April 6, 2005



# Statement of The Honorable Joseph E. Schmitz Inspector General Department of Defense

before the

Airland Subcommittee Senate Committee on Armed Services

on

"Contracting for and Performance of the C-130J Aircraft"

Mr. Chairman and Members of the Airland Subcommittee:

Thank you for the opportunity to appear today and to answer your questions regarding our audit report, "Contracting for and Performance of the C-130J Aircraft," which my staff previously provided to the Subcommittee. We conducted the audit in response to allegations made to the Defense Hotline that the C-130J aircraft does not meet contract specifications and therefore cannot perform its operational mission. Our report addresses the issues in the Subcommittee's invitation letter, namely [quote] "whether or not use of a commercial acquisition strategy to procure the C-130J was justified," and [quote] "the C-130J's ability to meet contract specifications and perform its operational mission." In summary, we concluded that the Air Force used an unjustified commercial item acquisition strategy to acquire the C-130J aircraft and fielded aircraft that did not meet contract specifications or perform their intended mission. Ultimately, the Air Force agreed with all our recommendations for the way forward.

## C-130J Aircraft

The primary mission of the C-130J aircraft is to airlift and drop troops and equipment into hostile areas. The Air Force contracted with Lockheed Martin for 117 C-130J aircraft for the Air Force, Marine Corps and Coast Guard at a cost of \$7.5 billion from FY 1995 through FY 2008.

#### **<u>Commercial Item Acquisition Strategy</u>**

The Air Force initially contracted with Lockheed Martin for two C-130J aircraft in 1995 through a modification to a 1990 contract for C-130H aircraft. Our audit found that Lockheed Martin promoted the C-130J as a commercial aircraft and the Air Force undertook to buy additional C-130J aircraft as commercial items. Specifically, Lockheed Martin developed and produced the C-130J aircraft using a commercial aircraft model performance specification. Lockheed initiated the C-130J upgrade and managed the program development, developmental testing, and production process. By acquiring the C-130J aircraft as a commercial item, using Federal Acquisition Regulation Part 12, "Acquisition of Commercial Items," the Air Force did not apply the normal acquisition process and could only provide limited program oversight to this \$7.5 billion aircraft program. The Director, Operational Test and Evaluation, Department of Defense, in his comments to a draft of our audit report, pointed out that the only Government acquisition decision on whether to buy the C-130J aircraft as a commercial item was based on force needs and affordability.

The Air Force commercial item acquisition strategy was unjustified. The Air Force was unable to provide evidence supporting its claim that 95 percent of the features were the same between the military and civilian versions of the aircraft. In fact, at the time of our audit, the Air Force acknowledged that the C-130J included features not customarily available in the commercial marketplace including aerial delivery (cargo and paratroop), defensive systems, secure voice communication, night vision imaging, and satellite communication. The Air Force contracting officer statement that the aircraft evolved from a series of Lockheed Martin developed/produced commercial aircraft configurations is contradicted by the fact that the prior version of the aircraft, the C-130H, was only used for government purposes. Further, at the time of our audit, the Air Force acknowledged that no commercial version of the C-130J (L-100J) currently existed and no sales of the L-100J had been made to the public. A website cited by the Air Force in its comments response to a draft of our audit report showed that the L-100J "would be a commercial derivative" of the C-130J. Also, the determination that modification (that also considered customer requirements) would be minor had no supporting analysis. Finally, the Air Force was unable to show that the commercial contract specification would meet the operational requirements. Because the Air Force determined that the C-130J was a commercial item, the Air Force relied on the commercial contract specifications to meet mission requirements.

#### **Contract Specifications**

In January 1999, the Air Force became aware that Lockheed Martin could not meet the C-130J commercial model specification and agreed to a contractor-initiated, three-phase upgrade program, consisting of upgrades 5.1, 5.2, and 5.3. Not withstanding, the Air Force continued to contract for additional aircraft and exercised options for more aircraft before the first aircraft was delivered or tested. The first two C-130J aircraft were not delivered until February 1999 and even those aircraft were conditionally accepted. Testing showed that even with the 5.1, 5.2, and 5.3 upgrades, the C-130J aircraft was still

not compliant with the commercial model specifications or, more importantly, operational requirements. In October 2002, the Air Force and Lockheed Martin reached an agreement that the design would be considered compliant with the successful completion of an agreed-upon action plan. Corrections as agreed upon are supposed to be completed in upgrade 5.4, which, at the time of the audit, was scheduled for installation in 2005. However, the Air Force commingled the contract specification work with out-of-scope work in upgrade 5.4. Since the Air Force was procuring the aircraft for the Coast Guard, the Marine Corps, and Air Force units, those customers who could not afford the cost of the out-of-scope work would not receive the improvements needed to have a mission capable aircraft.

