

c2

Army Library  
Law Section

✓



# REPORT TO THE CONGRESS

## Opportunities For More Effective Use Of An Automated Procurement System For Small Purchases

B-162394

Department of the Navy

*BY THE COMPTROLLER GENERAL,  
OF THE UNITED STATES*

DEC. 17. 1964

770272 / 087464



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

**B-162394**

To the President of the Senate and the  
Speaker of the House of Representatives

This **is** our report on opportunities for more effective use of an automated procurement system for small purchases by the Department of the Navy. Our review was made pursuant to the Budget **and** Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

Copies of this report are being sent to the Director, Bureau of the Budget; the Secretary of Defense; and the Secretary of the Navy.

Comptroller General  
of the United States

D I G E S T

WHY THE REVIEW WAS MADE

As of June 30, 1968, the Navy Aviation Supply Office (ASO) was responsible for the management of over 323,000 different aeronautical spare parts and assemblies. During fiscal year 1968, ASO processed by automation about 68,000 procurement actions, or about 70 percent of the purchases for the year. These actions, each under \$2,500, totaled about \$52 million.

The General Accounting Office (GAO) reviewed the policies, procedures, and practices followed by ASO in operating an automated procurement system to determine whether more effective use of the system's capabilities could be realized.

FINDINGS AND CONCLUSIONS

The automated procurement system utilized by ASO was designed for the primary purpose of providing a better, faster, and easier way to process small purchases. GAO observed, however, that the system could be improved by programming the automated equipment to (See p. 6.)

- Assist buyers in making price analyses of small purchases,
- Solicit quotations from all known supply sources,
- Consolidate requirements,
- Make** maximum use of basic ordering agreements (BOAs) (defined on p. 10), and
- Process many of the small purchases that continue to be processed without the aid of automation.

There was a lack of periodic comprehensive reviews of the automated system by ASO, Navy, or the Department of Defense (DOD) audit groups. (See p. 11.)

During GAO's review, ASO made changes in its automated system which should help ensure that requirements for like items are consolidated and

that sole-source requirements are placed, as applicable, under existing BOAs. (See pp. 9 and 10.)

RECOMMENDATIONS OR SUGGESTIONS

GAO suggested that ASO (1) consider programming the automated system to perform price analyses, solicit all known supply sources, and process other small purchases and (2) provide for a periodic review of the operation of the automated system so that management can be informed of problem areas.

In view of the present and potential use of automated procurement systems by other activities and the need for improvements in the existing system at ASO, GAO further suggested that the Secretary of Defense establish programs to monitor the implementation and improvement of automated procurement systems.

AGENCY ACTIONS AND UNRESOLVED ISSUES

The Navy informed GAO that a study would be performed to determine the feasibility of using automated equipment to assist buyers in performing price analyses and that innovations currently under development will materially increase the number of small purchases which can be processed automatically.

The Navy also advised that, within the resources available, Navy reviews have placed appropriate emphasis on the ASO automated system but that these reviews have consisted of observation and conversation rather than an in-depth examination into system performance. The Navy stated that the automated system was eliminated from the scope of a Navy review in fiscal year 1968 because of GAO work in the area.

The Deputy Assistant Secretary of Defense (Installations and Logistics) advised GAO that supply sources identified by the Defense Logistics Services Center would be utilized as soon as this information becomes reliable through long-range DOD improvement programs already established and that additional steps were planned for monitoring the implementation and improvement of automated purchase systems. (See pp. 19 through 21.)

GAO believes that actions proposed or taken by the Navy and DOD are generally responsive. However, because the matters discussed in this report were not disclosed during limited reviews performed by the Navy, GAO is recommending that the Secretary of the Navy place greater emphasis on internal review of automated procurement systems under his jurisdiction.

GAO is also recommending that the Secretary of Defense consider the improvements discussed in this report for incorporation, as applicable, into other systems.

MATTERS FOR CONSIDERATION BY THE CONGRESS

This report is being submitted to the Congress in view of its expressed interest in the efficiency and related economy with which Government procurement is accomplished.

Tear Sheet

## C o n t e n t s

	<u>Page</u>
DIGEST	1
INTRODUCTION	4
OPPORTUNITIES TO INCREASE EFFECTIVENESS OF ASO'S AUTOMATED PROCUREMENT SYSTEM FOR SMALL <b>PURCHASES</b>	6
Obtain more effective price analyses	6
Increase the number of competitive procurements	7
Savings possible by consolidating requirements	9
Reduce administrative costs and lead time requirements through maximum use of basic ordering agreements	10
Expand coverage of the automated system to other small purchases	11
Need for periodic comprehensive reviews of the automated system	11
Agency comments	12
Conclusions	13
Recommendations	14
SCOPE OF REVIEW	15
	<u>Appendix</u>
<b>APPENDIXES</b>	
Letter dated May 29, 1969, from the Office of the Assistant Secre- tary of Defense (Installations and Logistics) to the General Accounting Office	I      19
Principal officials of the Department of Defense and the Department of the Navy responsible for administration of ac- tivities discussed in this report	II     27

