



TECHNICAL SUMMARY
FINANCIAL MANAGEMENT PROFILE
OF THE
CENTER FOR DISEASE CONTROL

PREPARED
BY THE STAFF
OF THE
U.S. GENERAL ACCOUNTING OFFICE

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Foreword

The Center for Disease Control is an organizational component of the Department of Health and Human Services. In fiscal 1982 it received approximately \$350 million in budget authority. The Center is primarily responsible for federal programs to control the spread of communicable diseases, protect the United States population against certain environmental hazards, provide for occupational health and safety in the workplace, and educate the American population on health and safety issues.

This technical summary is one of eleven volumes of detailed information that supports the overall Financial Management Profile for the Department of Health and Human Services (AFMD 84-15, April 9, 1984). The technical summaries provide detailed information on the major organization components of the Department of Health and Human Services (the Department), their financial management systems, and major internal control strengths and weaknesses in these systems.

The financial management profile of the Department and the eleven technical summaries were prepared by GAO as a pilot test of a new audit approach--called Controls and Risk Evaluation (CARE)--for (1) identifying and describing the financial management systems used by an agency, and (2) assessing and ranking the internal control strengths and weaknesses of the systems. This analysis is based on reviews of available systems documentation, discussions with agency personnel, and reviews of prior GAO and Inspector General reports. Tests were not performed on actual information processed by and recorded in the systems, therefore, conclusions cannot be reached about whether the systems' internal controls were actually operating as designed.

The information in this technical summary is intended for use in:

- planning future tests and evaluations of the accounting and financial management systems at the Center for Disease Control,
- monitoring the Center's efforts to implement the Federal Managers' Financial Integrity Act of 1982, and
- supporting and enhancing the understanding and application of the CARE-based methodology by designers, operators and evaluators of agency accounting and financial management systems.

This technical summary provides a description of the financial management structure of the Center for Disease Control. Eleven financial management systems form the financial management structure of the Center. These systems are used to (1) control appropriated funds and other resources; (2) authorize the use of funds and other resources; and (3) capture, record, process, and summarize financial information related to the execution of budget

authority. This summary provides a detailed analysis of nine of the eleven systems and identifies specific internal control strengths and weaknesses within these systems.

During the course of GAO's survey agency officials were briefed. The summary was provided to cognizant agency officials for their review and comment. Agency comments were considered and changes made where appropriate. The assistance and cooperation of agency management enhanced the successful completion of the work. The summary is being provided to the Center to assist it in its continuing efforts to improve financial management.

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CENTER FOR DISEASE CONTROL--
ITS RESPONSIBILITIES, ACTIVITIES,
AND FINANCIAL MANAGEMENT STRUCTURE

The Center for Disease Control (CDC) is responsible for federal programs to control the spread of communicable diseases in the United States, reduce the incidence of communicable diseases in the United States, provide protection to the United States population against certain environmental hazards, promote occupational safety and health in the workplace, and educate the American population on health and safety issues. CDC's fiscal 1982 budget authority exceeded \$350 million, and it employed more than 4,000 individuals.

Our review of available system documentation and discussions with agency officials disclosed that eleven systems are used to authorize the use of appropriated funds and other resources, make payments, control assets and liabilities, record and control receipts, control appropriated funds, and report on the financial results of program and administrative operations. Taken together, these systems constitute CDC's financial management structure.

In assessing the internal control strengths and weaknesses in CDC's financial management structure, we determined that:

- Controls appeared adequate to ensure the proper recording and reporting of the financial results of program and administrative operations.
- Controls over appropriated funds appeared adequate.
- Controls over travel advances did not appear adequate to ensure that only entitled persons received travel advances.
- Controls over cash receipts did not appear adequate to ensure that all receipts were actually recorded in the accounting system and deposited in the Treasury.
- Controls over about \$1.8 million in supplies appeared inadequate to ensure that supplies were only used for authorized purposes.

In addition, we have other concerns about CDC's financial management systems. Specifically, users of CDC's accounting system were not provided with adequate instructions for preparing and entering financial transactions for computer processing; system documentation for its financial management systems was incomplete and out-of-date, and several manual accounting processes could be done more quickly and correctly if they were automated.

Further, in a recently issued report, the Department of Health and Human Services expressed concerns over poor documentation for CDC automated systems, an overall lack of physical security at

CDC's computer facilities, and a lack of an emergency plan to continue computer operations if CDC's main computer facilities were rendered inoperable.

Appendix I discusses the objectives, scope, and methodology used in applying the Controls and Risk Evaluation audit approach to identify and evaluate the financial management structure of the Center for Disease Control. Appendix II lists the internal control strengths and weaknesses we identified in the financial management systems and appendix III shows the interrelationships of these systems.

RESPONSIBILITIES OF THE CENTER FOR DISEASE CONTROL

CDC was initially responsible for controlling malaria at military bases located in the southeastern United States during the Second World War. Since the war, however, CDC's responsibilities have been expanded and today it is responsible for federal programs aimed at preventing chronic disease, promoting the general level of health of the American people, improving health education, improving preventive health services, and improving protection against environmental and occupational health hazards. The authority for CDC's current programs is the Public Health Service Act.

Pursuant to the Public Health Service Act, CDC:

- Identifies major preventable health problems in the United States and identifies steps that can be taken to preclude the unnecessary incidence of disease.
- Collects, records, analyzes, and reports on the incidence of diseases in the United States.
- Develops and implements programs to solve environmental health problems to include federal programs to respond to and deal with environmental, chemical, and nuclear radiation emergencies.
- Conducts research programs to develop and test methods to improve disease prevention, promotes improved health of the general population, and enhances health education programs for the general population. CDC also supports similar programs implemented by states and local governments.
- Develops federal occupational health and safety standards for private businesses engaged in interstate commerce.
- Conducts a national program for improving the performance of clinical laboratories.
- Stimulates the capacity of state and local health agencies to respond to their citizen's health needs.
- Fulfills the federal responsibilities for controlling the introduction and spread of infectious diseases.

- Participates with other nations and international agencies in dealing with diseases and environmental health problems on a global scale.

CENTER FOR DISEASE CONTROL ORGANIZATIONAL STRUCTURE

The CDC consist of the Office of the Director and nine major operating components. The Office of the Director is responsible for the overall implementation of CDC's programs. The operating components are responsible for the day-to-day operation of CDC programs. A brief description of each component follows.

- Center for Prevention Services assists states and localities, through grants and other mechanisms, in establishing control programs directed toward health problems such as immunizable diseases, sexually transmitted diseases, diabetes, kidney disease and tuberculosis.
- Center for Environmental Health is responsible for responding to environmental, chemical and radiation emergencies occurring outside the workplace. It maintains surveillance of environmentally related health programs, conducts research and epidemiologic studies, and assists states through grants and technical assistance.
- National Institute for Occupational Safety and Health (NIOSH) establishes medical criteria to be followed by employers to ensure that employees will not suffer diminished health as a result of work experience. In addition, NIOSH administers research and training programs and provides technical assistance in the field of occupational safety and health.
- Center for Health Promotion and Education serves as a national focal point for health education and promotion activities. It conducts research and provides grants and technical assistance to states and localities in implementing health promotion, health education and risk reduction efforts. In addition, the center maintains surveillance and evaluates ongoing programs such as nutrition, family planning and abortion programs.
- Center for Professional Development and Training conducts training for public health workers, and conducts research, works with educational institutions, and provides assistance to states to develop and improve education programs related to disease prevention, health promotion, and the transfer of technology.
- Center for Infectious Diseases, provides scientific services in support of CDC laboratory activities, maintains surveillance of infectious diseases and conducts research for production of experimental vaccines and guidelines for their production. It also provides epidemic support and

other technical assistance to states and localities on request.

- Epidemiology Program Office serves as the national focal point for the collection, analysis, and communication of basic disease surveillance information. In addition, it provides epidemic assistance through epidemiologists assigned in the field; and provides consultation on epidemiology and surveillance to other federal agencies, state and local health departments and other nations.
- International Health Program Office provides CDC expertise to international health organizations and developing countries to assist in improving health activities; conducts and evaluates research activities in various global programs; and maintains regular liaison with the Public Health Service's Office of International Health and other related organizations.
- Laboratory Program Office coordinates a comprehensive national laboratory improvement program; develops and recommends standards, regulations and criteria for clinical laboratory licensing and certification; administers a national proficiency testing program for clinical laboratories and a laboratory training program; and offers consulting services to state public health and other laboratories.

FINANCIAL MANAGEMENT STRUCTURE OF THE CENTER FOR DISEASE CONTROL

There are eleven financial management systems at CDC that authorize payments, control assets, and record the receipt of funds due the government. In essence these systems taken together form the financial management structure of CDC. Included in the survey was one automated system that does not meet the definition of financial management but does allocate computer time and charges. A brief description of each system follows:

- CDC Umbrella Accounting System maintains CDC's general ledger accounts, records the financial results of program and administrative operations, produces internal and external reports, and administratively controls CDC's spending authority.
- Cash Control System records all cash transactions which affect general ledger accounts, and generates data used to manually prepare the monthly Treasury Statement of Transactions.
- Miscellaneous Recurring Obligation File System records recurring obligations and expenses like utilities and building maintenance contracts and provides the Umbrella Accounting System with a magnetic tape record of these obligations.

- Travel Advance System records and controls all travel advances made to employees and produces an aging report and a listing of outstanding advances.
- Accounts Receivable System bills and accounts for collections of money due CDC under operations of its quarantine stations and for reimbursements for nonfederal travel. The system also includes a manual accounts receivable subsidiary ledger for all other receivables due CDC.
- Real Property System is a manual card file system which presently accounts for about \$52 million in land, improvements and structures at seven locations in four different states. Cost data is accumulated and reported to HHS headquarters annually.
- Property Management System records two categories of personal property--capitalized items costing \$300 or more and noncapitalized items which the agency considers sensitive, such as small desk calculators and camera lenses.
- Warehouse Inventory System is a computerized perpetual inventory system for warehouse supplies. Controlling a total inventory over \$750,000, the system allows a requestor to order general supplies directly by computer terminal.
- Property Reconciliation System involves both automated and manual procedures which compare and reconcile all entries made to the Warehouse Inventory, Real Property, and Property Management Systems.
- Engineering Services Control System maintains records for and control over Engineering Service's cupboard stock of about \$1.8 million in maintenance supplies.
- Computer Resources Accounting and Billing System records costs of computer usage and Computer Systems Office staff time charged to various programs or offices. The system summarizes the cost of services provided each user of computer equipment or computer system office staff services.

