management--Fact or Rhetoric?" (FPCD-78-82, Jan. 24, 1979) we reported that manpower management in the Navy is disseminated among many organizations with little coordination.

## CHAPTER 4

### CONCLUSIONS AND RECOMMENDATIONS

#### CONCLUSIONS

Personnel costs are increasing, and the Congress is keenly interested in the urgent need for better management and use of human resources. One aspect of this need is determining manpower requirements as realistically as practicable, using analytical work measurement techniques.

SHORSTAMPS is a functional and comprehensive system for determining shore establishments' manpower needs. It incorporates proven industrial engineering and statistical work measurement techniques--simple in concept and complex in execution. But does the Navy really want it? Lack of commitment to the program indicates that it may not.

Even though over half the Navy's manpower is used at shore-based activities, the Navy has proceeded slowly in developing and implementing SHORSTAMPS. The Navy does not anticipate having most of its shore establishment positions under staffing standards until 1987, and even this target date is contingent on a significant increase in resources. If the additional resources are not provided, it is unlikely that SHORSTAMPS standards will be implemented before 1992.

In May 1979 the House Armed Services Committee directed the Navy to present a plan by September 30, 1979, which would substantially comply with its earlier commitments. The report, which the Assistant Secretary of the Navy (Manpower, Reserve Affairs and Logistics) sent to the committee on October 22, 1979, provided a good overview of SHORSTAMPS and the Navy's program to develop and implement it. Defense and Navy officials had previously furnished some of this information to congressional committees. The Assistant Secretary said that important corrective actions had been completed and other critical improvements were underway.

In our view, SHORSTAMPS' slow progress is indicative primarily of one basic problem--lack of top Navy management commitment. This lack of commitment is most apparent by the Navy's failure to develop and approve a comprehensive plan for administering and integrating SHORSTAMPS into Navy practice. Moreover, continuity of effort and program accountability are burdened by obstructions to manpower and personnel manager professionalism caused by Navy's military personnel

rotation practices and deficiencies in its civilian career management programs. Consequently, SHORSTAMPS has been beset by critical problems that have hindered its development and implementation:

- Inadequate program accountability and decisionmaking stability.
- Insufficient funds and people.
- High turnover of trained and experienced personnel.
- Major problems in the SHOROC subsystem.
- Inadequate training and assistance for users.
- Lack of tested and approved implementation procedures.

We believe that the key to SHORSTAMPS' implementation is the development and approval of a comprehensive plan. Such a plan should aid Navy headquarters and the Congress in (1) defining clearly SHORSTAMPS' short-term and long-term goals and the resources needed to achieve them, (2) identifying the magnitude and priorities of program activities, (3) measuring the program's progress, (4) identifying problem areas early and taking appropriate actions to resolve them, (5) establishing accountability at all levels of management, and (6) evaluating the program's effectiveness.

We also believe that Navy headquarters needs to establish more effective controls, including systematic information feedback on program goals and achievements, to assure that standards are uniformly applied throughout shore establishments, consistent with Navy policy.

#### RECOMMENDATIONS

We recognize that the Navy has responded to the House Armed Services Committee's request that it present a plan by September 30, 1979, to substantially comply with earlier SHORSTAMPS commitments. In view of the Navy's past performance on the SHORSTAMPS program, however, we recommend that the Secretary of Defense, with the Secretary of the Navy's assistance, complete the development, approval, and execution of a comprehensive plan that includes:

- Clearly defined short-term and long-term objectives and responsibilities and realistic estimates of the resources necessary to achieve them.

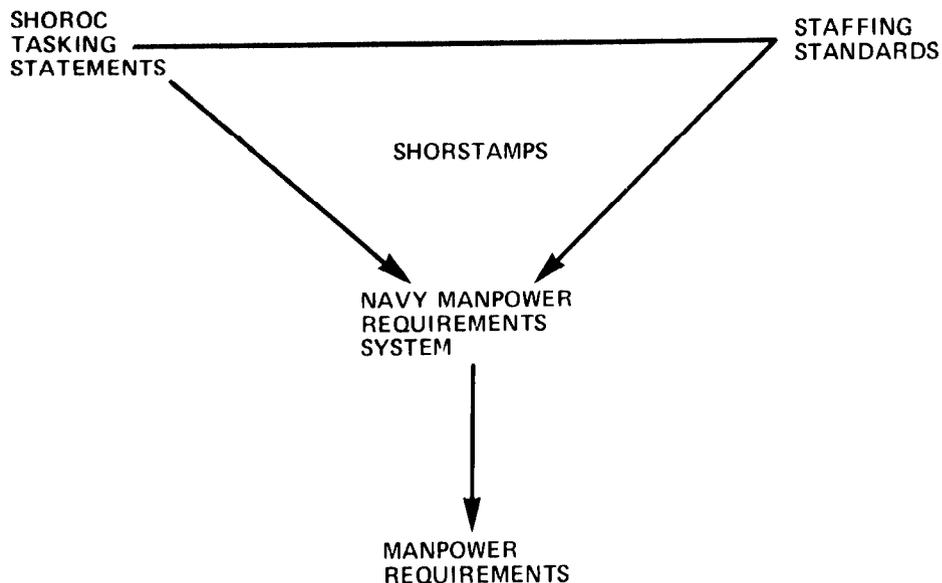
- Identification of the magnitude and priorities of program activities, including the standards reports to be developed and implemented and approved procedures to be used in (1) maintaining valid SHOROC data, (2) developing and implementing the standards, and (3) establishing accountability at all levels of management.
- Provisions for realistically measuring program progress; recruiting, training, and retaining SHORSTAMPS personnel; and assessing program effectiveness.