## ABBREVIATIONS

ASO	Aviation Supply Office
ASPR	Armed Services Procurement Regulation
BOA	Basic Ordering Agreement
DLSC	Defense Logistics Services Center
DOD	Department of Defense
GAO	General Accounting Office
RFQ	Request for Quotation

## DIGEST

### WHY THE REVIEW WAS MADE

As of June 30, 1968, the Navy Aviation Supply Office (ASO) was responsible for the management of over 323,000 different aeronautical spare parts and assemblies. During fiscal year 1968, ASO processed by automation about 68,000 procurement actions, or about 70 percent of the purchases for the year. These actions, each under \$2,500, totaled about \$52 million.

The General Accounting Office (GAO) reviewed the policies, procedures, and practices followed by ASO in operating an automated procurement system to determine whether more effective use of the system's capabilities could be realized.

### FINDINGS AND CONCLUSIONS

The automated procurement system utilized by ASO was designed for the primary purpose of providing a better, faster, and easier way to process small purchases. GAO observed, however, that the system could be improved by programing the automated equipment to (See p. 6.)

- Assist buyers in making price analyses of small purchases,
- Solicit quotations from all known supply sources,
- Consolidate requirements,
- Make maximum use of basic ordering agreements (BOAs) (defined on p. 10), and
- Process many of the small purchases that continue to be processed without the aid of automation.

There was a lack of periodic comprehensive reviews of the automated system by ASO, Navy, or the Department of Defense (DOD) audit groups. (See p. 11.)

During GAO's review, ASO made changes in its automated system which should help ensure that requirements for like items are consolidated and



that sole-source requirements are placed, as applicable, under existing BOAs. (See pp. 9 and 10.)

#### RECOMMENDATIONS OR SUGGESTIONS

GAO suggested that ASO (1) consider programming the automated system to perform price analyses, solicit all known supply sources, and process other small purchases and (2) provide for a periodic review of the operation of the automated system so that management can be informed of problem areas.

In view of the present and potential use of automated procurement systems by other activities and the need for improvements in the existing system at ASO, GAO further suggested that the Secretary of Defense establish programs to monitor the implementation and improvement of automated procurement systems.

#### AGENCY ACTIONS AND UNRESOLVED ISSUES

The Navy informed GAO that a study would be performed to determine the feasibility of using automated equipment to assist buyers in performing price analyses and that innovations currently under development will materially increase the number of small purchases which can be processed automatically.

The Navy also advised that, within the resources available, Navy reviews have placed appropriate emphasis on the ASO automated system but that these reviews have consisted of observation and conversation rather than an in-depth examination into system performance. The Navy stated that the automated system was eliminated from the scope of a Navy review in fiscal year 1968 because of GAO work in the area.

The Deputy Assistant Secretary of Defense (Installations and Logistics) advised GAO that supply sources identified by the Defense Logistics Services Center would be utilized as soon as this information becomes reliable through long-range DOD improvement programs already established and that additional steps were planned for monitoring the implementation and improvement of automated purchase systems. (See pp. 19 through 21.)

GAO believes that actions proposed or taken by the Navy and DOD are generally responsive. However, because the matters discussed in this report were not disclosed during limited reviews performed by the Navy, GAO is recommending that the Secretary of the Navy place greater emphasis on internal review of automated procurement systems under his jurisdiction.

GAO is also recommending that the Secretary of Defense consider the improvements discussed in this report for incorporation, as applicable, into other systems.

MATTERS FOR CONSIDERATION BY THE CONGRESS

This report is being submitted to the Congress in view of its expressed interest in the efficiency and related economy with which Government procurement is accomplished.

## INTRODUCTION

The General Accounting Office has made a review of the policies, procedures, and practices followed by the Aviation Supply Office in processing small purchases through its automated procurement system. The scope of our review is presented on page 15.

ASO is under the joint control of the Naval Air Systems Command and the Naval Supply Systems Command. As of June 30, 1968, ASO was responsible to these commands for the management of over 323,000 different aeronautical spare parts and assemblies worth about \$2.6 billion.

Prior to March 1963, ASO processed all purchases without the aid of automated equipment. Recognizing the need for a change in processing small-value procurements, ASO, in March 1963, implemented the first Department of Defense automated procurement system for small purchases. This system was designed to automatically process a large volume of purchases each costing \$2,500 or less.

Basically, under this system a computer determines those items in the system that need to be replenished and the quantities needed of consumable items. The computer prepares, for each listed supplier, a request for quotation (RFQ). The RFQs, showing the suppliers' part number and quantities desired, are submitted to the suppliers for price quotation. The suppliers are allowed about 3 weeks to prepare a quotation and return the completed RFQs to ASO. The RFQs of the successful offerors are then entered into the computer and purchase orders are automatically prepared.

