

092152



TO THE READER:

ANY PORTIONS OF THE FOLLOWING MATERIAL  
WHICH ARE ILLEGIBLE IS DUE TO POOR QUAL-  
ITY OF COPY SUBMITTED FOR MICROFILMING.

716863  
092152

MWD-76-90



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

POWER AND WEAPONS  
DIVISION

FEB 6 1976

B-133044

The Honorable Richard L. Roudebush  
Administrator of Veterans Affairs  
Veterans Administration

Dear Mr. Roudebush:

We have surveyed the internal controls for the Veterans Administration (VA) computer-based Compensation and Pension (C&P) benefit payment system.

We observed and made limited tests of the control methods and procedures employed at the VA Data Processing Center, Hines, Illinois (DPC Hines), and at the Washington, Baltimore, and Chicago VA regional offices (VAROs), to assure accurate, complete, and valid processing of benefit payments and related transactions. We also inquired into the extent of internal audit coverage of computer processing controls. A report concerning our observations at VAROs was sent to the Chief Benefits Director on September 11, 1975.

The Budget and Accounting Procedures Act of 1950 states that each agency shall establish and maintain systems of internal controls designed to provide effective control over funds, property, and other assets for which the agency is responsible, including appropriate internal audit. Standards for internal management control prescribed by the Comptroller General of the United States pursuant to the act require considering the following:

- Safeguarding assets against waste, loss, or improper use.
- Assuring the accuracy and reliability of system data.
- Minimizing unauthorized, fraudulent, or otherwise irregular transactions.

Our survey at DPC Hines raised questions concerning the effectiveness of controls programmed in the computer runs of the C&P system in assuring the completeness and accuracy of processing transactions. Our examination of control data and discussions with DPC Hines personnel showed:

MWD-76-90

B-133044

--Data produced by programed control routines during the processing cycles of the C&P system does not assure that transactions and benefit calculations are processed completely and accurately.

--A project to resolve discrepancies in control data has been given a low priority by DPC Hines.

--DPC Hines personnel could not resolve the discrepancies, but believed that the inconsistencies in control data are probably attributable to faulty programed control routines and do not indicate misprocessing. When programs are revised, control routines are not routinely revised accordingly to insure their continuing effectiveness.

--Although DPC Hines relies upon alternative control procedures, the system is not adequately documented to define these alternative controls or explain their effectiveness in assuring that computer processing of transactions is accurate or reliable.

--Internal processing controls in the C&P system have not been evaluated by the Internal Audit Service.

We do not plan a review of this potential problem because the Compensation, Pension, and Education (CP&E) Improvement Task Force is engaged in a project to improve the operational efficiency of the CP&E computer systems. In view of recent processing problems experienced at DPC Hines, we recognize the importance of expeditious completion of the project, and our review would require considerable assistance from DPC Hines personnel.

However, the above observations provide a basis for questioning the reliability of programed controls in the C&P system. The adequacy of the network of internal controls in an automated system is the key to determining the reliance to place upon the accuracy of the data processing system. Accordingly, the apparent lack of attention by DPC Hines to resolving discrepancies in control data and in documenting the controls increases the risk of vulnerability of the C&P system to undetected error and misuse.

DPC Hines should take more stringent measures to assure the reliability of the network of controls because (1) benefit payments processed by the system are substantial--about \$7.4 billion in fiscal year 1975 and (2) programs in the current system will be used in the Target System, which is being developed to replace the current system.

DISCREPANCIES IN CONTROL DATA

The objectives of controls in computer processing are to assure that all authorized data is completely and accurately processed by the computer. These objectives can be achieved by various preventive and detective measures. The use of control totals and record counts is generally recognized as an effective method of controlling the number of records processed by the computer and the accuracy of the computer processing. These totals generally furnish an excellent means of detecting errors in computer processing.

C&P system computer programs contain routines which produce control totals and record counts which were intended for display in a series of control reports as a basis for visual review and verification of the results of processing.

We found that these routines do not produce reliable data to reflect the completeness and accuracy of processing. As a result, the reports--intended to afford visual verification of the results of processing--are either no longer produced or no longer used for their intended purpose. Examples of discrepancies in control data noted during our survey follow.

Discrepancies in transaction counts

A control routine in the C&P system develops totals to reflect the results of processing each type of transaction through the various runs of the processing cycle. The routine counts the various transactions from run to run to account for transactions rejected or processed. A report intended to afford visual verification of these results is no longer produced apparently because it was never used for its intended purpose.

We obtained printouts showing the data developed by this routine for four processing cycles in February, March, and April 1975. The data shows that control counts for all transactions received and processed from run to run do not agree. Of particular concern are discrepancies in control data accounting for award transactions received and processed or rejected by the main C&P processing run, which processes transactions against the C&P master records and provides the information for payment change tapes sent to the Treasury Disbursing Center in Austin, Texas. This out-of-balance condition could indicate that some transactions may not be processed completely or that unauthorized payments may be made.

B-133044

Discrepancies in controls  
over check amounts

Another control routine develops totals from various controlled fields in the C&P master files to reflect the changes to these fields in the master files as a result of processing. The difference between amounts available for payment to recipients of awards processed and the deductions from these awards should be the amount of the recurring or irregular checks paid to recipients. We examined control reports produced by this routine for processing cycles in February and June 1975 and found that control totals reflecting recurring check amounts on master records after transaction processing during various cycles did not agree with control totals reflecting amounts available less deductions. This out-of-balance condition could indicate misprocessing.

