

HELLFIRE[®] II

AGM-114R



*The following presents products and product configurations in development.
Qualification of the product is ongoing.*

LOCKHEED MARTIN

We never forget who we're working for[®]

TM099-0497- 1

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Laser-Guided HELLFIRE II History



1995

2000

2005

2010

2015



AGM-114K: High explosive anti-tank (HEAT) warhead; point detonation



AGM-114M: Blast fragmentation warhead; penetrates and detonates



AGM-114N: Metal augmented charge (MAC) warhead; penetrates and detonates,



AGM-114R: Warhead replaces previous SAL models

- Multi-function warhead
- IMU-aided trajectories



AGM-114KA: Augmented HEAT warhead; point detonation and blast fragmentation

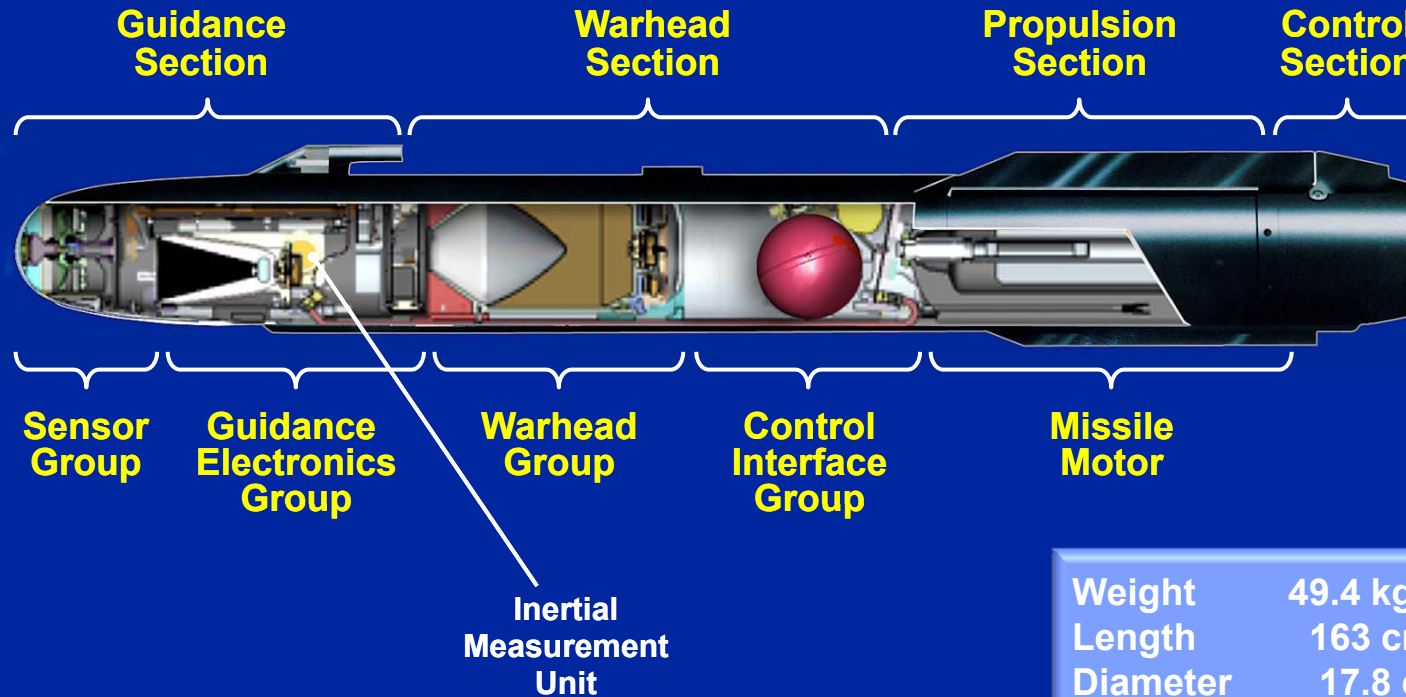
All depicted HELLFIRE II models feature semi-active laser (SAL) guidance

Key AGM-114R Improvements:

- **Enhanced Trajectories**
 - Incorporates Lessons-learned from Legacy Systems
 - Inertial Measurement Unit-aided Trajectories from Capable Platforms
- **Multi-Function Warhead**
- **Enhanced Health-monitoring Capability**

