Audit Report

OFFICE OF THE INSPECTOR GENERAL

SOURCE OF REPAIR FOR THE TF34 JET AIRCRAFT ENGINE

Report No. 94-134 June 14, 1994

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REPORT
NO. 94-134

June 14, 1994

MEMORANDUM FOR DEPUTY UNDER SECRETARY OF DEFENSE FOR LOGISTICS
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)

SUBJECT: Audit Report on the Source of Repair for the TF34 Jet Aircraft Engine (Project No. 4LB-8011)

Introduction

We are providing this report for your information and use. The audit was performed in response to the February 18, 1994, DoD Hotline allegations related to the selection of a source of repair for the TF34 jet aircraft engine. TF34 engine repair work was performed at the Naval Aviation Depot, Alameda, California. However, the depot was recommended for closure by the 1993 Commission on Defense Base Closure and Realignment (the Commission) and the TF34 engine repair work was being redistributed.

Audit Results

Allegations that the Defense Depot Maintenance Council did not follow Depot Maintenance Interservice procedures and did not perform a formal cost analysis of the realignment of the TF34 jet aircraft engine repair work between the Naval Aviation Depot, Jacksonville, Florida, and the San Antonio Air Logistics Center, San Antonio, Texas, were correct. However, the Navy and the Air Force followed the guidance of the Deputy Under Secretary of Defense for Logistics and performed an informal cost analysis aimed at determining the best source of repair of the TF34 engine. At the completion of the informal analysis, the Navy proposed realigning the TF34 engine repair work at the Naval Aviation Depot, Jacksonville. The Air Force concurred with the Navy's proposal and the Deputy Under Secretary of the Defense for Logistics accepted the proposal on February 1, 1994. We believe that the informal cost analysis was based on adequate data; and that the decision to relocate the TF34 repairs to Jacksonville will result in optimum readiness at a reasonable cost.

Objectives

The primary objective of the audit was to determine the validity of allegations relating to the realignment of TF34 engine repair work from the Naval Aviation Depot, Alameda, which was scheduled for closure. The allegations related to a comparison of the cost of relocating the TF34 engine repair work between the

Naval Aviation Depot, Jacksonville and the San Antonio Air Logistics Center. The audit also evaluated applicable internal controls.

Scope and Methodology

We evaluated records and correspondence covering the period from January 1992 through March 1994 relating to the redistribution of TF34 engine repair work. We gathered cost data from the depots that were candidates for performing TF34 repairs, but did not attest to the reliability of the data. Additionally, we held discussions with representatives from the Office of the Secretary of Defense, the Navy, and the Air Force. We did not validate the accuracy of computer-processed data that we obtained from the Naval Aviation Depot, Alameda. Those data were used in our analysis of the value of the TF34 repair work.

This economy and efficiency audit was made in April 1994 in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD, and accordingly, included such tests of internal controls as were considered necessary. The audit was performed at the organizations in Enclosure 1.

Internal Controls

We evaluated the effectiveness of the internal controls that were applicable to the relocation of interservice work load upon closure of a military installation. Those controls are principally the procedures defined in the Logistics Depot Maintenance Interservice Program (Chief of Naval Operations Instruction 4790.14, Army Material Command Regulation 750-10, Air Force Materiel Command Regulation 800-30, and Marine Corps Order P4790.10A). The program establishes the policy and guidelines for implementing the Depot Maintenance Interservice Program uniformly among the Military Departments. Our evaluation consisted of reviews of programmatic controls and included interviews, analyses of data, and reviews of records. The internal controls applicable to the audit objectives were deemed to be effective in that no material deficiencies were disclosed by the audit. No weaknesses were noted in the DoD Internal Management Control Program as it related to the audit objective.

Prior Audits and Other Reviews

There was no audit coverage of this specific topic in the last 5 years.