In addition to these eleven systems, CDC operates several other systems to analyze and report financial information for planning purposes. Because these systems do not authorize or account for expenditures, we did not include those systems in our survey.

CDC'S UMBRELLA ACCOUNTING SYSTEM--
THE MAJOR FINANCIAL MANAGEMENT SYSTEM

The Umbrella Accounting System maintains CDC's general ledger accounts and controls the processing and reporting of financial information. The system accounts for funded costs, unfunded costs, expenditures and administratively controls CDC's appropriated funds. For fiscal year 1982, the system controlled CDC's total budget authority of about \$350 million. In addition to fulfilling

internal financial information needs, the system produces all financial information required by the Congress, Office of Management and Budget, and Treasury Department.

System overview

The Umbrella Accounting System is run on an IBM 370/computer located at CDC headquarters, Atlanta, Georgia. It receives transaction information from twelve CDC organizational components that initiate accounting transactions which are called accounting points. The two major accounting points are the CDC Financial Management Offices located in Atlanta, Georgia and Cincinnati, Ohio. The remaining ten accounting points are the CDC staff assigned to the Department's regional offices. The Umbrella Accounting System also receives information from and/or sends information to the Departmental Federal Assistance Financing System, Central Personnel/Payroll System, Federal Assistance Reporting System, and Central Registry System.

System inputs

The Umbrella Accounting System receives input information on a daily, bi-weekly, and monthly basis. It operates on a 24-hour turn-around basis: that is, it processes transactions received during the day that night and returns hardcopy reports on processing results to CDC accounting points the following day. Only the Cincinnati accounting point receives information from the Umbrella Accounting System via computer terminal.

Each day, CDC accounting points transmit transaction data via telecommunication lines to the system. CDC's accounting points record obligations, disbursements, collections, etc. on a form called the Document History Record (DHR). DHR's are grouped into batches, and the transaction information in each batch is sent by computer terminal to the Umbrella Accounting System.

Batches consist of a header/trailer document and the detailed transactions. Header/trailer documents provide a record count and total dollar amount of transactions in a batch. Transactions include such documents as vendor invoices and obligation documents. Header/trailer information is used by the Umbrella Accounting System to help ensure that transactions are not lost, added to, or improperly changed during processing.

In addition to CDC's Atlanta and Cincinnati accounting points, the Department's 10 regional offices also initiate transactions that must be processed through the Umbrella Accounting System. Transactions initiated in the regional offices are first processed on a daily basis through the Regional Accounting System. Monthly, the Regional Accounting System provides the Umbrella Accounting System with a magnetic tape that summarizes the transactions initiated by the regional offices during the month.

The Umbrella Accounting System also exchanges information with the Department's Central Personnel/Payroll System and the

Departmental Federal Assistance Financing System. The exchange of information is accomplished by magnetic tape files. The Umbrella Accounting System receives biweekly payroll disbursement and cost data from the Central Personnel/Payroll System. Monthly, the Umbrella Accounting System receives from the Departmental Federal Assistance Financing System information on cash advances made to CDC contractors and grantees and expenditures of advanced cash reported by CDC contractors and grantees.

The Umbrella Accounting System provides information to the Departmental Federal Assistance Financing System, the Departmental Federal Assistance Reporting System and Central Registry System. It provides the Departmental Federal Assistance Financing System with obligation information for new CDC awards of contracts and grants. The Umbrella Accounting System provides Federal Assistance Financing System information on contracts and grants funded by CDC, and it provides the Central Registry System with identification information--name, address, and identification number--for CDC contractors and grantees.

System files

The Umbrella Accounting System's files fall into two groups: transaction level files and status level files. Overall, the Umbrella Accounting System maintains a total of seven major files.

Transaction Level files account for and control transaction information prior to updates of the status files and include the:

- Rotating Error File which accounts for all transactions rejected by edits. It includes rejected transactions until they are corrected, changed, or deleted.
- Weekly Activity Hold File which contains all valid transactions that passed edits and were updated to the Open Obligation Document File. It is used to update the Report Master File and General Ledger Master File.

Status Level files account for and control transactions that passed edits and maintain CDC's general ledger accounts and include the:

- General Ledger Master File which reflects the current status of general ledger accounts by accounting points, appropriation, and region.
- Report Master File which is used for reporting purposes and contains data necessary to prepare financial reports such as the daily status of funds report.
- Open Obligation Document File which controls obligations. It contains data pertaining to each document which is opened and also those closed documents which have not yet been purged. It is used for data validation and fund control

because it records the cumulative status of commitments, obligations, accruals, and disbursements.

--Vendor File which contains data for entities doing business with CDC. It is arranged by entity name and location.

--Miscellaneous Codes and Description File which contains system tables of valid codes used during editing of transaction information.

System processing and reports

The Umbrella Accounting System requires a user password and an accounting point identification code to gain access to and process transactions through the system. It processes transactions, updates its files and generates reports on a daily basis. The system produces about 117 daily, weekly, monthly, and yearly reports. These reports show, among other things, the status of funds, appropriation balances, obligations, and disbursements.

As mentioned earlier transactions are grouped into batches for processing through the Umbrella Accounting System. When transactions enter the system, the system counts the number of transactions in a batch and computes total dollar amounts of transactions in a batch. It records these counts and totals and compares them with the figures shown on the batch header/trailer records. If the two do not agree, the system will reject the batch and print out an error message.

The system edits transactions against information in the Miscellaneous Codes and Description File and the Open Obligation Document File. The system performs about 50 edits on the validity and accuracy of transaction information like object class codes, common accounting numbers (CAN's), and transaction codes. The system rejects transactions that do not pass the edit checks, generates error messages, and produces a daily error report for all transactions it rejects. The system also writes all rejected transactions onto the Rotating Error File.

The system writes error free transactions onto a Weekly Activity Hold File. The Weekly Activity Hold File is used to update the Open Obligation Document File and General Ledger Master File on a weekly basis. The Report Master File is updated on both a daily and weekly basis with information in the Weekly Activity Hold File. Transactions rejected by edit checks are held in the Rotating Error File until they are corrected. The system uses the Report Master File and the Open Obligation Document File to create various internal and external financial reports.

System internal control strengths and weaknesses

The internal controls in the Umbrella Accounting System appear adequate to ensure that financial results of program and administrative operations are completely and accurately recorded in the

general ledger accounts. For example, the system has a user password to identify persons authorized access to enter transactions; it checks transactions entering the system against tables of valid codes, and it uses a rotating error file to help ensure that rejected transactions are corrected and reentered into the system for processing through the computer in a timely manner.

The key internal control strengths in the Umbrella Accounting System, include:

- Requirement that a receiving report, vendor's invoice, and the obligating document--e.g. purchase order--be compared prior to processing to ensure that only goods and services actually received are paid for.
- Rotating error file that keeps account of all error transactions until corrected and generates a daily error report.
- Vendor file to assure that only authorized contractors and grantees are accepted and unauthorized ones rejected by the system.
- Creation of an audit trail for transactions received, processed, and rejected.

We also noted several control weaknesses and operational inefficiencies in the Umbrella Accounting System:

- Lack of written procedures describing the batch processing routine for disbursements, receipts, and obligations.
- Inadequate documentation of the system. The draft accounting manual contains a description of several system files which have actually been consolidated or are simply not used at CDC. In response to our inquiry CDC representatives provided descriptions of the system as it currently operates. The descriptions do not adequately document the entire system, but do provide an overview.
- Maintenance of manual files of payments to vendors and related information. Therefore, CDC has to look in several places in order to obtain the necessary information for responding to an inquiry. This is an involved process. The computer could easily capture this information and generate a hardcopy documents that the staff could use to respond to vendor inquiries more timely.

System enhancement projects underway

In its fiscal 1983 computer programming needs plan, CDC's Financial Management Office requested that CDC's Computer Systems Office modify and upgrade existing financial reports and modify the Umbrella Accounting System. For example, the Computer System Office was requested to develop a subsidiary accounts receivable

system that could process transactions entered into the Umbrella Accounting System. The Computer System Office has also been requested to develop a vendor inquiry system to maintain a master file of all transactions processed by the Umbrella Accounting System for a particular vendor and develop an automated reconciliation system for the Umbrella Accounting System's general ledger accounts with related subsidiary ledger detailed accounts.

SUBSIDIARY LEDGER SYSTEMS THAT SUPPORT CDC'S UMBRELLA ACCOUNTING SYSTEM

The Umbrella Accounting System is supported by four systems that maintain detailed subsidiary ledger detailed accounts which support summary financial information in general ledger accounts maintained by the Umbrella Accounting System. These four systems are the Miscellaneous Recurring Obligation File, the Cash Control, Travel Advance and Accounts Receivable systems. Each operates on the IBM 370/computer at CDC headquarters in Atlanta.

Miscellaneous Recurring Obligation File System

This system accounts for and controls recurring obligations--utilities and maintenance contracts for example--and reports them to the Umbrella Accounting System for entry in the general ledger accounts. At the beginning of each month, the system provides a magnetic tape file of recurring obligations to the Umbrella Accounting System and produces hardcopy reports summarizing all recurring obligations for the month.

At the beginning of the fiscal year, CDC lists all its recurring obligations and enters this information into the Miscellaneous Recurring Obligation File System. During the year, the Financial Management Office prepares monthly lists of updates or changes to the original list of recurring obligations. These updates and changes are entered into the system.

At the beginning of each month, the Miscellaneous Recurring Obligation File System produces a magnetic tape file of the month's recurring obligations for entry into the Umbrella Accounting System. Upon entry to the Umbrella Accounting System, the information on the tape is edited. For example, recurring obligations are checked against the Common Accounting Number table for validity. Transactions including errors are rejected from further processing and are reported on the daily error report of the Umbrella Accounting System and kept in its Rotating Error File until corrected.

Recurring Obligations rejected by edits in the Umbrella Accounting System are sent to the Financial Management Office which distributes them to the program offices and centers for review, correction, and reprocessing through the Miscellaneous Recurring Obligation File System the following month.

Our survey of the Miscellaneous Recurring Obligation File System did not disclose any obvious internal accounting control

weaknesses. However, we observed that CDC lacks adequate documentation to describe the system's operations.

Cash Control System

The Cash Control System separately accounts for all transactions affecting the general ledger cash accounts maintained by the Umbrella Accounting System. This system is used to independently verify cash account balances. It produces seven reports, one of which is used to support the manual preparation of the monthly Treasury SF-224 report--Statement of Transactions Report.

The Umbrella Accounting System maintains the general ledger cash accounts based on individual cash disbursement and collection documents processed through the system. The Cash Control System maintains its cash accounts based on (1) Vouchers and Schedules of Payments sent to the Treasury Department to initiate the issuance of checks and (2) on schedules of collections sent to the Treasury Department to report cash receipts.