**Modularity Enabled Continuous Product Improvement:
AGM-114R Replaces Previous Laser-Guided Variants**

HELLFIRE II Missile Overview



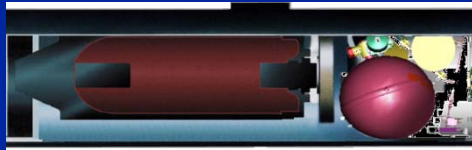
Weight	49.4 kg (109 lb)
Length	163 cm (64 in)
Diameter	17.8 cm (7 in)

AGM-114R Incorporates a Multi-Function Warhead, Inertial Measurement Unit, and Tailored Trajectories; Backward Compatible with Existing HELLFIRE II Platforms

HELLFIRE II Romeo Warhead



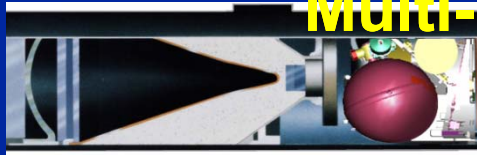
Blast Fragmentation



Metal Augmented Charge



High Explosive Anti-Tank



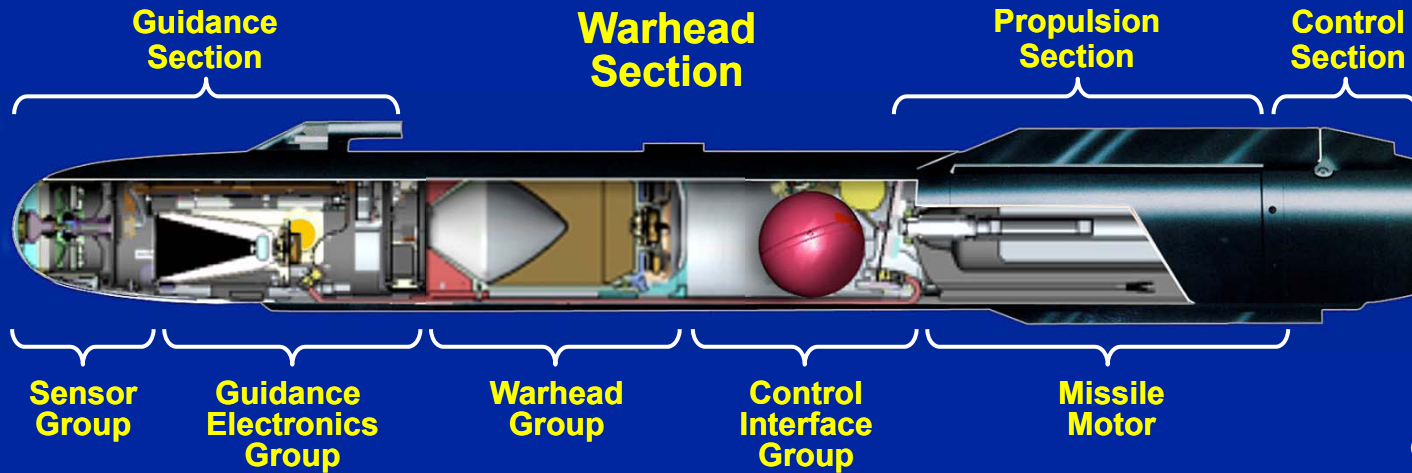
Multi-Function



Augmented High Explosive Anti-Tank



Multi-Function Warhead Services a Wide Array of Targets



Click to start

One Warhead Now Services All Target Types

Multi-Function Warhead Target Set



AGM-114R Multi-Function Warhead Target Set



Main Battle Tanks (MBTs)



Air Defense Systems



Commercial Vehicles (Pickups, SUVs)