Background

The Navy performs repairs for Navy and Air Force TF34 jet aircraft engines at Naval Aviation Depot, Alameda. The TF34 engines are used in the Navy S-3 aircraft and the Air Force A-10 aircraft. In 1993 the Naval Aviation Depot, Alameda was selected for closure by the 1993 Commission. The depot is

scheduled to close (cease operations) by April 1996. As a result, the TF34 engine repair work that was performed at the Naval Aviation Depot, Alameda was being redistributed.

On February 1, 1994, in a memorandum to the Deputy Under Secretary of Defense for Logistics, the Commander, Naval Air Systems Command recommended transferring the Navy and Air Force TF34 engine repair work from the Naval Aviation Depot, Alameda to the Naval Aviation Depot, Jacksonville. The Commander, Air Force Materiel Command cosigned the memorandum, confirming that the Air Force agreed with the Navy's recommendation. The Deputy Under Secretary of Defense for Logistics accepted the recommendations of the Navy; and, based on the concurrence of the Air Force, he agreed that the TF34 engine repair work would be transferred to the Naval Aviation Depot, Jacksonville.

Discussion

The Office of the Inspector General, DoD, received the following allegations on February 18, 1994.

Allegation 1. On or about January 11, 1994, the Deputy Under Secretary of Defense for Logistics requested the Defense Depot Maintenance Council (the Council) to expeditiously conduct, an informal integrated cost analysis aimed at determining the source of repair for the TF34 engine work load that would yield the lowest cost to the taxpayer. The Council was instructed to compare the estimated costs of accomplishing the combined workload requirements at the Naval Aviation Depot, Jacksonville against the estimated comparable cost of accomplishing the work load at the San Antonio Air Logistics Center. The Deputy Under Secretary of Defense for Logistics requested that the results of the analysis be briefed to him no later than January 31, 1994. Sufficient information was not available for the Navy and the Air Force to perform an informal analysis of the TF34 repair at the Naval Aviation Depot, Jacksonville and the San Antonio Air Logistics Center in a 2-week to 3-week period.

The allegation was not substantiated. The Deputy Under Secretary signed the cited memorandum on December 30, 1993, not January 11, 1994, as alleged. The Deputy Under Secretary's memo specifically requested that the Council members perform an "informal" analysis of the cost of performing the TF34 engine repair work between the Naval Aviation Depot, Jacksonville and the San Antonio Air Logistics Center and report to him no later than January 31, 1994. Thus, 4 weeks were provided for the informal analysis.

Between December 30, 1993, and February 1, 1994, the Navy and the Air Force collected data to compare the recurring cost of repairing TF34 engines and components and the nonrecurring costs of establishing repair capability for the TF34 engine at their candidate depots, the Naval Aviation Depot, Jacksonville and the San Antonio Air Logistics Center. Although the

analysis was termed informal, we believe it was based on sufficient data for the Navy and the Air Force to make a reasonable decision about where to relocate the TF34 engine repair work.

The Navy indicated that a comparison of information from the two candidate depots showed that the cost of labor was slightly lower in San Antonio. However, the cost of establishing the repair capability in San Antonio was slightly higher than in Jacksonville. Based on the analysis of all costs, the Navy and the Air Force decided to realign the TF34 engine repair work to the Navy's aviation depot in Jacksonville.

We reviewed the data used by the Navy and the Air Force to make the decision to relocate the TF34 repair work to Jacksonville. The data included the estimated TF34 engine and engine component work load and the cost of labor, materials, overhead, support equipment, transportation, training, and construction at both aviation depots. We concluded that over the 6-year Future Years Defense Program (from FY 1995 through FY 2000) the cost of performing the work at the Naval Aviation Depot, Jacksonville, as opposed to performing the work at the San Antonio Air Logistics Center, would result in minimal cost differences.

Although cost was a consideration in relocating the TF34 engine repair work, there were other important factors, including responsiveness and readiness, that led to the joint Navy and Air Force decision to relocate the repair work to Jacksonville.