Inputs to the Cash Collection System are disbursement and collection schedules produced and sent to the Treasury Department each week that summarize individual cash transactions posted to general ledger accounts. Information on payment and collection schedules is recorded on a code sheet and the code sheets, in turn, are key-punched and are entered into the Cash Collection System. The Cash Collection System also receives weekly extracts from the general ledger cash accounts on a magnetic tape file.

The Cash Collection System creates several masterfiles of cash collection and disbursement transactions. The system then compares the masterfiles it created with the magnetic tape file of the extracts of general ledger cash accounts maintained by the Umbrella Accounting System to identify and report any differences in cash balances.

To do its job, the Cash Control System maintains eight masterfiles. They are the:

- Cash Transaction Input File contains all transactions entering the system.
- Accumulated Cash Control File is an update of the previous day's activity with the current day's activity.
- Unreconciled Cash Transaction File contains all cash transactions with a balance other than zero.
- Unreconciled General Ledger Transaction File contains all general ledger cash transactions with a balance other than zero.
- Updated Cash Transaction File includes all current cash transactions.

--Updated General Ledger File contains all selected current general ledger cash accounts.

--Invalid Cash Transactions File maintains all transactions in error.

--Valid Cash Transactions File accounts for all error free cash transactions.

The Cash Control system performs three processing functions. They are the edit, update, and report generation functions.

The edit function validates transaction data based on nine predetermined numeric criteria. For example, the system checks for a batch number, date, amount, transaction type, and transaction code for each transaction record. If an error is identified in input information, an error message is printed-out. The edit function produces an error listing, writes rejected input information on an error file, and writes error free input information on a valid transaction file. The valid transaction file is used by the update function to maintain the system's masterfiles listed above.

Input information rejected by edits in the Cash Control System is placed in a "hold" state pending correction of rejected transactions by the Financial Management Office. The error lists produced by the edit function are sent to the Financial Management Office for correction of errors and resubmission of the corrected input information for reprocessing by the Cash Control System. This process may be repeated as often as necessary until all errors have been corrected.

The Cash Control System's update function updates the system's eight masterfiles. It is based on information in the valid transaction file created by the edit function and the magnetic tape file of general ledger cash accounts maintained by the Umbrella Accounting System. The files updated by the update function are the inputs to the report generation function.

The report generation function, based on information in the Cash Control System's masterfiles, produces seven reports and listings showing weekly cash transactions and comparisons between the weekly cash transactions and the general ledger cash accounts. These reports go to the Financial Management Office for retention and preparation of the monthly Treasury report.

We did not observe any internal accounting control weaknesses in the Cash Control System. This system does not authorize any transactions but serves as a control to reconcile the general ledger cash accounts with cash disbursement and receipt information sent to Treasury.

Travel Advance System

The Travel Advance System accounts for and controls all travel advances made to CDC employees and refunds of advances received

from them. It maintains travel advance information in automated files and produces three reports with subsidiary listings in various formats.

Inputs to the Travel Advance System are (1) standard travel advance cards (SF-1138) for each employee for travel advances and (2) collection schedules and travel vouchers for refunds of travel advances received from employees. Input information is processed on a daily basis.

The Travel Advance System consists of three functions: the edit, update, and report generation functions. These functions use four automated masterfiles to record, process, and report travel advance information. The four masterfiles are the:

--Daily Transaction Input File contains all transactions submitted for entry to the system. Transactions remain in this file until processing is completed.

--Valid Transaction File includes all transactions that passed edits.

--Invalid Transaction File includes all transactions that did not pass the edits.

--Updated Transaction File includes status of all valid transactions by employee showing all advances and refunds by employee.

The edit function validates transaction data based on six predetermined numeric criteria. For example, one edit check involves the transaction code. Only two transaction codes are used by the system--one for a travel advance and one for a refund of an advance. If a transaction fails any one of the six edits it is rejected and an error message is produced. The system writes transactions that passed edits on the Valid Transaction File and the Daily Transaction Input File and rejected transactions onto the Invalid Transaction File.

Rejected transactions and related error messages are sent to the Financial Management Office for correction and resubmission for processing through the Travel Advance System. This process may be repeated as often as necessary to ensure that all errors are corrected.

The update function uses the Daily Transaction Input File as the source of information for processing. The system sorts transactions by employee name and social security number, computes balances for each employee, and updates the Updated Transaction File.

The report generation function uses the Updated Transaction File as an input and produces two weekly reports and one monthly report that are sent to the Financial Management Office. The major report produced is the travel advance subsidiary report which shows total outstanding advances by employee.

The key internal control strengths in the Travel Advance System are:

- Use of predetermined numeric criteria to edit transactions.
- Use of system edits to ensure only valid transactions update the system files.
- Edit listing of accepted and rejected transactions.

The key internal control weaknesses and inefficiencies in the Travel Advance System are that:

- An automated error suspense file is not maintained to account for and control rejected transactions until corrected.
- A list of all employees' social security numbers is not maintained to ensure that only bona-fide employees receive advances.

Accounts Receivable Systems

CDC uses a manual and an automated system to account for, control, and maintain detailed subsidiary ledger accounts for accounts receivable. The detailed subsidiary ledger accounts support summary financial accounts in the general ledger.

CDC routinely processes six classes of accounts receivable. These classes of receivables and the system they are processed through follow.

Automated Accounts Receivable System	--Reimbursements of Foreign Quarrantine Overtime Pay
	--Non-federal reimbursable Travel
Manual Accounts Receivable System	--Miscellaneous Refunds
	--Transportation Request Refunds
	--Reimbursement Training
	--Reimbursement Agreements

The operations of the two accounts receivable systems are briefly discussed below.

Automated Accounts Receivable System

This system accounts for, controls and maintains detailed subsidiary ledger accounts for receivables for reimbursements of foreign quarantine overtime pay and non-federal reimbursable

travel. This system processes transactions on a monthly basis because of the small volume of billings and collections.

The Automated Accounts Receivable System processes accounts receivable transaction batches once a month. It produces three reports. At the completion of monthly processing, detailed subsidiary ledger accounts are manually reconciled with summary general ledger accounts maintained by the Umbrella Accounting System.

Billing and collection documents are the inputs to the automated Accounts Receivable System. These same documents are summarized on a separate document which is used to enter summary billing and collection information into the Umbrella Accounting System. The billing and collection documents are grouped into batches, and the information on the documents in the batches is keypunched onto machine media records. The machine media records are entered into the automated Accounts Receivable System for processing through the computer.

The automated Accounts Receivable System consists of three functions: editing, updating, and reporting functions. The system uses four automated masterfiles in processing billing and collection information:

- Invalid Transaction File.
- Valid Transaction file.
- Weekly Activity File.
- Month-to-Date Activity File.

The editing function accepts billing and collection information and performs 12 edit checks of this information. For example, the system verifies the number of items in each batch, the date of the individual transaction, transaction code, and bill number. The system will reject any transaction that fails to pass any one edit check and writes this transaction onto the Invalid Transaction File. The Invalid Transaction File is used to prepare an error listing which is sent to CDC's Financial Management Office. All transactions passing all edit checks are written onto the Valid Transaction File which is the input for the updating function.

CDC's Financial Management Office is responsible for investigating, correcting, and resubmitting for processing all billing and collection transactions that are rejected by edit checks in the automated Accounts Receivable System. Corrected transactions are reprocessed through the system's editing function.

CDC's Financial Management Office is responsible for investigating, correcting, and resubmitting for processing all billing and collection transactions that are rejected by edit checks in the automated Accounts Receivable System. Corrected transactions are reprocessed through the system's editing function.

The Valid Transaction File is used by the updating function to update the two detailed accounts receivable subsidiary ledgers maintained by the system: the Weekly Activity File and the Month-to-Date Activity File. The updating function computes current accounts receivable balances based on the billing and collection information entered into the system and posts these balances to the appropriate masterfile. The Weekly Activity and Month-to-Date Activity files are the inputs to the reporting function.

The Weekly Activity and Month-to-Date Activity Files are used by the reporting function to produce three reports. These reports show detailed accounts receivable transactions for the month, current balances for each account receivable, and an aging of all accounts receivable. The three reports are sent to CDC's Financial Management Office. The Office uses the reports to monitor the collection of accounts receivable and to reconcile detailed subsidiary ledger accounts receivable accounts with summary financial control accounts for receivables in the general ledger maintained by the Umbrella Accounting System. This reconciliation is done manually.

We noted some internal control strengths in the automated accounts receivable system, and we also observed some apparent control weaknesses. The internal control strengths in the Automated Accounts Receivables System are:

- Predetermined numeric criteria is used to accept or reject transactions for processing.
- System allows only valid transactions to update the system files and be used by the report generating function.
- Financial Management Office reconciles the system's balance with the general ledger.

We also observed the following internal control weaknesses and operation inefficiencies in the Automated Accounts Receivable System:

- CDC does not maintain a receipt log book, listing of checks received, nor does it endorse checks upon receipt.
- The system does not have an automated error suspense file to account for transactions rejected by the system.
- Financial Management Office lacks sufficient documentation to describe the system and its operations.

Manual Accounts Receivables Ledgers

The manual Accounts Receivable Ledgers account for, control, and maintain detailed subsidiary ledgers accounts for receivables arising out of miscellaneous refunds, transportation request refunds, reimbursable training, and reimbursement agreements. Billing and collection information is processed on a daily basis. Monthly, the detailed subsidiary ledger accounts are reconciled

with summary general ledger accounts maintained by the Umbrella Accounting System.

Billing and collection documents are the inputs to the manual Accounts Receivable System. These same documents are summarized on a separate document which is used to enter summary billing and collection information into the Umbrella Accounting System. The manual Accounts Receivable System consists of manually maintained billing and collection registers for each account receivable. Billing and collection information is posted to the billing and collection registers as the information is received.

Each month, the manually maintained billing and collection registers are reconciled with summary financial control accounts for receivables in the general ledger maintained by the Umbrella Accounting System. Quarterly, an aging report is prepared from the information in the billing and collection registers.

We did not identify any internal control weaknesses in the manual accounts receivable ledgers. CDC should consider automating ledgers and save time currently spent in maintaining and using these manual records.

OTHER FINANCIAL MANAGEMENT SYSTEMS

In addition to the four systems that maintain subsidiary ledger accounts to support general ledger accounts maintained by the Umbrella Accounting System, CDC operates six other financial management systems. These systems account for, control, and report on its investment in personal property and supplies and the costs it incurs to operate its computer center. CDC's six other financial management systems are the:

- Real Property System
- Property Management System
- Warehouse Inventory System
- Property Reconciliation System
- Engineering Services Control System
- Computer Resources Accounting and Billing System.