Small Boats



Patrol Craft and Ships



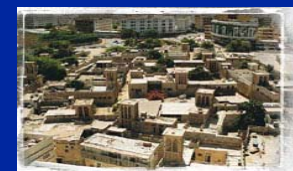
Heavy and Light Armored Vehicles



Transporter Erector Launcher



C2 Node



Buildings



Personnel in Open



Thin-Skinned Vehicles



Artillery Systems



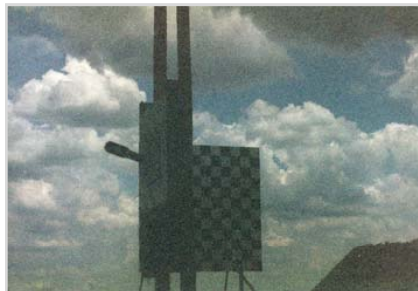
Bunkers and Caves

Anti-Armor Capability



AGM-114R Precursor/Main Warhead Defeat All Known and Projected Armor Capabilities

Effective Against Vehicles and Personnel



Fragmentation Lethal to Heavy Equipment, Light Armor, Electronics, and Personnel

Effective Against Buildings, Bunkers, Ships



Main Charge Penetrates Targets Before Detonation

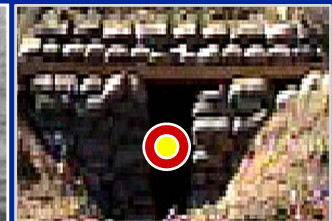


Effective Against Multi-Room Structures and Other Confined Spaces

HELLFIRE II Precision



- Lethal Against Moving and Stationary Targets
- Precise Control of Designator Aimpoint Maximizes Hit Probability
- Impacts Laser Spot Within 1 Meter



HELLFIRE Precision Provides Targeting Flexibility



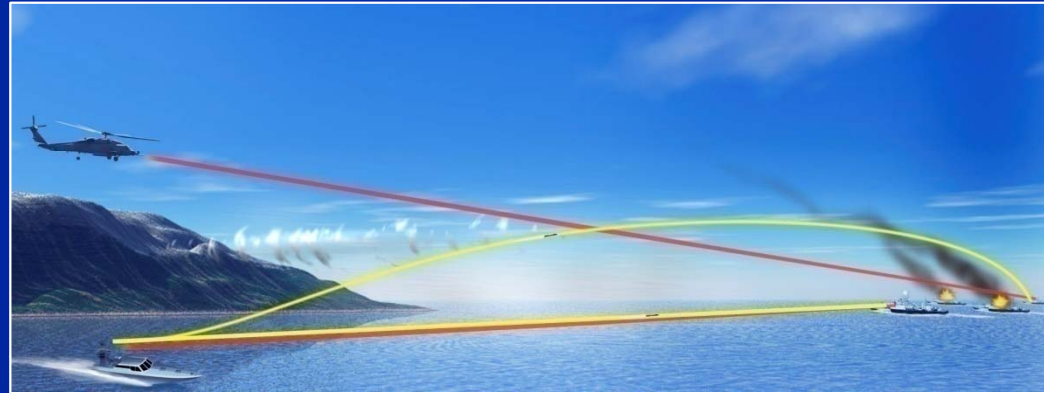
Laser
Aimpoints

HELLFIRE II Missile Launch Modes



Lock On Before Launch

- Missile Seeker Powers Up Prior to Launch
- Seeker Acquires Laser Energy While on Launch Rail
- Self- or Third-Party Designation




Lock On After Launch

- Seeker Powers Up After Launch
- Missile Seeker Acquires Laser Energy En Route to Target
- Self- or Third-Party Designation

