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UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D.C. 20548

DEFENSE DIVISION



FEB 16 1971

Commanding General, Air Force Logistics Command
Wright-Patterson Air Force Base, Ohio 45433

Attention: MCIML

Dear Sir:

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The General Accounting Office has made a limited review of the Management of Items Subject to Repair (MISTR) system in the Air Force at the Ogden, San Antonio, and Warner Robins Air Materiel Areas. Our review was generally confined to the repair programs affecting fiscal years 1969, 1970, and 1971.

During the course of our review, we identified the following conditions related to MISTR which we feel require management attention.

- Unreliable long-range repair projections are resulting from the use of erroneous and unsupported data.
- Unjustified or premature repairs are resulting from invalid adjustments made by inventory managers to the biweekly repair schedules.
- Excess repair parts are being accumulated at the maintenance inventory centers as a result of using invalid repair parts standards and an absence of consistent procedures for requisitioning.

The occurrence of the above conditions was sufficiently frequent, in our opinion, to indicate that MISTR, a basically sound system, requires an increased degree of surveillance to insure it is properly and consistently implemented.

LONG-RANGE REQUIREMENTS

We examined 22 randomly selected "Hi-Valu" items to determine the validity of the data used to project long-range repair

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requirements for two quarters. The following table illustrates the extent of the erroneous data used in the repair computations for these 22 items.

<u>Description of Elements Used in the Computation</u>	<u>Number of Errors Found</u>	
	<u>1st quarter</u>	<u>1st quarter</u>
	<u>FY 1970</u>	<u>FY 1971</u>
Depot Stock Level	10	8
Assets (already in the inventory)	4	2
Quantitative (additional assets required for special purposes)	10	6
Repair Cycle Time	16	5
Production Lead Time	16	14
Administrative Lead Time	18	20

Most of the errors noted related directly to unsupported data used by inventory managers in computing requirements. We did not quantify the effect of these errors on repair projections, but observed that they generally resulted in overstated repair requirements.

The impact of erroneous computations under the MISTR system is felt in many other ways as well. The system is used to (1) determine procurement quantities, (2) stratify requirements and assets for management analysis, (3) prepare budgets, and (4) make decisions on retention, disposition and interservice transfer of assets.

SHORT-RANGE REQUIREMENTS

The MISTR system was designed to alert the inventory managers every 2 weeks when and with what priority repair actions should be scheduled in order to replenish depot stocks up to authorized levels and to sustain those levels while meeting the demands of using activities. For more than 2 years, however, the demand for repair actions to fill backorders has prevented the scheduling of repair for depot stocks, and generally, only those items with outstanding backorders were scheduled for repair.

To overcome this condition, inventory managers continually altered the short-range repair schedules to show backorders, whether or not any actually existed. This practice provided the inventory managers with some assurance that at least a portion of the total requirement would be available for depot stocks. However, it overlooked the fact that such scheduling could be preempting repairs on other items more urgently needed.

Following is an example:

<u>Repair to be applied against</u>	<u>Units computed by MISTR</u>	<u>Units as adjusted by IM</u>	<u>Net Change</u>
High Priority Backorders	0	41	+41
Low Priority Backorders, plus 1/2 the depot level	66	52	-14
Routine Stock Replenishment	61	34	-27

By showing a large repair requirement to meet unfilled high priority requisitions, the inventory manager was able to gain some assurance that at least a portion of the total requirement computed by the MISTR system would be repaired during the 2-week period for which the computation was made. At the time the adjustment was made, however, there were no outstanding high priority backorders.

In our opinion, the number and extent of invalid adjustments to the short-range repair requirements constitute a serious lack of supply discipline at the depot level. Under the present austere conditions and limited resources currently available to the Air Force, we believe the constant changing of repair requirements and priorities could cause or contribute to:

- Unnecessary or premature repair of some items while failing to repair other items more urgently needed.
- Unnecessary or premature procurement and accumulation of some repair parts while perpetuating shortages of others.
- Withholding from depot management potentially serious production problems which may be correctable with appropriate management action.
- Misstating to higher Air Force echelons the repair requirements, priorities, and repair capability by organic maintenance facilities.

We believe that the MISTR system is basically sound and is workable, even under the austere circumstances now facing the Air Force. It must be recognized, however, that any such system is merely a means to an end and that, unless a reasonable degree of supply discipline is exercised and enforced, the system cannot operate effectively.

EXCESS PARTS IN MAINTENANCE ACTIVITIES

At each of the five air materiel areas, maintenance inventory centers have been established to provide prepositioned repair parts adjacent to the maintenance shops to support the biweekly repair program. These centers form an integral part of the MISTR operation.

At one Air Force maintenance activity, there were 12 maintenance inventory centers being operated to support the maintenance shops. In March 1970 these 12 centers had repair parts on hand valued at \$6.8 million, of which \$3.4 million, or one-half of the parts were acknowledged by the centers as being excess to current or projected needs.

We believe that excesses accumulated in the centers primarily because the maintenance activities were not consistent in the manner in which they requisitioned material and the material standards, which reflect the rate at which repair parts are expected to be replaced in repairing a piece of equipment, were not reliable.

In some cases, parts were replenished on the basis of projected quarterly needs; while in others, they were replenished on an as-needed basis. In some cases parts were requisitioned by production personnel, and in others, requisitioning was performed by stock clerks in the centers.

At one location, our examination of material standards for 152 repair parts applicable to seven items undergoing repair during the 9-month period ending June 30, 1969, showed that 96 percent of the parts experienced variances between the standards and the quantities actually used. The variances were minor for one-half of the parts, but variances for the remaining 46 percent ranged from 11 to 100 percent between the standards and the quantities actually used during the 9-month period.

Most of the standards were inflated, which, we believe, caused excesses, or contributed to their accumulation, in the inventory centers and ultimately could result in unnecessary procurement of repair parts.

Further, the excess parts were retained in the centers because the stock fund from which the parts were obtained would not grant credit for parts returned, unless the stock fund was in the process of buying additional parts, and adequate surveillance was lacking to make proper disposition of the excesses.

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CONCLUSIONS

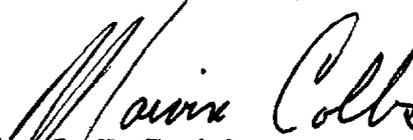
The Air Force requested \$443.6 million for fiscal year 1971 to overhaul equipment managed under the MISTR system. However, on the basis of our review of system operations and tests of selected items, we believe that the Air Force has little assurance that the MISTR system is accomplishing its intended purpose--the orderly accomplishment of this large repair program on a realistic, priority-of-need basis.

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We appreciate the cooperation extended to our staff during this review. We will be glad to discuss these matters further and will appreciate your comments and advice of any actions taken as a result of this letter.

Copies of this letter are being sent to the Comptroller of the Air Force.

Sincerely yours,


For J. K. Fasick
Associate Director

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