Real Property System

CDC owns and operates seven building complexes located in four states which cost--including major improvements--about \$52 million. The Real Property System accounts for, controls, and reports on this \$52 million investment. The system is an antiquated manual card file system which contains (1) the original cost of the property and (2) the cost of any project which would involve major repair or improvement to an existing structure.

Transactions involving real property--acquiring new property, disposing of old property or making improvements to existing property--are independently recorded in three systems. Obligations and disbursements for new property, or improvements to existing property and transactions related to disposing of old property are recorded in the general ledger asset accounts maintained by the Umbrella Accounting System. In addition, entries for these obligations, disbursements, and transactions are also made in the Real Property System and the Property Reconciliation System.

CDC's Real Property Office receives source documentation for any purchase of property, disposition of property, or construction of repair work to be performed on any CDC-owned building or other facility. A property specialist decides whether to enter the transaction in the capitalized or non-capitalized accounts and records the appropriate amounts in the Real Property System. Annually, the Real Property Office forwards to the Department of Health and Human Service's, Office of the Secretary copies of all source documents involving acquisition, disposition, or modification of real property. This information is entered into the Department-wide Real Property System operated by the Office of the Secretary.

Copies of source documents covering real property transactions are also sent to the Financial Management Office for independent entry into the general ledger asset accounts of the Umbrella Accounting System. The information in the general ledger asset accounts maintain--in summary form--financial accountability and control for CDC's investment in real property. In addition, the Financial Management Office also enters real property transactions into the Automated Property Reconciliation System.

The Real Property System essentially consists of a manually maintained card file which is CDC's detailed permanent record of real property. Monthly, the Department-wide Real Property System, operated by the Office of the Secretary, provides the CDC Real Property Office with a list of CDC entries in the Department-wide system for reconciliation with the Real Property System and for verification and correction if needed.

All decisions to capitalize a real property transaction by CDC's Real Property Office are reviewed by the Financial Management Office. Because of this built in control, CDC is assured that any marginal decision has at least been reviewed by two different individuals.

Property Management System

CDC operates its automated Property Management System to account for, control, and report on all personal property costing \$300 or more and about 4,000 'sensitive' equipment items costing less than \$300--like hand-held electronic calculators. CDC's total investment in personal property exceeds \$60 million.

Transactions involving personal property--acquisition of new property and disposition of excess property--are independently recorded in three CDC financial management systems. Obligations and

disbursements for acquisition of new property and transactions for dispositions of excess property are recorded in the general ledger accounts maintained by the Umbrella Accounting System. Similar entries are also made in the Property Management System and the Property Reconciliation System.

All transactions involving purchases of personal property are initiated in CDC's operating components through preparation of a purchase requisition. Purchase requisitions are sent to CDC's Procurement Branch which, after reviewing and approving the requisition, prepares and issues a purchase order. Copies of purchase orders are sent to CDC's Personal Property Office. The Personal Property Office holds the purchase orders until the corresponding receiving reports are received from CDC's operating components. Once both documents are received, the Personal Property Office (1) decides whether or not each item should be capitalized and (2) prepares a computer coding sheet--called a document history record (DHR)--to enter items of personal property that should be capitalized into the automated Property Management System.

Similarly, CDC operating components will notify CDC's Personal Property Office of excess property. The Personal Property Office will first determine whether the excess property can be used by any CDC operating component. If the excess property cannot be used within CDC, the Property Office will offer the excess property to other operating components in the Department of Health and Human Services. If the property is not needed within the Department, the Property Office will contact the General Services Administration for disposition instructions. Once disposition of excess property has been decided upon and disposition instructions are received, the CDC Personal Property Office will prepare a DHR to record the disposition transaction in the automated Property Management System.

Copies of source documents processed by the Personal Property Office--purchase orders, receiving reports, and disposition instructions for excess personal property--are forwarded to CDC's Financial Management Office for entry into the Umbrella Accounting System and the Property Reconciliation System.

The Personal Property Office also records all DHR's in a manually maintained property voucher log as a back-up record to the automated files maintained by the automated Property Management System and keypunches the DHR's onto machine media records which are entered into the Property Management System.

The Property Management System processing involves the computer receiving data input, arranging that data into various formats and totalling cost figures. Although the system performs only limited edits, it does perform a file search to ensure that no duplicate entries are made to the property records. When duplicate entries occur, which are infrequent, the computer rejects the second entry and prints an exception report for corrective action to be taken. After data input, an edit run is made. Reports are sent to the Personal Property Office where a manual edit is also

performed. Corrections are reprocessed through the automated Property Management System.

Although the controls presently in place adequately control CDC personal property, increased computer edits would reduce staff time spent reviewing edit reports. The system can reconcile each month's balances to the previous month's balances and to the balances in the general ledger accounts maintained by the Umbrella Accounting System.

Warehouse Inventory System

The Warehouse Inventory System accounts for, controls, and reports on various office and warehouse supplies along with laboratory glassware and some special control items. The system controls a total inventory of about \$730,000.

The Automated Warehouse Inventory System automatically provides management with all information, on a timely bases, needed to control and account for supplies. Specifically, system features include on-line information retrieval, automatic update of inventory records, preset reorder levels, monitoring of inventory levels and usage, the ability to print a catalogue of items and inventory lists, and on-line printing of documentation required for the Umbrella Accounting and Property Reconciliation systems.

Transactions involving office, warehouse, and laboratory supplies are independently recorded in three CDC financial management systems: Obligations and disbursements for the acquisition of supplies and costs for supplies used in operations are recorded in the general ledger accounts maintained by CDC's Umbrella Accounting System. These transactions are also recorded in the Warehouse Inventory System and Property Reconciliation System.

Transaction information is entered into the Warehouse Inventory System by Computer terminal. The system recognizes two transaction codes: one code for issuing supplies and another code for purchasing supplies. The Warehouse Inventory System includes two processing cycles: the issuing cycle and the purchasing cycle.

Personnel in CDC operating components that need supplies enter their requests, via computer terminal into the Warehouse Inventory System. The system identifies requestors of supplies by the requestors' system passwords, CDC location codes, telephone numbers, and Common Accounting Numbers (CAN'S). A CAN identifies a CDC organizational component and program.

Once the Warehouse Inventory System identifies a requestor as a proper system user, it will accept the supply requisition, and, if the supplies are in stock, produce, by computer terminal, an instruction to the warehouse to issue the supplies. The system also produces a hardcopy report and magnetic tape file of all supply issues. These outputs are sent to CDC's Financial Management Office for entry into the Property Reconciliation and Umbrella Accounting Systems respectively.

If requested supplies are not on-hand, the Warehouse Inventory System will allow the requestor to initiate a purchase requisition for the needed supplies. If the requestor wants to initiate a purchase requisition, the system can provide the requestor with useful information. For example, if the requestor enters a CDC catalogue number for an item, the system will display detailed information about the item to help the requestor in deciding if the item is what he or she wants. The information includes a narrative description of the item, its unit price, current inventory level and the accounting code. If the item is what the requestor wants, an order can be made by simply entering the catalogue number and quantity requested. The computer will then perform certain tasks and edits such as adjusting the inventory balance, edit for items reaching the reorder level, assign a requisition number, and print the purchase requisition.

The Warehouse Inventory System maintains individual item perpetual inventory balances and flags each item record when the stock item reaches a predesignated reorder point. Periodically, usually every few days, the warehouse will have a list printed containing reorder items. That list constitutes a warehouse purchase requisition.

Purchase requisitions prepared by the Warehouse Inventory System are sent to CDC's Financial Management Office for preparation of needed purchase orders. The purchase orders initiate an entry into CDC's Umbrella Accounting System to establish an obligation for the ordered supplies.

When a vendor delivers a shipment to the warehouse and after the quantities are verified, a shipment number is assigned and entered into the warehouse tally log--a manually maintained chronological record of shipments received. That log, among other things contains the shipment number, the vendor, a brief narrative of what was received, the applicable purchase order, and whether that purchase order was partially or completely filled. The warehouse enters the receiving information into the Warehouse Inventory System by computer terminal. The system then assigns a tally number to that shipment, using the CDC inventory number, records the location in the warehouse; recomputes average unit cost based on the quantity received and total cost; and finally prints a hard copy receiving report.

The hardcopy receiving reports are sent to CDC's Financial Management Office. When the Financial Management Office receives vendor invoices, they are matched with the corresponding purchase requisitions and receiving reports, and the Financial Management Office enters the invoices into the Umbrella Accounting System to record the expenditures and initiate payments to the respective vendors. The invoices are also entered into the Property Reconciliation System.

The Warehouse Inventory System produces about 20 different reports available in several different formats. In addition to

inventory lists and catalogues, the system generates such information as the value of inventory receipts, issuances and stock on hand, reorder lists, activity reports including a report of items having no activity, and various order status reports.

Only one copy of a users manual was prepared when the system was designed, and it has since disappeared. The result has been that several reports listed in the inventory are not being used and information is being obtained through other, more complicated means.

Property Reconciliation System

The Property Reconciliation System is the link between the detailed records maintained by the Real Property, Property Management, and Warehouse Inventory systems and the summary financial accounts maintained by the Umbrella Accounting System. The system reconciles the property systems' detailed accounts with general ledger accounts maintained by the Umbrella Accounting System and produces three reports on request.

As discussed previously all property related transactions are independently recorded in the Real Property, Property Management, Warehouse Inventory, Umbrella Accounting, and Property Reconciliation systems. Property transactions are recorded onto a standard code sheet which includes the cost, appropriation number and general ledger account. Once the code sheet is prepared it is keypunched onto a machine media record and is processed through the Property Reconciliation System. The system also receives information on selected accounts in the general ledger from the Umbrella Accounting System.

This system uses several files to reconcile amounts recorded in the detailed property records with amounts recorded in the general ledger property accounts. These files are the:

- Property Transactions Input File which contains all transactions entering the system for a month.
- Valid Property Transactions File which contains only error free transactions that passed the edit function.
- Invalid Property Transactions File which contains all rejected transactions.
- Updated Property Records File which consists of last month's activity plus the current month's activity.
- End-of-the-Month Non-Zero Document Records File which contains all property transactions without a zero balance.
- Selected Records from General Ledger Transactions File which contains selected property records from the Umbrella Accounting System.

--Accumulated General Ledger Transactions File which includes the cumulative property accounting data for the selected general ledger property accounts.

--Appropriation Balances File which includes ending property balances for each appropriation.

