

# Maverick AGM-65



The AGM-65 Maverick family of missiles is the versatile, precision strike missile of choice for the U.S. Air Force, Marine Corps, Navy, and 27 international customers.

## Benefits

- ▶ Launch and leave capabilities
- ▶ High single pass kill probabilities
- ▶ Modular design allows various combinations of guidance and warheads
- ▶ Integrated on virtually every fighter aircraft in the free world

The missile's autonomous guidance systems give aircrews launch-and-leave capability at a wide range of distances and speeds. Because of its accuracy and lethal warhead, Maverick provides a high single-pass kill probability.

Mavericks can be fired from a number of aircraft against a variety of targets such as field fortifications, bunkers, hangarages, tanks, armored personnel carriers, parked aircraft, radar or missile sites, port facilities, and ships, including high-speed patrol craft.

Maverick's versatility comes from its modular design, which allows various combinations of guidance and warheads to meet a wide range of threats. All members of the Maverick family have the same aerodynamic configuration. This commonality extends to much of the hardware and cockpit functions. Thus, Maverick can evolve to meet future military needs with a minimum of new design and aircraft integration costs.

## Most Widely Used

The AGM-65 Maverick is the most widely used precision-guided missile in the free world. First deployed in Vietnam, Maverick has undergone a number of system upgrades and modifications to keep pace with evolving threats and the need to expand the target envelope. Maverick is integrated on virtually every fighter aircraft in the free world ranging from the F-4 Phantom, F/A-18 Hornet, F-16 Falcon, AV-8B Harrier, the JAS-39 Gripen, and most recently, the P-3C Orion. Maverick has also been demonstrated on the AH-1W Super Cobra and is currently being integrated on the SH-2G Sea Sprite for the New Zealand Navy and the L-159 for the Czech Republic Air Force.

Maverick is a joint U.S. Air Force, Navy, and Marine Corps weapon that has a unique operational capability not replaced by newer systems. Maverick is also used by 27 nations as the primary precision-guided missile for close

air support and Interdiction and has a worldwide logistic support system.

## Exceptional Combat Record

Maverick has an exceptional combat record because of its precision guidance, ability to hit high-speed moving vehicle and ship targets, and a combination of TV, laser, and infrared guidance systems providing day and night operations in a variety of atmospheric conditions. Over 65,000 Mavericks have been produced.

## TV Maverick

The first Maverick was the television-guided AGM-65A, delivered to the U.S. Air Force in 1972. This was followed in 1975 by the AGM-65B with improved optics. Today the TV missiles are being upgraded with 480x480 array CCD cameras which triples the lock-on range of the current TV Maverick.

The TV Maverick carries an electro-optical seeker in its nose that produces a television-like



Some of the Aircraft Operating with Maverick

image on a cockpit display. In operation, the pilot selects a target on the display, marks it with a set of crosshairs and launches the missile. The Maverick autonomously guides to the designated target. This enables the pilot to perform evasion maneuvers or attack a second target.

### Imaging Infrared

Further development of Maverick has provided guidance systems that work day or night. An imaging infrared (IR) seeker guides the U.S. Air Force AGM-65D, G and the U.S. Navy's AGM-65F against the same target set including moving targets. The seeker forms a TV-like image on the cockpit display by sensing small differences in heat energy between that

radiated by objects in view and in the background.

### Laser

The Marine Corps AGM-65E uses a seeker that tracks laser energy reflected off a target from a laser designating device either from the air or from the ground.

Two warheads are available for the Maverick. The A, B, D, and H versions use a 125-pound warhead with a forward-firing conical-shaped charge for high armor penetrations. The E, F, G, and K Mavericks employ a 300-pound penetrator/blast fragmentation warhead that was developed for maximum effectiveness against a broad spectrum of reinforced targets. Selectable fuzing gives the

### Maverick AGM-65

#### Specifications

Length:	98 in	249 cm	Wing Span:	28.5 in	72 cm
Fin Span:	22.3 in	0.4 m	Diameter:	12 in	35 cm
Launcher:	Rail		Fuzing:	Contact, 125-lb Shape Charge; Selectable Delay, 300-lb Penetrator	
Weights:					
H(TV)	462 lb	210 kg			
D(IR)	485 lb	220 kg			
E(laser)	645 lb	293 kg			
K(TV)	675 lb	307 kg			
F/G(IR)	675 lb	307 kg			

aircrew the option of detonating the warhead on impact or after penetration.

### Desert Storm

Over 5,300 Mavericks were launched during Operation Desert Storm with a successful hit rate of 92%. The historical hit rate with over 12,000 launches is 89%. There are 9 configurations of the AGM-65 Maverick that include three different guidance options with two different warhead configurations.

In 1989, Raytheon began prototype design integration studies with the Naval Air Systems Command for the P-3 Orion maritime patrol aircraft. These studies led to the first free-flight launches of the AGM-65F IR Navy Maverick against stationary and moving small patrol craft targets. There have been a small number of aircraft operationally deployed with this prototype configuration which has proven the viability of the Maverick to meet tactical requirements for the maritime patrol mission.

In 1994, the U.S. Navy awarded the Unisys Corporation (now Lockheed Martin) the first in a

series of contract awards to design a production integration configuration for the P-3 to carry Maverick on four wing stations. This expanded use of the Maverick demonstrates the weapon's versatility and effectiveness across a broad range of targets and operational mission areas.

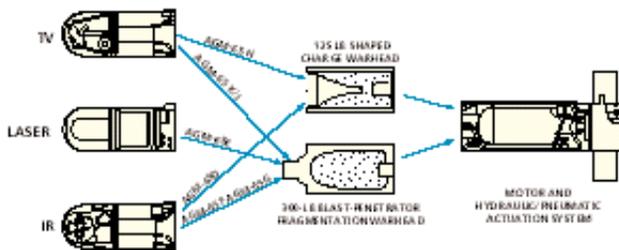
Maverick's evolution isn't over yet. The newest versions, the AGM-65H/J/K, incorporates modern TV technology, circuitry and associated software that replaces the outdated Maverick A and B technology, providing a clearer picture, longer standoff range, and enhanced tracking capability.

### Precision Strike

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