Navy and Air Force personnel agreed that the realignment of the TF34 engine repair work to the Navy's depot at Jacksonville minimized the risk involved in the selection of a new source of repair. Navy maintenance personnel indicated that the Navy's depot in Jacksonville already maintained a skilled work force that had demonstrated the capability to repair TF34 engines in the past. The Navy had repaired TF34 engines in Jacksonville from 1976 to 1991, and at the time of audit, it had 59 employees who were experienced in TF34 engine repairs.

Navy and Air Force personnel also indicated that the TF34 engine is core (essential) work load and believed that benefits were to be gained from the realignment of the TF34 engine repair work at Jacksonville. The Naval Aviation Depot, Jacksonville had repaired the engine previously, and because it was already a proven source of repair, the Navy believed that the repair work would transition smoothly, and that there would be minimum disruption in the supply of engines to DoD users.

Allegation 2. The TF34 engine repair work has an estimated value of $40 million.

The allegation was not substantiated. The value of the FY 1995 Navy and Air Force TF34 engine repair work that will be moved from the Naval Aviation Depot, Alameda was estimated at $58.6 million.

Allegation 3. Regardless of the cost data provided, the transition of TF34 engine work load would go to Naval Aviation Depot, Jacksonville to ensure that they would not be reviewed for possible closure by the Commission.

The allegation was not substantiated. No documentation supported the allegation. Naval Aviation Depot, Jacksonville is not exempt from the Commission's future studies. The realignment of the TF34 engine repair work to the Naval Aviation Depot, Jacksonville does not provide that Navy depot with any unique capability that would be difficult to relocate if the depot is selected for closure in the future. It is possible that the TF34 engine repair work will again be realigned, if a future Commission selects the Navy's depot in Jacksonville for closure.

Allegation 4: United States Code, title 10, section 2469 mandates that the Secretary of Defense not change the performance of depot-level maintenance work load that has a value of not less than $3 million from an organic depot to performance by a contractor unless competitive procedures are used to select the source of repair.

The allegation was not substantiated. As stated in the allegation, compliance with United States Code, title 10, section 2469 is required when changing depot level maintenance "from an organic depot to performance by a contractor." However, the law does not apply to the subject case because the Military Departments were not changing the performance of the TF34 engine repair work from an organic source to contractor repair. According to information provided by the Navy, the TF34 engine repair work is considered core work load and is not a candidate for repair by a contractor. Had the Military Departments attempted to contract out the TF34 engine repair work, they would have been required by law to follow competitive procedures.

Allegation 5. The Conference Report for 103-160, section 346 states that the Secretary of Defense should, to the maximum extent possible, compete the depot maintenance work load from those depots that are closing among the remaining DoD depot operations. However, such competition between depots should not impede the schedule for closing depots under the base closure process.

The allegation is partially correct. The statement cited was published in Conference Report 103-357, section 346, of the National Defense Authorization Act for Fiscal Year 1994; not in Conference Report 103-160, as alleged. The Conference Report states that interservice competition should be considered "to the extent possible" but should not "impede the schedule for closing depots." The Navy and the Air Force believed that delays could be anticipated if all depot options for the TF34 engine repair work were formally analyzed. As stated previously, sufficient information was available for the Navy and the Air Force to perform an informal cost analysis of the two most likely candidate depots, the Naval Aviation Depot, Jacksonville and the San Antonio Air Logistics Center.

Allegation 6. The recommendation of the 1993 Commission did not realign the TF34 engine repair work. It only stated that the work load at the Naval Aviation Depot, Alameda is to be transferred to other depot maintenance activities.

The allegation is correct. The 1993 Commission did not realign the TF34 engine repair work. The Commission's report recommends the closing of the Naval Aviation Depot, Alameda and relocating the repair capability, as necessary, to other depot maintenance activities.

Allegation 7. The Logistics Depot Maintenance Interservice Program obligates the Military Departments to conduct a study for proposed or planned realignment of work load. The Program's guidance also provides review criterion. Specifically, if $100,000 of capital investment is required to transfer work load, the Depot Maintenance Interservice Work Group must review the proposed realignment. It is well known that the Naval Aviation Depot, Jacksonville has a Military Construction Program in the process that exceeds $100,000. It is also well known that the San Antonio Air Logistics Center did not have sufficient information to provide a cost analysis for performing the TF34 engine repair work.

