03435 - [A2633759]

[Approval of the Design of the Department of the Navy Field
Activity Level System, General Accounting, Fleet (Surface)].
FGMSD-77-50; B-159797. July 14, 1977. 2 pp. + 4 enclosures (15
pp.).

Report to Secretary, Department of Defense; by Elmer B. Staats,
Comptroller General.

Issue Area: Accounting and Financial Reporting (2800).
Contact: Financial and General Management Studies Div.
Budget Function: Miscellaneous: Financial Management and
    Information Systems (1002).
Organization Concerned: Department of the Navy.

        The design of the Department of the Navy Field Activity
Level System, General Accounting, Fleet (Surface), was approved
as requested by the Assistant Secretary of Defense (Comptroller)
on June 21, 1977. The adequacy of the automatic data processing
aspects of the system design was evaluated as to internal
controls, audit trails, data integrity, and consistency with the
accounting specifications. Findings/Conclusions: The system
design deviates from accrual accounting principles by charging
travel expenses at the time the travel orders are issued. This
approval is granted with the understanding that the revision
recently made in the Department of Defense (DOD) Accounting
Guidance Handbook, which requires that travel be recorded as an
expense in the accounting period in which performance occurs,
will be incorporated in the Navy design documentation at an
early date. To maintain the approved status of the design, any
significant changes to the system design require approval. Any
planned changes to the design should be discussed with GAO
representatives to determine whether or not they are
significant. The system is currently in operation. At some
future date GAO will examine selected portions of the system to
determine whether it is functioning effectively and in
accordance with the approved design. Recommendations: The
Department of the Navy internal auditors should periodically
review the system to assure that it is operating as designed and
that the revision made to the DOD Accounting Guidance Handbook
is implemented. (SC)

B-159797

JUL 14 1977

The Honorable
The Secretary of Defense

Attention: Assistant Secretary of Defense
(Comptroller)

Dear Mr. Secretary:

It is my pleasure to approve the design of the Department of the
Navy Field Activity Level System, General Accounting, Fleet (Surface),
as requested by the Assistant Secretary of Defense (Comptroller) on
June 21, 1977.

In evaluating the system design, we looked at the automatic data
processing aspects primarily to determine their adequacy as to inter-
nal controls, audit trails, data integrity, and consistency with the
accounting specifications.

The system design deviates from accrual accounting principles by
charging travel expenses at the time the travel orders are issued.
This approval is granted with the understanding that the revision re-
cently made in the Department of Defense Accounting Guidance Handbook,
which requires that travel be recorded as an expense in the accounting
period in which performance occurs, will be incorporated in the Navy
design documentation at an early date.

To maintain an approved status, any significant changes to the
system design require approval. Any planned changes to the design
should be discussed with our representatives to determine whether or
not they are significant.

We are pleased to note that the system is in operation. We
suggest that the Department of the Navy internal auditors periodically
review the system to assure that it is operating as designed, and that
the revision made to the Department of Defense Accounting Guidance
Handbook is implemented. At some future date we will examine selected
portions of the system and advise you as to whether it is functioning
effectively and in accordance with the approved design.

Please express our appreciation to the Navy staff for their coopera-
tion in the evaluation process. We commend the Navy for the progress
being made in submitting accounting system designs for approval.

Sincerely yours,

(SIGNED) ELMER B. STAATS

Comptroller General
of the United States

2 1 JUN 1977

Honorable Elmer B. Staats
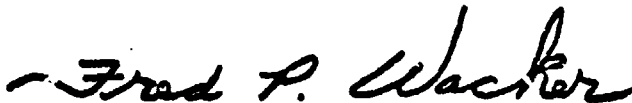Comptroller General of the
  United States
Washington, D.C.   20546

Dear Mr. Staats:

Your representatives have advised us that they have completed their
informal review of the Department of the Navy's accounting system
design entitled "Field Activity Level Systems, General Accounting,
Fleet (Surface)."

