

**GAO**

Report to the Chairman, Committee on Appropriations, U.S. Senate, and the Chairman, Committee on Government Operations, House of Representatives

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May 1989

# ADP SYSTEMS

## SSA Efforts in Implementing Its Field Office Modernization





United States  
General Accounting Office  
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Information Management and  
Technology Division

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The Honorable Robert C. Byrd  
Chairman, Committee on Appropriations  
United States Senate

The Honorable John Conyers, Jr.  
Chairman, Committee on Government Operations  
House of Representatives

In response to your committees' continuing interest in the Social Security Administration's (SSA) computer systems, we reviewed the agency's field office modernization project. This project is a major part of an overall plan SSA developed in 1982 to improve its computer systems, which it believed were close to collapse and unable to process its work load. The cost to modernize the computer equipment in the agency's approximately 1,300 field offices is about \$148 million.

Our review was conducted to (1) evaluate the status of the project, and (2) assess how the modernization is affecting field operations. The information presented in this report on the project's effect on field offices is based on interviews with staff at regional and field office locations and our own observations. While our selection is not projectable to all field offices, it does provide information from officials at a number of SSA field locations.

The agency's field offices are the primary point of public contact for the Retirement, Survivors, and Disability Insurance Program (referred to as the retirement program) and the Supplemental Security Income Program (referred to as the supplemental income program). Clients wishing to establish a claim under these programs, make a change to an existing account, resolve a problem, or inquire about benefits may do so by visiting or phoning a local SSA field office.

In 1982 SSA began the field office modernization project to provide for more rapid client service. The project called for increasing the number of computer terminals available to provide automated capabilities for entering information and making benefit calculations on new accounts, thereby eliminating the paper-oriented, manual processes. These capabilities required a redesign of the retirement and supplemental income software systems to take advantage of the new and larger quantity of terminals and on-line computer technology. The project also included developing new software so that the increased number of terminals

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time, now 25 minutes, that terminals may remain on-line without being used. At one time, this period was as long as 1 hour. Longer periods of inactivity increase the opportunity that a terminal will be left unattended by the person who logged onto the system. Left unattended, terminals could be used by other persons to enter transactions, which would be recorded under the identification number of the person who originally logged on. Such usage subverts the audit trail that traces transactions by employee identification number and could make it more difficult to detect fraudulent transactions.

As mentioned above, staff believe that the project has improved their ability to answer client inquires and locate and retrieve information on retirement claims. Further, SSA has stated in the most recent update of its overall modernization plan<sup>1</sup> that benefits such as improved quality and staff efficiency can accrue from its modernization efforts. We could not determine the extent that the modernization improved field office operations because measurable goals specifically related to the project were not defined.

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## Background

SSA's approximately 1,300 field offices administer the retirement and supplemental income programs that serve over 40 million beneficiaries. These beneficiaries receive payments of over \$200 billion annually. The primary services SSA field offices deliver to the public are taking new claims; making changes to existing accounts; providing information; answering questions about program benefits; and resolving problems.

SSA decided to modernize its field offices because they were experiencing a variety of problems limiting the efficiency of field office operations. Many of these problems were caused by employees having to access information through a limited number of terminals (4,200). With few terminals available in each office, employees frequently had to wait in line to use them. Requests for information from SSA data bases often would not be answered for a day or more because data bases were on magnetic tape and a single record could not be quickly accessed. Further, changes to accounts were being transcribed on paper and later entered into the computer system for processing without routine follow-up to ensure that the change took effect. The combination of the field modernization project's new and larger quantities of terminals and redesigned software was expected to address these problems.

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<sup>1</sup>System Modernization Plan: 1987, Office of Systems, Social Security Administration, Dec. 1986.

they are in the field office or on the telephone with an SSA representative. In addition, employees can now use their terminals to check that a change has been made and they can review a beneficiary's record for problems when it is displayed on the terminal. SSA field employees said that before the current system was installed, changes to accounts were not routinely checked to ensure that the changes were actually made.