During fiscal year 1968, ASO processed about 93,000 procurement actions, each being for \$2,500 or less, which totaled about \$72 million and which included about 68,000 procurement actions, amounting to about \$52 million, that were substantially processed under the automated system. The remaining procurement actions were processed without the aid of the automated system. (See p. 11.)

ASO's use of automated equipment to process small purchases is not unique. **Two other** Navy procurement offices, the Electronics Supply Office, Great Lakes, Illinois, and the Ships Parts Control Center, Mechanicsburg, Pennsylvania, also use automated equipment for their procurement functions. Further, we understand that the Air Force is currently developing an automated procurement system for small purchases.

Expanded use of automated equipment in processing small purchases was highlighted when it was recommended, in a Defense Procurement Management Review Program Summary of Findings for calendar year 1966, that other activities implement automated procurement systems similar to the system utilized by ASO.

The principal officials of the Department of Defense and the Department of the Navy responsible for the administration of activities discussed in this report are listed in appendix II.

OPPORTUNITIES TO INCREASE EFFECTIVENESS  
OF ASO'S AUTOMATED PROCUREMENT SYSTEM  
FOR SMALL PURCHASES

The automated procurement system utilized by ASO was designed for the primary purpose of providing a better, faster, and easier way to process small purchases. We found, however, that the system was not programmed to assist buyers in performing price analyses, solicit quotations from all known supply sources, consolidate requirements, make maximum use of BOAs, or process many small purchases. We found, further, that comprehensive reviews of the system have not been made by ASO, the Navy, or DOD.

As a result, the automated equipment has not been fully utilized and small purchases have not been processed with the effectiveness and efficiency which might otherwise have been achieved.

OBTAIN MORE EFFECTIVE PRICE ANALYSES

We found that ASO did not use its automated equipment to assist buyers in making price analyses of negotiated small purchases. Price analysis is an important step in obtaining a reasonable price. Use of automated equipment to compare proposed prices with available pricing data would permit buyers to concentrate on reviewing those items for which substantial price differences are identified by the automated equipment.

The Armed Services Procurement Regulation (ASPR) requires some form of price analysis in connection with each negotiated purchase in order to determine the reasonableness of the vendor's proposed price. ASO procedures provide for a price analysis of all negotiated purchases. This task, however, is being performed entirely by the buyers without the assistance of automated equipment. In fiscal year 1967, six buyers were assigned to review approximately 86,000 automated purchase actions. The examples in this report show that the buyers' performance in this regard, because of the limited time available for review, is not always effective.

The ASPR states that reasonableness of price may be established by comparing proposed prices with past purchase prices. **ASO** placed a purchase order with a supplier for 10 motor shafts at a unit price of about \$222. During the following 12-month period, ASO placed five additional orders for the identical motor shaft with the same supplier at unit prices ranging from about \$237 to \$509. ASO records do not show that the buyers compared the significantly varying prices with the past procurement history of the item or otherwise performed a price analysis of these procurements to determine reasonableness of price.

Another method cited by the **ASPR** for determining the reasonableness of price is to compare the supplier's proposed price with his catalog price. We found instances, however, where ASO paid substantially higher prices for items than the prices shown in the supplier's catalog. For example, a purchase order was issued for 10 mounting clamps at a unit price of \$5, even though the supplier's catalog showed the unit price of the item to be only 80 cents. **ASO's** records do not show that the buyer compared the quoted price to the catalog price or otherwise performed a price analysis of the procurement.

ASO officials recognize that the automated procurement system is not programmed to perform price analyses but stated that every quotation is manually reviewed to determine reasonableness of price. We believe that, to provide greater assurance that effective price analyses are performed as required, ASO should consider using automated equipment to assist in price analyses and thus give buyers time to more effectively evaluate substantial pricing differences identified by the automated equipment.

#### **INCREASE THE NUMBER OF COMPETITIVE PROCUREMENTS**

ASO has made sole-source purchases because its automated procurement system for small purchases is not programmed to solicit price quotations from vendors identified by the Defense Logistics Services Center (DLSC) or those identified on technical drawings. Programming the automated system to solicit these additional vendors would

provide an opportunity to increase the number of competitive awards, with a corresponding savings in procurement costs.

A computer printout summarizing ASO automated purchases for the 2-month period ended May 15, 1967, showed a total of 10,549 purchases, of which 8,721, or about 83 percent, were awarded on the basis of solicitations of price quotations from only one source. We found instances where only one source was solicited even though additional sources were identified by DLSC. ASO management personnel told us that, about June 1965, they received from DLSC a list of approximately 100,000 sources that were used by other DOD activities for some of the same items managed by ASO. Although ASO incorporated these sources into the master data file, they were not coded for access by the automated system in processing small purchases because of the time required to review the extensive list.

The number of competitive purchases could be further increased if sources identified by technical drawings were programmed into the system. We examined technical drawings for 10 selected items that were purchased on a sole-source basis. Although sources for ASO's suppliers were listed on the drawings for three of the items, we found that quotations were solicited only from the prime contractors.