In our opinion, this system design conforms in all material respects
with the Navy accounting principles and standards and with Title 2
of the General Accounting Office Policy and Procedures Manual.
Accordingly, we are requesting your formal approval of the system
design which has been submitted to your staff.

We appreciate the cooperative and constructive manner in which your
representatives conducted their review.

                              Sincerely,

                              Fred P. Wacker
                      Assistant Secretary of Defense

TO   :   Director, FGMS Division - D.L. Scantlebury

THRU   :   Deputy Director, FGMS Division/FM - R.W. Maycock

FROM   :   Assistant Director, FGMS Division/FM - R.L. Meyer

SUBJECT: Recommendation for approval of the design of the
            Department of the Navy Field Activity Level System,
            General Accounting Fleet (Surface) (Code 93688)

Attached are our Summary Reports recommending approval of the subject accounting system design, and the approval letter for the Comptroller General's signature.

The Navy Fleet (Surface) is responsible for the operation and maintenance of surface ships and administrative staffs. Under this system, the ships operating forces comprise ships, ship commands, headquarters commands, and administrative staffs.

The accounting and reporting system is based essentially on the Resource Management System (RMS) implemented within the Department of Defense on July 1, 1968. RMS is concerned with operating resources, as contrasted with investment resources. Thus, the system is limited to accounting for resources that are financed under the Operation and Maintenance (O&MN) and Military Personnel appropriations. The O&MN appropriation applicable to ship surface forces for the fiscal year 1975 is estimated at $1,877 million.

Official accounting for the ship surface forces is centralized at the Navy Regional Finance Center at Norfolk, Virginia for the Atlantic forces and at San Diego, California for the Pacific forces. The system is in operation at both locations.

Because of their mobility, operating forces are serviced by wide-spread sources of supply, which renders the application of sophisticated accrual accounting for costs impracticable. In order to equate costs with resources consumption, under these circumstances, the Navy adopted a policy of expensing simultaneously with the recording of requisitions (unfilled orders). The rationale expressed by the Navy is that requisitions are generally initiated to replace items consumed in operations. Since the original outfitting of ships, which is designated "allowance list materials", is provided at no current cost to the units, the practice of assigning costs on this basis appears plausible.

With respect to travel costs, however, the practice of accruing costs on the basis of travel orders as opposed to performance, deviates from the accrual principle. This was a Department-wide deviation which has been corrected at the Department of Defense level. We believe that the Fleet Surface system should be approved with the understanding that revisions, dated February 1977, made to the Department of Defense Accounting Guidance Handbook, which require that travel costs be recorded in the accounting period in which incurred, will be incorporated into the Fleet Surface system design at an early date. The deviation is included in the approval letter.

The Fleet Surface system was evaluated by our Washington staff. About 208 staff days costing about $46,000 was spent in carrying out the evaluation of the accounting system design.

Attachment

cc: Mr. Wysong, (FGMSD/FM)

DEPARTMENT OF THE NAVY

FLEET SURFACE ACCOUNTING SYSTEM

(CODE 93688)

SUMMARY OF ADP DESIGN EVALUATION

RECOMMENDED ACTION: APPROVAL

A. INTRODUCTION

1. Name of Department: Department of the Navy

2. System Being Evaluated: Fleet Surface Accounting System

3. Date Formally Submitted for Evaluation:

   Date Informally Submitted: July 21, 1976

   Date Completed: May 2, 1977

   Staff Days Expended: 89

4. Recommended Action: Approval

B. BACKGROUND

1. Approach Used in Evaluation:

   Normal procedures using ADP Review Guide.

2. Nature and Scope of the ADP Objectives:

   The Fleet Surface Accounting System is an automated accounting system designed to perform the official accounting and reporting for operating budgets issued for operation and maintenance of ships, ship commands and administrative expenses of staffs and headquarter commands. The system is designed to provide accurate and timely financial accounting and reporting services for the Atlantic and Pacific Fleets.