## Status of SSA Software Redesign

SSA's 1982 plans for modernizing its software called for (1) the development of new software to automate manual processes for the retirement and supplemental income programs, and (2) the redesign of large portions of the existing retirement and supplemental income software from batch to interactive (on-line) processing. SSA estimated that all of its software would be modernized by 1987. We reported in 1988<sup>3</sup> that the scheduled completion of the redesign had slipped and that the agency was narrowing the scope of its modernization effort to the retirement software, which services about 37 million beneficiaries, because it would provide the most potential for improving service to the public. SSA's current plan calls for fully completing the retirement software development in 1992, while the development of supplemental income software has been suspended indefinitely. On April 18, 1989, SSA's Deputy Commissioner for Operations said that the agency is beginning to study when the development of supplemental income software can begin. However, no specific time period for starting the development has been established.

In 1987 an interim version of the retirement claims-taking software was released on a nationwide basis.<sup>4</sup> This interim version of the software, along with the new and larger quantity of terminals, allowed field staff to enter claims data on-line while interviewing clients. According to SSA's Associate Commissioner, Office of Systems Design and Development, on February 21, 1989, the agency deployed a new release of the retirement software. This software release expanded the capabilities of the software deployed in 1987. For example, the new software release allows field offices to process a related claim (spouse or dependent) after the primary claim has been processed. Before this new version of software was deployed, related accounts that were not filed concurrently with the primary claim had to be processed through the old paper-oriented claim system.

<sup>3</sup>ADP Systems: Status of SSA's Modernization Efforts (GAO/IMTEC-88-56, Sept. 29, 1988)

<sup>4</sup>SSA is developing software in incremental steps termed "release groups." Each new release enhances the capability of prior releases.

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used, thus eliminating the current need to exit the retirement claims system and access another system to retrieve data.

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## Internal Control Issues Being Assessed

The Federal Managers' Financial Integrity Act of 1982 requires federal agencies to have internal control systems, which, among other things, ensure that assets are safeguarded, and revenues and expenditures are properly recorded and accounted for. The new, automated retirement claims system includes security features to ensure the integrity of the claims process. Access to the claims system is granted only when an employee enters a valid password, which authorizes the employee's access to the system, and a valid employee identification number, which determines the types of transactions the employee is authorized to make. The claims software then creates an audit trail by tracking specific transactions by employee identification number.

Another feature automatically logs off a terminal if no activity is detected within a specified period of time—originally set at 15 minutes by SSA. If lock-out occurs, all data entered on a claim in progress are not saved by the system and must be re-entered after retransmission of the password. The time period a terminal can remain inactive before lock-out can be adjusted upward or downward. Generally, the less time a terminal is allowed to remain inactive before lock-out, the less chance there is of it being unattended by the authorized person who logged the terminal onto the system. On-line terminals that are left unattended introduce the potential for other persons to use connected (on-line) terminals. Early in the deployment of the field office modernization, a 15-minute lock-out period proved too short a period of time as employees were routinely being cut off by the system during the course of their work. Recognizing this problem, SSA increased the time that a terminal could be connected but not used before a lock-out occurred from 15 minutes to 1 hour.

Leaving inactive terminals connected for 1 hour increased the potential for unauthorized use of terminals. This extended period increased the chances that the terminal could be left unattended by its authorized user and used by unauthorized personnel. Further, since all transactions would be recorded under the identification number of the person who originally logged onto the system, unauthorized use of unattended terminals subverts the audit trail feature that traces transactions by employee identification number and could make it more difficult to detect fraudulent transactions.



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# Objectives, Scope, and Methodology

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Our objectives were to determine (1) the status of the field office modernization project, and (2) the effect of the modernization project on field office operations. Our work was done at SSA headquarters in Baltimore, Maryland; SSA regional offices in Philadelphia, Pennsylvania, and San Francisco, California; and eight field offices. The field offices we visited were Northeast-Philadelphia, Reading, Towanda, and York, Pennsylvania; and Mission-San Francisco, Napa, San Rafael, and Santa Cruz, California. We chose these field offices because they provided a mix of size, location, and work load. Offices ranged in size from Northeast Philadelphia, which processed about 375 retirement claims per month, to Towanda, which processed about 35 retirement claims per month. Offices were located in large urban areas, small cities, suburban neighborhoods, and rural areas. Office work loads consisted primarily of transactions related to the retirement program, or of transactions related to the supplemental income program.

