



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

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DIVISION OF FINANCIAL AND  
GENERAL MANAGEMENT STUDIES

APRIL 30, 1980

B-196862

The Honorable Edward Hidalgo  
The Secretary of the Navy

Dear Mr. Secretary:

Subject: [Naval Supply Systems Command Acts to Improve  
Usefulness of Financial Reports Produced by  
the Aviation Supply Office's Automated  
Allotment Accounting System] (FGMSD-80-42)

This report discusses the need for and usefulness of financial reports produced by the Naval Supply Systems Command's automated Allotment Accounting System. The Aviation Supply Office, a major user of the system, uses this system to keep all needed financial records for the Navy Stock Fund and to produce monthly reports showing allotments, obligations, expenditures, materials on hand and in transit, and accounts payable. Our review was part of a multiagency review on which we plan to issue an overall report to the Congress. As part of this work, we reported to you on January 15, 1980, on our review of the usefulness of financial reports produced by the Naval Resource Management System (FGMSD-80-19).

Because of computer systems problems and the lack of an effective report revalidation program, the automated Allotment Accounting System produced reports that were inaccurate and so detailed and voluminous that managers and operating personnel made little, if any, use of them.

The Aviation Supply Office estimated the value of assets and liabilities in preparing its fiscal 1979 budget reapportionment request because it did not have confidence in information from the automated Allotment Accounting System. The Aviation Supply Office estimated that the system overstated assets by \$15.1 million and understated liabilities by \$32.6 million.

Certain reports from the system were too detailed and voluminous for effective management use. Thousands of pages of computer-produced accounting information were not used,

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although relatively straightforward changes would have turned these reports into valuable financial management tools. For example, one report contained about 2,000 pages and more than 15,900 account balances, but the Aviation Supply Office was only interested in 380 balances, or about 2.4 percent of the report. Operating personnel had to search through the entire report to pick out the needed information, a process that wasted valuable staff time. Another report, produced weekly and averaging 650 pages, generally was not used at all because it contained 450 pages of extraneous information.

We could not determine the cost of preparing unused reports because the Naval Supply Systems Command and the Aviation Supply Office do not accumulate the total cost of individual reports. A good indicator of the cost, however, is the number of unused computer printout pages. The two reports above, which were generally not used by managers and operating personnel, consisted of about 30,000 pages annually and required the processing of tens of thousands of punched card transaction records at considerable expense.

Although the computer systems problems, which caused the balances of assets and liabilities to be inaccurate, were brought to the attention of the Naval Supply Systems Command and the Aviation Supply Office in December 1975 and February 1978 by the Naval Audit Service and the Naval Inspector General, respectively, the Navy did not take any corrective action until our review was completed. Revisions to the system are currently being implemented and could appreciably improve the usefulness of financial information. Effective coordination and management oversight, however, is needed to assure that the changes are properly implemented and that further delays do not occur.

Also acting on our suggestions, the Naval Supply Systems Command turned the two unused reports into useful financial management tools by changing the formats of these reports and the underlying computer systems to eliminate unneeded detailed information.

The type of computer systems and report design problems identified during our review would have been brought to management's attention and corrected through an effective reports revalidation program. Early in 1978, the Naval Supply Systems Command took the first step to put such a program in place by forming a reports revalidation group to determine continued need for and usefulness of the outputs of standard Naval automated accounting and management information systems. Previous revalidation efforts were not effective because they did not provide for prompt identification and correction of reporting weaknesses.

We, therefore, recommend that you direct that the group, which is still in organizational stages, provide for

--an independent, indepth assessment of managers' and operating personnel's use of computer-produced reports and

--effective, prompt followup action to assure that report deficiencies are corrected.

Because of the importance of producing accurate and useful accounting information, we also recommend that you see that other naval commands have effective reports revalidation programs.

Further, we recommend that you designate a representative to see that the ongoing revisions to the automated Allotment Accounting System are effectively and promptly implemented and that the Naval Audit Service review the system after it becomes operational to determine its effectiveness.

Enclosure I discusses the results of our review, our recommendations, and the Naval Supply Systems Command's actions to improve the usefulness of financial reports and develop a reports revalidation program.