   The automated accounting system is designed to support the requirements for operating budgets issued under the Resources Management System concept. Funding authority for the establishment of operating budgets is received through the Chief of Naval Operations to the Commanders of

.the Atlantic and Pacific Fleets. Operating targets are created and issued directly from an operating budget. Operating targets for example, identify funding authority issued to specific ships within the fleet.

3. Description of Operational Environment:

This system was designed and developed inhouse by the systems and programming staff at the Navy Regional Finance Center, San Diego, California. The system is operational at San Diego for the Pacific Fleet and Norfolk, Virginia, for the Atlantic Fleet. The system is designed to operate on an IBM 360 model 30 computer configuration using the Disk Operating System. Application programs are written in American National Standard COBOL language.

4. Degree of Automation:

This accounting system is a batch processing system designed to process obligations reported by operating target holders in conjunction with disbursements reported by the Navy Regional Finance Centers. A monthly reconciliation of unfilled orders (obligations) and disbursements is performed resulting in summary reports for each operating target and monthly financial reports for higher authority.

This system receives military personnel standard cost statistical data from the Navy Bureau of Personnel as an interface on a monthly basis. The system also interfaces with the Navy Cost Information System by providing ledger balances for inclusion on a monthly basis.

C. ESSENTIAL FEATURES OF THE SYSTEM

1. Systems Description:

The system design consists of the Dictionary Maintenance, Unfilled Order Processing, Disbursement Processing, Reconciliation and Fund

Administrator Reporting Subsystems. The system provides for the progressive summarization of data for management control and reporting purposes. Each subsystem is described below.

a. The Dictionary Maintenance Subsystem creates a master file on disk which serves as the basis for validation of all detail transactions introduced into the system. The master file contains a record identified by the unit identification code for each operating target holder. Each master file record contains the accounting classification, identification data and processing codes necessary to edit and process detailed transactions submitted by operating target holders. The fleet accounting department generates transactions to add, change or delete records on the master file based upon information advice received from the fleet commander. These input transactions are keypunched and edited before updating the master file. A listing of the changes made to the master file is generated and a magnetic tape backup file is created. A listing of the dictionary master file is produced for use within the fleet accounting department. Dictionary maintenance is accomplished prior to processing any of the other subsystems.

b. The Unfilled Order Processing Subsystem is designed to process unfilled orders submitted three times each month by operating target holders to the fleet accounting department. Each batch is submitted with a covering transmittal letter which is serially numbered and includes the total dollar amount and number of documents submitted in the group. The fleet accounting department performs a cursory review of the documents prior to submittal to the data processing department. Once the documents and the batch totals have been keypunched and written to tape they are edited against the dictionary master file. Individual transactions which fail the edit are

error coded to indicate error conditions. Once transactions pass the edit, accounting classification and processing codes are extracted from the master dictionary file and become a part of the transaction record. Both valid and invalid input transactions are written to a temporary output tape until each batch is balanced to its control record and listed. At this point invalid transactions are purged out for correction and re-entry and an error listing is produced. Valid transactions are written out to a tape file which will be combined with the other valid transmittals received and edited. As each batch is balanced the control record for each batch is recorded on a transmittal control file on disk.

After all batches for the month are received, validated, edited, balanced and corrected, the final monthly processing of this subsystem begins in which the current month unfilled orders are merged with the prior months unmatched unfilled orders from the Reconciliation Subsystem. Unfilled orders that contain the same document number are combined. A summary record is created for each operating target holder and written to tape which reflects the total amount of current month unfilled orders. This tape file is used in the Reconciliation Subsystem where it is matched to the disbursements tape file created in the Disbursement Subsystem. This subsystem processes approximately 300,000 records on a monthly basis.

c. The Disbursements Subsystem consists of a weekly and monthly cycle. Disbursements are received from Navy Regional Finance Centers and Navy Supply Activities throughout the month primarily in the form of cards or card image tapes. The majority of disbursements consist of issues of material from Interdepartmental Stock Fund and Navy Supply Activities. Upon receipt the fleet accounting office manually posts the dollar totals

to a disbursement control log and forwards documents, cards and tape to the data processing department for processing in a weekly cycle.

