Admiral T. B. Hayward  
Chief of Naval Operations

Dear Admiral Hayward:

Subject: Opportunities to Improve the Navy's Retrograde Materials Program (LCD-80-99)

This letter is to advise you of the results of our review of the Navy's retrograde distribution program. We evaluated the retrograde of reparable items to determine if components were being returned by the most economical mode of transportation and if these components were being repaired in a timely manner.

Although the Navy's retrograde system works reasonably well, we observed several practices requiring management attention. We bring them to your attention not only to inform you of the weaknesses we found at the installations audited, but more importantly because such weaknesses may exist at other installations within the Service.

We believe the Navy can manage its reparable components program more effectively by:

--advising item managers of excess stocks held by Naval Air Forces, Atlantic,

--reducing the backlog of components awaiting repair parts,

--improving the management of industrial fund stores inventories, and

--reporting accurate turnaround times for repairing components.

While some Naval overseas activities were contacted most of our work was performed at the Naval Air Rework Facility, the Naval Air Supply Depot and the Naval Ship Yard, Norfolk, Virginia; The Aviation Supply Office, Philadelphia and The Naval Supply Systems Command, Crystal City, Virginia.
EXCESS ITEMS NOT REPORTED TO INVENTORY CONTROL MANAGER

The Naval Air Forces, U.S. Atlantic Fleet Headquarters had not reported about $44 million of excess repairable and consumable material to the Aviation Supply Office—the cognizant inventory manager for these items. Naval regulations provide specific guidance and procedures for establishing stockage levels and reporting excesses to inventory managers for redistribution and use. A breakdown of the material which Naval Air Forces, Atlantic had failed to report is shown in the following table:

<table>
<thead>
<tr>
<th>Category of Material</th>
<th>Type of Material</th>
<th>Number of Components</th>
<th>Dollar Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2R</td>
<td>Aeronautical, photographic and meteorological</td>
<td>4,937</td>
<td>$30,274,275</td>
</tr>
<tr>
<td>6R</td>
<td>Aeronautical ground support equipment</td>
<td>27</td>
<td>82,035</td>
</tr>
<tr>
<td>1R</td>
<td>Consumables</td>
<td>17,121</td>
<td>14,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$44,356,310</td>
</tr>
</tbody>
</table>

The Aviation Supply Office could have used nearly $6 million of the above unreported excess components and about $1.5 million of consumable material to fill outstanding requisitions and to cancel some due-in procurements.

Naval Air Forces, Atlantic, officials said that the excesses were a result of assets "left behind" when updating a carrier's Aviation Consolidated Allowance List. They explained that when ships are undergoing overhaul or returning from deployment, all allowance list assets are removed from the ship and stored at their Fleet Aviation Logistics Support Center site. To the extent possible, the assets removed are used to fill the ship's new allowance list and any remaining assets are used to satisfy (1) future allowance lists of U.S. Atlantic Fleet ships/carriers, (2) supply requisitions from other Atlantic Fleet commands, and (3) requisitions from other customers.

We suggested that Aviation Supply Office inventory managers for these items would be in a better position to redistribute these assets by considering needs Navy-wide. Naval Air Forces, Atlantic, officials agreed, and informed us that the excess materials would be reported to the inventory managers and turned in to the Naval Air Station Supply.
NEED TO REDUCE BACKLOG OF COMPONENTS
WAITING REPAIR PARTS

At the time of our visit in February 1980, the Naval Air Station Supply Office in Norfolk was holding a backlog of about 4,000 reparable components for reinduction into the Naval Air Rework Facility repair program. The rework facility had transferred these items to the Supply Office as condition code "C" assets because parts needed to repair the items were not available for over 30 days. About 41,000 parts valued at $5.6 million were needed to repair the various component items. Analysis showed that many of the components had been awaiting repair parts for several months.

A lack of discipline on the part of item managers to follow established policies and procedures contributed to the backlog of items awaiting repair parts. The policies and procedures were issued specifically to control these assets and to assure that items are promptly repaired. We found that item managers at the Navy Aviation Supply Office had not identified the repair parts that were holding up repairs, and were not expediting the procurement of such parts. Item managers were also not conducting quarterly reviews to determine if there were excessive numbers of components awaiting repair parts. Naval Air instruction 4440.613, issued in June 1976, requires such actions.

The Naval Air Station Supply Office and the rework facility were also lax in following clearly established procedures. The Supply Office did not promptly provide the rework facility with monthly lists of items which could be reinducted for repair because parts had been received. The rework facility did not promptly reinduct items that were reported available.

Officials of the Naval Material Command and Supply Systems Command agreed that improvements were needed in management of items awaiting repair. To reduce the backlog of components awaiting repair they planned to expedite actions to secure needed repair parts. They also indicated that they would screen the backlog to remove any items that might not currently be needed.