We informally discussed this report with officials of the Naval Supply Systems Command and the Office of the Secretary of Defense. Naval officials agreed with our findings and said that our suggestions for improving the usefulness of specific reports have been implemented and that work programs and approaches being developed by their reports revalidation group will provide for (1) independent, indepth assessments of uses made of reports and (2) effective, prompt followup action to assure that deficiencies in problem reports are corrected.

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 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 Chairmen, House Committee on Government Operations and Senate Committee on Governmental Affairs.

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We wish to express our appreciation for the cooperation received during this review. If you desire further information concerning the results of our review, we would be happy to meet with you or your staff.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "D. L. Scantlebury".

D. L. Scantlebury  
Director

Enclosure

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SUMMARY OF GAO'S FINDINGS AND  
RECOMMENDATIONS TO IMPROVE  
FINANCIAL REPORTING AT THE NAVAL  
SUPPLY SYSTEMS COMMAND

The Naval Supply Systems Command, through its subordinate field activities--such as the Aviation Supply Office, Ships Parts Control Center, and Naval Forms and Publications Center--maintains the majority of the Navy's inventory of parts for ships, aircraft, missiles, and other weapons systems.

Our work focused on the Aviation Supply Office which controls the Navy's inventory of spare parts needed to maintain and overhaul Naval and Marine Corps aircraft. The Office gets appropriated funds annually which form the capital used to buy spare parts and keep an adequate inventory of parts on hand at depots and aircraft maintenance facilities. This capital is called the Navy Stock Fund. The Aviation Supply Office uses its automated Allotment Accounting System to keep all needed financial records for the Navy Stock Fund and to produce monthly reports showing allotments, obligations, expenditures, materials on hand and in transit, and accounts payable. The information on these reports is designed to tell managers the financial position of the Navy Stock Fund and help them prepare annual requests for appropriated funds.

SCOPE OF WORK

Our review was directed at determining:

- How effectively the reports produced by the automated Allotment Accounting System meet the financial information needs of managers and operating personnel.
- What could be done to improve marginally useful reports.
- How effectively the Naval Supply Systems Command and its subordinate field activities revalidate the continued need for and usefulness of computer-produced financial reports.

We evaluated the uses made of Aviation Supply Office reports by its managers and operating personnel. We also visited the Naval Ships Parts Control and Forms and Publications Centers--two other major field activities that use the automated Allotment Accounting System.

NAVAL SUPPLY SYSTEMS COMMAND'S  
AUTOMATED ALLOTMENT ACCOUNTING SYSTEM  
NEEDS IMPROVEMENT

Because of computer systems problems and the lack of an effective reports revalidation program, the Aviation Supply Office's automated Allotment Accounting System produced reports that are inaccurate and so detailed and voluminous that managers and operating personnel make little, if any, use of them. As a result:

- The Aviation Supply Office's fiscal 1979 budget reapportionment request included estimates rather than actual values because management did not have confidence in the accounting system's information. Officials estimated that the system overstated assets by \$15.1 million and understated liabilities by \$32.6 million.
- The Aviation Supply Office and Naval Supply Systems Command incurred costs to produce thousands of pages of computer printouts each month that managers and operating personnel ignored because the information was inaccurate or too voluminous.

The Automated Allotment Accounting  
System misstates assets and liabilities

The fiscal 1979 budget reapportionment request for the Navy Stock Fund, managed by the Aviation Supply Office, included estimates of assets and liabilities rather than values based on actual transactions. This was because computer systems problems prevented the automated Allotment Accounting System from accepting and processing all transactions.

This problem was brought to the attention of Naval Supply Systems Command and Aviation Supply Office officials in December 1975 and February 1978 by the Naval Audit Service and the Naval Inspector General, respectively. However, corrective action was initiated only after we brought these problems to the attention of naval officials.

Accounts maintained by the automated Allotment Accounting System are designed to give managers the financial information needed to develop budget requests. Three of these accounts--accounts payable, prepaid materials, and materials-in-transit--included meaningless information because all transactions were not posted. As a result

- reports on the financial results of Navy Stock Fund operations are inaccurate and

--budget requests are based, in part, on estimates of assets and liabilities rather than on actual values.

#### System structure

Shipment performance notices and payment notices are the source documents for entries in the accounts payable, prepaid materials, and materials-in-transit accounts. Shipment performance notices are prepared by contract administrators when contractors ship spare parts to naval installations. The shipment performance notice causes the automated Allotment Accounting System to set up an accounts payable. Payment notices are prepared and checks are issued to contractors by disbursing officers when they get a shipment performance notice. The payment notice causes the automated Allotment Accounting System to eliminate the accounts payable.