We examined a control report which was intended to provide visual verification of the net change made to controlled fields in the master records as a result of processing award transactions. We noticed imbalances for processing cycles in February 1975 which could indicate that the master files are not updated properly by transactions processing.

Discrepancies in closing balance routines

The C&P system also employs a closing balance routine whereby, on a monthly basis, control totals applicable to all master records are accumulated. These totals are compared with control totals accumulated during cycle processing which reflect changes made to the master records updated by processing. If processing is being accomplished correctly these totals should agree. We were told that this routine has consistently indicated out-of-balance conditions.

DPC Hines initiated research to investigate the causes of these out-of-balance conditions, but the project has been suspended because of reassignment of the researcher.

Comments by DPC Hines

DPC Hines officials and personnel could not resolve the above mentioned discrepancies, but expressed belief that the out-of-balance control data is probably the result of faulty control routines which produce the data and not of misprocessing. These control routines are regarded as faulty because they are not routinely revised or tested concurrently with changes in the programs which they control. We were told,

B-133044

however, that assurance as to whether the control routines are faulty can be obtained only by detailed review of the programming procedures which produce the control data.

DPC Hines personnel said that there is little reliable output produced by which visual verification of the results of computer processing can be accomplished.

We were told that reliance is placed on alternative computer program control procedures and on program certification procedures to assure accurate computer programming to provide assurance of computer processing reliability. However, DPC Hines personnel acknowledged that these alternative computer program controls are not adequately defined by documentation and that detailed review of the programs would be required to identify and describe them.

#### LACK OF INTERNAL AUDIT OF PROCESSING CONTROLS AT DPC HINES

In a report <sup>1/</sup> summarizing the results of a study of internal auditing of computer-based systems, we emphasized the importance of internal audit staffs reviewing and evaluating automatic data processing operations, especially those systems involving disbursement of billions of dollars every year. We noted that internal auditors should continually monitor the computer operation and perform necessary spot-checks to determine whether an effective and reliable system is functioning. In the absence of such independent evaluations, computer operations are vulnerable to undetected error, misuse, and possible fraud.

We were informed by the Internal Audit Service resident staff at DPC Hines that, because of insufficient manpower, they have not reviewed and evaluated the adequacy of controls over computer processing in the C&P system. We were told, however, that future audit effort by this staff will include increased emphasis on controls within the C&P system at DPC Hines.

#### CONSIDERATION OF TARGET SYSTEM IN ASSESSING CONTROLS

Details of the out-of-balance conditions were discussed with personnel of the VA central office.

---

<sup>1/</sup>"Case Studies of Auditing in a Computer-Based Systems Environment," 3-115359, June 1971.

P-133044

Personnel of the System Development Service, Department of Veterans Benefits, indicated that the Target System will use the current C&P system for at least the first year of its implementation. Elements of the Target System are currently scheduled to become operational in June 1977. The Target System, currently under development, will be an advanced communications-based system to support the processing of veterans' compensation, pension, and education claims and will eventually replace the current C&P and Education systems. Accordingly, reliance would be placed upon programs in the current system to assure reliable processing of benefit payments and related transactions in a processing environment more complex than that which exists in the current system. A study to resolve the aforementioned discrepancies and to fully document the existing controls would be appropriate to adequately insure that controls in the new system are effective. This study would not only provide assurance that all controls are reliable, but also could result in eliminating any ineffective or duplicate controls which may exist.

#### CONCLUSION

Our observations regarding discrepancies in control data raise questions as to the effectiveness of programmed controls in the C&P system in providing adequate assurance of the accuracy and reliability of processing benefit payments. Reliance is instead apparently placed on alternative controls which are not adequately defined. Apparently, adequate attention has not been given by DPC Hines to reviewing control routines concurrent with programing changes to insure their continuing effectiveness and in documenting alternate controls which are relied upon. Also, the Internal Audit Service has not provided sufficient independent evaluation of the adequacy of controls over computer processing. In view of the magnitude of payments made by the C&P system and the planned reliance on current programs by the Target System, we believe that VA should place a high priority on assessing the network of computer processing controls in the C&P system to assure their reliability.

#### RECOMMENDATIONS

We recommend that you direct the Chief Data Management Director to evaluate C&P system controls to (1) resolve the discrepancies in control data reflecting the results of processing and (2) document the existing system of controls relied upon to assure the reliability of processing.

B-133044

We further recommend that you assure that the Internal Audit Service monitors the adequacy of controls in the C&P system and the successor Target System.

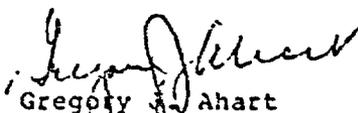
- - - -

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

We are sending copies of this report to the Chairmen, House and Senate Committees on Appropriations, Government Operations, and Veterans Affairs; and to the Director, Office of Management and Budget.

We appreciate the cooperation and assistance given to us by VA personnel. Please advise us of any actions taken or planned on the matters in this report.

Sincerely yours,

  
Gregory A. Ahart  
Director