For example, ASO awarded sole-source purchase orders for artist brushes to a major electronics manufacturer. The drawing for the brush shows the prime contractor's source to be a paint and wallpaper company.

We believe that there would have been an opportunity to increase the number of competitive awards, and savings to the Government, had these sources been programmed into the system. Although we did not attempt to estimate the extent of the potential increase in competitive procurement awards, we believe that it would **have** been significant in view of the fact that, during a 2-month period in 1967, only one source was solicited for about 83 percent of the automated purchases.

## SAVINGS POSSIBLE BY CONSOLIDATING REQUIREMENTS

ASO's small purchase procedures, at the beginning of our review, did not provide for the aggregating of requirements for like items under one procurement action. Programming the automated system to combine requirements should result in lower prices and reduced administrative costs.

Experience has shown that unit prices are usually lower on large-quantity buys. Although several activities may request the same item, ASO small purchase procedures have provided that each RFQ and resulting purchase order cover only one type of item and one using activity. For example, on August 7, 1967, four automated purchase orders were issued to the same supplier for a total of 110 bearing assemblies. The purchase orders specified that the units were to be shipped at the Government's expense to four different activities. The price on each purchase order varied as follows:

<u>Purchase order</u>	<u>Quantity</u>	<u>Unit price</u>
NO0383-68-P-WT28	20	\$8.87
-WT29	10	9.85
-WT30	50	7.88
-WT31	<u>30</u>	8.87
Total assemblies	<u>110</u>	

We believe that, had ASO consolidated the four purchase orders into one order, it might have obtained all 110 bearing assemblies at the \$7.88 unit price or a lower price. We believe also that aggregating all requirements for each individual line item, regardless of the required destination, would substantially reduce the number of documents processed and effect a corresponding savings in administrative costs. If the orders had been consolidated into one procurement, the number of RFQs and purchase orders handled could have been reduced from four to one.

We were informed that, about September 1967, ASO programmed the automated system for use of single-item, multiple-destination documents. This procedure should help ensure that requirements for like items are consolidated.



REDUCE ADMINISTRATIVE COSTS AND LEAD-TIME REQUIREMENTS THROUGH MAXIMUM USE OF BASIC ORDERING AGREEMENTS

At the time of our review, ASO had not incorporated all BOAs into the automated procurement system for small purchases. Programming the automated system to make maximum authorized use of these agreements could reduce administrative costs and lead-time requirements.

A BOA is a written understanding between a Government procuring activity and a contractor, providing a description of goods or services which might be ordered by the Government and supplied by the contractor and a method for determining prices. BOAs are used when certain classes of items will be required by the Government, but specific items, quantities, and prices are not known. Orders can be placed under the BOAs when it is not practical to obtain competition.

The ASPR states that the appropriate use of BOAs is an economical method of ordering parts for equipment support since BOA procedures shorten the time required for placing these parts in production status. This, in turn, reduces the amount of support inventory required and decreases the possibility that parts will become obsolete as a result of design changes in the equipment.

We found instances, however, where the automated system processed individual RFQs and resultant sole-source purchase orders for items even though the items were covered by BOAs. For example, on August 7, 1967, ASO awarded a supplier 35 purchase orders for the procurement of 16 different items, even though a BOA covering these items was in effect with the supplier at the time of the award.

Had these purchase orders been combined under the existing BOA, the cost of processing the RFQs would have been eliminated. Also, since suppliers are given 3 weeks to answer RFQs, many days could have been eliminated from the time required to process the procurement.

An ASO procurement official told us that the system is programmed to match requirements on sole-source items

-against 40 of 57 BOAs. We believe that, in view of potential savings, the system should be programmed to utilize all existing BOAs.

ASO officials informed us that in the future all sole-source requirements processed through the system would be placed, as applicable, under existing BOAs.

#### EXPAND COVERAGE OF THE AUTOMATED SYSTEM TO OTHER SMALL PURCHASES

Because of its design, the automated system was not used to process about 25,000 procurement actions of \$2,500 or less, during fiscal year 1968.

We believe that, to reduce workload and resulting costs, ASO should consider expanding system coverage to many of the small purchases still being processed without the aid of automation. ASO officials informed us that they also believe the automated techniques should be applied to additional procurement actions.

#### NEED FOR PERIODIC COMPREHENSIVE REVIEWS OF THE AUTOMATED SYSTEM

The foregoing sections of this report illustrate segments of the system which, in our opinion, need to be improved in order to promote greater efficiency and economy of operation. We believe that, had ASO, Navy, or DOD audit activities periodically performed comprehensive reviews of the automated system, the matters discussed in this report might have been disclosed on a more timely basis.

## ASENCY COMMENTS

We brought our findings to the attention of the Secretary of Defense in a draft report dated March 27, 1969. We proposed that the Secretary of Defense establish programs to monitor the implementation and improvement of automated procurement systems.

