The Honorable Caspar W. Weinberger  
The Secretary of Defense  
Attention: Director, GAO Affairs  
Dear Mr. Secretary:

Subject: Management of DOD's Shelf-Life Program—Better, But Still In Need of Improvement (GAO/PLRD-82-84)

We have completed our limited survey of the management of the Department of Defense's (DOD's) shelf-life program. As of June 30, 1981, this program covered about 40,000 supply items with inventories valued at about $1.2 billion.

Since our last review, DOD has appointed an Administrator with overall responsibility for the shelf-life program and has taken other initiatives to improve program management. However, we found problems still exist which can increase management costs and lead to unnecessary disposal of material. These need to be resolved.

For many years, the shelf-life program has suffered because insufficient data has not been accumulated and reported to allow management to evaluate the program's effectiveness. A critically needed management reporting system, intended to overcome this problem, has been allowed to slip far beyond its originally anticipated completion date. In our opinion, this reporting system would significantly enhance the Shelf-Life Program Administrator's capability to fulfill his responsibilities.

Other continuing problems exist because:

- The services' inventory control points (ICPs) assign erroneous shelf-life designations to many items.
The Air Force's storage activities do not apply shelf-life management controls to many items designated for shelf-life management by non-Air Force ICPs. If the Air Force policy is correct, it should be expanded to other users; if it is wrong, it should be discontinued.

Military storage activities have not corrected longstanding deficient shelf-life management practices, although these deficiencies have been reported many times.

We are bringing these matters to your attention because we believe DOD needs to take more aggressive action to implement the shelf-life management reporting system and resolve the inconsistent and ineffective management practices that still exist.

BACKGROUND

A shelf-life supply item, such as photographic film, paint, or a rubber product, possesses deteriorative or unstable characteristics to the degree that a maximum period must be designated during which it is suitable for use. These items require special management attention, including extensive identification and frequent and extensive inspection while in storage, to assure that they are used before their useful life expires instead of being discarded.

Recognizing the special nature of these items and the potential waste that results from their mismanagement, the Congress has expressed continuing concern over DOD's management of its shelf-life item inventories. In response to that concern, we reviewed DOD's shelf-life program in 1979 (LCD-79-220, June 19, 1979) and reported inconsistent and inadequate management practices which could increase management costs and lead to unnecessary disposals. Specifically, our report pointed out that DOD lacked any means of providing effective program oversight and, therefore, should appoint a focal point—a Shelf-Life Program Administrator—as recommended by the Defense Logistics Analysis Office in its earlier report on the program. The Administrator's duties would include reviewing and evaluating program operations,
--periodically providing an evaluation report to
the Assistant Secretary of Defense/Manpower,
Reserve Affairs and Logistics (ASD/MRA&L), and

--recommending policy and procedural changes, as
required.

OBJECTIVE, SCOPE, AND
METHODOLOGY

This survey, a followup to our 1979 report, was to deter-
mine whether previous inconsistent and ineffective management
of shelf-life inventories had been corrected. We performed our
work at the Offices of the ASD/MRA&L, the military service head-
quarters, and the Administrator, and at the following activities:


--Defense Industrial Supply Center, Philadelphia,
Pennsylvania.


--New Cumberland Army Depot, New Cumberland,
Pennsylvania.

--Air Force Logistics Command, Dayton, Ohio.

--San Antonio Air Logistics Center, San Antonio,
Texas.

--Wright-Patterson Air Force Base, Dayton, Ohio.

At these locations, we interviewed cognizant officials,
reviewed internal audit reports, and evaluated management proce-
dures and practices. We toured warehouses and inspected shelf-
life items in storage. Additionally, we reviewed and evaluated
reporting and surveillance systems established by the Adminis-
trator to monitor and evaluate shelf-life management at ICPs
and storage activities.

Originally, we had planned to make an indepth review of
the shelf-life program, including the identification of specific
organizations or types of shelf-life items that were experienc-
ing particular problems and the causes of and unnecessary costs
resulting from these problems. However, we modified our plans
because (1) DOD had not completed implementing a management
reporting system, originally expected to be in operation
by January 1981, which would have enabled us to identify the organizations or types of items experiencing difficulty, and (2) neither DOD nor the services accumulate and maintain cost data which can be used to evaluate the cost effectiveness of the program.