NEED FOR IMPROVED MANAGEMENT OF
NAVY INDUSTRIAL FUND STORES STOCKS

The Naval Air Rework Facility at Norfolk has established Naval Industrial Fund Inventory Record stores to provide supply support to its various repair ships. The combined inventory carried in the stores is about $17 million.
The stores are not centrally managed, but for the most part operate autonomously. These stores were established to provide a quick level of support to the various repair shops to 1) reduce waiting time for spare parts and 2) eliminate the need for the repair shops to carry a large volume of spare parts. However, it was expected that stores would obtain support from each other instead of stocking identical items. Since all the stores are located on the same compound and some are only two blocks apart it should be practical for the stores to support each other. Limited tests of items stocked by the store indicate that the store inventories are not managed and controlled in accordance with established policies and procedures. The conditions warrant immediate management attention. We found that

---about $2 million of the combined $17 million in inventory carried in store accounts has not been reported for disposition even though it is classified as excess (no demands or issues during 12-month period),

---identical items were stocked in several stores,

---some stores were exceeding their authorized stock levels and storing stocks which were not authorized, and

---unauthorized supplies held by some stores were needed and on-order at stores authorized to carry the items.

These conditions violate policies and procedures set forth in management directives and instructions. For instance, the Naval Air Industrial Material Management System provides that identical items should be stored in a single store to avoid fragmentation of demands and to minimize the duplication of material stocked at a local point. Navy instruction NAVAVNLOGEN 4400.1, dated June 22, 1978, states that industrial fund store stocks should be considered excess if there has been no recorded usage during a 12-month period, and that a quarterly excessing plan for the disposition of such stocks should be coordinated with the Comptroller Division.

An official at the rework facility told us the conditions, described above have resulted because the individual store managers do not attempt to get needed materials from other stores. He also told us that the Naval Air Logistics Center is considering the benefits of developing a computer program
that will enable the transfer of the materials among stores on an as needed basis. The program would consider the material in all stores before a buy decision is made; if the material is found, the program will generate a transfer document to physically move the material to the store that needs it.

REPORTS OF REPAIR CYCLE TIME
UNNECESSARILY LIMIT MANAGEMENT EVALUATIONS

Management reports of the total time needed to repair an item do not include time awaiting parts for that time which exceeds 30 days. This omission is contrary to Navy instructions, and prevents accurate management assessments of program effectiveness because the reports understate repair cycle time.

Two organizations use data on repair cycle time. The Naval Air Logistics Center use the data to evaluate program effectiveness at its rework facilities. The Aviation Supply Office uses the data to compute quantities to procure and stock, and to identify items to be disposed of.

Reports to the Naval Air Logistics Center are Understated

When a reparable component is held over 30 days (condition "G") while awaiting parts, its total repair cycle time is split into and reported as two shorter time periods: time at the rework facility before condition "G", and time after condition "G". Since waiting time while in condition "G" is excluded from reports, the two reported repair cycle times do not equal the actual total. Consequently, the reported cycle times show far better repair performance than is actually the case.

Naval Air Logistics Center officials told us they consider waiting for parts as being a supply problem, thus such time should not be included in the repair cycle time. They also told us that in addition to the repair cycle time, they use other data (financial, man-hours expended, and size of component) to evaluate the rework facility's performance.

We agreed that the supply problem may not be within the rework facility's control, but do not agree that this reason justifies ignoring the problem. Waiting time for parts should be included in determining whether timeliness
goals have been met. If uncontrollable factors, such as waiting time, resulted in not meeting goals, then such factors can be identified.

Reports to the Aviation Supply Office

The Aviation Supply Office gets all the raw data it needs, but their computer system, as now programmed, cannot match the various segments of data received to arrive at a breakout for total repair cycle time. As a result, the office cannot determine

--how long reparable components are awaiting parts,
--how many components are being held for lack of parts,
--which requisitions for repair parts should be expedited, and
--which, if any, components should be removed from the repair cycle.

Aviation Supply Office officials told us that they were aware of the problem, and have recommended changes to the computer program. The changes should provide total repair cycle time with breakouts for each segment of the repair process.

Conclusions and Recommendations

We believe that the underlying causes for the problems described in this report can be attributed to (1) the failure of subordinate commands to comply with existing regulations, and (2) the need for additional guidance and management attention to assure compliance with regulation.

We discussed these matters with officials of the Naval Material Command and local command officials. While some corrective measures have been initiated, other actions are needed. Accordingly, we recommend that you direct the Commander in Chief, Atlantic Fleet to issue guidance and procedures to ensure that excess aviation materials are reported to National inventory managers for Navy-wide redistribution and use.

In addition, we recommend that you direct the Commander, Naval Material Command take action to
reduce the backlog of items awaiting repair parts at the rework facility in Norfolk

improve the management of the Navy industrial fund stores inventories, and

assure that accurate repair cycle time is reported to item managers in the Aviation Supply Office and to the Naval Air Logistics Center.

Also, we recommend that you check to see if similar problems exist at the other NARFS and Fleet Commands.

We want to thank you, for the cooperation and courtesies extended to us during our audit and will be glad to discuss these matters with you or with members of your staff.

We would appreciate receiving your comments on the issues discussed in this report and being kept informed of corrective actions taken.

Sincerely yours,

Henry W. Connor
Associate Director