In addition to those actions already taken or promised, we proposed that ASO consider the use of automated equipment to assist buyers in performing analyses of price proposals, in programming into the automated system additional sources identified by DLSC and by technical drawings of parts obtained from prime contractors, and in expanding system coverage to many of the small purchases still being processed without the aid of automation. We proposed also that ASO provide for periodic reviews of the automated system.

In a letter dated May 29, 1969 (see app. I), the Deputy Assistant Secretary of Defense (Installations and Logistics) concurred in our proposal that programs be established to monitor the implementation and improvement of automated procurement systems. He advised us that, although such a program was established early in calendar year 1968, additional steps were being taken, or were planned, to monitor the implementation and improvement of these systems. The Deputy Assistant Secretary further commented that, because of its scope and growing importance, the automated procurement area will be included in the Department of Defense logistics systems blueprint. (See p. 21.)

In regard to our proposal that consideration be given to programming the automated system to assist the buyers in performing price analyses, the Navy advised us that a feasibility study of such a program would be conducted.

The Navy, in commenting on our proposal to program into the automated system the sources identified by DLSC and by technical drawings of parts obtained from prime contractors, advised us that only about 8 percent of the DLSC-identified sources could be used to increase competition because of the unreliability of the DLSC data. The Deputy Assistant Secretary commented that supply sources identified by DLSC

would be utilized as soon as the long-range DOD improvement programs produce reliable information.

With respect to our proposal to consider expanding system coverage to small purchases still being processed without the aid of automation, the Navy advised us that numerous conditions caused the computer to reject the small purchase and refer it for manual processing. The Navy indicated that the implementation of a "closed loop" capability, currently scheduled for July 1, 1971, and an automated purchase description file would materially increase the number of small purchases which could be processed automatically.

Concerning our proposal to perform periodic reviews of the operation of the automated system, the Navy advised us that such reviews had been made in the past. The Navy advised us also that (1) both the 1966 review of ASO purchase operations by the Navy Procurement Management Review Staff and the Naval Supply Systems Command Inspection of ASO in August 1968 (performed after the completion of our fieldwork) placed appropriate emphasis on automated purchasing and (2) the automated system was eliminated from the scope of the fiscal year 1968 Naval Audit Service review because of GAO work in the area. In discussing this comment with Navy officials, we were advised that the 1966 review was of limited duration. We were advised also that, although coverage under these reviews was considered appropriate for the resources available, review of the automated system would have consisted primarily of observation and conversation rather than an in-depth examination of system performance.

### CONCLUSIONS

ASO has pioneered in the development of automated procurement systems for small purchases in the Department of Defense. However, ASO could have made more effective use of its computer and related equipment in processing small purchases, had the computer been programmed to (1) assist buyers in performing price analyses, (2) solicit additional sources identified by DLSC and by drawings of parts obtained from prime contractors, (3) consolidate requirements, (4) make maximum use of BOAs, and (5) process many of the small purchases still being processed without the aid of automation.

We believe that agency actions already taken or contemplated, if properly implemented, will improve the effectiveness of ASO's automated procurement system. However, we believe also that periodic in-depth reviews should be made of the automated system so that management can be informed of problem areas on a timely basis. We further believe it is important that problems cited in this report associated with the ASO system are not carried forward to succeeding systems.

### RECOMMENDATIONS

In view of the actions already taken or promised by the Navy and DOD, we are not making any recommendation concerning this individual system. However, because the matters discussed in this report were not disclosed during limited reviews performed by the Navy, we recommend that the Secretary of the Navy place greater emphasis on internal review of automated procurement systems under his jurisdiction.

Further, in view of the present and potential use of automated procurement **systems** by other activities, we recommend that the Secretary of Defense consider the improvements discussed in this report for incorporation, as applicable, into other systems.

## SCOPE OF REVIEW

We reviewed ASO's policies, procedures, and practices to determine the effectiveness of the automated procurement system utilized to process small purchases.

In performing this review we examined only a limited number of small purchase transactions, We believe, however, that the transactions selected for review were representative of the small purchases processed by ASO during the period of our review.

Our review included an evaluation of the internal control and review of the automated system. We obtained data on automated procurement systems being employed or tested by the Electronics Supply Office, Great Lakes, Illinois; the Ships Parts Control Center, Mechanicsburg, Pennsylvania; and the Oklahoma City Air Materiel Area, Oklahoma City, Oklahoma.

We have discussed our findings with appropriate agency officials.

**APPENDIXES**



SS

INSTALLATIONS AND LOGISTICS

ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON, D.C. 20301

29 MAY 1969

Mr. C. M. Bailey  
Director, Defense Division  
General Accounting Office  
Washington, D. C. 20548

Dear Mr. Bailey:

This is in reply to your letter of March 27, 1969, which forwarded for review and comment a Draft Report on the "Survey of the Automated Procurement System for Small Purchase, Navy Aviation Supply Office, Philadelphia, Pennsylvania" (OSD Case #2918).