Upon request, this system reconciles property accounting transactions with selected general ledger accounts. It uses four automated functions: the selection and accumulation, edit, update, and report generation functions.

The selection and accumulation function selects general ledger property account records from the magnetic tape file produced by the Umbrella Accounting System. It transfers this data onto another magnetic tape file, thereby, creating a general ledger work file that is used during the update and report generating functions.

Once all general ledger transactions for the month have been accumulated and monthly property transactions entered, the monthly property transactions are processed through the edit function. The edit function validates data according to about eight predetermined criteria such as date, amount, and batch number. Transactions that do not pass edits are rejected from further processing and are printed onto an error report. The error reports are sent to CDC's Financial Management Office for correction of errors and resubmission of the corrected transactions for processing through the system. The Property Reconciliation System does not have a rotating error file.

Transaction information that passes edits enters the update function which matches the information in general ledger asset accounts with the detailed property transactions by account, appropriation, and document numbers. It identifies and prints out for investigation and correction any general ledger asset accounts and detail property records that do not match and posts the correct transactions to the Updated Property Records File. The system then uses the Updated Property Records File during the report generation function.

The report generation function produces about three reports. The main report produced is the property reconciliation report which shows the general ledger records and property transactions that passed the edit function and updated the system, and denotes any differences between the two.

Our survey of the Property Reconciliation System disclosed several internal control strengths such as the:

- Edit function which accepts and rejects transactions that do not meet certain predetermined numeric criteria, and
- An edit listing identifying transactions rejected by the system.

While we did not observe any apparent internal control weaknesses, we did note an apparent operating inefficiency. The system processes transactions already processed by the Real Property, Property Management, and Warehouse Inventory systems as well as the Umbrella Accounting Systems.

Engineering Services Control System

The Engineering Services Control System (1) schedules periodic maintenance required for CDC's real and personal property and (2) accounts for, controls, and reports on CDC's inventory of maintenance supplies. The system also compiles time charges and computes costs for individual maintenance projects to allow CDC's Engineering Services office to monitor individual project costs and timeframes.

In surveying the operations of the Engineering Services Control System we focused on those aspects of system operations that pertained to accounting for, controlling, and reporting on CDC's inventory of maintenance supplies. We did not focus on those aspects of system operations relating to (1) scheduling periodic maintenance projects and (2) compiling costs and time changes for individual maintenance projects.

The Engineering Services Control System accounts for, controls, and reports on supplies inventory used for maintenance projects. These supplies constitute a "cupboard stock"--that is items expected to be consumed within a 30-day period. The estimated value of supplies on hand at any point in time is about \$1.8 million.

Purchase requisitions for maintenance supplies are initiated in the Engineering Services Office and are sent to CDC's Financial Management Office. The Financial Management Office issues a purchase order for the requested supplies and enters the transaction into CDC's Umbrella Accounting System.

Vendor shipments of maintenance supplies are received at CDC's Engineering Services building. Upon receipt of supplies a receiving report is prepared. One copy of the report is sent to the Financial Management Office to be matched with the related purchase order and vendor invoice and for processing through the Umbrella Accounting System to record the cost of supplies and to initiate payment to the vendor. Another copy of the report is sent to the Engineering Services Office to enter the supplies received into the inventory records maintained by the Engineering Services Control System. Entry into the system is made by computer terminal.

Issuances of maintenance supplies for specific maintenance projects are signed for and charged to an active maintenance project number. Issuances of supplies are recorded on a supply coding sheet. The information on these sheets is subsequently entered into the Engineering Services Control System by computer terminal.

The system performs routine edit checks such as verifying the CAN number and stock number. It is not designed to verify the

quantity or unit cost of inventory entries. Any data entry errors are reported on a daily error report. The system also compares quantity balances on hand during each run to predetermined reorder levels, and stores that information until requested. The system can also recall at any time, items which have had no activity over a given period. The Engineering Services Control System produces a standard inventory listing, a detailed transaction register, a listing of items having reached a predesignated reorder level, and a list of inactive inventory items.

The Engineering Services Office does have in place a good set of manual controls over the receipt and issuance of supply items. The maintenance supplies, however, are not routinely inventoried and reconciled with the records maintained by the Engineering Services Control System. Consequently, there is no assurance that the inventory balances reported by the system are accurate.

Computer Resource Accounting And Billing System

The Computer Resource Accounting and Billing System maintains detailed records and information about the users of computer resources, Computer Systems Office personnel costs associated with operational support, and programming costs. The Computer Resource Accounting and Billing System processes four types of input information. The four types of input information are:

- ADP equipment and personnel unit cost factors.
- Actual time charges by Computer Systems Office personnel.
- Computer and other equipment resource usage.
- Direct charges from the Computer Operations Branch.

Annually the Computer Systems Office manually computes unit costs for various programming services and computer usage. These unit costs include hourly rates for different levels of programmers, charges for computer time, computer printouts, and charges for keypunching services and photocopying of copies of reports. These unit costs are estimated on the basis of estimates of annual computer usage and the Computer Systems Office's operating budget.

Computer System Office personnel record and report the time they spend on specific projects. These time records are the bases for inputs into the system regarding actual time charges for Computer System Office personnel.

Computer and other equipment resource usage is provided by standard reports produced by the operating systems that control the operations of CDC's computer equipment. Operating systems are complex computer programs that are supplied by the manufacturer of the computer equipment itself. Operating systems actually control the operations of the computer equipment and produce reports which detail the amount of computer resource used by each job done by the computer.

Direct charges from the Computer Operations Branch for services like keypunching and photocopying services are accumulated on manual logs by project number. These logs become the source for entering information into the Computer Resource Accounting and Billing System.

The four types of input information are entered into the Computer Resources Accounting and Billing System by computer terminal. The system, based on input information computes project costs and updates the system's workload control file. The system performs no substantive edits, and as long as input information is entered according to required formats, it will be accepted and processed.

The workload control file is used to produce two monthly reports, a computer resource cost and utilization summary, and a computer billing report. The cost and utilization report breaks out monthly charges to each organizational component and reports charges by individual users. The computer billing report is a detailed report which breaks down organization charges by which programs were run, how many times they were run, the time required for each run, and the total applicable cost. Only one copy of each report is prepared and it is used by the Computer Systems Office for planning and reporting purposes. In addition to these, the system can generate four other infrequently used reports on request.

OTHER CONCERNS

In addition to the specific systems weaknesses discussed in the preceding sections, our survey disclosed concerns with the security over CDC's computer equipment and files. According to a recently issued Office of Inspector General report, security for ADP systems at CDC was generally inadequate because management placed little emphasis on protecting computer hardware or stored data. The OIG also found that documentation for computer systems was either absent or incomplete. Specifically, OIG had the following major criticisms:

- Emphasis on ADP security was not sufficient to ensure ADP production.
- Contingency plans were not in place to ensure continuity of data processing in the case of an emergency.
- Physical security at CDC computer facilities was inadequate.
- Documentation of computer application systems was poor.

OBJECTIVES, SCOPE, AND METHODOLOGY

This survey viewed the Center for Disease Control as a financial entity and focused on identifying its financial management structure, related systems, and internal control strengths and weaknesses in these systems. The survey applied GAO's Controls and Risk Evaluation (CARE) audit approach.

SURVEY OBJECTIVES

Our survey objectives were to (1) document all manual and automated systems at the Center for Disease Control that process financial transactions from the time they are authorized through final reporting of these transactions in internal and external reports, (2) identify the relationships between these systems, that is, the flow of information among different systems, and (3) identify and document internal control strengths and weaknesses in the systems.

SURVEY SCOPE

This survey viewed the Center for Disease Control as a single financial entity. Therefore, we identified and surveyed the financial management systems in the various organizational components of the Center. Survey work was performed at Headquarters, Center for Disease Control, Atlanta, Georgia.

We documented the financial management systems in operation and identified, based on available system documentation and through discussions with agency accounting, ADP systems, and program officials, and review of prior GAO, Inspector General and special system study group reports, the internal control strengths and weaknesses in these systems. We did not perform any tests of system operations or actual financial information and transactions. The following sections present the definitions of a financial management system, internal control, and an agency system of internal control used in this survey.

DEFINITION OF A FINANCIAL
MANAGEMENT SYSTEM

In consonance with GAO's Policy and Procedures Manual for Guidance for Federal Agencies (Titles 2 through 8), we defined a financial management system for this survey, as the manual and/or automated systems that capture, record, summarize, and/or report financial and related quantitative information related to the:

- Authorization of the use of resources.
- Management of liabilities.
- Receipt of revenue.
- Disbursement of funds.

- Control of assets.
- Control of appropriated funds.
- Development and issuance of reports on the financial status of assets, liabilities, and appropriated funds and the financial results of program and administrative operations.

In an April 18, 1983, letter to the heads of Departments and Agencies, the Comptroller General announced changes to GAO's procedures for approving agency accounting systems. In this letter, the Comptroller General reiterated the definition of an accounting system in GAO's Policy and Procedures Manual for Guidance of Federal Agencies.

DEFINITION OF INTERNAL CONTROLS

On June 16, 1983, the Comptroller General issued the standards for internal controls in the federal government to be followed by agencies in establishing and maintaining systems of internal controls. The standards define systems of internal control as

"The plan of organization and methods and procedures adopted by management to ensure that resource use is consistent with laws, regulations, and policies; that resources are safeguarded against waste, loss, and misuse; and that reliable data are obtained, maintained, and fairly disclosed in reports."

Processing procedures are those manual and/or automated procedures that govern capturing, recording, processing, summarizing, and reporting of financial and related quantitative information. Internal control procedures and independent procedures provide evidence that processing procedures have, in fact, been followed.

DEFINITION OF AN AGENCY'S SYSTEM OF INTERNAL CONTROL

Most agencies operate several financial management systems that process different types of financial transactions and provide information to each other. The individual financial management systems--taken together--form the agency's overall financial, accounting, control, and reporting system. For example, most agencies have a general ledger/administrative control of funds system, and a subsidiary system that, for example, process transactions relating to personnel/payroll actions, personal property, disbursements, receipts, loans, accounts receivable, and accounts payable. These systems--taken together--are the agency's overall financial accounting, control, and reporting system.

The financial management systems that make up an agency's overall financial, accounting, control, and reporting system include both processing procedures and independent internal control procedures, as defined in the preceding two sections. For this

survey, we defined an agency's system of internal control as all the internal control procedures--taken together--that are included in all the financial management systems that comprise the overall financial accounting, control, and reporting system.

