
Office of Inspector General

Audit Report

Valuation of Logistics Center Inventory

Federal Aviation Administration

Report Number: FE-1998-202
Date Issued: September 10, 1998





Memorandum

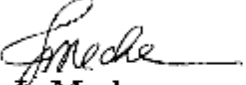
**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

Office of Inspector General

Subject: **INFORMATION:** Report on Inventory Valuation,
FAA Logistics Center
FE-1998-202

Date: September 10, 1998

From: 
John E. Meche
**Deputy Assistant Inspector General for Financial,
Economic, and Information Technology**

Reply To
Attn Of: JA-20:x61496

To: Program Director
FAA Logistics Center

This report presents our audit results on valuation of inventory at the Federal Aviation Administration (FAA) Logistics Center, Oklahoma City, Oklahoma. Our objective was to determine whether the Logistics Center inventory was valued based on historical cost. This audit was performed in conjunction with our Chief Financial Officer Act responsibilities to opine on the FAA financial statements for Fiscal Year (FY) 1998.

RESULTS-IN-BRIEF

On October 1, 1997, FAA implemented new procedures for valuing its inventory to comply with financial accounting standards. For these new procedures to produce accurate valuations, the beginning inventory balance should have been based on historical cost. About half of the items we reviewed were not properly valued, primarily because the Logistics Inventory System was programmed to use current market price instead of historical cost, and inventory managers made manual price adjustments. We estimate the inventory value of \$571 million was overstated by about \$66 million as of March 31, 1998. FAA agreed with our results and took immediate corrective action.

BACKGROUND

The Statement of Federal Financial Accounting Standards Number 3 states that inventory should be recorded at historical cost, or other valuation that approximates historical cost. FAA implemented this accounting standard effective October 1, 1997.

Prior to October 1997, FAA valued its inventory in two main ways: items were valued based on the last purchase price, or at current vendor price. In FY 1997, FAA completed a comprehensive physical inventory of its Logistics Center. However, valuation of items in the Logistics Inventory System was not addressed.

SCOPE AND METHODOLOGY

As of March 31, 1998, Logistics Center records showed about 36,000 line items of operating materials and supplies valued at \$571 million. We statistically selected and reviewed 212 line items of inventory valued by FAA at \$123 million. We requested that FAA provide purchase documents to support recorded prices. We reviewed purchase history files and purchase documents for each sample item, held discussions with inventory managers, and recalculated inventory values based on historical cost using weighted average prices. We conducted the audit in accordance with Government Auditing Standards prescribed by the Comptroller General of the United States. We performed the work between April and July 1998, at the Mike Monroney Aeronautical Center in Oklahoma City, Oklahoma, and at FAA Headquarters in Washington, D.C.

ANALYSES AND RECOMMENDATIONS

FAA reprogrammed the Logistics Inventory System to compute weighted average prices based on historical cost. We reviewed 212 line items of inventory to determine whether the changed procedures produced accurate valuations based on current accounting standards. We found 105 of the 212 items were not valued based on historical cost. Thus, the beginning balances and the resulting weighted average prices were not accurate. Based on these audit results, we estimate the inventory value was overstated by \$66 million¹. Our analyses identified three reasons for inaccurate valuations.

Automatic Price Adjustments

About 65 percent of the overpriced amounts in our sample were due to FAA processing automatic price changes on items purchased from Department of Defense (DoD). DoD routinely provided price updates to FAA. The Logistics Inventory System automatically matched all FAA stock items against the DoD updates. When matches occurred, the Logistics Inventory System automatically updated FAA records to use the latest DoD prices,² although FAA had not purchased any new stock from DoD. To illustrate:

¹ We performed a stratified statistical sample, and we are 95 percent confident that the historical inventory cost was between \$470 million and \$540 million. In other words, we are 95 percent confident the inventory cost was \$505 million, plus or minus \$35 million. Thus, the Logistics Inventory System overvalued inventory by about \$66 million (\$571 million minus \$505 million).

² On March 31, 1998, FAA had 8,662 stock items where DoD was the prime supplier.

In October 1992, FAA had 159 units of amplifier parts (for air-to-ground communications) valued at \$1,850 each. Between October 1992 and March 31, 1998, FAA did not purchase new stock, and still had 142 units. The Logistics Inventory System had these items valued at \$15,568 each. The \$1.9 million overstated value was due to six price changes from DoD since the last FAA procurement.

Manual Price Adjustments

About 24 percent of the overpriced amounts were due to inventory managers making manual price adjustments. Until October 1, 1997, inventory managers were allowed to change inventory prices, and often did so, to reflect current market cost. For example:

On September 9, 1997, an inventory manager increased the unit price of 14 auxiliary power units to \$170,000 each, although no new items were purchased. The Logistics Inventory System had this item valued at \$57,929 since March 1993 (FAA's earliest available record). The price increase was made based on the current market price. As a result, the inventory value for this item was overstated by \$1.6 million.

Updating Records

The remaining 11 percent of the overpriced amounts were because FAA did not update Logistics Inventory System records with the latest purchase prices. Although FAA made system changes to ensure proper price updates after October 1, 1997, the prices of on-hand inventory were not updated. For example:

In April 1993, FAA had six maintenance kits valued at \$624,000 each. In September 1993, FAA purchased two additional kits for \$494,000 each. FAA purchased no more kits, and on March 31, 1998, the Logistics Inventory System reported two kits on-hand valued at \$624,000 each. The price had not been reduced to reflect the last purchase, thus this item was overpriced by \$260,000.

RECOMMENDATIONS

We recommend the Logistics Center Program Director:

1. Discontinue the practice of updating the Logistics Inventory System to use current DoD prices as the inventory value.
2. Identify stock that was purchased from DoD or had manual price adjustments prior to October 1, 1997, and replace inventory values with the current purchase prices as of September 30, 1997.
3. Recalculate weighted average prices for all stock on-hand after inventory values were updated as of September 30, 1997.

MANAGEMENT COMMENTS

We discussed this report with the Logistics Center Program Director on August 5, 1998. He agreed with the findings and immediately implemented the recommendations. Actions included reviewing the entire inventory to obtain latest purchase prices, which resulted in reducing inventory values by \$58.5 million in the Logistics Inventory System and the Departmental Accounting and Financial Information System.

ACTION REQUIRED

We consider the report and recommendations closed. We appreciate the courtesies and cooperation of FAA representatives. If you have questions, please call me at (202) 366-1496, or Harry Fitzkee at (410) 962-3612.

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