**IMPROVEMENTS MADE IN SHELF-LIFE PROGRAM MANAGEMENT SINCE OUR 1979 REPORT**

Based on our 1979 report, the House Committee on Appropriations directed DOD to establish a focal point for the shelf-life program. In March 1980 the DOD Shelf-Life Program Administrator was officially appointed; however, he has acted in that capacity since about June 1979. The Administrator is assigned to the Defense Logistics Agency (DLA).

By appointing an Administrator, DOD has taken a major step toward improving shelf-life program management. Finally there is a focal point responsible for carrying out DOD-wide program oversight and evaluation.

In addition to appointing the Administrator, DOD has taken other initiatives to improve program oversight and evaluation capability. Since June 1979, the Administrator has periodically met with representatives from ASD/MRA&L, the services, DLA, and the General Services Administration. Out of these meetings evolved the DOD Shelf-Life Committee whose objective is to develop, monitor, evaluate, and improve the shelf-life program. Committee meetings provide a means for the Administrator and service/agency focal points to discuss their problems and devise coordinated solutions; recommend and evaluate policy and procedural changes for inclusion in the DOD Shelf-Life Management Manual; and review, analyze, and provide input to the Shelf-Life Item Management Report, which is discussed further below.

In addition to the meetings, Committee members also participate in shelf-life surveillance visits to service/agency ICPs and storage activities. During these visits, participants attempt to determine if the activities are complying with the policies and procedures contained in the DOD manual. If problems are identified, the Committee recommends corrective actions. After the visits, the activities formally notify the Administrator of actions taken to correct the problems and/or implement the Committee's recommendations.

The appointment of the Administrator, the actions he has taken to date, and the other initiatives discussed above are important steps toward improving the effectiveness of the DOD
shelf-life program. However, as discussed in the next section, the ability of the Administrator and other interested parties, including GAO, to evaluate the program's effectiveness is hampered because a critically needed management reporting system has not been implemented.

**DELAY IN COMPLETION OF SHELF-LIFE PROGRAM MANAGEMENT REPORTING SYSTEM**

Since at least 1969, the DOD shelf-life program has been criticized because sufficient data has not been accumulated and reported to allow management to evaluate the program's effectiveness. At the completion of our survey, an effective management information reporting system still had not been implemented.

One of the primary goals of DOD's shelf-life program is to minimize the risk of shelf-life expiration before issuance; that is, to keep disposal of shelf-life material to a minimum. Consequently, for top management to evaluate the effectiveness of the program, we believe it must be provided with information showing, among other things, the extent to which shelf-life material has been disposed of instead of being issued and used. With DOD-wide shelf-life item disposal data, the Administrator could isolate significant problems by service, manager, storage location, and type of material and then quantify the adverse effect; that is, the dollar value of expired shelf-life material disposed of. Availability of this type data is a key element in program evaluation.

In 1969, the Analysis Division, the predecessor of the Defense Logistics Analysis Office (DLAO), reviewed and reported on DOD's shelf-life program. It concluded that the most important result of its examination was the identification of management data which would provide a basis for assessing the program. It recommended that DOD immediately implement a system to report this data; however, no system was implemented.

In 1977, we reviewed shelf-life management procedures and practices at various storage locations. In our report (LCD-77-211, June 29, 1977), we pointed out that storage activities lacked overall information on the shelf-life material that expired while in storage. We recommended that DOD establish a management reporting system as part of the shelf-life program.

As a result of that report, DLAO studied the shelf-life program to determine the feasibility of developing a management
information and evaluation system. Using existing DOD information collection systems and the data base and methodology it developed, DLAO concluded in its September 1978 report that a shelf-life program evaluation could be performed with a relatively small amount of effort and at a very low cost. As did its predecessor, DLAO recommended that DOD develop and maintain the type of program data base DLAO proposed. In our 1979 report, we urged that DOD implement these recommendations as soon as possible. This has not yet been done.