However, if a payment notice is received by the Aviation Supply Office before its corresponding shipment performance notice, the transaction is recorded in the materials-in-transit and prepaid materials accounts. Materials-in-transit is a temporary inventory (asset) account, and prepaid materials is a temporary payable (liability) account. The shipment performance notice, if subsequently received and processed through the computer, will reverse the entries in the two temporary accounts. If the shipment performance notice is not received or if it cannot be processed through the computer because it includes missing or incorrect information, the temporary asset and liability amounts will continue to be carried on the books.

#### Problems with shipment performance notices

The Aviation Supply Office has serious problems receiving and processing all shipment performance notices through its automated Allotment Accounting System. Many notices are never received and a large portion of received notices fail computer edits because important information is not entered or because the information is incorrect. For example, during 1 month, 23,000 shipment performance notices were received and, of these, about 10,000 notices were rejected by the computer--6,200 notices were rejected because important information was missing and 3,800 notices were rejected because information was incomplete or incorrect.

#### The Aviation Supply Office ignored the problem

The Aviation Supply Office did nothing to correct errors on computer-rejected shipment performance notices and resubmit them for processing through the automated Allotment Accounting

System. It continued to ignore this problem even after receiving a December 1975 Naval Audit Service report and a February 1978 Naval Inspector General report discussing the serious impact of the shipment performance notice problem on the Navy Stock Fund budget. Rather than correct rejected notices, the accounting staff simply discarded them.

The Aviation Supply Office's failure to deal with (1) the incorrect shipment performance notices and (2) the underlying computer system problems causing the high rejection of these notices caused

- balances in the materials-in-transit and prepaid materials accounts to grow larger and larger and
- abnormally high account balances to distort Navy Stock Fund financial reports and budget requests.

For example, the Naval Audit Service reported in December 1975 that the account balances for materials-in-transit and prepaid materials grew from \$1.8 million to \$14.3 million and from \$10.3 million to \$16.3 million, respectively, over 6 months. Officials also reported that those balances could not be substantiated.

In response to the Naval Audit Service report, the Aviation Supply Office changed the automated Allotment Accounting System's computer programs to automatically reverse all entries in the materials-in-transit and prepaid materials accounts 30 days after the original entries were made. This was done to keep the balances in these accounts from growing larger each month. This action did not solve the problem because it does not produce asset and liability values based on actual transactions.

The questionable values for materials-in-transit and prepaid materials cause budget requests for the Navy Stock Fund to be based on estimates of assets and liabilities rather than on actual transactions. For example, the Navy Stock Fund budget reapportionment request for fiscal 1979 included a \$15.1 million adjustment for materials-in-transit and a \$32.6 million adjustment for accounts payable. These adjustments were made because naval budget officials knew that the accounting records overstated materials-in-transit and understated accounts payable.

Naval Supply Systems Command officials agreed that as a result of the way shipment performance notices are handled and materials-in-transit and prepaid materials accounts maintained, valueless information is produced and computer resources are wasted. As an alternative source document for the shipment



performance notice, the Naval Supply Systems Command was considering using the Transaction Item Record which was used to update the automated supply system. This record is prepared when material is delivered to a naval installation.

After we completed our review, the Naval Supply Systems Command initiated a systems project to revise the automated Allotment Accounting System to use the Transaction Item Record in place of the Shipment Performance Notice. This project is currently underway, and the Naval Supply Systems Command is implementing changes to the system.

Costs needlessly incurred to  
produce thousands of pages  
of unused computer output

The Aviation Supply Office and Naval Supply Systems Command produced computer reports that managers and operating personnel ignored because the outputs were too voluminous and included extraneous information.

We could not determine the cost of preparing the unused reports because the Aviation Supply Office does not accumulate the total cost of individual reports. A good indicator of the cost, however, is the number of unused computer print-out pages. Two reports generally not used by managers and operating personnel--the Information Error Report and Cumulative Reconciliation of Expenditures and Collections Report--consisted of about 30,000 pages annually and required the processing of tens of thousands of punched card transaction records at considerable expense.

Information Error Report

The Information Error Report lists transactions causing negative balances in general ledger accounts which should have positive balances. It is produced weekly and averages about 650 pages. This report was not used because most transactions listed were self-correcting when related transactions were later processed through the computer.