CENTER FOR DISEASE CONTROL
FINANCIAL MANAGEMENT SYSTEMS
INCLUDED IN OUR SURVEY

Based on the foregoing definitions, we included in our survey all manual and automated systems in the Center that:

- Maintain general ledger accounts and produce financial reports.
- Control appropriated funds.
- Validate information from subsidiary financial management systems that feed information to general ledger systems.
- Determine eligibility for, and authorize the making of payments to vendors.
- Authorize acquisition of resources.
- Record and account for assets and liabilities.

SURVEY METHODOLOGY

Our survey followed the requirements of GAO's Controls and Risk Evaluation (CARE) survey approach. Accordingly, our survey included identification and documentation of the Center's:

- Organizational structure and major organizational components and the mission of each component.
- Accounting and related financial management systems, as previously discussed, and the interrelationships between these systems.
- Internal control strengths and weaknesses in the Center's systems based on the internal control strengths and weaknesses identified during the survey.

In consonance with the CARE audit approach our work entailed identification and documentation of the operations and related internal control strengths and weaknesses of the Center's financial management systems based on (1) available agency system documentation, (2) discussions with cognizant agency accounting, program, and ADP systems officials, and (3) prior issued GAO, Inspector General, and special study group reports. Our survey was made in accordance with our current "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions," except that no tests were performed of system operations or of information processed by and recorded in these systems.

CENTER FOR DISEASE CONTROL - DISBURSEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control ObjectivesControls In PlaceControl Weaknesses

Authorization

1. Disbursements should be authorized in accordance with laws, regulations, and management's policy.

The CDC umbrella accounting system includes a vendor file which contains grantees and contractors authorized to enter into agreement with CDC. CDC receives input from the Central Registry System via magnetic tape for updates to the system. The system is designed so that only authorized entities on file will update the system files. Additionally, CDC uses a separate automated file to authorize and store miscellaneous recurring obligations such as utility expenses. For each disbursement, CDC requires that obligating, invoicing, and receiving documents be on file prior to forwarding a disbursement schedule to Treasury for payment. This disbursement schedule should be certified by the certifying officer and be based upon original documents. The procurement office maintains a manual file for vendors authorized through other obligating documents such as a purchase order.

CDC lacks documentation to describe the miscellaneous recurring obligation file.

2. Adjustments to disbursements and account distributions should be authorized in accordance with laws, regulations, and management's policy.

CDC requires the FMO to make necessary adjustments via a journal voucher, interoffice transfer, etc. These documents should be approved by the authorizing official, usually the Chief of the accounts control section. This includes adjustments due from overpayments to vendors, contractors, etc.

CENTER FOR DISEASE CONTROL -- DISBURSEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

3. Disbursement processing procedures should be established in accordance with laws, regulations, and management's policy.

Controls In Place

While CDC uses the Department's Voucher Examiners Manual which explains procedures for examining vouchers, it orally instructs its staff on batch processing procedures as part of on-the-job training and supervision. Prior to forwarding a disbursement schedule to Treasury for payment, CDC records entries on a document history record (DHR) by transaction codes and object class codes and indicates whether the payment is in full or partial. Entries on a DHR show the actual amount of the purchase less any discounts and/or freight charges. This data is keyed via computer terminal and transmitted to the umbrella accounting system. Additionally, CDC must complete Treasury report SF-224 by the third working day following the month end. To assist in preparing this report, CDC created the automated Cash Control System. The umbrella accounting system has processing controls built within computer programs such as record counts, hash totals, etc. It also contains edits and generates an error listing and an audit trail printout. The miscellaneous recurring obligation system uses the same edits as the umbrella accounting system. The cash control system has predetermined numeric criteria used to ascertain the accuracy of transactions processed by the system.

Control Weaknesses

Lack of written procedures for describing the batch processing routine. Incomplete and not up-to-date documentation of the operation and functions of the umbrella accounting system. For example, the CDC draft accounting manual contains descriptions of several files that are not used by or have been combined in the umbrella accounting system. To illustrate, CDC combined the Allotment Allowance and the Common Accounting Number (CAN) files described in the draft accounting manual into the Report Master file the system uses for financial reporting.

CENTER FOR DISEASE CONTROL - DISBURSEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control ObjectivesControls In PlaceControl Weaknesses

Economy, Efficiency, and Effectiveness

- | | | |
|--|--|---|
| <p>4. Disbursement cycle results should be in accordance with laws, regulations, and management's policy and plans.</p> | <p>Procedures are in place that require accounting personnel to process vendor invoices only for goods and services received. Prior to certifying disbursement schedules for payment by Treasury, the FMO is required to compare the obligating document, vendor's invoice, and receiving report to ensure receipt of goods and services. The FMO accounts control section is responsible for reviewing each batch of transactions prior to its entry to the accounting system and forwarding the schedule to Treasury. CDC requires the FMO to process invoices within 30 days after receipt and include the invoice due date on the face of the schedule in accordance with Treasury requirements.</p> | <p>CDC lacks recent internal audit coverage to ensure the system complies with laws, regulations and management's policy.</p> |
| <p>5. Disbursement should be made in an economical and efficient manner.</p> | <p>CDC uses the batch processing method for entering transactions into the accounting systems. Daily, CDC enters transactions in the system files prior to receiving confirmation from Treasury that the payment has actually been made.</p> | |
| <p>6. Disbursement processing procedures used to create, recognize, and report events and related transactions should be economical and efficient.</p> | <p>See cycle control objectives 3 and 5. Also, the FMO assigns vouchers for processing to the voucher examiners by document, thereby, clearly stating who is responsible for what. The FMO manually keeps records on the number of vouchers processed and on hand at month end as well as discounts earned and lost. Preparation of hash totals, record counts, and batch balancing are integral steps in the batch process at CDC.</p> | |

CENTER FOR DISEASE CONTROL - DISBURSEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
<u>Transaction Processing</u>		
7. Only those requests for disbursements that meet management's policy should be approved.	See cycle control objective 1.	
8. Disbursements should be accurately and promptly reported.	See cycle control objectives 4 and 5. Also, CDC uses the rotating error file concept in processing transactions through the umbrella accounting system which accounts for error corrections until they are corrected. The umbrella accounting system produces daily, weekly, monthly, and yearly financial reports such as the daily error and status of funds reports.	
9. Amounts due to vendors for goods and services, and the accounting distributions of such amounts should be computed and recognized as liabilities promptly.	CDC records entries on a DHR showing the actual amount of the purchase less any discounts and plus or minus any freight charges. In essence, these entries de-obligate the initial obligated amount by the amount forwarded to Treasury for payment. Also see cycle control objective 13.	See cycle control objective 13.
10. Each disbursement of cash should be based upon a recognized liability, accurately prepared, and appropriately authorized.	See cycle control objectives 1 and 9.	
11. Disbursements should be accurately and promptly classified, summarized, and reported.	See cycle control objective 8.	
12. Cash disbursements and related adjustments should be accurately and promptly classified, summarized, and reported.	See cycle control objectives 8 and 2.	

CENTER FOR DISEASE CONTROL - DISBURSEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

13. Liabilities incurred, cash disbursements and related adjustments should be accurately applied to the vendor's accounts.

Controls In Place

The umbrella accounting system accounts for obligations incurred and payments to vendors by document number. As such, liabilities are not recognized at CDC until all documents required for voucher processing have been received and processed through the system. In effect, the amount shown as obligated in the system represents the liability. The FMO also records any related adjustment in the detailed vendor records. See cycle control objectives 1 and 4 also.

Control Weaknesses

CDC maintains manual files of payments to vendors and related information. Thus, upon vendor inquiry, staff has to look in several places to obtain the information necessary to respond to the inquiry. For example, if a vendor wanted to know the date a check was mailed to her/him, the staff would have to look up the vendors purchase order number, check the payment control document history record for the date the payment was processed to Treasury, check the related disbursement schedule for the date Treasury mailed the check, and then inform the inquirer of the status of the payment. This is an involved process. The computer could capture this information and generate a hardcopy document that the staff could use to respond to vendor inquiries more timely.

CENTER FOR DISEASE CONTROL - DISBURSEMENT CYCLE
INTERNAL CONTROL, STRENGTHS AND WEARNESES

Cycle Control ObjectivesControls In PlaceControl Weaknesses

Classification

14. Transactions for amounts due to vendors, cash disbursements, and related adjustments should be prepared each period.
15. Disbursements should be summarized and classified in accordance with management's plan.
16. Recorded balances of disbursements and related transaction activity should be periodically substantiated and evaluated.

See cycle control objectives 2 and 13.

See cycle control objective 8.

CDC must complete Treasury SF-224, Statement of Transactions, showing disbursements and receipts for each month and report it by the third working day following month end. CDC also reconciles the general ledger balance of the umbrella accounting system with the balance of the subsidiaries (travel advance, accounts receivable, etc.). The CDC component organizations, e.g., Center for Infectious Disease, are expected to review the reports received, investigate any differences, and notify the FMO of any discrepancies noted.

See cycle control objective 4. CDC manually reconciles the general ledger account balance with the subsidiary ledgers' balances. This appears an inefficient use of its resources since the computer could be programmed to perform this function.

CENTER FOR DISEASE CONTROL - DISBURSEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

Controls In Place

Control Weaknesses

Physical Safeguards

- 17. Access to disbursement records, critical forms, processing areas, and processing procedures should be permitted in accordance with management's policy.

The FMD maintains processed documents in a central file room. Documents pending processing are kept in a suspense file at the responsible staff person's desk. Transactions processed through the system are maintained in the system files along with back files maintained in a fire proof vault. Only authorized staff in the computer system office have access to the systems via system passwords (i.e., a special code that the system recognizes for entry).

The Inspector General's office of the Public Health Service office recently issued an audit report that's critical of CDC's physical security controls over access to the computer and its contingency plans in case of an emergency.

CENTER FOR DISEASE CONTROL - RECEIPT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Authorization		
1. Receipts should be accepted from only those parties authorized in accordance with laws, regulations, and management's policy.	CDC accepts funds from only those sources that have a written agreement with the agency. The exception to this practice is donations from citizens, etc. CDC maintains accounts receivable subsidiary ledgers to record monies due to and collected by CDC. CDC requires its staff to document their communication with vendors regarding overpayments, return of goods etc.	Upon entry of transactions into the travel advance system, the computer does not maintain a list of employee's social security numbers to identify and assure that only bona fide employees received travel advances made at CDC.
2. The amounts of receipts (license fees, tax rates, etc.) should be authorized in accordance with laws, regulations, and management's policy.	See above.	
3. Adjustments to receipts, receivables, and other accounts should be authorized in accordance with laws, regulations, and management's policy.	CDC requires certain documents to make adjustments to receipts, receivables, etc. In the case of overpayments, the related disbursement is adjusted via a journal voucher with supporting documentation such as a copy of the collection schedule.	
4. Receipt processing procedures should be established and maintained in accordance with laws, regulations, and management's policy.	The FMO has written procedures that require separate personnel to account for the receipt of monies and to make bank deposits. Also maintenance of the accounts receivable ledgers and the general ledger functions is performed by separate employees.	CDC does not have written procedures describing the receipt processing procedure for transactions entering the general ledger nor the subsidiaries. CDC does not log receipts in when received at the mail desk. Usually, CDC staff places the receipts in a safe or gives them to the staff responsible for remittances control who then log them in a log book. Not logging receipts in at the mail desk enhances the likelihood that remittances may be misplaced, lost, stolen, etc. without documentation of receipt by the agency.

