

## 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."*

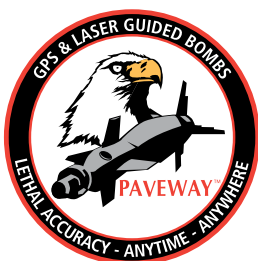
—RAF Gp Capt Jon Fynes  
*Defense Daily, April 2, 2003*

### 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

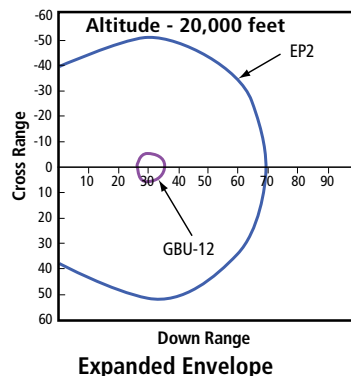
### State-of-the-Art GPS

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

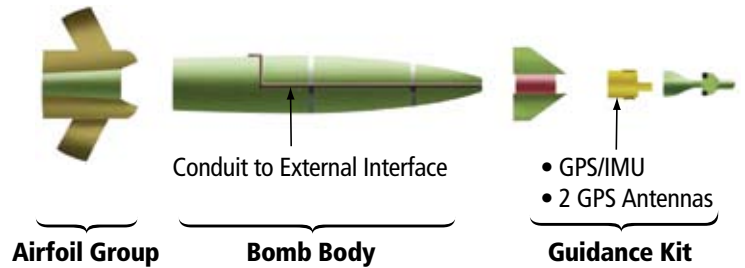
on-demand laser guidance allows the weapon to correct for up to 5,000 feet of target location error.

### Expanded Envelope

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

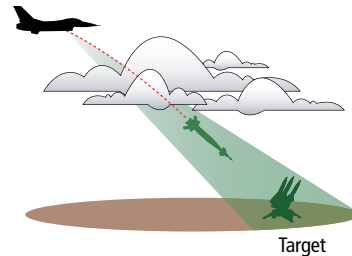


GPS guidance provides greatly expanded footprint over standard Paveway™II LGB.



### 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.



### Aircraft Integration

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

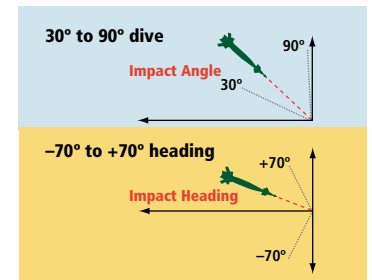
- Full-interface is available for 1760/1553 equipped aircraft
- Minimal-interface mode provides power plus retargeting for aircraft with partial 1553 capability
- Non-1553 aircraft have the options of the Enhanced Paveway™ Avionics Kit, which provides full functionality, or the power-only mode, which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

*“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*



### 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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