Office of the State Auditor

Audit Report

Department of the Treasury
Management Acquisition Control
System-Enhanced

February 1, 1996 to January 23, 1997
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The Honorable Christine Todd Whitman  
Governor of New Jersey

The Honorable Donald T. DiFrancesco  
President of the Senate

The Honorable Jack Collins  
Speaker of the General Assembly

Mr. Albert Porroni  
Executive Director  
Office of Legislative Services

Enclosed is our report on the audit of the Department of the Treasury, Management Acquisition Control System-Enhanced for the period February 1, 1996 to January 23, 1997.

If you would like a personal briefing, please call me at (609) 292-3700.

Richard L. Fair  
State Auditor  
April 16, 1997
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Department of the Treasury
Management Acquisition Control System-Enhanced

Scope

We have completed an audit of the Management Acquisition Control System - Enhanced (MACS-E) for the period February 1, 1996 to January 23, 1997. Our audit evaluated application controls and selected general controls involved in the processing of procurement activities.

MACS-E is an integrated statewide government purchasing system which is maintained and operated by the Office of Telecommunications and Information Systems under the direction of the Division of Purchase and Property. The system was designed to ensure adherence with management’s policies and contractual terms. It is closely integrated with the state’s accounting system. Its main functions include:

- contract management, including maintenance of a bidders list, generation of requests for bid, and the preparation of term contracts and notices of award;
- preparation and processing of purchasing documents initiated by the Division of Purchase and Property and state agencies; and
- accumulation of purchasing data based on actual purchasing activity to provide buyers with information which may assist them in preparing future contracts.

Objectives

The objectives of our audit were to determine whether MACS-E ensured procurement data were reliable, valid, safeguarded and recorded properly. We also tested for resolution of significant conditions related to the system noted in our prior report entitled Term Contracts. We did not determine whether purchasing transactions were related to agencies’ programs or were reasonable.

This audit was conducted pursuant to the State Auditor’s responsibilities as set forth in Article VII, Section 1, Paragraph 6 of the State Constitution and Title 52 of the New Jersey Statutes.

Methodology
Our audit was conducted in accordance with Government Auditing Standards, issued by the Comptroller General of the United States. Additional guidance for the conduct of the audit was provided by Assessing the Reliability of Computer-Processed Data issued by the United States General Accounting Office and Auditing Computer Applications issued by Auerbach.

In preparation for our testing, we studied system user, operation, and facility guides, contract deliverable documentation, system program code, circular letters promulgated by the State Comptroller, and policies of the Division of Purchase and Property. Provisions that we considered significant were documented and compliance with those requirements was verified by interview and observation and through our sampling of procurement transactions. We also received data entry training, reviewed transaction type trends, and interviewed agency personnel to obtain an understanding of the internal controls.

A nonstatistical sampling approach was used. Our samples of procurement transaction types were designed to provide conclusions about the integrity of the data as well as internal control attributes. Sample transactions were judgmentally selected.

To ascertain the status of findings included in our prior report, we identified corrective action, if any, taken by the division and walked through the system to determine if corrective action was effective.

**Conclusions**

We found that MACS-E does not have sufficient preventative, detective or corrective controls to ensure the accuracy, reliability and safeguarding of purchasing data and adherence with management's purchasing policies and contractual terms. The reader should not assume that we found purchasing transactions to be materially improper, for the focus of our audit was on system controls, not on whether purchasing transactions were related to agencies' programs or were reasonable. In making this determination, we noted certain internal control weakness meriting management's attention.

We also found that the division has not resolved some of the significant issues related to the system noted in our prior report. These issues have been updated and restated in our current report.

Details of our findings and recommendations follow.

**Input Edits**

The MACS-E system as it currently operates attempts to accommodate for every purchasing contingency. As a result, some fundamental
input edits do not exist which would otherwise ensure the accuracy of data. Also, manipulation of individual data fields can and has occurred which overrides other input edits. This has resulted in an environment whereby a purchaser of goods and services is virtually unrestricted by the system.

While the design of MACS-E incorporated a data entry edit comparing the commodity code with the account object code, this edit was never placed into production. Management has not yet determined how to initiate this edit. This control is necessary to prevent typing errors or charges to an incorrect account (bypassing the need for a transfer of funds). For example:

Utility services on one purchase order for $768,000 were erroneously entered on the system as veterinary services.

