

Joint Direct Attack Munition (JDAM)

Executive Summary

- Joint Direct Attack Munition (JDAM) aircraft integration and testing of the 1,000-pound and 500-pound JDAM variants continued to demonstrate satisfactory performance consistent with historic JDAM accuracy and reliability.
- The JDAM Multi-Service Operational Test and Evaluation completed with the Air Force certification of the 1,000 pound JDAM variant on the F-22A.

System

- The JDAM is a low cost, autonomously controlled, adverse weather, accurate guidance kit tailored for Air Force/Navy general purpose bombs to include:
 - 2,000-pound Mk 84 and BLU-109 bombs
 - 1,000-pound Mk 83 and BLU-110 bombs
 - 500-pound Mk 82 bomb
- An inertial navigation system provides primary guidance to the weapon. Enhanced accuracy is provided by augmenting the JDAM inertial navigation system with the Global Positioning Satellite (GPS) system signals.
- Guidance and control is designed to enable accuracy of less than 13 meters when GPS is available and less than 30 meters when GPS is absent or jammed after release.



Mission

- Combatant commanders use JDAMs employed by fighter, attack, and bomber aircraft to engage targets day or night, in all weather at the strategic, operational, and tactical levels of warfare.
- JDAM is employed against fixed and relocatable, soft and hard targets to include command and control facilities, airfields, industrial complexes, logistical and air defense systems, lines of communication, and all manner of battlefield forces and equipment.

Activity

- Test and evaluation was conducted in accordance with the August 2004 DOT&E-approved JDAM Test and Evaluation Master Plan.
- The Air Force certified the 1,000-pound JDAM variant on the F-22A. This completed the JDAM Multi-Service Operational Test and Evaluation.
- Air Combat Command's operational F-22A squadron participated in an investigative demonstration of JDAM capabilities as part of the Command's Air-to-Ground Weapon System Evaluation Program. The operational unit achieved satisfactory results consistent with historic JDAM performance.
- The Air Force certified the 1,000-pound JDAM variant for use on the F-117A and the 500-pound JDAM variant for use on the B-1.
- The Navy did not certify JDAM on the BRU-55 smart weapons rack due to problems with the rack unassociated with the JDAM weapon.

Assessment

- Aircraft integration and testing of the 1,000-pound and 500-pound JDAM variants continued to demonstrate satisfactory performance consistent with historic JDAM accuracy and reliability.
- The Navy's BRU-55 smart weapons rack problems were isolated to the rack itself and not related to JDAM suitability. Although inability to use the BRU-55 rack precludes the Navy from carrying a load out of eight 500-pound JDAMs on the F/A-18C/D, the limitation is operationally insignificant under current user employment scenarios.

Recommendations

- Status of Previous Recommendations. There are no outstanding recommendations from FY05.
- FY06 Recommendations. None.

AIR FORCE PROGRAMS