

# Mark 84 bomb

## Mark 84 General Purpose (GP) Bomb



A Mk 84 GP bomb

<b>Type</b>	Low-drag general purpose bomb
<b>Place of origin</b>	United States
<b>Unit cost</b>	\$3,100

### Specifications

<b>Weight</b>	2039 lb (925 kg)
<b>Length</b>	129 in (3280 mm)
<b>Diameter</b>	18 in (458 mm)

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<b>Filling</b>	Tritonal, Minol or Composition H6
<b>Filling weight</b>	945 lb (429 kg)

The **Mark 84** is an American general-purpose bomb; it is also the largest of the **Mark 80** series of weapons. Entering service during the Vietnam War, it became a commonly used US heavy unguided bomb (due to the amount of High-explosive content packed inside) to be dropped, second only to the 15,000 pounds (6,803.9 kg) BLU-82 "Daisy Cutter" then in service and presently third only to the 22,600 lb (10,251.2 kg) GBU-43/B Massive Ordnance Air Blast bomb (MOAB) currently in service. Pilots flying the F-117 Nighthawk over Iraq during the first gulf war nicknamed it the "Hammer" (albeit fitted with the GBU-24 Paveway III kit for use especially by the *Nighthawks*), for its considerable destructive power and blast radius.



An aviation ordnance technician handling the bomb body of a Mark 84 aboard the *USS George Washington*.

The Mark 84 has a nominal weight of 2,000 lb (907.2 kg), but its actual weight varies depending on its fin, fuse options, and retardation configuration, from 1,972 to 2,083 lb (894.5 to 944.8 kg). It is a streamlined steel casing filled with 945 lb (428.6 kg) of Tritonal high explosive.

The Mark 84 is capable of forming a crater 50 feet (15.2 m) wide and 36 ft (11.0 m) deep. It can penetrate up to 15 inches (381.0 mm) of metal or 11 ft (3.4 m) of concrete, depending on the height from which it is dropped, and causes lethal fragmentation to a radius of 400 yards (365.8 m).

Many Mark 84s have been retrofitted with stabilizing and retarding devices to provide precision guidance capabilities. They serve as the warhead of a variety of precision-guided munitions, including the GBU-10 and GBU-24 Paveway laser-guided bombs, GBU-15 electro-optical bomb, GBU-31 JDAM and Quickstrike sea mines.

According to a test report conducted by the United States Navy's Weapon System Explosives Safety Review Board (WSESRB) established in the wake of the 1967 USS Forrester fire, the cooking off time for a Mk 84 is approximately 8 minutes 40 seconds.



Mk 84 exploding in North Vietnam, 1972.