Two professional services contracts ($11 million) relating to the design and development of a computer system at one agency were structured with a unique commodity code. Expenditures in each case were recorded in three different object code accounts: Information Processing-External, Professional Services, and Special Services. These contracts should have been charged to Professional Services.

Acquisitions of pharmaceutical drugs for $1,000 and education and training services of $46,000 were charged to the “Other Equipment” object code account.

The system permits agencies to override or add to the commodity description when ordering. This allows the purchaser to clarify the specifics of the item acquired. We recognize the need for flexibility to allow for necessary clarifications, but changes contrary to the commodity code should not be allowed. There is no assurance that the description on the purchase document will match the commodity code. During the period of September 1996 to December 1996 the commodity descriptions for contracted items were overridden 87 percent of the time. Although a review of the activity indicates most of these were for clarifying purposes, we did find instances where the description was changed by the agency, acquiring an item contrary to the commodity code or the corresponding contract.
For example, three orders totaling $44,000 for monthly copier lease payments were recorded against the contract for maintenance of machines. This purchase activity was therefore recorded in error as hourly service charges.

In another case, an order for $2,000 changed the commodity code description of mailroom carts to pay for the maintenance of a mail machine. This service should have been acquired from another vendor.

The system is structured so that the quantity order field allows up to three decimal places to be used when placing an order or making a payment. This is at times necessary. However, we found instances where this field was improperly used by state agencies. This results in erroneous data accepted by the system, allows agencies to acquire items not under the contract, and bypasses the system’s edit which automatically performs the dollar extensions.

In one case, the quantity field on an order was entered as 26.965 on a “unit price” type contract. A review of the vendor’s invoice disclosed the agency acquired 12 units. The difference was because two of the units were of a type not under the contract and the vendor charged shipping and handling which was not allowable according to the contract terms.

In another case, the quantity field for payments on a multi million dollar "percent discount off" contract was adjusted by the agency so that the proper dollar amount could be paid to the vendor. The adjustment was necessary because the purchase bureau buyer recorded the incorrect discount percentage when structuring the contract. Therefore, the system forced the agency to alter the quantity and unit price fields so that the calculation would result in the appropriate amount paid to the vendor.

**Recommendation**

We recommend that the Division of Purchase and Property implement adequate input edits to ensure the accuracy of the data and adherence with contract terms. The quantity order field should only allow decimals for appropriate commodities. Moreover, all commodity code
descriptions should be frozen, only allowing the purchaser to add to this
description for clarifying purposes.

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Distribution Center

Treasury circular letter 96-23G mandates acquisition rules for state agencies including where and when to obtain selected commodities or to use Direct Purchase Authority (DPA).

The circular letter stipulates that agencies are to acquire commodities from the Distribution Center. While MACS-E was designed to incorporate this stipulation, it’s development was discontinued. Management chose not to commit the resources necessary to implement this feature. As noted in our 1992 audit of term contracts, a potential exists to save an additional 30 percent of the cost of office supplies purchased from contract vendors if the supplies were acquired through the center.

Recommendation

As is the case with State Use commodities, edits should be established that will stipulate the use of the Distribution Center as the primary source of all items that the Center makes available to State agencies.

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Ease of Use

Individual buyers at the purchase bureau have the responsibility of establishing their contracts on the system which is the foundation for recording contract activity. No consistent method was employed causing a cumbersome and confusing process for the end user when attempting to acquire goods or services.

Contracts should be structured in a consistent manner.

On “net line” type contracts, price lists are referred to which are not shared with the agencies as part of the Notice of Award (NOA). On “percent discount off” type contracts, catalogs are not available to the agency to ensure the contract item is acquired at the contract price. Based on the way these contracts are structured, agencies do not have all pertinent information at the time of acquisition. Therefore, agencies have relied on the vendor to provide to them accurate information regarding prices and items contracted. We found instances where agencies did not acquire the correct item or pay the correct amount. In addition, vendors charged for items contrary to the contract terms.
The office furniture commodity is a “percent discount off” type contract. Our review of selected orders from this contract disclosed agencies who did not pay the proper price (varying from 1 percent to 4.5 percent).

The copy machine maintenance commodity is a “net line” type contract and a multi vendor award. One vendor has continually charged agencies for services based on a price per copy when the contract calls for a fixed price.

Commodity codes and descriptions need to be consistent, and the data base needs to be properly maintained.