To retain SHORSTAMPS institutional expertise and to establish and facilitate accountability for implementing staffing standards, we recommend the Secretary of Defense require the Navy to:

- Establish both manpower and personnel management career fields for military personnel, with defined standards of background, education, training, experience, and tenure for positions, and establish viable and complete career management systems for civilians in both the manpower and personnel functions.
- Consolidate all manpower management functions and responsibilities for military and civilian personnel Navy-wide and assign one office the authority to redistribute resources to reflect staffing standards requirements.
- Develop and use a control system which defines the responsibilities of headquarters officials and commanders at local shore establishments and provides for a common data base, through information feedback on program goals and achievements, that can be used to meet the manpower and budgeting needs of managers at all levels.

SHORSTAMPS SUBSYSTEMS AND THEIR ROLE IN  
DEVELOPING STAFFING STANDARDS

The following diagram shows the interrelationship of the SHORSTAMPS subsystems.



SHOROC SUBSYSTEM

The SHOROC subsystem provides the foundation upon which the staffing standards are developed and, ultimately, the minimum quantity of manpower resources required to do specific jobs. In essence, SHOROC is a dictionary of precise, standardized, and quantified tasking statements which identify the kinds of tasks done and how much of each kind is done at individual Navy shore establishments. The subsystem, using automated terminology, is designed to project known changes in Navy tasking and to separate mission-essential tasks from tasks which may be deferred because of insufficient resources or other constraints.

The SHOROC subsystem is divided into four elements. Three elements identify the types of tasks performed by:

- Mission areas: broad categories or major subdivisions of the overall shore establishment's missions, such as aircraft maintenance, construction of shore facilities, financial services, medical services, and ship repair.
- Functional areas: various functions performed within each mission area.

--Required functional capabilities: specific tasks performed within functional areas.

The fourth element, or parameter, specifies the quantity, frequency, and duration of work performed and ultimately becomes the driver of manpower requirements.

The number of functional areas and required functional capabilities within mission areas varies considerably. The table below shows the number of functional areas and required functional capabilities in the SHOROC subsystem as of May 1978 for five mission areas.

<u>Mission area</u>	<u>Functional areas</u>	<u>Required functional capabilities</u>
Aircraft maintenance	9	a/ 1,512
Construction of shore facilities	13	46
Financial services	4	15
Medical services	10	329
Ship repair	19	62

a/This represents the required capabilities associated with the various types of Navy aircraft, engines, missiles and ancillary services as of May 1978. However, the SHOROC subsystem at that time provided for a total of 3,239 such capabilities in anticipation of future aircraft procurements and modifications.

The magnitude of the SHOROC subsystem is immense. As of May 1978, the subsystem included 25 shore establishment mission areas, 231 functional areas, and over 5,000 required functional capabilities. The required functional capability level represented only the starting point for the staffing standards subsystem. Standards development teams further divide each required functional capability, or homogeneous grouping of such capabilities, into work center responsibilities and subtasks and quantify the actual work performed. For example, some of the direct and indirect work center tasks associated with one required functional capability within one functional area of the overall financial services mission area include: formulation and apportionment of budgets, preparation of operating plans, analysis and revision of budgets, supervision, administration, meetings, training, travel, and cleanup. Other required functional capabilities have many more direct work-center responsibilities.

The SHOROC subsystem is dynamic, and periodic changes to it will be a continuing process to adjust for changes in

tasking, workload variations, erroneous input, and the standards development subsystem processes. Since February 1974 the SHOROC subsystem has been revised three times, and at the time of our review the fourth revision was being prepared. The third version contained 5,119 required functional capabilities within 231 functional areas. The fourth version is expected to contain 4,311 (808 fewer) required functional capabilities within 251 (20 additional) functional areas.

#### STAFFING STANDARDS DEVELOPMENT SUBSYSTEM

The staffing standards subsystem uses SHOROC tasking information to develop mathematical equations or algorithms that translate workload data into expressions of quantitative and qualitative manpower requirements. Teams from the Navy Manpower and Material Analysis Centers in Norfolk and San Diego develop standards for particular SHOROC functions.