Initial discussions among DOD activities on the reporting system began in June 1979. In March 1980 ASD/MRA&L approved the report format and assigned it a report control symbol. The first semiannual report was originally scheduled for delivery in December 1980. Part I of the report was delivered on schedule; however, part II has been continually delayed by problems in obtaining service identification data, changeovers in computer systems at the Defense Logistics Services Center, a reorganization within the Defense Property Disposal Service, and a reorganization in the programing office with a resultant loss of the original project officer. Now, the report is not expected before December 31, 1982.

Without the report, the Administrator's program evaluation capability is, in our opinion, significantly diminished. We believe, therefore, that the Administrator needs to take more aggressive action in getting the Shelf-Life Item Management Report implemented.

INCONSISTENT AND INEFFECTIVE SHELF-LIFE MANAGEMENT PRACTICES

Inconsistent and ineffective management practices continue to impair the shelf-life program. ICPs make many errors when designating items for inclusion in the program. The Air Force often ignores shelf-life designations made by non-Air Force ICPs. And, DOD storage activities continue to engage in deficient practices. These problems, which are discussed in more detail below, need to be resolved because they can increase management costs and lead to unnecessary disposal of material.

Erroneous shelf-life designations by ICPs

The services and DLA continue to erroneously designate items for shelf-life management and/or assign wrong shelf-life periods or types to the items they manage.
In 1979 we reported that contractor recommendations on whether items entering the supply system should be designated as shelf-life items were usually accepted by ICPs with little or no technical evaluation. We also pointed out that ICPs did not have formal programs to routinely reevaluate shelf-life designations after their original assignment. At that time, we concluded that these practices were ineffective because almost half the shelf-life items we reviewed had been assigned incorrect or questionable shelf-life designations.

The situation found in 1979 has not been corrected. The services and DLA continue to experience miscoding problems. This is evidenced by the results of a recent review, requested by the Administrator, of about 20 percent of the shelf-life items managed by the services and DLA. As the following table shows, 16 percent of shelf-life items reviewed had some form of error in the original shelf-life determination.

<table>
<thead>
<tr>
<th>Managing activity</th>
<th>Reviewed</th>
<th>Deleted</th>
<th>Revised (note a)</th>
<th>Deleted and revised</th>
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<tr>
<td>DLA</td>
<td>3,567</td>
<td>322</td>
<td>86</td>
<td>408</td>
</tr>
<tr>
<td>Air Force</td>
<td>2,460</td>
<td>239</td>
<td>44</td>
<td>283</td>
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<td>Army</td>
<td>181</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>123</td>
<td>73</td>
<td>50</td>
<td>123</td>
</tr>
<tr>
<td>Navy</td>
<td>710</td>
<td>183</td>
<td>125</td>
<td>308</td>
</tr>
<tr>
<td>Total</td>
<td>7,041</td>
<td>819</td>
<td>306</td>
<td>1,125</td>
</tr>
<tr>
<td>Percent</td>
<td>100.0</td>
<td>11.6</td>
<td>4.4</td>
<td>16.0</td>
</tr>
</tbody>
</table>

*Includes cases where the original shelf-life period was shortened and cases where the shelf-life type was changed.*

Based on the results of this review, the Administrator requested the services and DLA to review the validity of the designations for all shelf-life items.
Also, Defense Industrial Supply Center officials continue to report that about 90 percent of the shelf-life items transferred to them by the services for management have been assigned incorrect shelf-life designations. They stated that most of the items should never have been designated as shelf-life items because they had no deteriorative characteristics.

In spite of these continued discrepant coding problems, the services and DLA still have not established programs to routinely reevaluate the shelf-life items they manage. These problems raise serious questions about the reliability and validity of decisions to code items for shelf-life management. If the ICPs are not accurate in designating shelf-life items, storage activities will not apply the appropriate inspection, storage, and retention criteria to the material in their inventories. If miscoding is as pervasive as the Defense Industrial Supply Center has found, service ICPs and storage activities are incurring unnecessary costs to apply unneeded intensive management controls to some material and are unnecessarily disposing of material under the mistaken assumption that its shelf-life has expired.

