

Hellfire Family of Missiles

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Engages and defeats individual moving or stationary advanced armor, mechanized or vehicular targets, patrol craft, buildings, or bunkers while increasing aircraft survivability.

DESCRIPTION

The AGM-114 Hellfire Family of Missile includes the Hellfire II and Longbow Hellfire missiles. Hellfire II is a precision strike, Semi-Active Laser (SAL) guided missile and is the principal air-to-ground weapon for the Army AH-64 Apache, OH-58 Kiowa Warrior, Gray Eagle Extended Range Multipurpose (ERMP) Unmanned Aircraft System (UAS), Special Operations aircraft, Marine Corps AH-1W Super Cobra and the Air Force's Predator/Reaper UAS.

The SAL Hellfire II missile is guided by laser energy reflected off the target. It has three warhead variants: a dual warhead, shaped charge high-explosive anti-tank (HEAT) capability for armored targets (AGM-114K); a blast fragmentation warhead (BFWH)

for urban, patrol boat and other “soft” targets (AGM-114M); and a metal augmented charge (MAC) warhead (AGM-114N) for urban structures, bunkers, radar sites, communications installations, and bridges. Beginning in 2012, a Hellfire multi-purpose warhead variant (AGM-114R) will be available to the warfighter that allows selection of warhead effects corresponding to a specific target type. The AGM-114R is capable of being launched from Army rotary wing and UAS platforms and provides the pilot increased operational flexibility.

The Longbow Hellfire (AGM-114L) is also a precision strike missile using millimeter wave (MMW) radar guidance instead of the Hellfire II's semi-active laser. It is the principal anti-tank system for the AH-64D Apache Longbow helicopter and uses the same anti-armor warhead as the Hellfire II. The MMW seeker provides beyond line-of-sight fire and forget capability as well as the ability to operate in adverse weather and battlefield obscurants.

Diameter: 7 inches

Weight: 99.8–107 pounds

Length: 64 inches

Maximum range:

Direct fire: 7 kilometers

Indirect fire: 8 kilometers

Minimum range: .5–1.5 kilometers

SYSTEM INTERDEPENDENCIES

None

PROGRAM STATUS

- **Current:** Laser Hellfire II missiles are procured annually to replace combat expenditures and war reserve requirements

PROJECTED ACTIVITIES

Laser Hellfire

- **Continue:** In production

Longbow Hellfire

- **Continue:** Sustainment activities

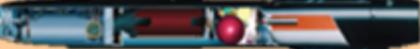
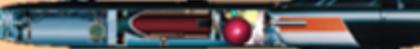
ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

System Description	Production	Characteristics	Performance
AGM-114A, B, C, F, FA – HELLFIRE Weight = 45 kg Length = 163 cm 	1982 – 1992	A, B, C have a Single Shaped-Charge Warhead; Analog Autopilot	<ul style="list-style-type: none"> Not Capable Against Reactive Armor Non-Programmable
		F has Tandem Warheads; Analog Autopilot	<ul style="list-style-type: none"> Reactive Armor Capable Non-Programmable
AGM-114K/K2/K2A – HELLFIRE II Weight = 45 kg Length = 163 cm 	1993 – until complete	<ul style="list-style-type: none"> Tandem Warheads Electronic Safe & Arm Device Digital Autopilot & Electronics Improved Performance Software 	<ul style="list-style-type: none"> Capable Against 21st Century Armor Hardened Against Countermeasures K-2 adds Insensitive Munitions (IM) K-2A adds Blast-Frag Sleeve
AGM-114L – HELLFIRE LONGBOW Weight = 49 kg Length = 180 cm 	1995 – 2005	<ul style="list-style-type: none"> Tandem Warheads Digital Autopilot & Electronics Millimeter-Wave (MMW) Seeker IM Warheads 	<ul style="list-style-type: none"> Initiate on Contact Hardened Against Countermeasures Programmable Software All-Weather
AGM-114M – HELLFIRE II (Blast Frag) Weight = 49 kg Length = 180 cm 	1998 – 2010	<ul style="list-style-type: none"> Blast-Frag Warhead 4 Operating Modes Digital Autopilot & Electronics Delayed-Fuse Capability 	<ul style="list-style-type: none"> For Buildings, Soft-Skin Vehicles Optimized for Low Cloud Ceilings Hardened Against Countermeasures WH Penetrates Target Before Detonation
AGM-114N – HELLFIRE II (MAC) Weight = 49 kg Length = 180 cm 	2003 – until complete	<ul style="list-style-type: none"> Metal-Augmented Charge – Sustained Pressure Wave 4 Operating Modes Delayed-Fuse Capability 	<ul style="list-style-type: none"> For Buildings, Soft-Skin Vehicles Optimized for Low Cloud Ceilings Hardened Against Countermeasures WH Penetrates Target Before Detonation
AGM-114P/P+ – HELLFIRE II (for UAS) Weight = 49 kg Length = 180 cm 	2003 – 2012	<ul style="list-style-type: none"> Shaped-Charge or Blast-Frag Designed for UAV Altitudes 21st Century Armor Capability 	<ul style="list-style-type: none"> P-2A adds Steel Frag Sleeve P-2B adds Tantalum Frag Sleeve P+ adds Enhanced IMU and SW Support, Many Customizations for Varying Battlefield
AGM-114R – HELLFIRE II (Bridge to JAGM- RW/UAS) Weight = 49 kg Length = 180 cm 	2012- until complete	<ul style="list-style-type: none"> Multi-purpose warhead Designed for all platforms Health Monitoring 	<ul style="list-style-type: none"> For all Target Sets P+ capabilities Increased Lethality and Engagement Envelope

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FOREIGN MILITARY SALES

Laser Hellfire:

Australia, Egypt, Greece, Israel, Kuwait, Netherlands, Saudi Arabia, Singapore, Spain, Taiwan

Direct commercial sale:

United Kingdom

Longbow Hellfire:

Israel, Japan, Kuwait, Singapore

Direct commercial sale:

United Kingdom

CONTRACTORS

Lockheed Martin (Troy, AL)

L-3 Communications (Chicago, IL)

Alliant Techsystems (Rocket City, WV)

Moog Inc. (Salt Lake City, UT)

Laser Hellfire Missile System, guidance section, sensor group:

Hellfire LLC (Orlando, FL)

Longbow Hellfire:

Longbow LLC (Orlando, FL)