The MACS-E system relies on an 11 digit commodity code for the recording and subsequent reporting of the state’s purchasing activities. The use of a proper commodity code is essential if the resulting purchasing data is to be reliable. There are currently 28,000 commodity codes in the system which are identified as under state contract. A cumbersome process of research is required by the end user to determine whether the item is under a current contract.

Our analysis of the commodity code data base found 50 percent (14,000) were associated with active contracts; 30 percent of the commodity codes were never used; and 20 percent were associated with expired contracts. During fiscal year 1996, contracted items acquired were recorded across only 7,000 commodity codes. An evaluation of the necessity of the number of the codes is warranted. As previously mentioned, we found instances where items were incorrectly recorded in the system. The use of fewer codes could simplify the system and improve the accuracy of the data.

While some commodity descriptions are too narrowly defined, others are too broad and do not provide sufficient information to meet an agency’s needs. This occurs because individual buyers are responsible for establishing their assigned commodity into the data base.

An example of a code which is too narrowly defined is correction fluid (white out). The commodity code data base has 14 descriptions and codes for liquid correction fluid, identifying the various colors.

An example of a code which is overly simplified is automobile windshields. The database has only one description for automobile windshields and that description would lead the agency to believe that it should be purchased DPA. Actually, there are 21 different types of glass under contract. The descriptions for the types are listed in the commodity
code database as either Category I, II, III, IV, or V with no further explanation. Additional research by the purchaser is required prior to the acquisition. Each line of the current contract specifies the item to be acquired. However, the purchaser would require the Notice of Award (NOA) to know those specifics in order to process the acquisition correctly and the NOA is not on this system. This is too cumbersome a process to be properly adhered to.

**Recommendation**

Efforts are needed to restructure contracts so that all pertinent information relating to the commodity is available to the purchaser at the time of acquisition. Also, the division should eliminate unnecessary inactive 11 digit commodity codes and make the descriptions consistent and clear.

### Delegated Purchase Authority

Enforcing adherence to policy over the use of Delegated Purchase Authority (DPA) can result in management’s improved ability to leveragemarket and achieve significant cost savings through bulk purchase initiatives.

Agencies at times utilize the DPA method of purchasing from a contract vendor. Even though the MACS-E system was developed to establish different dollar limits for direct purchase of DPA commodities, this edit has not been imposed. Therefore, nothing prevents an agency from improperly processing the order nor are they effectively monitored on the DPA activities as stipulated in Treasury circular letter 96-23G. The usefulness of the MACS-E reports regarding spending activities is questionable when purchase orders are processed in this manner. Specifically, these reports provide data on contract purchases which is used by buyers at the time of reprocurement. DPA purchases are not included. Moreover, significant cost savings, as a result of bulk purchasing abilities, might not be realized because accurate purchasing history does not exist.

During fiscal year 1996, 48 percent of the transactions processed, representing $70 million, were for commodities purchased via DPA. Specific examples:

A statewide analysis of one vendor under state contract for fiscal year 1996 disclosed $60,000 paid to them via DPA. A potential of 42 percent in lost discount exists taking into consideration the terms of this vendor’s accepted bid.
Three agencies processed their purchasing activities as DPA in excess of 95 percent of the time over the last three fiscal years.

At one agency acquisitions totaling $14,000 obtained from a contract vendor were processed entirely as DPA. At another agency, over 50 percent of acquisitions from another contract vendor were processed as DPA totaling $24,000.

In a recent monthly management report entitled, “Purchase and Property Accomplishments” four separate bulk purchasing initiatives resulting from leveraging the market were reported with an estimated annual savings ranging from $150,000 to $4 million. Accurate data is essential as a basis for contracting in this manner.

**Recommendation**

We recommend that the Division of Purchase and Property reestablish their Contract Compliance Unit for purposes of ensuring compliance with the requirements of the treasury circular letter. Sanctions should be imposed and remedial training given for those agencies found in violation of this policy. In addition, different limits for direct purchase should be imposed. This would permit the division to more closely monitor purchases where the DPA limit (currently $10,500) is not appropriate. Examples of such commodities would be office supplies, sporting goods, and auto repair.

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**System Security**

During our audit period, we found that the Division of Purchase and Property has not implemented adequate security measures to ensure that unauthorized access is denied by the system. This leads to a heightened risk that the data is not properly protected.