Our audit work consisted of interviewing field and headquarters personnel (59 of those interviewed were in various field office positions) and reviewing available documentation dealing with equipment installation schedules, systems performance and reliability, and software development schedules. We also reviewed the results of a recent study by the Department of Health and Human Services Inspector General on the impact of modernization on field offices.<sup>5</sup> While our selection is not projectable to all field offices, it does provide information from numerous officials at a random number of SSA field locations, as well as our observations.

We discussed the information presented in this report with agency officials and incorporated their comments where appropriate. Our review was primarily conducted from March 1988 through November 1988. We also performed some additional work through April 1989 to update the status of SSA's software development. Our work was performed in accordance with generally accepted government auditing standards.

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<sup>5</sup>Adjusting To Technological Change In SSA To Improve Public Service, Richard P. Kusserow, IG No. 0AI-02-88-00110, Dec. 21, 1988.

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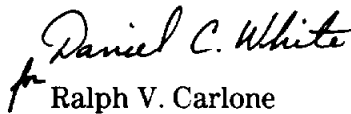
SSA recognized the increased risk associated with the extended lock-out period, and according to the Director, Division of Operational Integrity and Security, the agency gradually reduced the lock-out time period to 25 minutes in late 1988. In addition, the Health and Human Services Inspector General is conducting a review of the internal controls for the field office modernization that includes looking at the audit trail features. The results of this work, which are scheduled to be reported in September 1989, should assist SSA in assessing the adequacy of the internal controls for the field office modernization, including the period before lock-out. In view of the agency's action to address this control feature and the ongoing review by the Health and Human Services Inspector General, we are making no recommendations at this time.

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We discussed the contents of this report with agency officials and incorporated their comments where appropriate. Our work was performed in accordance with generally accepted government auditing standards. Appendix I describes in detail our assignment objectives, scope, and methodology.

We are sending copies of this report to the Secretary of Health and Human Services; the Director, Office of Management and Budget; the Commissioner, Social Security Administration; the Senate Committee on the Budget; the Senate Committee on Governmental Affairs; the House Committee on Appropriations; and the House Committee on Ways and Means. We will also send copies to other interested parties and make copies available upon request.

This report was prepared under the direction of Melroy D. Quasney, Associate Director. Other major contributors are listed in Appendix II.

  
for Ralph V. Carlone  
Assistant Comptroller General

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Future software releases are planned to allow field staff to determine a claimant's eligibility for retirement benefits while the claimant is in an SSA field office and automatically calculate the amount of the retirement benefit. Currently, information on a claimant's eligibility and benefit amount is not processed immediately, but is delayed a day or more to be processed by the current batch retirement software.

While the retirement software redesign is planned for completion in 1992, the Associate Commissioner, Office of Systems Design and Development, said that SSA will not automate every type of retirement claim because some are encountered so infrequently. Consequently, the official said that a paper system for handling these exceptions will still be needed.

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## Response to Software Redesign Is Mixed

At the time we conducted our field office audit work, SSA staff expressed some positive reactions to the new retirement claims software. Positive aspects mentioned by the field staff included (1) completed applications are easier to read and retrieve, and (2) fewer recontracts with applicants are needed because the software ensures that more complete information is obtained initially. The staff also reported some negative aspects of the new software, including (1) the need to leave the retirement claims system in order to access another system to retrieve data for processing a claim, (2) spending more time per claim because they are responsible for the entire claims process from initial client interview to entering the information into the retirement processing system, (3) an inability to take a subsequent automated claim on the same social security number, and (4) the inefficiency of having to enter the same information several times when taking a claim. The majority of the staff we interviewed felt that the benefits experienced by both themselves and the public primarily resulted from the new and increased number of terminals, as opposed to the new retirement software.