The findings and recommendations in this Draft Report resulted from a survey of the policies, procedures and practices followed by the Navy Aviation Supply Office (ASO) in processing small purchases through its automated procurement system. Based on this survey the General Accounting Office (GAO) made recommendations for improving the ASO system and also recommended that the Secretary of Defense establish programs to monitor the implementation and improvement of automated procurement systems.

Enclosure 1 contains Navy comments concerning the four recommendations directed to ASO. These comments are considered responsive and are endorsed by this Office. With respect to the Navy comments concerning the use of Defense Logistics Service Center (DLSC) furnished supply sources, the Department of Defense (DoD) is engaged in a long range program to improve the **quality** and responsiveness of DLSC services as well as to increase the accuracy and reliability of logistics data used throughout the DoD. **Two portions** of this program bear directly on the reliability of DLSC supply source data. **The first** is the Federal Item Identification Guide (**FIIG**) Improvement Program which is a major effort to improve the identification and description of items of supply and includes an upgrading of present item descriptions through a redescription process. The second portion of the improvement program concerns the **DLSC** Integrated Data System (**DIBS**) which



is currently under development with implementation scheduled to commence in the 1971 time-frame. Improvement resulting from the FIIG program should ease the problem raised by ASO of determining part number equivalency, while the DIDS program, with its integrated common-data base approach to the catalog problem, is expected to produce quantum improvements in the reliability of DLSC data. Accordingly, it is anticipated that all DoD automated procurement systems will make increasing use of DLSC supply sources as benefits from the long range DLSC improvement programs are realized.

This Office concurs with the recommendation that the Secretary of Defense establish programs to monitor the implementation and improvement of automated procurement systems and, in fact, such a program was established early in calendar year 1968. In recognition of the need for improvement in purchase operations and for overall plans that would provide DoD program control and guidance in the design development and implementation of automated procurement systems, the Defense Supply Agency, on February 24, 1968, was assigned lead responsibility for designing, developing and coordinating an automated system for assisting in the acquisition of supplies. Guidance furnished the Defense Supply Agency was that the system, which is now called "Military Standard Purchase Operation Techniques" (MILSPOT), should cover the full range of procurement functions extending from the point in time that a requirement to purchase has been determined until the contract or purchase order has been prepared. MILSPOT will then interface with the Military Standard Contract Administration Procedures (MILSCAP) now scheduled for implementation on July 1, 1970. The two systems will give DoD effective mechanized control over the material acquisition cycle. Since the Services/Agencies are in various phases and stages of automation in the procurement area, one of the primary objectives of MILSPOT is to provide uniform guidance for bringing into juxtaposition these automation efforts. In addition, the advance guidance directed that MILSPOT be developed on a modular basis in order to gain flexibility of implementation and ready response to change.

MILSPOT is being designed and developed under a two-phase plan as follows :

Phase I - A Joint Task Group to conduct a reconnaissance of automated procurement techniques in use and planned with the objective of identifying and describing (in general terms) the modules comprising the purchase operations.

Phase II - **This** phase will encompass the design and development aspects of the system. It is envisioned that lead responsibilities for system design will be made to those Services/Agencies who have the greatest capability in particular modules or segments of the purchase operation.

The Phase I Joint Task Force has completed its efforts; its report is now being reviewed by the Services/Agencies and their comments will be submitted to this Office this month. After analysis of Phase I comments, Phase II will be initiated in the next two to three months. Results of the Phase I reconnaissance indicate that the modules can be designed so as to provide the requisite uniform guidance over automated procurement operations while permitting sufficient flexibility to allow integration of the modules into on-going and newly designed automated logistics systems.

While MILSPOT represents the major portion of our efforts in the automated procurement area, we are also taking additional steps to monitor the implementation and improvement of automated procurement systems. We previously reported to you on the objectives of our Materiel Management System Division in developing a DoD blueprint for automation of logistics systems. By late May the blueprint staff will have completed on-site reviews of the major materiel management systems of each of the Services and the Defense Supply Agency. **As** part of these reviews the staff has had an opportunity to examine the automated procurement modules included in each of the systems reviewed. **This** examination indicates that the problems identified in your survey of ASO are recognized and measures have been or are being taken to eliminate or substantially reduce their effects in the "third generation" systems now being developed or installed. However, because of its scope and growing importance we are including the automated procurement area in the logistics systems blueprint.

We appreciate the opportunity to review and comment on this report in draft form.

Enclosure  
As stated

Sincerely,



Glenn V. Gibson  
Deputy Assistant Secretary of Defense

DEPARTMENT OF THE NAVY COMMENTS

ON

GAO DRAFT REPORT OF 27 MARCH 1969

ON

Automated Procurement System for Small Purchases

Navy Aviation Supply Office, Philadelphia, Pa.

(OSD Case No. 2918)

---

I. GAO Findings and Recommendations

The GAO surveyed the policies, procedures and practices followed by ASO in operating an automated procurement system. During fiscal year 1967, ASO processed about 101,000 actions of \$2,500 or less and totaling about \$45 million, About 86,000 of these actions amounting to about \$30 million were processed under the ASO automated system, the remainder were not.

