

# 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 Missiles 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 Unmanned Aerial System (UAS), Special Operations aircraft, Marine Corps AH-1W Super Cobra, and 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 II multipurpose warhead variant (AGM-114R) will allow the warfighter select warhead effects corresponding to a specific target type. The AMG-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 (SAL). 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:** 64-69 inches

**Maximum Range:**

**HELLFIRE II:** AGM-114R

**Direct fire:** 7 kilometers

**Indirect fire:** 8 kilometers

**Minimum range:** 0.5-1.5 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:** Maintain production

**Longbow HELLFIRE**

- **Continue:** Sustainment activities








## ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

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

## HELLFIRE Family of Missiles

### FOREIGN MILITARY SALES

#### Laser HELLFIRE:

Australia, Egypt, France, Greece, Israel, Japan, Kuwait, Netherlands, Saudi Arabia, Singapore, Spain, Taiwan, Sweden, United Arab Emirates, United Kingdom

#### Direct commercial sale:

Netherlands, Norway, Saudi Arabia, Turkey, United Kingdom

#### Longbow HELLFIRE:

Israel, Japan, Kuwait, Singapore, Taiwan, United Arab Emirates

#### Direct commercial sale:

United Kingdom

### CONTRACTORS

#### Prime Contractor:

Lockheed Martin (Orlando, FL)

#### Seeker:

Lockheed Martin (Ocala, FL)

#### Rocket Motor/Warhead:

Alliant Techsystems (Rocket City, WV)

#### Control Section:

Moog Inc. (Salt Lake, UT)

#### Firing Component (ESAF):

L-3 Communications (Chicago, IL)