Each transaction is edited against the master dictionary file. Invalid transactions are error coded, and valid transactions have accounting classification and processing codes from the master dictionary file added as a part of the transaction record. Detail and summary listings are prepared by operating target holder to facilitate balancing. Invalid transactions are printed on an error listing. Once the error transactions have been corrected or resolved, they are reentered in the next weekly cycle.

Once the error transactions have been corrected or resolved the weekly disbursement tapes are merged for the monthly cycle. Disbursements for travel advances are separated from the current month disbursements and written to a tape file. Current month disbursements are combined with the unmatched fiscal year to date disbursements for processing in the Reconciliation Subsystem. A summary record is created for each operating target holder and fund category containing dollar totals and record count for current month and prior months unmatched records. This summary record is written to the detail disbursements file. A detail listing and disbursements posting media are generated giving totals by operating budget for selected general ledger accounts.

Travel advance reconciliation occurs within the monthly disbursements cycle. Travel advance collections are matched with disbursements from the file created in the current monthly cycle. Matched advances and collections are liquidated. Unmatched advances and collections are written to an unliquidated travel advance file for processing next month. A detail listing of outstanding travel advances is prepared for the accounting department. Approximately 350,000 records are processed monthly in the Disbursements Subsystem.

d. The Reconciliation Subsystem matches unfilled order and disbursement transactions monthly on accounting classification and document number. Matched records are written to a filled order expenditure difference tape file. Unmatched disbursements and unfilled orders are written to separate tape files for report preparation and for the following months reconciliation. Control and summary records are generated and written to the appropriate tape file whenever there is a change in the operating target holder. Control records are written to the unmatched disbursement and unfilled order files. Summary records are written to the filled order expenditure difference file. A detailed and summary filled order expenditure difference listing reflecting the matching process is printed. Detailed and recap listings are prepared from the unmatched disbursement and unfilled order files. On a quarterly basis an aged unfilled order listing is prepared for the accounting office and operating target holders. A general ledger control record is written to the management data tape file from which a recap posting listing is prepared and used for the manual posting of the general ledger and preparation of the Navy Comptroller expense operating budget report.

Navy shipyards submit a monthly report on the status of funds for each project order or work request they hold. These shipwork management reports are validated against the master dictionary file and balanced. The current month input and fiscal year to date input are processed to determine the current months net change for each project work request which is written to a tape file. A summary record is created when there is a change in the fund code and written to a data base summary file used in the Fund Administrator Reporting Subsystem. A listing is generated to assist in the manual posting of the general ledger and preparation of the monthly expense operating budget report.

e. The purpose of the Fund Administrator Reporting Subsystem is to introduce statistical expenses and operating budget grants with the data generated in the other subsystems to produce monthly financial status reports for fund administrators and higher authority. Statistical military personnel cost data is received monthly from the Bureau of Navy Personnel. Budget operating target reports received from operating target holders are combined monthly with operating budget grants in a common data base from which fund status reports are produced. Posting media reports are generated from the common data base to assist the accounting office in the manual posting of the general ledger.

2. Systems Controls:

Overall controls within the system are adequate. The fleet accounting office is responsible for receiving all appropriate cards, documents, and magnetic tapes for processing. Unfilled order documents are received at the accounting office under the cover of a serially numbered transmittal letter identifying the number of cards or documents and the total dollar amount of the batch. Dollar totals and the number of records in the batch are manually posted to a control log. Disbursements are received from Navy Regional Finance Centers and Navy Supply Activities principally in the form of cards or magnetic tape. Each submission is accompanied by a standard Navy Controller report which gives the control amounts for the submission. The accounting department manually posts the dollar totals by operating budget cited to a disbursement control log.