Specifically we noted the following weaknesses.

**System Administrators**
We found fifteen employees with system administrator privileges in the MACS-E system. Some perform various data integrity adjustments while others were given the privilege which exceeds their authority and defined responsibilities. The administrators are self-monitored without review of another party.

Our analysis of their activities relating to the specific ability to overwrite existing data (maximum risk of this privilege) for a one month period found that six had no activities and two of these employees had no MACS-E responsibilities. We did not detect any instances of unauthorized changes, however, the potential still exists. When brought to management's attention, the number of employees with this privilege was reduced to eight. However, they continue to be self-monitored without review of another party.

**User Access**

Multiple sessions by a user are not restricted and terminal time-outs after a period of inactivity have not been implemented.

**Program Change Controls**

Two employees are authorized to perform program changes and migrate those changes into the production environment. The affected programs relate to the MACS-E reports. A lack of an appropriate segregation of duties exists since unauthorized changes could occur without detection. During our audit period, we found no instances of unauthorized changes to the system.

**Recommendation**

We recommend that the Division of Purchase and Property limit the privileges of the users to their authority and defined responsibilities and monitor the activity of the system administrators. The system administrator privilege should be limited to two employees at a time, as is the case with NJCFS. To further reduce the risk of unauthorized access, consideration should be given to restricting users to one active session at a time and time-out of terminals after a period of inactivity. Also, to reduce the risk of unauthorized changes to programs, migration of changes to the production environment should be restricted to individuals with only that ability.

**System Documentation**
By updating user manuals and system documentation to reflect the current environment, future system maintenance costs will be minimized and data will be protected.

MACS-E, which was designed and developed by a consultant, became functional as New Jersey’s purchasing system in May 1993. Its predecessor, MACS, had been in operation since October 1988 as a stand-alone system. An interface to the new state accounting system necessitated the enhancement. The consultant extensively modified a baseline software package for MACS and MACS-E in an attempt to satisfy the needs of New Jersey. This package was originally marketed nationally in the early 1980’s.

Information contained in MACS-E user manuals, baseline user manuals, and operating production system manuals is outdated or insufficient. The manuals do not provide an accurate representation of the system as it exists today because they were not adequately updated as the modifications and enhancements were made. As of January 1997 there have been over 600 program changes to the MACS-E system that have not been incorporated into the various manuals.

Based on industry experience, the cost to maintain MACS-E through its system development life cycle will exponentially increase and the potential for errors to occur is more likely because adequate documentation is not available.

Recommendation

We recommend that the Division of Purchase and Property and the Office of Telecommunications and Information Systems adequately document MACS-E to minimize future maintenance costs and reduce the potential for errors.
DEPARTMENTAL RESPONSE

Richard L. Fair, State Auditor
Office of the State Auditor
CN-067
Trenton, New Jersey 08625-0067

Dear Mr. Fair:

I have reviewed the Office of State Auditor report on the Department of Treasury Management Acquisition Control System-Enhanced for the period February 1, 1996 to January 23, 1997.

The Department of the Treasury does not find warranted the conclusion that MACS-E "does not have sufficient preventative, detective or corrective controls to ensure the accuracy, reliability and safeguarding of purchasing data and adherence with management's purchasing policies and contractual terms." The report overlooks the role of agency fiscal officers in the overall internal control framework and assumes that MACS-E is the primary control. Agency fiscal officers are the managers charged with the responsibility for ensuring agency compliance with procurement circulars. The MACS-E system has approximately 2000 users throughout the Executive Branch who issued roughly 250,000 purchase orders during the period under review. The fiscal officer and other agency personnel authorized to approve purchases and vouchers are the primary vehicles for ensuring that proper purchasing, accounting and fiscal procedures are followed. In contrast, the MACS-E system is designed primarily to function as a procurement processing system. Accordingly, I find that the MACS-E system functions as intended and fulfills its role within the framework of procurement, fiscal and accounting controls.

As always, the Department of the Treasury accepts the constructive recommendations identified by the Office of the State Auditor. These findings and recommendations have been discussed with appropriate department personnel who have indicated that where appropriate, remedial action will be taken.

The Divisional response is attached.