CENTER FOR DISEASE CONTROL - RECEIPT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Economy, Efficiency, and Effectiveness		
5. Receipt cycle results should be in accordance with laws, regulations, and management's policy and plans.	See cycle control objective 1.	
6. Receipts should be collected in an economical and efficient manner.	The FMO requires staff to make deposits on a daily basis to ensure that monies received are not lost, stolen, misplaced, etc.	Although CDC maintains a remittance log book, it does not date stamp receipts nor record the actual date received in a log book at the mail desk, thus not ensuring that receipts are timely deposited. See the above cycle weaknesses.
7. Receipt processing procedures used should be economical and efficient.	See cycle control objective 4.	CDC had not documented the automated accounts receivable system prior to our inquiry. During our work, however, CDC provided an overview describing the system, but still has not sufficiently documented the system. CDC stops the entire transaction processing for the travel advance subsidiary error transactions since the system does not have an automated rotating error file.
8. Only those receipts that meet management's policy should be approved.	See cycle control objective 1.	The travel advance system accepts a dummy travel order without tracking the disposition of such transactions. See cycle control objective 1.
9. Each receipt should be prepared accurately and promptly.	The umbrella accounting system and the receivable ledgers (i.e. accounts receivable systems and the travel advance system) contain edits and predetermined numeric criteria to ensure the accuracy and validity of transactions entering the systems. The systems generate reports such as edit listings and provide them to the FMO the following day.	

CENTER FOR DISEASE CONTROL - RECEIPT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Economy, Efficiency, and Effectiveness		
10. Accountability for cash items should be established before the cash can be misdirected.	CDC requires an employee other than the one who prepared the collection schedule to compare the completed schedule with the manual receipt log book and to investigate any differences after the deposit has been made. The FMO created the cash control system which alerts them to any cash items not accounted for but should have been.	See cycle control objectives 4 and 6.
11. Cash items received should be accurately and promptly classified, summarized, and reported.	See cycle control objective 9.	
12. Adjustments to receipts, receivables, and other accounts should be accurately and promptly classified, summarized, and reported.	The umbrella accounting system and the subsidiary systems contain edits to verify the accuracy of transactions and functions to control financial information for generating reports. CDC processes transactions through the umbrella system and the travel advance system daily, and the accounts receivable system at least weekly.	
13. Receipts, collection on account and related adjustments should be accurately applied to the proper receivable account.	See cycle control objectives 4 and 17. Also, on a monthly basis CDC manually reconciles the receivables with the general ledger.	CDC's manual reconciliation of the general ledger account balance with the subsidiaries appears to be an inefficient use of its resources.
14. Journal entries should be prepared each accounting period for receipts and related adjustments.	See cycle control objective 15.	
15. Revenue journal entries should summarize and classify receipts in accordance with management's plan.	CDC uses the common accounting number (CAN), appropriation number, object class, etc. to summarize and classify transactions. Each of these items are contained within system tables of the umbrella accounting system and are automatically produced during transaction processing.	

CENTER FOR DISEASE CONTROL - RECEIPT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Control Weaknesses

Controls In Place

Cycle Control Objectives

Substantiation and Evaluation

16. Recorded balances of receipts, accounts receivables, and related transaction activity should be periodically substantiated and evaluated.

See cycle control objective 13.

CENTER FOR DISEASE CONTROL - RECEIPT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Physical Safeguards		
17. Access to cash and cash items received should be permitted only in accordance with management's criteria until control is turned over to the asset management cycle.	The person assigned responsibility for the cash receipt function is required to provide each person responsible for an accounts receivable ledger a copy of the completed collection schedule. It should be used to record data in the related account. CDC uses a safe to safeguard monies received. The safe's location permits visibility by supervisors.	The safe remains unlocked during the day and staff in the FMO frequent the files including those responsible for the receivables. Although CDC does restrictively endorse remittances prior to depositing them, it does not do so upon receipt at the mail desk and recording them in the log book.
18. Access to receipts and receivables records, critical forms, processing areas, and processing procedures should be permitted only in accordance with management's criteria.	See cycle control objectives 4 and 9.	The Inspector General's office of the Public Health Service office recently issued an audit report that is critical of CDC's physical security controls over access to the computer and the lack of a contingency plan in the case of an emergency.

CENTER FOR DISEASE CONTROL - REPORTING CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

Controls In Place

Control Weaknesses

Authorization

1. Data entered to reporting systems should be authorized in accordance with laws, regulations and management's policy.
2. Reporting system processing procedures should be established and maintained in accordance with laws, regulations, and management's policy.

The CDC umbrella accounting system contains a Report Master file that is used for generating reports. The subsystems contain a report generating function within a computer program of each system. The systems permit only those transactions that passed the systems' edit functions to enter their report generating functions.

The system analyst responsible for the accounting systems appears to understand how the systems process reports thereby enabling the person to respond to inquiries about the systems' report processing procedures. Additionally, the computer operators have written instructions for processing reports.

CENTER FOR DISEASE CONTROL - REPORTING CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Authorization		
3. Reporting should be in accordance with laws, regulations, and management's policy and plans.	See cycle control objective 1. Also, the program offices and centers at CDC are responsible for reviewing reports and providing feedback to the FMO on the accuracy, etc. of the reports.	Lack of recent internal audit coverage.
4. Reporting should be achieved in an economical and efficient manner.	The accounting systems at CDC have specific system files for generating reports and arranging financial information. The system may create reports daily, weekly, etc. or as required to satisfy user needs. The systems use only error free transactions for reporting purposes.	
5. Reporting procedures used should be economical and efficient.	The systems maintain reporting procedures within computer programs and use specific system files to generate reports.	

CENTER FOR DISEASE CONTROL - REPORTING CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Transaction Processing		
6. Only those reports that meet management's policy should be approved.	The systems generate reports only with those authorized transactions that passed the systems' edits. CDC requires the FMO, program offices, etc. to submit a request for data processing services form to the computer system office for any additions, changes, etc. to reports. The form should be signed by an authorizing official.	
7. Reports should be prepared accurately and promptly.	The accounting systems permit transactions that passed the systems' edits to update the systems' files on a daily, weekly, and monthly basis with reports generated accordingly, as well as yearly and as required. The systems compute control totals to provide reasonable assurance that all entries have been recorded in the systems files and that no unauthorized transactions entered the systems.	
8. Relevant disclosure data should be gathered accurately and promptly.	This cycle control objective was not surveyed.	
9. Relevant disclosure data should be accurately summarized and reported.	This cycle control objective was not surveyed.	
10. File and account balances should be accurately and promptly reported.	CDC requires the program offices and centers to check reports upon receipt for accuracy, omissions, etc.	
11. Consolidation of reports should be accomplished accurately and promptly.	This cycle control objective was not surveyed.	

CENTER FOR DISEASE CONTROL - REPORTING CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Classification		
12. Reporting entries should classify activities in accordance with management's plan.	CDC has agency-wide coding instructions for accounting transactions. For example, each transaction must contain an appropriation number, common accounting number, transaction code, etc. See cycle control objective 10 above.	See cycle control objective 10 above.
13. Reports should be prepared accurately and promptly, be prepared on consistent basis and fairly present the information they purport to display.	See cycle control objectives 4 and 7.	See cycle control objective 3.

CENTER FOR DISEASE CONTROL - REPORTING CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Substantiation and Evaluation		
14. Recorded balances in the records should be periodically substantiated and evaluated.	See cycle control objective 7. Also, the FMO monthly reconciles the general ledger balance with the subsidiary ledgers.	

CENTER FOR DISEASE CONTROL - REPORTING CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

Controls In Place

Control Weaknesses

Physical Safeguards

15. Access to records, critical forms, processing areas, and processing procedures should be permitted only in accordance with management's policy.

The FMO maintains processed documents in a central file room. Documents pending processing are kept in a suspense file at the responsible staff person's desk. Transactions processed through the system are maintained in the system files along with backup maintained in a fire proof vault. Only authorized staff in the computer system office have access to the systems via system passwords (i.e. a special code that the system recognizes for entry).
The FMO is responsible for distributing financial reports sent by the computer staff. CDC maintains a mailing list of persons authorized to receive financial reports.

The Inspector General's office recently issued an audit report that is critical of CDC's physical security controls over access to the computer and its contingency plans in case of an emergency.

CENTER FOR DISEASE CONTROL - PROCUREMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Authorization		
1. Vendors should be authorized in accordance with laws, regulations and management's policy.	A manual vendor file is maintained at CDC. Purchase orders all originate from the procurement section that maintains that file. It has not been automated because of the large number of open market vendors designated locally and the high frequency of changes in those vendors. For capital expenditures or improvements, established procedures exist for bidding or negotiating contracts.	
2. The types, estimated quantities, and prices and terms of goods and services needed should be authorized in accordance with laws, regulations, and management's policy.	The requesting agency initiates a purchase requisition which goes to Procurement and Grants Office where the purchase order is prepared.	
3. Adjustments should be authorized in accordance with laws, regulations and management's policy.	Receiving documents are forwarded to the procurement branch and the Financial Management Office for full or partial receipts. Invoices go from the vendor directly to the Office of Financial Management for the accounting entry. If the order amount is increased by the requestor, a change order must be approved by the procurement branch.	
4. Procurement cycle processing procedures should be established and maintained in accordance with laws, regulations and management's policy.	All purchase orders go through the property sections for a decision about capitalizing the entry. All inventory and property purchase documents go to the Financial Management Office for reconciliation of amounts recorded by the receiving agency and the amount recorded in the accounting transactions. FMO also reviews the purchase order for a capitalization decision. Legal compliance was not surveyed.	