Unfilled orders and disbursements are entered in the weekly cycle of their respective subsystems for editing and validation. The control logs,

established initially upon receipt of data, are the primary control for the batches processed in the weekly cycles. The weekly cycle edits and balances the individual batches submitted. The Unfilled Order Subsystem creates an automated summary transmittal letter control file to facilitate the validation process. Each of the weekly cycles provide an edit error listing identifying transactions which must be corrected and reentered in the following weekly cycle. This system is not designed with an automated systems file. Each batch of transactions is balanced until correct by recycling error records. This process continues until all batches are correct before the monthly reconciliation cycle is processed.

A fixed schedule has been established for the receipt of unfilled orders from operating target holders. Final reports are available for distribution approximately 15 days after the last input transmittals are received. The separation of duties appears adequate. The organization within the data processing department is separated at the division level between operating functions and programming functions. Control over system and program changes is maintained by requiring the preparation of an ADP task assignment document by the responsible functional office before any changes are made. The task assignment document is not prepared until approved change requests are received from the fleet commanders by the data processing director who has been designated the project leader. The subsystems are designed to preclude the necessity for operator intervention other than loading tape files or disks. Recovery procedures for any unexpected operational problems require processing from the beginning of each subsystem.

3. Auditability:

Transaction registers are produced in the initial edit and validation process which permits tracing of transactions back to its origin or forward to its final account total.

Tape and disk files created during processing are copied onto backup files which extend back to three generations. In addition, microfilm is used extensively as a medium to record transactions. No special programs that assist auditing are used in this system. Computer software does not include programs specifically designed to interrogate data elements. The nature of the processing and reports produced provide all necessary data for auditing purposes.

4. Security:

A card access security control system is installed to restrict access to computer facilities, source data and financial systems software. During non-working hours the security branch is responsible for checking the main door to the data processing department twice during the early morning hours. Offsite storage facilities have been provided to store magnetic tape backup files and microfilm. Computer backup support is provided by the Marine Corps Recruit Depot, San Diego, in the event of a disaster. Backup systems software can be secured from the fleet accounting office at Norfolk within a 24-hour period.

D. PROBLEM AREAS:

No significant problems were encountered in the system during the evaluation.

E. <u>STATUS OF SYSTEM DEVELOPMENT</u>:

       This system is operational at Norfolk, Virginia, to support the Atlantic Fleet and San Diego, California, to support the Pacific Fleet. The "Privacy Act of 1974" will not impact on this system since it does not process personal information subject to provisions of the Act. No further ADP staff involvement will be necessary during the next 12 months.

Name of Agency ___Department of the Navy___

Name of System ___Fleet Surface Accounting System___

Date Review Completed ___May 2, 1977___

ADP APPLICATION WITHIN A
FINANCIAL ACCOUNTING SYSTEM

	YES	NO	N/A
1. General ledger			
2. Accounts receivable analysis		X	
3. Invoice billing and customer statements		X	
4. Merchandise inventory analysis		X	
5. Fixed asset analysis		X	
Buildings, improvements, and leaseholds			
Machinery and equipment		X	
Office furniture and equipment		X	
6. Depreciation		X	
7. Journal entries		X	
8. Accounts payable			
9. Payroll & Leave			
Timekeeping			
Payroll checks and register		X	
Forms W-2		X	
FICA reports		X	
State unemployment reports		X	
10. Sales analysis		X	
11. Cost analysis		X	
12. Budget analysis		X	
Appropriations		X	
Contract authority		X	
Limitations		X	
Apportionments		X	
Reimbursements		X	
Obligations		X	
Accrued expenditures	X		
Expenditures		X	
13. Financial statements	X		
Balance Sheet			
Statement of Income and Expense		X	
14. Does the agency use an automated audit program?		X	
If yes, please furnish name		X	