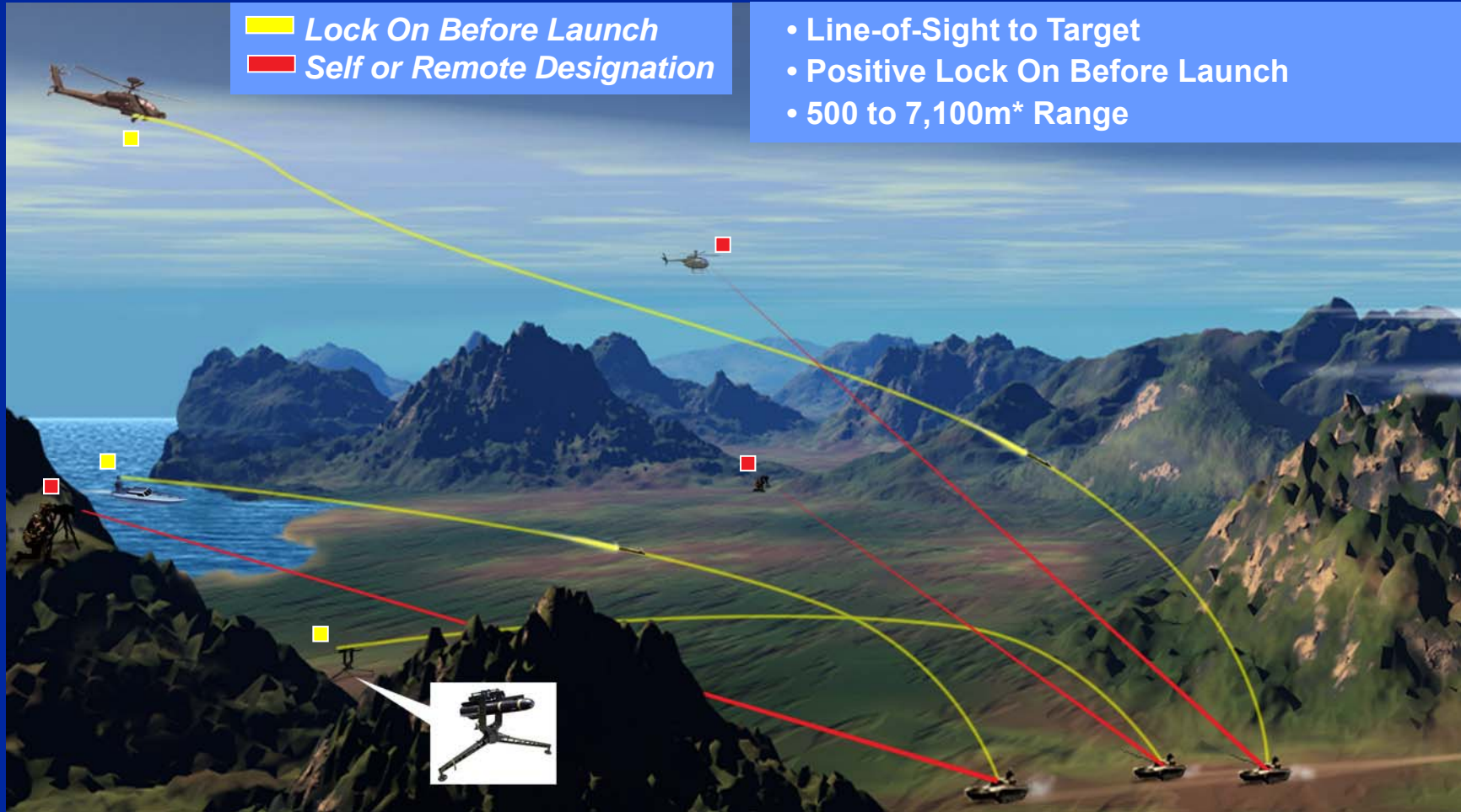


Lock-On-Before-Launch Mode



 *Lock On Before Launch*
 *Self or Remote Designation*

- Line-of-Sight to Target
- Positive Lock On Before Launch
- 500 to 7,100m* Range



*Specified Using Remote Designator Located $\leq 3,000\text{m}$ from Target

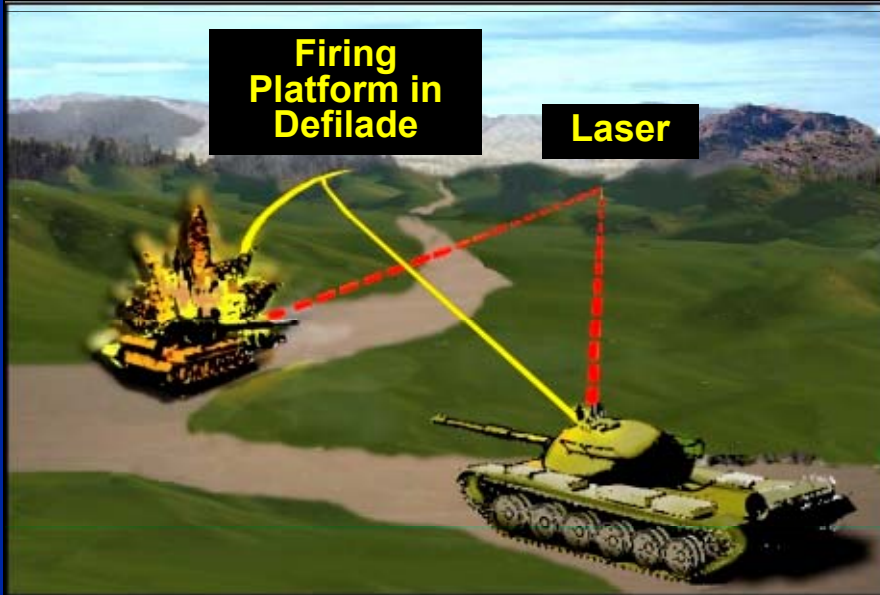
Lock-On-Before-Launch is Quickest and Most Direct Attack Mode