GAO found the following areas in which opportunities exist for improving the system:

a. Automated equipment could be used to assist buyers in making price analyses of negotiated small purchases.

b. There is an opportunity to increase the number of competitive purchases by programming the automated system to solicit quotations from all known supply sources.

c. Possible savings could be achieved by programming the automated system to consolidate requirements.

d. Administrative costs and lead time could be reduced by programming the automated system for maximum use of basic ordering agreements.

e. Automated techniques could be expanded to include many of the small purchase actions that continue to be processed without the aid of automation,

GAO also found a need for periodic operational reviews of the automated system by the internal control groups of ASO, the Navy, or the DOD.

GAO recommended that ASO:

1. Consider the use of automated equipment ,to assist buyers in performing an analysis of price proposals.
2. Consider programming into the automated system additional sources identified by DLSC (Defense Logistics Services Center) and in technical drawings of parts obtained from prime contractors.
3. Consider expanding system coverage to many of the small purchases still being processed without the aid of automation.
4. Provide for a periodic review of the operations of the automated system so that management can be informed of problem areas.

GAO also recommended that SECDEF establish programs to: (1) assure that improvements included in the GAO report are considered for other existing systems and those under development: (2) monitor the implementation and improvement of automated procurement systems,

#### II. Navy Comment

. The Navy agrees that the points covered by the first three recommendations to ASO should be considered. The Navy agrees also that there should be periodic reviews of the operations of the automated system, but does not agree with the GAO finding that reviews of the system have not been made in the past. The following paragraphs provide a discussion of these points,

#### III. Discussion

In the field of logistics management, the Navy has developed a uniform inventory control point (UICP) automated system under which the various aspects of military logistics are to be uniformly automated at the Navy's three ICP's. These include such functions as supply demand review, requisitioning processings, inventory control and procurement. ESO (Electronics Supply Office) and SPCC (Ships Parts Control Center) are currently operating under the UICP system, and certain of the UICP programs are operating at ASO. For automated purchasing, ASO is due to convert to the UICP purchase program on 1 July 1969. Since, under current plans, ASO's automated purchase system will become extinct in its present form on 1 July 1969, efforts toward improving and expanding automated purchasing at ASO will be in conjunction with UICP system developments affecting ESO and SPCC as well. Since the UICP purchase programs were developed to a great extent from ASO's pioneering efforts

## APPENDIX 1

### Page 6

in this field, there is a considerable degree of similarity between ASO's automated purchase operation and UICP operation.

Regarding recommendation 1, there are many complex problems that must be solved and many techniques that must be developed in order to fully automate the price analysis function. Thus far in automating purchase operations, the main thrust of Navy efforts has been to use the computer for as many clerical functions as possible in order to conserve its buyers' valuable time for making the pricing and other decisions essential to sound purchasing. For example, the computer's production of the RFQ card and finished purchase or delivery order and the computer's retention and retrieval of purchase history data relative to each purchase save untold hours which purchase personnel would otherwise have to expend on routine clerical tasks. The 86,000 small purchase actions reviewed by six buyers in fiscal year 1967, mentioned in the GAO report serves as a good illustration, although it may be slightly misleading. Actually, the 86,000 figure represents the effect of writing single destination individual purchase orders after solicitation and evaluation on some 35,000 items by the six buyers during fiscal year 1967. Nonetheless, the mere fact that so many purchases could be transacted by only six buyers eloquently attests to the benefits of automation in the purchasing field,

The concept of expanding the computer's role to perform price analyses of quotations received is feasible in theory. The same general principle is used under UICP in the UPO (unpriced purchase order) program, wherein the computer surveys purchase history of an item for the two previous years and calculates a UPO ceiling price based upon the degree of price variance and the age of the last price history entry. However, a mathematical model which would be a reliable substitute for buyers' judgment in analyzing price quotations would exceed the UPO program in both sophistication and complexity. On this point the DOD MILSPOT (Military Standard Purchase Operations Techniques) Task Group's Report on the Automation of Purchase Operations (December 1968) included the following comment: "A substantially 'untouched by human hands' approach ... is not generally proposed here due to the fact that the determination of price reasonableness has become more and more critical and is difficult to reduce to computer logic."

Nevertheless, in view of the obvious potential for manpower savings inherent in an effective automated price analysis program, the Navy will recommend that a feasibility study of such a program be conducted as part of DOD's MILSPOT effort.

Concerning recommendation 2, GAO's discussion of loading DLSC - supplied sources, and sources identified on technical drawings, into the MDF for automated solicitation is slightly over-simplified. An extremely important consideration is that automated solicitations generally identify the item being procured only in terms of item name,

supplier part number, and **FSN**. The DLSC input is not only a potential source but a part number which is believed to meet the technical requirements of the FSN (spare part) item. Thus the actual equivalency of such a part must be studied and evaluated before the part can be programmed for automated purchases. In order to evaluate the benefits to be gained from this expenditure of technical resources, ASO conducted a study of approximately 314 items **for** which additional sources had been introduced by DLSC. The study showed that only about 7.4% of the items would actually yield an increase in competition by programming the DLSC sources and part numbers. This **low** yield was attributable primarily to the unreliability of the DLSC data because of such deficiencies as:

- (a) transposition of part numbers:
- (b) failure to list the latest **items** of supply: and
- (c) listing of items offered by surplus dealers.

