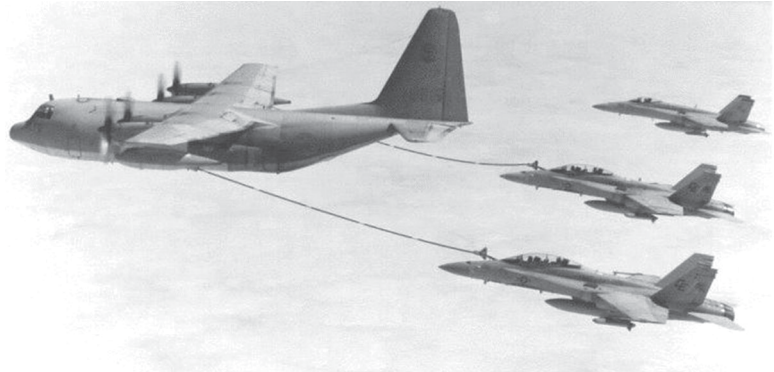


# NAVY PROGRAMS

## KC-130J Aerial Tanker/Airlift Aircraft

### SUMMARY

- Marine Corps operational testing (OT-III A/B) began in September 2003 to determine the operational effectiveness and suitability for airland, air delivery, and aerial refueling capability, and to support a recommendation for fleet introduction.
- In May 2004, the Marine Corps began OT-III C to evaluate the operational effectiveness and suitability of selected KC-130J defensive systems.
- The Marine Corps intends to deploy the aircraft to the Central Command area of responsibility in February 2005.
- There are no Milestone or production decisions. Deficiency corrections are not budgeted before the FY08-FY09 timeframe.



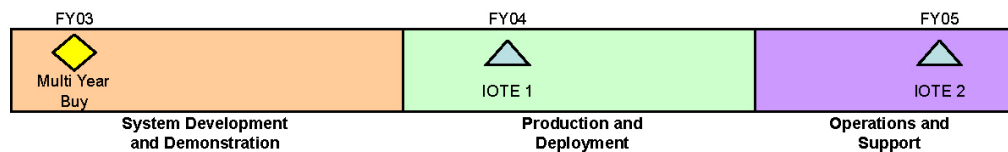
*The KC-130J, a variant of the C-130J, is a medium-sized, four-engine turboprop aircraft modified to perform a primary mission of aerial refueling of fixed- and rotary-wing aircraft for the United States Marine Corps.*

### SYSTEM DESCRIPTION AND MISSION

The KC-130J, a variant of the C-130J, is a medium-sized, four-engine turboprop aircraft modified to perform a primary mission of aerial refueling of fixed- and rotary-wing aircraft for the United States Marine Corps (USMC). Secondary missions include rapid ground refueling, assault transport, logistics support, and special warfare, while preserving personnel and cargo transport capabilities. The KC-130J will perform the same missions as the aircraft it will replace, the KC-130F and KC-130R. Procurement of the KC-130J is proceeding under a commercial off-the-shelf acquisition strategy, instituting catalog pricing and commercial payments through the Air Force's C-130J Developmental Systems Office. No milestone decisions are planned for this program.

A Navy/USMC KC-130J test program addresses the key differences in aircraft configuration and mission employment from the baseline Air Force C-130J. The KC-130J program intends to build upon prior contractor, Federal Aviation Administration, and Air Force test efforts and data collection rather than duplicate any tests. The Air Force and contractor tests have been ongoing since 1995.

### TEST AND EVALUATION ACTIVITY



The Navy/USMC developmental test and evaluation program completed approximately 1,200 flight test hours. Operational testing (OT-III A/B) began in September 2003 to determine the operational effectiveness and suitability for airland, air delivery, and aerial refueling capability, and to support a recommendation for fleet introduction. OT-III A/B ended in January 2004 after covering fixed-wing and rotary-wing aerial refueling, rapid ground refueling, personnel and cargo airdrop, cargo container delivery system, airland at tactical landing zones, and self-deployment of the aircraft. Production representative aircraft, without deficiency corrections identified in Air Force initial operational test and evaluation (Phase 1), and operationally realistic aircrews and scenarios were used during OT-III A/B.

## NAVY PROGRAMS

The Marines are conducting an abbreviated OT-IIIC of the electronic warfare suite from May-December 2004. The suite consists of infrared and radio frequency warning receivers, plus an automatic expendables dispenser that deploys either flares or chaff. Some performance anomalies have been found, and the results are being analyzed to determine if improvements can be incorporated. The USMC intends to deploy the aircraft to the Central Command area of responsibility in early 2005. Testing has not demonstrated that the defensive system is effective and suitable. An integrated defensive systems test using improved hardware, software, and test procedures is essential before operational crews are required to rely upon system performance in a combat environment. Such a test is planned in spring 2005.

The USMC did not conduct live fire test activities in FY04. Live fire tests of the center fuselage fuel tank are scheduled for FY05.

DOT&E approved the KC-130J Test and Evaluation Master Plan and the Operational Test Plan in October 2003.

### **TEST AND EVALUATION ASSESSMENT**

In 2003, a new aerial refueling system initially slated for the KC-130J could not be qualified because of flight safety and operational performance problems. The new refueling pod design was replaced by the existing (legacy) pod used on the KC-130T. Legacy pods were successfully used in OT-IIIA/B, but the rendezvous aids are not as effective as the legacy aircraft and are not adequate for routine training. OT-IIIA/B did not retest any major deficiencies found during earlier phases of operational test for the C-130J. Low mission capable rates continue to hamper all J-model operations. Likewise, an excessive false alarm rate for the built-in test equipment decreases the confidence of operators and maintainers in the diagnostic functions of this highly automated platform. False alarms also increase the maintenance burden to an unacceptable level. Deficiency corrections are not likely before the FY08-FY09 timeframe.