CENTER FOR DISEASE CONTROL - PROCUREMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Economy, Efficiency, and Effectiveness		
5. Procurement cycle operations should be in accordance with laws, regulations and management's policy and plans.	See cycle control objective 4.	
6. Procurements should be achieved in an economical and efficient manner.	Procedures are in place for CDC to screen available surplus property to fill a request before a purchase order is prepared. This is done centrally at the Procurement and Grants Office. Also see cycle control objective 4.	
7. Procurement procedures used should be economical and efficient.	Purchase requests go to a central location where all purchase orders are initiated.	The entire procurement process, beginning with the preparation of the purchase order through the submission of a payment schedule to the U.S. Treasury, is a manual one. With this agency's ADP capabilities much of that process could be automated, saving considerable staff time.

CENTER FOR DISEASE CONTROL - PROCUREMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Transaction Processing		
8. Only those requests of vendors for goods or services that meet management's criteria should be approved.	All purchase orders are screened by property sections for a decision on capitalization.	
9. Only requested goods and services should be accepted.	See cycle control objective 3.	There is no centralized receiving point at CDC. Inventories are located in three different places, and controlled by three separate systems. Although strengths within the procurement cycle appear to control proper receipt of incoming shipments, central receiving is a more efficient alternative.
10. Goods and services accepted should be accurately and promptly reported.	All incoming warehouse inventory shipments are recorded in a logbook at the receiving point. Receiving reports are processed for partial receipts of personal property or inventory orders. OFM records entries upon direct receipt of an invoice and then reconciles the reported entry to the inventory/property records with the actual recorded expenditures. Capital improvement project work-in-progress is usually not recorded in a property asset account until the project is completed.	Incorrect cost entries can be made to the warehouse inventory system, because it does not have an edit for reasonable cost. Engineering Services expenses all its purchases; and FMO does not reconcile the reported inventory valuation and actual invoice payments.
11. Amounts due to vendors for goods and services accepted, and the accounting distributions of such amounts, should be computed and recognized as liabilities promptly.	Accounting branch records an obligation from a purchase order, and later records the actual expenditure from the invoice after both it and a receiving document have been received.	CDC does not routinely record all accounting transactions in an accounts payable account.
12. Amounts due to vendors should be accurately and promptly classified, summarized and reported.	Invoices go directly to the Office of Financial Management. Once the invoice is matched with the receiving report, payment is authorized. Also see the umbrella accounting system cycles.	

CENTER FOR DISEASE CONTROL - PROCUREMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
13. Purchasing adjustments should be accurately and promptly classified, summarized and reported.	When a request is adjusted for the warehouse system, the computer stores both reports and entries. Thus, when the daily transaction activity is reconciled by FMO, an adjustment document is necessary to reconcile the inventory balance with accounting entries.	The Engineering Services inventory can be adjusted from daily error reports produced from the system. The error file does not, however, keep errors in memory for more than one report cycle. If an error is not reentered correctly, it may never be corrected. Also, there has been no independent physical inventory in the recent past, even though the inventory balance is reported as \$1.8 million.
14. Liabilities incurred, and related adjustments, should be accurately applied to the proper vendors' accounts.	See cycle control objective 11.	

CENTER FOR DISEASE CONTROL - PROCUREMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Classification		
15. Journal entries for amounts due to vendors and related adjustments should be prepared each accounting period.	See umbrella accounting system, disbursement cycle objectives 2 and 3.	See cycle control objective 11.
16. Purchasing journal entries should summarize and classify economic activities in accordance with management's plan.	See cycle control objective 11; and the umbrella accounting system, disbursement cycle objectives 1, 2, 3.	

CENTER FOR DISEASE CONTROL - PROCUREMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

Controls In Place

Control Weaknesses

Substantiation and Evaluation

17. Recorded balances of accounts payable, and related transaction activity, should be periodically substantiated and evaluated.

Property and most inventory transaction activity is reviewed daily and account balances reconciled monthly through the property reconciliation system.

The Engineering Services' cupboard stock is not included in the FMO reconciliation process; and no independent physical inventory is taken. Because of its large carrying value and the nature of several of the items, capitalization of the inventory balance appears warranted.

CENTER FOR DISEASE CONTROL - PROCUREMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

Controls In Place

Control Weaknesses

Physical Safeguards

18. Access to purchasing, receiving and disbursement records; critical forms; processing areas; and processing procedures should be permitted only in accordance with management's criteria.

A card key is required for entry to computer facility, and individual identification codes authorize predetermined information access to the computer.

ADP security at CDC, according to an OIG report, was generally inadequate. CDC emphasis on ADP security was insufficient to ensure that ADP facilities were protected against damage, unauthorized use, fire, natural disasters or theft.

CENTER FOR DISEASE CONTROL - ASSETS AND
LIABILITY MANAGEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Authorization		
1. Sources of assets and liabilities should be authorized in accordance with laws, regulations and management's policy.	All purchase orders are initiated from one central procurement office which maintains listings of current authorized vendors. The responsibility is with that one office to ensure the list is current. An automated vendor file is contained in the umbrella accounting system and is discussed in that system's cycle control objectives.	
2. The amounts, timing and conditions of transactions should be authorized in accordance with laws, regulations and management's policy.	See procurement cycle authorization objectives.	
3. The amounts, timing and conditions of expenditures of funds should be authorized in accordance with laws, regulations and management's policy.	See procurement cycle objectives 2, 3 and 11. Also, HHS regulations outline criteria for those inventory items which may be expensed.	Engineering Services has a large stock of supplies which may not meet the Department definition which allows items to be expensed. If not in compliance, these items should be capitalized as are other smaller agency inventory balances.
4. Adjustments to asset and liability accounts and account distributions should be authorized in accordance with management's policy.	During the monthly reconciliation of property and inventory account balances, items requiring an adjustment are returned to the originating agency with an FMO recommendation for action. When the decision is made, it is approved by an authorized official, and returned to FMO where an adjusting journal voucher is prepared for entry into the system.	
5. Asset and liability management procedures should be established and maintained in accordance with management's policy.	CDC maintains property listings for (1) real property; (2) capitalized personal property with a cost of at least \$300; and (3) non-capitalized sensitive items costing under \$300, such as camera lenses or desk calculators.	

CENTER FOR DISEASE CONTROL - ASSET AND
LIABILITY MANAGEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

Controls In Place

Control Weaknesses

Economy, Efficiency, and Effectiveness

- 6. Cycle results should be in accordance with laws, regulations and management's policy and plans.
- 7. Cycle results should be achieved in an economical and efficient manner.
- 8. Processing procedures used to create, recognize and report events and related transactions should be economical and efficient.

Agency budgets generally control the amount of purchases for property items. That information is available not only to approving officials at each center, but also to those responsible officials in property and procurement areas who review the requests for expenditures.

Property/inventory purchase entries include (1) an entry to the property system from the purchase order; (2) an entry to the property reconciliation system from the same source documentation; and (3) an entry to the accounting system after receipt of an invoice and receiving documents.

There have been no audits of CDC financial management systems by HHS's Office of Inspector General in the past 3 years. Also, the property reconciliation system could be used to provide data for printing automated real property reports.

Property and inventory systems have no edits and insufficient documentation to ensure the reliability of entered data.

CENTER FOR DISEASE CONTROL - ASSET AND
LIABILITY MANAGEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Transaction Processing		
9. Only those requests to buy or sell assets that meet laws, regulations and management's policy should be approved.	Compliance is the responsibility of the applicable property or inventory office and all requests to buy or sell are reviewed and approved by those offices.	
10. Assets and liabilities acquired should be accurately and promptly reported.	Procedures involving matching receiving documents with invoices are adequate to assure timely recording of acquisition of property.	
11. Retirements or dispositions of assets to outsiders should be accurately and promptly reported.	Regulations dictate the handling of property for disposal or write-off. See cycle control objective 1.	
12. Amounts due from or to purchasers and creditors, and the accounting distribution of those amounts should be computed accurately and promptly recognized as assets or liabilities.	See procurement cycle control objective 11.	CDC does not record payables.
13. Changes in values should, where required by generally accepted governmental accounting principles, be computed accurately and recognized promptly.	Records reporting useful asset life and imputed depreciation are maintained for internal use in scheduling replacement. Capital assets are carried on the books at original cost or assigned value.	

CENTER FOR DISEASE CONTROL - ASSET AND
LIABILITY MANAGEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

<u>Cycle Control Objectives</u>	<u>Controls In Place</u>	<u>Control Weaknesses</u>
Classification		
14. Amounts due to creditors, and related adjustments, should be accurately and promptly classified, summarized and reported.	See cycle control objectives 6 and 9. Also see procurement cycle control objectives 2, 3 and 11.	
15. Purchases and sales of assets, changes in liabilities and related adjustments should be accurately applied to the proper subsidiary accounts.	See cycle control objectives 11 and 14.	
16. Journal entries for assets and liabilities acquired and retired, and related adjustments, should be prepared and posted each accounting period.	See cycle control objectives 6 and 9.	
17. Journal entries should summarize and classify economic activities in accordance with management's plan.	See cycle control objective 6 and 7.	

CENTER FOR DISEASE CONTROL - ASSET AND
LIABILITY MANAGEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

Controls In Place

Control Weaknesses

Substantiation and Evaluation

18. Recorded balances of asset and liability accounts, and related transaction activity, should be periodically substantiated and evaluated.

See procurement cycle objective 4. Physical inventories are conducted annually for capitalized inventory balances by FMO. Through random sampling, the property section verifies existence of personal property items each year.

CDC does not capitalize its supplies inventory of about \$1.8 million. Consequently, this balance escapes the scrutiny of the FMO reconciliation process and physical counts.

CENTER FOR DISEASE CONTROL - ASSET AND
LIABILITY MANAGEMENT CYCLE
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

Controls In Place

Control Weaknesses

Physical Safeguards

19. Physical security safeguards should be maintained where assets are stored and transactions processed.

Inventories are well secured physically, and, with the exception noted to the right, they are inventoried under the direction of FMO at fiscal year end. In addition to the routine personal property custodial reports filled out annually, the property section performs random property counts each year to verify the accuracy of the custodial report balances.

Engineering Services maintains an internal perpetual inventory balance, but there is no physical inventory to verify that balance.

CENTER FOR DISEASE CONTROL -- GRANT
INTERNAL CONTROL STRENGTHS AND WEAKNESSES

Cycle Control Objectives

Grant Cycle

We did not survey this cycle due to its small dollar portion of CDC's total fiscal year 1983 budget authority. Additionally, most of the grants awarded through CDC's grant management office are research and training grants for CDC's National Institute of Occupational Safety and Health (NIOSH)—about \$10.5 million.

Control Weaknesses

Controls in Place

CENTER FOR DISEASE CONTROL
FINANCIAL MANAGEMENT STRUCTURE