In developing staffing standards, individual standard equations are produced for tasks that are reasonably the same. The tasks are normally grouped together into what is called a "work center," and an equation is developed for each work center. The work center refers to a grouping of personnel using similar machines, processes, methods, and operations and performing homogeneous work, usually located in a centralized area. A work center normally equates to a required functional capability in the SHOROC subsystem, but it may also equate to a combination of such capabilities within a functional area or to a total functional area. Standard equations covering closely related work centers may be grouped together and published as one staffing standards report.

In developing a standard, workload factors may appear that are unique to certain activities and have a significant impact on the staffing requirement. In these cases, "additive" standards are developed to handle the special requirements and identify major differences, such as special requirements because of location, climate, or tenant support demands. The differences must be significant enough to make it impractical to use a single standard for all work centers.

The standards development subsystem recognizes that developing a staffing standard is not a one-time effort. The estimated life of a staffing standard is from 2 to 5 years. Once a specific standard has been developed, it must be updated to keep SHORSTAMPS a viable manpower management system. For this reason, standards development policy includes frequent updating of existing standards.

PHASES OF STAFFING STANDARDS DEVELOPMENT

Staffing standards development comprises three phases-- preliminary, measurement, and computation.

During the preliminary phase, the staffing standards development team acquires as much knowledge as possible about the area to be studied, develops a study plan, and prepares for the measurement phase. Significant steps in the preliminary phase are:

- Establishment of liaison with program managers, major manpower users, and technical experts.
- Orientation of work center personnel and operating officials.
- Identification of work centers.
- Development of work center descriptions.
- Identification of work units and potential workload factors.
- Selection of appropriate work measurement methods.
- Selection of measurement locations.
- Installation of a work-count system.
- Identification of potential management improvement recommendations.
- Development of a detailed measurement plan.

Once developed, the measurement plan is sent to those major manpower claimants expected to use the standard. These claimants are allowed 60 days to comment on the plan. The plan is concurrently field-tested at a maximum of three shore activities. The measurement plan is revised as necessary by field testing and claimant review.

The measurement phase consists of onsite visits to a statistical sample of shore activities to collect workload and manpower data according to the measurement plan. One or more work measurement techniques generally will be used: work sampling, time study, operational audit, predetermined time standards, and queuing (waiting line) theory. Through the use of these and other techniques, workload is measured in terms of man-hours. This information is then used in the computation phase to develop the standards equation.

During computation, the staffing standards team examines and analyzes the results of the measurement plan. All suspected variables for the function studies are put through a series of statistical tests to determine whether they do, in fact, have an impact on manpower requirements. Again, using accepted statistical techniques, the staffing standard equation is developed. Staffing tables are then constructed showing the breakpoints for each incremental increase in manpower. These tables display quantity and quality of each manpower space and identify it as military only, civilian only, or military or civilian.

Following the computation phase, the staffing standard is merged with the SHOROC data base for each affected shore activity to produce the activities' total manpower requirements.

#### APPLICATION OF STAFFING STANDARDS TO SHOROC DATA BASE

The third element of the SHORSTAMPS concept, the Navy Manpower Requirements System (NMRS), provides the automatic data processing to merge the staffing standards with the SHOROC tasking to calculate manpower requirements. This is called the application phase of staffing standards processing.

At the beginning of the application phase, NMRS produces a manpower requirements worksheet for each activity affected by the standard. NMRS applies the SHOROC information for each activity to the staffing standard equation and calculates a total man-hour figure for each required functional capability. The total man-hour figure is supplemented or adjusted for unique requirements associated with a particular activity and is then used to generate the correct number of positions. This information is listed on the manpower requirements worksheet. Summary manpower requirements worksheets are produced for each claimant. Ultimately, the staffing standards report, activity worksheets, and summary worksheets are sent to the claimants for review and comment within 60 days. Claimants indicate on the worksheets whether they wish to fill the positions with military or civilian personnel or handle the work through contract.

During application, changes to the SHOROC dictionary may be necessary as a result of the work performed by the staffing standards development teams. In addition, the standards' equations may be changed as a result of the claimants' reviews.

When all necessary changes have been made, the final manpower requirements document (shore manpower document) is produced. This document shows each affected activity's manpower requirements for each required functional capability covered by developed standards and the number of manpower spaces remaining to be covered by approved staffing standards.

A staffing standard is considered complete and ready for implementation when the application process is finished and the standard has been approved for use by the CNO. Implementation means using the manpower requirements as calculated by the standard in making a conscious decision to change or not change the actual manpower authorizations. Changes in manpower authorizations can take place, in the short run, through reprogramming existing manpower resources or, in the long run, through budget requests for future years.

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