

MISSILES AND ROCKETS

**ROCKET SYSTEMS** 

General Dynamics Ordnance and Tactical Systems is the system integrator of the 2.75-inch (70mm) Hydra-70 family of rockets. These rockets include unitary and cargo warheads for use against point and area targets, providing the user a lethal and lightweight weapon system with multi-mission capability. The Hydra-70 rockets produced by General Dynamics are universally compatible with the Advanced Precision Kill System (APKWS).

The rocket system contains three components: the MK66 MOD 4 rocket motor, one of the nine warheads, and the associated point-detonating, or remote-set fuze(s). When these components are combined, they provide a tailor-made solution to the warfighter's situational requirements.

Warheads are available in training, unitary or cargo configurations (see reverse). Fitted to the MK66 MOD

4 motor, these warheads provide low-cost munitions capable of area suppression and defeating threats at extended ranges, as well as providing battlefield obscuration, illumination and marking.

Hydra-70 provides the Army with affordable firepower matched to the mission for effective engagements and area suppression of a long list of lower-value targets on the battlefield.

General Dynamics has produced more than five million Hydra-70 rockets since 1996 in support of the Army's Joint Attack Munition Systems Project Office.

Hydra-70 fires from the existing seven and 19-tube launchers and can be mounted on most rotary and fixed-wing aircraft, including: Apache, Cobra, and F-16.

# Warheads

## M264 Smoke (RP)

 Length
 26.9 inches (68.3 cm)

 Weight
 8.6 pounds (3.9 kg)

#### M255A1 Flechette

Length 26.9 inches (68.3 cm)
Weight 14 pounds (6.4 kg)

## M257/M278 Illuminating Flare

Length 29.1 inches (73.9 cm)

Weight 11 pounds (5.0 kg)

#### **M278 Infrared Flare**

Length 29.1 inches (73.9 cm)

Weight 11 pounds (5.0 kg)

### **M229 High Explosive**

Length 26 inches (66 cm) (with fuze)

Weight 17 pounds (7.7 kg)

#### M151 High Explosive

Length 16.2 inches (41.2 cm) (with fuze)

Weight 9.3 pounds (4.2 kg)

## M156 (WP)

Length 16.2 inches (41.2 cm) (with fuze)

Weight 9.65 pounds (4.38 kg)

## WTU-1/B (practice)

 Length
 16.2 inches (41.2 cm)

 Weight
 9.3 pounds (4.2 kg)

### M274 (practice) Smoke Signature

Length 16.2 inches (41.2 cm) (with fuze)

Weight 9.3 pounds (4.2 kg)

## MK66 MOD 4 Motor

Length41.7 inches (106 cm)Weight13.6 pounds (6.2 kg)Diameter2.75 inches (70 mm)

### **Temperature Limits**

Operational -50° to 150°F (-46° to 66°C)

Storage -65° to 160°F (-54° to 71°C)

Average Thrust (77°F/25°C) 1,415 pounds (629 daN)

Total Impulse (77°F/25°C) 1,515 pounds/second

(674 daNs)

Time of Burning (77°F/25°C) 1.07 seconds

