

Enhanced Paveway™II Dual Mode GPS/Laser Guided Bombs Dual-Mode Precision-Guided Weapon



Photo courtesy of Henning Kristensen, RDAF



**Enhanced Paveway™II
Dual Mode GPS/Laser
Guided Bombs**
The world standard
for low-cost, highly
reliable, dual-mode,
precision-guided bombs.

Benefits

- First and only dual-mode weapon proven in combat
- Increase standoff range
- Minimizes collateral damage
- Retains legacy Paveway™II guidance for pinpoint accuracy

Description

Enhanced Paveway™II Dual Mode GPS/Laser Guided Bomb (DMLGB) is the next generation of the Paveway™II LGB series of laser-guided weapons. Combat proven by the United Kingdom's Royal Air Force (RAF) during operations Southern Watch, Enduring Freedom and Iraqi Freedom, the Enhanced Paveway™II DMLGB combines the strengths of both laser guidance and GPS/INS guidance to create a low-cost, all-weather, precision-strike weapon. The result provides the warfighter with the option for autonomous GPS-aided guidance in addition to laser terminal guidance.

Enhanced Paveway™II DMLGB offers operational flexibility not currently available with any other weapon outside the Paveway™II family. Specifically, GPS guidance can be used for all-weather attacks of known targets and laser guidance provides an option for improved accuracy, man-in-the-loop, moving targets and targets of opportunity when GPS is denied. Enhanced Paveway™II DMLGB is currently fielded with the RAF and has proven itself in combat.

"It has paid off in dividends. It is certainly our weapon of choice."

—RAF Gp Capt Jon Fynes
Defense Daily, April 2, 2003

All-Weather

The addition of the GPS/INS system to the Paveway™II LGB weapon provides increased delivery accuracy, better in-flight wind corrections, increased low-level performance and expanded delivery envelopes. The dual-mode capability of the

Modularity

Modularity Enhanced Paveway™II DMLGB has a low overall unit cost while retaining the conventional Paveway™II LGB ease of use and proven legacy of reliability and performance. General purpose bombs fitted with the



Specifications

EGBU-10 Lot 2/3

Warhead: MK-84
 Weight: 2101 lb
 Length: 170 in
 Guidance: MAU-169
 Airfoil Group: MXU-651/B



EGBU-16 Lot 2/3

Warhead: MK-83
 Weight: 1110 lb
 Length: 145 in
 Guidance: MAU-169
 Airfoil Group: MXU-667/B



EGBU-12 Lot 2/3

Warhead: MK-82
 Weight: 627 lb
 Length: 131 in
 Guidance: MAU-169
 Airfoil Group: MXU-650/B



Enhanced Paveway™II DMLGB Lot 1 (UK)

Warhead: MK-13/20
 Weight: 1228 lb
 Length: 136 in
 Guidance: MAU-169
 Airfoil Group: MXU-651/B



Enhanced Paveway™II DMLGB Lot 4 (Paveway™ IV-UK)

Warhead: MK-82E
 Weight: 680 lb
 Length: 131 in
 Guidance: MAU-169
 Airfoil Group: MXU-650/B (modified)



Enhanced Paveway™II DMLGB weapon kit provide significant overall mission cost savings while gaining the enhanced guidance options. This has the benefit of increasing overall weapon system effectiveness.

Modes of Operation

- GPS/IMU only
- Laser only
- GPS then laser
- GPS laser GPS
- IMU only

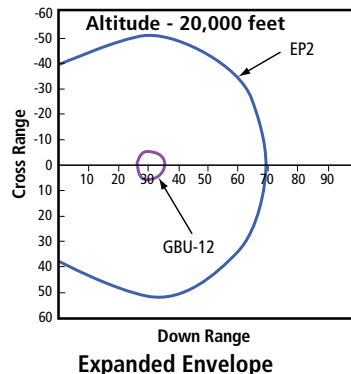
State-of-the-Art GPS

Raytheon's GPS-Aided Inertial Navigation System extends weapon steering ability by providing autonomous midcourse and terminal modes of guidance. The option for

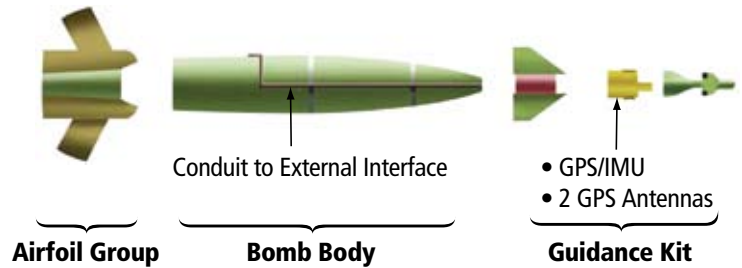
on-demand laser guidance allows the weapon to correct for up to 5,000 feet of target location error.

Expanded Envelope

The GPS/IMU augmented trajectory significantly improves delivery flexibility and endgame performance superior to single-mode GPS or laser weapons.



GPS guidance provides greatly expanded footprint over standard Paveway™II LGB.

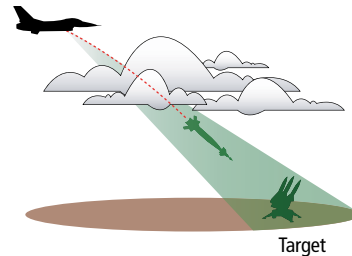


Flexibility

Up to eight targets can be entered and modified on the ground or in-flight before weapon delivery, providing an all-weather attack capability.

“Enhanced Paveway™ has been used many occasions in Iraq, Southern Watch, and has performed superbly well.”

— RAF Air Mshl Sir Jack Stirrup
Defense Daily, March 3, 2003



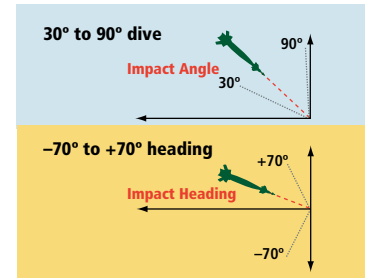
Aircraft Integration

Multiple integration options enable Enhanced Paveway™II DMLGB to function with nearly any aircraft system.

- Full-interface is available for 1760/1553 equipped aircraft
- Minimal-interface mode provides power plus retargeting for aircraft with partial 1553 capability
- Non-1553 aircraft have the options of the Enhanced Paveway™ Avionics Kit, which provides full functionality, or the power-only mode, which provides on-deck programming.

Performance

Release profiles have been demonstrated at high and low altitudes, off-target boresight, and multiple carriage releases at both single and multiple targets. Terminal impact has been demonstrated with both autonomous GPS and laser guidance.



Growth Options

- INS-only capability
- Data link
- Penetrating 500-lb warhead
- Multi-event hard-target fuze
- Range extender kit
- Autonomous seeker
- Extended anti-jam (selective availability anti-spoofing module included for Lot 3 and up)

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