The transactions involved can best be illustrated by a progress payment on a spare parts contract where the value of the progress payment exceeds the total contract value. In this case, the accounting staff usually knows that a contract amendment is being processed, and when the amendment is processed through the computer, it will eliminate the negative balance in the account. As a result, the accounting staff ignores these types of "error transactions."

Most of the entries on the Information Error Report are of no interest to the accounting staff. For example, the report lists 19 potential problem situations, only 6 of which the accounting staff is interested in. The report is generally not used because needed information is buried among extraneous details the accounting staff does not need and cannot use.

In at least one case where the report could help cut down the time needed to identify and correct posting errors, it is not used because of its size. The Information Error Report includes transactions posted to general ledger obligation control accounts but not to subsidiary ledger detail accounts. This data could help the accounting staff quickly resolve differences between general and subsidiary ledger accounts. However, the report is not used in these cases because the data is buried among a large volume of temporary conditions that will automatically be corrected when related transactions are subsequently processed through the computer.

We suggested that if the Information Error Report were limited to showing only those errors of interest,

- the weekly Information Error Report would be cut down from about 650 pages per week to less than 200 pages per week and
- the accounting staff would get a report they need and could use.

Aviation Supply Office officials agreed that the Information Error Report should be used to resolve differences in obligation account balances in general and subsidiary ledgers. They agreed to propose a design change to the automated Allotment Accounting System.

#### Cumulative Reconciliation of Expenditures and Collection Report

The Cumulative Reconciliation of Expenditures and Collections Report is prepared monthly by the Naval Supply Systems Command and is sent to selected field activities, including the Aviation Supply Office. It lists payments made by Government disbursing officers that match preestablished obligations and other payments which have not been matched with preestablished obligations. The Aviation Supply Office accounting staff is supposed to screen the report against their obligation accounting records to identify those unmatched payments that relate to obligations they established.

The Expenditures and Collections Report lists all payments made Navy-wide and not just those that pertain to the

operations of the Aviation Supply Office. As a result, the accounting staff has to search through hundreds of pages of suballotment balances to pick out needed information. Consequently, needless staff time and cost is incurred because of the poorly designed report. For example, the July 1978 report totaled about 2,000 pages and included more than 15,900 suballotment balances. The Aviation Supply Office, however, was only interested in 380 balances or about 2.4 percent of the report.

The accounting staff at the Naval Ships Parts Control Center had similar difficulties with the hundreds of pages of extraneous information in the report. Also, the accounting staff of the Naval Forms and Publications Center said that they need this report but do not receive it.

We suggested that the Expenditures and Collections Report be redesigned so each recipient receives the segment of the report that shows only the payments that pertain to its operations. This would cut down on the time users spend identifying the information they need from a large volume of superfluous material. We also suggested that the Naval Forms and Publications Center receive a copy of a segment of the report formatted to meet its needs.

Naval Supply Systems Command officials agreed with these suggestions and have initiated a project to

- reformat the Cumulative Reconciliation of Expenditures and Collections Report to show only those payments that pertain to the operations of the field activity the report is sent to and
- prepare and send a reformatted copy to the Naval Forms and Publications Center.

#### NEED FOR AN EFFECTIVE REPORTS REVALIDATION PROGRAM

The computer systems and report format problems we identified would have been disclosed by an effective reports revalidation program. The Naval Supply Systems Command took the first step to implement such a program in early 1978. This effort is still in the organizational stages with the staff developing detailed work programs and approaches.

In Naval Instruction 5214.2 of June 8, 1978, the Secretary of the Navy provided for a continuing and systematic program of reports revalidation. However, previous reports revalidation efforts were not effective because they did not provide for prompt identification and correction of financial reporting weaknesses.

Naval Supply Systems Command  
takes first step to implement  
a reports revalidation program

In early 1978, the Naval Supply Systems Command formed a small group of systems accountants and made them responsible for evaluating the need for and usefulness of computer-produced reports generated by the Command and its subordinate field activities.

This revalidation group has completed several visits to Naval Supply Systems Command field organizations to train group members in performing reports revalidation reviews. It has participated in Naval Inspector General reviews of the Aviation Supply Office and Ships Parts Control Center and in the implementation of the Navy's automated Centralized Accounting and Billing System at naval inventory control points. Most importantly, the group is developing detailed work programs and approaches for revalidating the continued need for and usefulness of standard naval automated accounting and management information systems.

