

Small Diameter Bomb (SDB)

## LOW-COST, PRECISION-STRIKE WEAPON SYSTEM

Small Diameter Bomb (SDB) GBU-39/B Weapon

## A low-cost, precision weapon system that provides a four-fold increase in sortie effectiveness.

The SDB's smaller weapon size and four-place carriage increases the number of weapons a platform can carry. The SDB enables precision strike for fighters, bombers and unmanned combat air vehicles with both internal and external carriages. It reduces collateral damage through its accuracy, size and effective, multi-purpose warhead.

## The SDB system includes:

- GBU-39/B weapon
- BRU-61/A four-weapon smart pneumatic carriage
- Mission planning system
- Logistics support system

The carriage with four SDBs can replace a single 1,000- or 2,000-lb weapon, quadrupling the number of targets serviced for a single aircraft sortie. The stand-off range provided by SDB's wings provides employment flexibility and reduces aircraft exposure to threats.

The SDB combines an effective, right-sized, penetrating and blast-fragmentation warhead and near-precision navigation/guidance to produce low collateral damage while achieving excellent effectiveness. SDB is effective against a wide variety of stationary targets including Command, Control, and Communications (C3) bunkers, air defense assets, airfields, Petroleum, Oil and Lubricant (POL) sites, missiles, and artillery.

The SDB provides the ability for day/night attack of fixed and stationary targets in adverse environmental and weather conditions. SDB has been fully integrated onto the F-15 Strike Eagle. The system also fits on nearly all delivery platforms including internal carriages in the F/A-22, F-35, and bombers. Boeing's SDB system exceeds the warfighter's stated needs for a wide variety of targets at a very affordable cost.

SDB delivery began in April 2005 after one of the most successful development and test programs on record.



## **SDB System Characteristics:**

- Guidance: Near-precision INS/GPS navigation with Anti-jam GPS and SAASM
- Standoff: Max Range: greater than 60 nm
- Warhead: Insensitive Munition compliant, Multipurpose - penetrating and blast fragmentation; penetrates greater than 3 ft steel reinforced concrete
- Fuze: Electronic Safe/Arm Fuze (ESAF), cockpit selectable functions – including air burst and delayed options



**GBU-39/B Weapon** Weight: 268 lb (122 kg) Length: 70.8 in. (1.8 meters) Width: 7.5 in. (19 cm)



**BRU-61/A Carriage** Weight: 325 lb (147 kg) Weight with weapons: 1,397 lb (634 kg) Length: 143 in. (3.6 meters) Width: 16 in. (40.6 cm) Height: 16 in. (40.6 cm)



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