Sincerely,

State Treasurer

Attachment
MEMORANDUM

TO: Brian W. Clymer
State Treasurer

THROUGH: John C. Ekarius
Associate Deputy State Treasurer

George M. Gross, Jr., Administrator
General Services Administration

FROM: Lana J. Sims, Director
Division of Purchase & Property

SUBJECT: Response to the OLS Audit Report of the Management Acquisition Control System - Enhanced
February 1, 1996 to January 23, 1997

DATE: April 3, 1997

The Audit of the MACS-E System three years after its operational start provided a much-needed overview of the design and functioning of the system within the internal controls environment at agencies using contracts awarded by the Division.

The Division feels that the report of the auditor overemphasizes the role of the MACS-E system and underemphasizes the role of agency fiscal officers in the overall internal controls that provide reasonable assurance that purchasing transactions are executed in accordance with management's directives. MACS-E is but one of many internal control mechanisms that exist to safeguard the integrity of the procurement process and the resulting data.

Each department in the Executive Branch has a fiscal office charged with the oversight and approval of procurement activities and accounting operations. Within each fiscal office there are internal controls designed to ensure adherence to the State's policies, contractual obligations and audit requirements. MACS-E is designed to facilitate and support this function not to supersede it. Fiscal approvals and signatures must be
obtained from the designated personnel in order to initiate a purchase or approve a payment.

We acknowledge that imperfections exist but we remain confident in the overall reliability and utility of the information provided by MACS-E. At the same time, we are committed to improving the quality of the data and exploring each of the Audit's recommendations under the direction of the OTIS technical team. Our specific response to each of the Audit's findings follows.

**INPUT EDITS**

*The commodity code and object code are not linked.*

OMB and the Division of Purchase & Property agree that this would enhance fiscal controls at the agency level and will pursue this recommendation.

*Commodity code descriptions can be altered when ordering.*

The audit correctly indicates that the capability to alter a commodity code description exists solely for the purpose of clarification. For example, a contract line described as "general fasteners, category 1" was subjected to modifications to read on the order as "8 x 1 PANTEK SCREWS" in one case, as "CAP SCREWS (USS) ASST" in another, and in yet another as "1/4 inch x 30 ACORN NUTS - 100 CT." These modifications are entirely appropriate and do not lessen the value of the purchasing data. In fact, a sample of every 20th order drawn from the same period subjected to the audit revealed that the overwhelming majority of the changes to commodity code descriptions were solely for purposes of clarification.

The alternative to flexibility in the two-line commodity description on purchase orders is a commodity code data base with a sufficiently high degree of specificity to anticipate all agency needs. This would require a large commitment of resources and that cost must be weighed against the resulting benefits to the purchasing data. We will, however, explore the Auditor's recommendation.

The examples of actual inappropriate modifications cited in the audit should be addressed by auditing agency transactions, training and increased management oversight of those employees placing orders.

*The quantity order field can be improperly used to override input edits.*

Although one of the examples cited illustrates an impermissible manipulation of the quantity field, the second example given to illustrate improper use of the overrides illustrates the need for that flexibility, particularly if MACS-E is used for all contracts awarded. The auditor cited a professional services contract to recover third party payments. The contractor bid variable commission rates expressed as a percentage of funds recovered. At the point of award, no estimate concerning the quantity (recovered
funds) could have been specified. This contract illustrates the need for flexibility in the MACS-E system. For this contract, the system will allow identification of recoveries from 63 different categories and identification of the percentage paid for each of these categories, thus furnishing valuable information.

The Division, in cooperation with the OTIS technical staff, will assess the cost benefits of establishing quantity control edits for selected contracts while maintaining the flexibility on others. Continuing audits of agency transactions to identify blatant abuse of the quantity override and commodity code alteration features is necessary to ensure the accuracy of the data.

**DISTRIBUTION CENTER**

**Distribution Center purchasing should be stipulated by the system.**

As the audit notes, State agencies are required by circular letter to purchase stock items from the Distribution Center and agency fiscal officers are responsible for ensuring compliance with these requirements. It should be noted that use of the Distribution Center has increased dramatically since the audit of 1992 through a combination of improvements at the Center, aggressive marketing and fiscal officer adherence to purchasing directives. The audit recommends that a contract be established on MACS-E for the Distribution Center stock items similar to the contract developed for State Use Industries (“DEPCOR”). This recommendation will be explored. It should be noted, however, that there are no edits that could be made within MACS-E that would ensure that State agencies comply with the directive to purchase from the Distribution Center or DEPCOR.