For this effort to be successful, it is important that the reports revalidation program provide for independent, indepth assessments of uses of computer produced reports and effective prompt followup action to assure that problems are corrected. Sufficient authority and resources must be given to the report revalidation group.

Previous reports revalidation  
efforts were ineffective

The Naval Supply Systems Command's previous reports revalidation efforts did not result in the prompt identification and correction of report deficiencies. These revalidation efforts, which were ineffective, included annual report users meetings, semiannual questionnaires, and executive council meetings. We found that:

- Annual users' meetings, lasting 2 to 3 days, did not result in substantial changes to problem reports because almost unanimous agreement by all users was needed before a change was initiated. The uses of computer-produced reports was not independently assessed in depth. Further, a users meeting was not even held in calendar 1978.
- Semiannual questionnaires on the usefulness of and continued need for computer-produced reports were sent to the computer systems analysts responsible for the computer systems that produce the reports. If the

questionnaire was not returned within 15 days, a followup phone call was made to the system analyst. If the questionnaire was still not completed, no further followup action was taken. Although the questionnaire was to be the primary means of assessing user satisfaction, it did not go to the users. Further, officials at the Aviation Supply Office could not even find copies of the most recent report revalidation questionnaires for the reports included in our review.

--Over the past few years, annual executive council meetings, attended by managers from all Naval Supply Systems Command field organizations, did not result in any changes to the reports produced by Aviation Supply Office's automated Allotment Accounting System.

### CONCLUSIONS

The Naval Supply Systems Command has acted on our suggestions to correct weaknesses in automated financial systems at the Naval Supply Systems Command and the Aviation Supply Office that caused financial reports to (1) misstate assets and liabilities and (2) be so voluminous and detailed that managers and operating personnel generally ignored them. The effectiveness of these actions, however, is dependent on effective coordination and management oversight to assure that these actions are properly taken and that further delays do not occur.

The Naval Supply Systems Command has taken the first step to put in place an effective reports revalidation program by setting up a reports revalidation group. The group's work will only be effective if its work approaches and program provide for independent assessments of the uses made of computer-produced reports coupled with effective, prompt action to correct report weaknesses.

Because of the importance of providing managers and operating personnel with accurate and useful accounting information, other major naval commands must also have effective reports revalidation programs.

### RECOMMENDATIONS

We recommend that the Secretary of the Navy direct that:

--A representative be designated to see that promised changes to the Allotment Accounting System are effectively and promptly implemented and that the Naval Audit Service review the system after it becomes operational to determine its effectiveness.

- The work approaches and programs being developed and used by the reports revalidation group in the Naval Supply Systems Command provide for (1) independent, indepth assessments of uses made of reports and (2) effective, prompt followup action to assure that deficiencies with problem reports are corrected.
- A representative be designated to make sure that other naval commands have effective reports revalidation groups to evaluate the need for and usefulness of reports produced by their automated financial and administrative systems.

#### AGENCY ACTIONS

In informal discussions of this report, the Naval Supply Systems Command agreed with our findings and told us that the following corrective actions have been taken:

- The automated Allotment Accounting System has been revised to use Transaction Item Reports instead of Shipment Performance Notices so that transaction information posted to the material-in-transit and prepaid materials accounts is accurate and complete. (See p. 5.)
- The Information Error Report has been revised to show only general ledger account balances that have been in error for more than 30 days. This revision will reduce the size of the report and will focus the report on those account balances that need correction. (See pp. 5-6.)
- The Cumulative Reconciliation of Expenditures and Collection Report has been revised to show only information that pertains to the user. This change has reduced the report size from 2,500 to 800 pages each month. The Naval Forms and Publications Center is now provided with this report as we suggested. (See pp. 6-7.)
- The Naval Supply Systems Command's reports revalidation group's work plans and approaches are being developed to provide for independent, indepth assessments of report use and prompt corrective action of report deficiencies. The revalidation group has initiated reviews of all activity financial reports both at the inventory control points and stock points.

These actions should improve the usefulness of reports produced by the Naval Supply Systems Command's automated accounting and administrative systems. Other major naval commands should follow the lead by the Naval Supply Systems Command in setting up similar reports revalidation programs.