**Air Force ignores shelf-life designations of other ICPs**

In our 1979 report, we pointed out that the Air Force followed a unique policy in that it exempted many items from shelf-life controls at its storage activities even though the items had been designated as shelf-life items by the Army, Navy, or DLA inventory control point responsible for their wholesale level management. We attempted to examine this policy more thoroughly during this survey. Essentially, we found the logic for and expected benefits from this policy are not documented.

In 1974 the Air Force Audit Agency issued a series of reports pointing out that many items were managed as shelf-life items at Air Force storage activities even though no adverse effect, such as end-item failures, could be attributed to their deterioration or shelf-life expiration. As a result, the Air Force Logistics Command adopted its current policy that no items in a Federal Supply Class will be subjected to shelf-life controls at its storage activities unless it is shown that deterioration of at least one item in the supply class had caused such an adverse effect.

However, the command ignored the auditors' recommendation to determine whether it was economically feasible to continue shelf-life controls for those items without critical end-item application. It simply dropped those controls.
Within DOD, the ICP has sole responsibility for designating which of the items it manages require shelf-life controls and issuing technical instructions regarding appropriate inspection, storage, and retention of disposal criteria. Other service users should comply with the requirements established by the manager. Where there are inconsistent management practices, the manager and user cannot both be correct. The items either will deteriorate or they will not; they either require special treatment or they do not. If the manager is right, users that do not follow the ICP's instructions risk increasing equipment deadline rates, more costly maintenance, and wasteful disposal of material that should have been used before its shelf-life expired. If the user that disregards the ICP's instructions is right, other users are spending too much to intensively manage the items and may be disposing of usable material under the mistaken belief that its shelf-life has expired. We did not perform the in-depth analysis necessary to determine the impact of the Air Force policy. However, we believe this impact should be determined and, depending on what is appropriate, either (1) the Air Force be instructed to comply with the instructions of the ICPs or (2) the Air Force policy be adopted DOD-wide.

Deficient practices at storage activities

In addition to the Air Force's ignoring ICP instructions concerning the physical management of shelf-life items, storage activities of all services and DLA continue to engage in deficient practices concerning items they recognize as requiring intensive management. These deficiencies, which were noted again in this survey, have been reported repeatedly in our past audits, in DOD internal audit reports, and in surveillance visit reports of the Administrator and service/agency focal points. They include

--not issuing oldest shelf-life material first;

--improperly identifying and marking shelf-life items;

--failing to properly inspect, test, and extend the useful life of shelf-life items;

--not detecting and recording changes in the condition of shelf-life items; and

--inaccurately recording data on the disposal of shelf-life items.
Failure to perform these required actions on shelf-life items can cause serious adverse impact, including the receipt of unusable material by military using organizations, wasteful disposal of material which should have been issued and used before its shelf life expired, and the inability of management to effectively monitor and evaluate the working of the shelf-life program.

RECOMMENDATIONS

To assure that the Administrator acquires the needed program evaluation capability as soon as possible, we recommend that you direct the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) to make sure the shelf-life management reporting system is implemented without further delay.

We also recommend that you direct the Secretary of the Air Force and the Administrator to jointly evaluate the costs and benefits of the Air Force's policy of not employing intensive management procedures for many items designated as shelf-life items by various ICPs. If the Air Force policy is cost effective, it should be adopted DOD-wide; if not, the Air Force should abandon the policy.

To improve the accuracy of shelf-life designations assigned by ICPs, we recommend that you direct the Secretaries of the military services and the Director, DLA, to require their ICPs to implement formal programs to

--thoroughly review contractor recommendations regarding the shelf life of items entering the supply system and

--periodically reevaluate assigned shelf-life designations of items in the supply system to validate the need for continued shelf-life controls.

AGENCY COMMENTS

We discussed a draft of this report with DOD officials, including the Shelf-Life Program Administrator, to obtain official comments. They concurred in our findings, conclusions, and recommendations, except for minor revisions, which we adopted.

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

We are sending copies of this report to the Secretaries of the Army, Navy, and Air Force; the Director, Office of Management and Budget; the Director, Defense Logistics Agency; and the chairmen of the appropriate congressional committees.

Sincerely yours,

Donald J. Horan
Director