Target Set: Multiple – Rapid or Ripple Fire



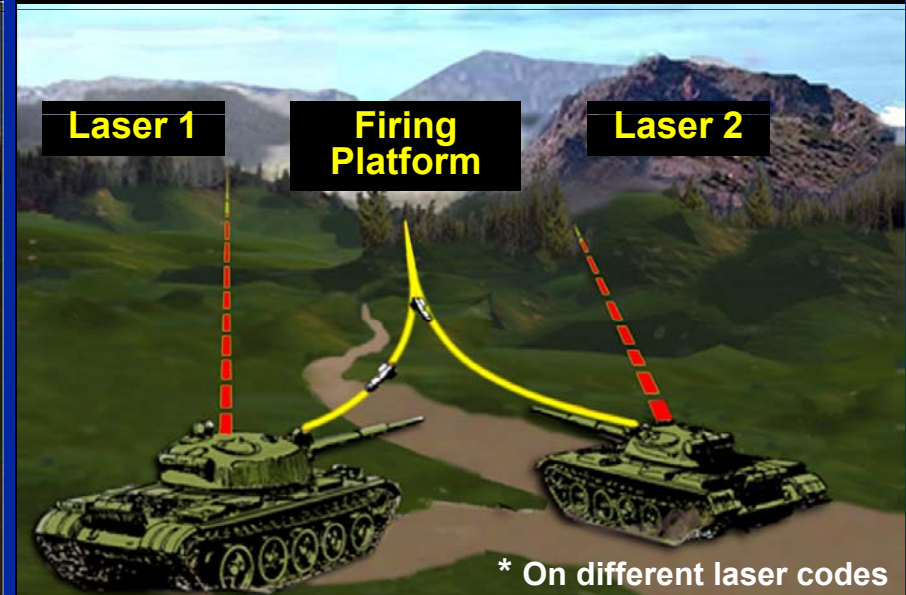
Rapid Fire

One Laser Designating



Ripple Fire

Two Lasers Designating*



1 Missile Every 8 sec: Limit Set by Minimum Guidance Time

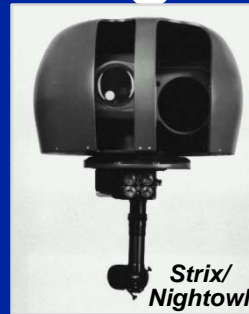
2nd Missile 2 sec After 1st; Limit Set by Launcher Capability

HELLFIRE Air-Launch Platforms



**HELLFIRE Has Been Successfully Integrated
with a Variety of Aircraft**

Aircraft Targeting/Designation

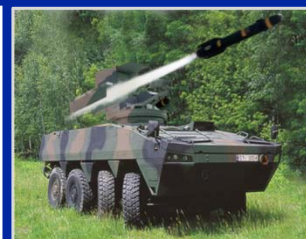


HELLFIRE Has Been Successfully Integrated with a Variety of Systems

HELLFIRE II Summary



- **Mature, Robust, Combat Proven**
- **A Multi-Mission Tactical Missile System**
 - Defeats Wide Array of Present and Future Targets
 - Modular Construction Enables Technology Upgrade
- **Common Support for Multiple Missions**
- **In Production, Available and Exportable; Over 28,000 Produced**
- **Thousands of Successful Combat Engagements**



Robust Missile Family Available for Multiple Missions