**EASE OF USE**

The Division agrees with the recommendation that pertinent information should be made available to the purchaser at the time the agency user is ordering from the contract and that contracts should be structured in a consistent manner. The Division is actively working toward establishing an electronic item catalogue that would be an amalgam of the manufacturer’s item catalogues and the MACS-E contract vendor file. The inability to furnish the extraordinarily high number of catalogues to our thousands of users is a recognized problem that has long eluded a satisfactory solution.

The Division also recognizes that commodity codes and descriptions need to be consistent with the type of contract. The need for very narrowly defined commodity codes in the example of correction fluid (White-Out) cited in the audit illustrates good business sense. The Distribution Center stationary catalogue identifies 8 of the 14 --colors as stock items and, when buying these in bulk, we need to identify this item to that degree of specificity. The remedy to ensure consistent commodity code descriptions would require a re-write or wholesale replacement of the MACS-E commodity code which has been established by OTIS to cost $1 million. Additional costs would incur for maintenance of this database.
DELEGATED PURCHASE AUTHORITY

Enforcing adherence to policy over the use of Delegated Purchase Authority ("DPA") can result in management's improved ability to leverage the market and achieve significant cost savings through bulk purchase initiatives.

We accept the finding and the recommendation that the Division re-establish its Contract Compliance Unit when funds are available. There exists an edit in MACS-E that prohibits a DPA transaction from exceeding $10,500. The examples given indicate that this edit can be circumvented. Again, it should be noted that agency Fiscal Officers, or their designees, are responsible to ensure compliance with DPA procedures.

The suggestion to establish and implement various dollar limits for the direct purchase authorization of various commodities may enhance control, but would also make DPA transactions measurably more complex. We will, however, study this recommendation, with the assistance of the OTIS support team to determine its feasibility, cost and impact on customers using the system.

SYSTEM SECURITY

System Administrators

We are most gratified that no instances of unauthorized changes to on-line MACS-E data were detected. We also recognize the risks identified by the audit and have taken steps to ameliorate this deficiency, both within the Purchase Bureau and within our OTIS support team. In response to a concern expressed by the audit team, the Bureau's OTIS support team has removed the ability to update MACS-E data on-line from all but one staff member. Arrangements have been made with the OTIS ADABAS database staff to create a daily log of any incidents of updates to MACS-E data. This log will be monitored by the team's project manager.

In accord with the changes made by our OTIS team, the Purchase Bureau based MACS-E staff will limit "system administrator" privileges to three people. We will make similar arrangements to log any on-line changes to MACS-E data and monitor this log daily.

In order to help minimize the risk of unauthorized procurement and payment transactions by agency users of MACS-E, we will issue guidelines for granting security profiles.

Application for security profiles (or changes to existing profiles) will be formalized and written justification will be a necessary component to any deviation from established standards.
User Access

Contrary to the audit's findings, at the Purchase Bureau MACS-E does "time-out" following approximately one hour of inactivity. We will, however, give consideration to restricting users to one active session at a time.

The matter of an inactivity induced "time-out" at the using agencies is a more complex undertaking. We will, however, actively explore with OTIS the feasibility of establishing a statewide, network-controlled "time-out" protocol.

Program Change Controls

We will request that our OTIS support team implement the recommendation to segregate the program change function from the actual migration.

SYSTEM DOCUMENTATION

By updating user manuals and system documentation to reflect the current environment, future system maintenance costs will be minimized and data will be protected.

We accept the recommendation to update the MACS-E user manual and will actively seek funding to accomplish this task. However, it should be noted that many of the 600 program changes are transparent to the MACS-E user. Those changes that are not transparent have been the subject of training at MACS-E User Group meetings and are announced to the user community via the MACS-E bulletin board.

SUMMARY

After 3 1/2 years of operation, MACS-E is operating essentially as designed. The system, designed primarily for commodities purchasing, has sufficient flexibility to allow the processing of professional services contracts while still providing a substantial degree of control, MACS-E also collects and reports a wealth of data associated with this myriad of processing activities.

We are most pleased that the initial reluctance on the part of users to embrace automated procurement has been more than overcome by the system's performance. The audit of AMCS-E at this point in its development and use has provided some helpful suggestions that will hasten its continued improvement.

LJS/can

c: Ellen M. Casey, Deputy Director Enrico G. Savelli, Supervisor
Purchase Bureau