According to SSA's Associate Commissioner, Office of Systems Design and Development, the new retirement software released on February 21, 1989, eliminates two of the four negative aspects cited above by field staff. These two negative aspects are the inability to take a subsequent claim on the same social security number and the need to enter the same information several times when taking a claim. In addition, SSA's current software development plan for the retirement program will address another negative aspect cited by staff. Specifically, a future software release is planned which, among other things, will allow the retrieval of SSA data base information while the new retirement software is being

In 1982, SSA estimated that all computer software needed for the field office modernization would be completed in 5 years. This included software for taking initial claims for the retirement and supplemental income programs, making changes to retirement and supplemental income accounts, and retrieving information from data bases. The software redesign plan was to convert the paper-oriented batch software systems used by the SSA field offices to systems that allowed, through an expanded base of terminals, the direct entry, processing, and retrieval of information. After several delays in developing the software, SSA concluded in 1987 that it was not possible to develop and implement all retirement and supplemental income software at one time, given the magnitude and complexity of the effort. Later in that same year, SSA refocused its software development efforts first to redesigning the retirement claims systems and to providing an interim capability to make it easier to submit changes to existing retirement accounts and access data base information. SSA now plans to complete the retirement system software by 1992. Redesign of the supplemental income software and achievement of the related benefits has been suspended until an as yet unspecified date.

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## Hardware and Telecommunications Network Installed on Schedule

As scheduled, by the end of 1988 SSA had installed 22,892 computer terminals, 2,805 controllers,<sup>2</sup> and 7,394 printers in over 1,300 field offices and other locations. It also replaced its outmoded telecommunications system with a faster, more reliable one. In addition to this equipment, the contract included a 5-year maintenance agreement and an option to purchase an additional 16,454 terminals and peripheral equipment. The original contract price for equipment and maintenance was about \$144 million. SSA exercised a contract option for about \$4 million by procuring and installing another 2,655 terminals during late 1988 for a total of 25,547 terminals.

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## Field Office Personnel Benefitting From New Terminals

Field office staff said the new equipment and the associated training has improved service to the public. These improvements include easier and faster access to and retrieval of information from the agency's data bases, which helps field staff answer customer questions, resolve problems, and submit changes to accounts. Also, because SSA employees can use more terminals in each office to access data base information, beneficiaries are more likely to receive the information they request while

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<sup>2</sup>Controllers manage the flow of information among the desk top terminals and printers within each office and from the telecommunications network linking the terminals to the central computer.

could be used to access and retrieve information for answering client questions and resolving problems. With the new system, beneficiaries would be more likely to receive the information they request while they are in a field office or on the telephone with an SSA representative.

During our review of the field office modernization project we found that:

- SSA met its initial field office hardware installation schedule by installing 22,892 computer terminals and the new communications network in some 1,300 field offices.
- SSA has redesigned portions of its retirement software and plans to complete this redesign by 1992. In order to better focus on completing the retirement software, the redesign of the supplemental income software has been suspended indefinitely. Thus, the benefits to SSA of the supplemental income software redesign have been postponed.
- SSA field office personnel believe the increased quantity of terminals and the ability to quickly access data base information for retirement and supplemental income accounts allow personnel to promptly answer client inquiries while clients are in an SSA field office or on the phone with an SSA representative.
- While the staff attributed the above benefit primarily to the increase in the number of terminals available for use within an office, they expressed mixed views on the new software for taking retirement claims. They cited benefits from using the new software, such as the completed applications being easier to read. Further, the staff said the data are easier to locate and retrieve. However, they also mentioned several less positive aspects. For example, staff said that the new software does not permit them to retrieve information from SSA data bases that is needed to process a retirement claim. In order to retrieve information needed for the claims process staff must access another system. SSA officials agree that this is a problem and noted that a future software release will permit retrieval of retirement information without staff having to access another system. SSA anticipates that it will complete the retirement software redesign in 1992.
- The Federal Managers' Financial Integrity Act of 1982 requires federal agencies to have internal controls, which, among other things, ensure that assets are safeguarded, and revenues and expenditures are properly recorded and accounted for. The new automated retirement claims system includes a security feature to ensure the integrity of the automated claims process. SSA is assessing the internal controls of the new claims system to reduce the opportunity for unauthorized transactions to be made using field office terminals. SSA is addressing the amount of

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