

Integrated Defense Systems
P.O. Box 516
St. Louis, MO 63166
www.boeing.com

Laser Joint Direct Attack Munition

Description & Purpose:

The Laser Joint Attack Direct Munition (LJDAM) expands the capabilities of the Joint Direct Attack Munition (JDAM). JDAM is a low-cost guidance kit produced by Boeing that converts existing unguided free-fall bombs into near-precision guided “smart” weapons. The JDAM kit consists of a tail section that contains a Global Positioning System/Inertial Navigation System and body strakes for additional stability and lift.



Laser JDAM provides a modular laser sensor kit that is easily installed in the field to the front of existing JDAM weapons. The laser-guided JDAM adds mission flexibility to prosecute targets of opportunity, including mobile targets, to an already outstanding GPS/INS all-weather capability that current JDAMs offer. If bad weather is expected in theater, the LJDAM sensor need not be installed.

Successful demonstrations against fixed and moving targets have been performed, and developmental flight tests of LJDAM were completed in 2006, demonstrating that the system is ready for production. The Air Force and the Navy, as well as multiple International JDAM customers, are extremely interested in the moving target capabilities provided by LJDAM. The first production LJDAMS have been delivered to the Air Force and were delivered in-theater in May 2008.

Customer(s):

U.S. Navy warfighters are very interested in a near-term flexible weapon that can simultaneously be used against stationary targets in adverse weather, and time critical or moving targets in clear weather. The US Air Force and International warfighters are equally interested in acquiring Laser JDAM.

General Characteristics:

Currently, tailkit variants are integrated with the MK-84 2,000- pound and BLU-109 2,000-pound (900-kg) warheads (GBU-31). MK-83 1,000-pound (GBU-32) and MK-82 500-pound (225-kg) warheads (GBU-38) are in production to deliver the cost-effective JDAM. When employed, these weapons have proven highly accurate and can be delivered in any flyable weather. JDAM can be launched from more than 15 miles from the target with updates from GPS satellites to help guide the weapon to the target.

LJDAM will initially be integrated with the GBU-38. Follow-on integration with the GBU-31 and GBU-32 is planned.

The JDAM production team includes Honeywell Inc. (inertial measurement unit); Rockwell Collins (global positioning system receiver); HR Textron (tail actuator subsystem); Lockheed Martin Tactical Defense Systems (mission computer); Lockely (tail fairing); Enser and Eagle-Picher (battery); and Stremel (strakes and cable cover).

Background:

As a result of an Air Force Fast Moving Target demonstration, the Air Force and Navy placed Boeing on contract to provide Laser JDAM seekers. The Air Force intends to deploy this capability into the Global War on Terror Theater of Operation immediately. The Navy purchased Laser JDAM as the first phase of their Direct Attack Moving Target Capability (DAMTC) program, which will involve operational testing of the system. A follow-on DAMTC Phase II may acquire up to 17,700 seekers. DAMTC Phase II may entail a competition in FY08.

Follow-on production of LJDAMs for domestic and international customers could result in sales exceeding 50,000 units.

Contact: Tim Deaton
Global Strike Systems
The Boeing Company
(314) 232-5886
timothy.r.deaton@boeing.com

August 2008