Federal Acquisition Regulation Part 12.208, "Contract quality assurance," requires that contracts for commercial items shall rely on contractors' existing quality assurance systems as a substitute for Government inspection and testing before tender for acceptance. As of the time of the audit, the Air Force had conditionally accepted 50 C-130J aircraft at a cost of \$2.6 billion and the contractor had been unable to deliver a specification compliant aircraft.

### **Performance of Operational Mission**

Air Force testers had identified performance deficiencies that degraded C-130J operations after the contractor began aircraft delivery. The Test and Evaluation Center had developed a testing plan with a two phased approach. The first phase evaluated the airlift capability for the C-130J and the second phase is intended to evaluate other capabilities including the air drop mission. At the time of our audit, the second phase of operational testing was scheduled for late 2005.

The Air Force Operational Test and Evaluation Center completed the first phase testing in September 2000. That testing showed that the C-130J was not effective or suitable in the airlift mission. Performance deficiencies included inadequate range and payload, immature software, lack of an automated planning system, and difficulties in cold weather operations. The test also showed that the C-130J was not suitable in its current configuration because its integrated diagnostic capability was poor, including high builtin-test false alarm rates. The Air Force stopped the suitability test in August 2000 because of the extent of the deficiencies identified. The report stated that many of the deficiencies were programmed to be corrected in upgrade 5.3.

In November 2001, the Air Force Operational Test and Evaluation Center performed an operational assessment of upgrade 5.3 to assess the program's progress towards readiness for the second phase of testing. The Air Force operational assessment stated that the progress in the effectiveness of the C-130J was unsatisfactory. Identified deficiencies included defensive system problems, global air traffic management compliance, mission planning system deficiencies, and interoperability issues with the existing C-130 fleet. The report also mentioned that progress in the suitability area was unsatisfactory. Development schedule slips, system immaturity, and training issues caused the Air Force

Operational Test and Evaluation Center to reschedule the second phase operational testing from July 2000 to November 2005. Further, the deficiencies found in upgrade 5.3 resulted in the C-130J Program Office requiring another upgrade.

Based on the qualification operational and evaluation testing results, the Air Mobility command determined the missions that the C-130J could safely perform given the known deficiencies. Specifically, the Air Mobility Command released the C-130J to perform basic air land, assault, overwater operations, and medical evacuation, but restricted the aircraft from performing night vision goggle operations, combat search and rescue, visual formation, global air traffic management, and air drop of paratroopers and containers. Because the aircraft performed poorly during testing, the Air Mobility Command could not release the C-130J to perform heavy equipment air drop and hostile environment missions. Installation of upgrade 5.4 is supposed to resolve those limitations except for heavy equipment air drop. Installation of upgrade 6.0, which is scheduled for installation in 2007, is supposed to allow the C-130J to perform the heavy equipment air drop mission.

## **Recent Director of Operational Test and Evaluation Assessment**

In the 2004 Director of Operational Test and Evaluation Annual report, issued in February 2005, the Director reported that that the aircraft is not operationally suitable. Demonstrated C-130J reliability, maintainability, availability, and logistics supportability failed to meet operational requirements and legacy standards. Deficiencies were noted with on-aircraft integrated diagnostics and fault isolation systems, portable maintenance aids, maintenance technical orders, and the availability of spare parts. Further, the testing of defensive systems did not demonstrate their effectiveness and suitability.

## **<u>Related ongoing audits</u>**

We have one related audit of commercial acquisition practices in the Department of Defense. The Audit of Commercial Contracting Practices for Procuring Defense Systems (Project No. D2004AB-0182) will determine whether procurement officials are complying with Federal Acquisition Regulation Part 12 "Acquisition of Commercial Items," and Part 15, "Contracting by Negotiation," when procuring defense systems or their subcomponents. Specifically, we will evaluate the justifications used to determine whether major systems or subsystems meet commercial item criteria and evaluate the adequacy of the basis for establishing price reasonableness. However, this audit is currently suspended due to audit support for Base Realignment and Closure and other operational priorities.

This concludes my oral statement. I would be glad to answer any questions.