The allegation is partially correct. The realignment of TF34 engine repair work met the criteria of the Logistics Depot Maintenance Interservice Program, which requires the Depot Maintenance Interservice Work Group to perform a comparative analysis of the options before realigning work load. The offices of primary responsibility in the Depot Maintenance Interservice Work Group, the Naval Air System Command and the Air Force Materiel Command, performed an informal analysis of the cost of repairing TF34 engines between the aviation depots at Jacksonville and San Antonio. Input to the analysis was provided by personnel at the Naval Aviation Depot, Jacksonville and the San Antonio Air Logistics Center.

As mentioned, the Deputy Under Secretary of Defense for Logistics wanted an informal cost analysis performed. The results of the informal analysis were provided to the Deputy Under Secretary of Defense for Logistics on February 1, 1994, and he accepted the conclusions that were derived from the analysis. We concluded that by his decision to request an informal analysis and to accept the Navy and Air Force conclusions and recommendations, the Deputy Under Secretary of Defense for Logistics superseded the guidance in the Logistics Depot Maintenance Interservice Program. The Deputy Under Secretary had the authority to override the instruction because his office is the current proponent for the policy.

Allegation 8. The transition process (for TF34 engine repair work) being utilized is not providing the maximum cost benefit to the taxpayer. Responsible parties could perform an integrated cost analysis in a 60- to 90-day period. All proper procedures have not been followed.

The allegation was partially correct. As stated previously, information provided to us by the Navy and the Air Force showed that the decision to move the TF34 engine repair work from Alameda to Jacksonville is in the best interest of

the taxpayer (see response to Allegation 1). Information we obtained from the Joint Depot Maintenance Analysis Group indicated that it believed it could have performed a formal cost analysis of the Navy's proposed facility with the Air Force's proposed facility in 67 days (or from December 21, 1993, to February 28, 1994). However, we believe sufficient data were available and used by the Navy and the Air Force to make an adequate informal cost analysis by January 31, 1994, as requested by the Deputy Under Secretary of Defense for Logistics (see response to Allegation 1).

We also believe that the Military Departments must comply with the policy and procedures that are specified in the Logistics Depot Maintenance Interservice Program, which governs the relocation of interservice work load. The process that is set forth in the instruction includes internal controls that ensure that properly planned and well-documented interservice decisions are made. In this instance, we believe that adequate TF34 engine repair cost data were gathered and reviewed and an adequate informal cost analysis was performed. We concluded that the work that was completed justified superseding the requirement for a formal cost analysis.

Management Comments

We provided a draft report to the addressees on May 24, 1994. Because there were no recommendations, no formal comments were required and none were received. However, if you wish to comment on this final report, your comments should be provided by July 15, 1994.

The courtesies extended to the audit staff are appreciated. If you have any questions on this audit, please contact Mr. Christian Hendricks, Audit Program Director, at (703) 692-3414 (DSN 222-3414) or Mr. James Kornides, Audit Project Manager, at (703) 692-3420 (DSN 222-3420).

The distribution of this report is listed in Enclosure 2. The list of audit team members is on the inside back cover of the report.

Robert J. Lieberman
Assistant Inspector General
for Auditing

Organizations Visited or Contacted

Office of the Secretary of Defense

Office of the Deputy Under Secretary of Defense for Logistics, Washington, DC

Department of the Navy

Office of the Chief of Naval Operations, Washington, DC
Headquarters, Naval Air Systems Command, Washington, DC
Naval Aviation Depot, Alameda, CA
Naval Aviation Depot, Jacksonville, FL
Naval Air Development Center, Warminster, PA
Aviation Supply Office, Philadelphia, PA

Department of the Air Force

Office of the Air Force Chief of Staff, Washington, DC
Headquarters, Air Force Material Command, Wright-Patterson Air Force Base, OH
San Antonio Air Logistics Center, San Antonio, TX

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