Accordingly, the expenditure of scarce technical resources in screening individual DLSC-supplied part numbers was not found cost-effective. The DLSC supplied sources are considered in the screening performed under the DOD High Dollar Spare Parts Breakout Program because the value of the items justifies such a procedure.

Concerning GAO's recommendation **3**, there are numerous conditions which cause the computer **to** reject the small purchase and refer it for manual processing, such as items described by government specifications as **GAO** noted. **As** mentioned above, generally only those items described by manufacturers' part number are candidates for the automated RFQ/purchase order routine. In addition, many small purchases otherwise susceptible of automated processing are relegated to manual purchasing because of one or more missing or erroneous file data elements. Future planning for UICP purchase operations envisions a "closed loop" principle whereby the computer will produce a correction notice rather than totally reject the purchase. Upon manually inserting the correct or missing data, the purchase could then proceed under the automated program. The target date for implementing this "closed loop" capability is 1 July 1971. In this same area, a recently issued change to **UICP** permits purchases which previously would have been rejected for want of an element such as, purchase description, technical drawing or special packaging instructions to be coded to complete the automated cycle, but with the finished RFQ or order routed to the cognizant personnel for attachment of the additional data prior to issuance. Future UICP plans as well as the MILSPOT concept call for an automated purchase description file (or "technical data file") to eliminate much of this "off-line" processing.

High priority buys to fill immediate end-use requirements ("spot buys" as opposed to stock replenishment purchases) generally come "off-line" for manual processing. Although UICP contains a "spot buy" program,

## APPENDIX I

Page 8

it is a local management decision whether to run this program or whether to exclude certain of the highest priorities from it for immediate manual attention and expediting. Another type of ICP purchase which completely misses the automated system is the purchase of non-stock numbered ("part numbered") items. There are no plans at this time to expand the UICP program to cover "part numbered" items because the sporadic demand for these items combined with the additional complexity they would add to the system are believed to make coverage of these items impracticable.

With respect to review of the automated system, the 1966 review of ASO purchase operations by the Navy's Procurement Management Review Staff and the Naval Supply Systems Command Inspection of ASO in August 1968 both placed appropriate emphasis on automated purchasing. In a broader sense, the automated purchasing concept continues to evolve from the surveillance provided by cognizant headquarters personnel, by the Fleet Material Support Office, and by the three ICP's who are constantly sharing the benefits of their experience and unique innovations. The area of procurement at ASO was included in the Naval Audit Service (NAVAUDSVC) planned coverage for FY 1968, which was developed during the last half of FY 1967. Prior to starting its review at ASO in November 1967, NAVAUDSVC representatives consulted with resident GAO auditors. When advised of the GAO survey of the automated procurement system for small purchases, NAVAUDSVC eliminated the area from its planned coverage. This action was in accordance with a policy consistently followed with respect to GAO to avoid unnecessary duplication. The same type of review of this area as that outlined above will be continued by the Naval Supply Systems Command, Fleet Material Support Office and ASO. Internal audit coverage will be made on a regularly scheduled basis.

PRINCIPAL OFFICIALS OF THE DEPARTMENT OF DEFENSE  
AND THE DEPARTMENT OF THE NAVY RESPONSIBLE FOR  
ADMINISTRATION OF ACTIVITIES  
DISCUSSED IN THIS REPORT

	Tenure of office	
	From	to
<u>DEPARTMENT OF DEFENSE</u>		
SECRETARY OF DEFENSE:		
Melvin R. Laird	Jan. 1969	Present
Clark M. Clifford	<b>Mar.</b> 1968	Jan. 1969
Robert S. McNamara	Jan. 1961	<b>Feb.</b> 1968
ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS):		
Barry J. Shillito	Jan. 1969	<b>Present</b>
Thomas D. Morris	<b>Sept.</b> 1967	Jan. 1969
Paul R. Ignatius	Dec. 1964	Aug. 1967
<u>DEPARTMENT OF THE NAVY</u>		
SECRETARY OF THE NAVY:		
John H. Chafee	Jan. 1969	Present
<b>Paul R. Ignatius</b>	<b>Sept.</b> 1967	Jan. 1969
Charles F. Baird (acting)	Aug. 1967	Sept. 1967
Robert H. B. Baldwin (acting)	July 1967	Aug. 1967
Paul H. Nitze	Nov. 1963	<b>June</b> 1967
COMMANDER, NAVY AVIATION SUPPLY OFFICE, PHILADELPHIA, PENNSYL- VANIA:		
Rear Adm. H.J.P. Foley, Jr.	June 1966	Present