



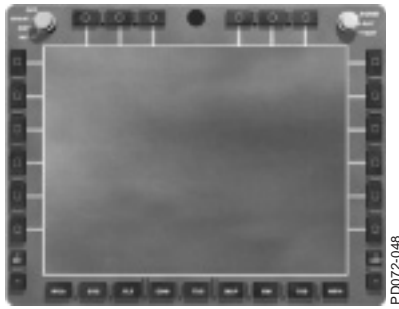
NORTHROP GRUMMAN

LOCKHEED MARTIN 

Cobra Radar System
Millimeter Wave Targeting System for the AH-1Z

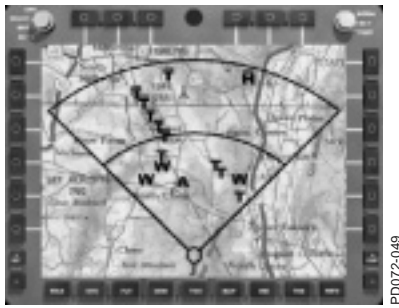


Do you see this?



PD072-048

When you need to see this?



PD072-049

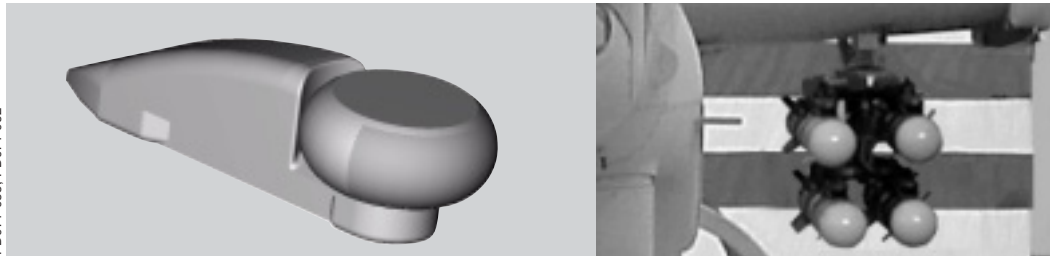
Right: Radar

Far Right: Longbow Missiles and Launcher

Cobra Radar System

Longbow International (LBI), a Joint Venture of Lockheed Martin and Northrop Grumman, developed and will manufacture the Cobra Radar System (CRS). The system consists of a pod-based radar mounted on a wingtip (AH-1Z) or stores position (legacy Cobras) of the helicopter, the AGM-114L Longbow Hellfire™ fire-and-forget missile, and the M299 Hellfire Launcher™. The CRS increases the warfighting, surveillance, and reconnaissance capabilities of the Cobra helicopter at an affordable procurement and life cycle cost.

LBI also manufactures the Longbow™ Weapon System for the Apache AH-64D and is in the engineering and manufacturing development stage on Longbow for the Comanche RAH-66 helicopter.



PD071-085; PD071-062

Radar

Using its Longbow heritage, the CRS achieves high performance at low cost. The system automatically searches, locates, detects, classifies, and prioritizes multiple moving and stationary targets on land and in the air while operating in adverse weather and battlefield obscurants. Target location is available for use by other onboard sensors, for transmission to other aircraft and command and control centers, and for fire-and-forget engagement with the Longbow Hellfire missile. The radar's automatic rapid search capability significantly adds to the operator's situational awareness and survivability.

The CRS is also capable against littoral targets, which are displayed on the map display and used to cue the Hawkeye™ Target Sight System. Hawkeye acquires the targets for transfer to other platforms or for engagement by the Hellfire II missile with a blast fragmentation warhead.

The CRS is reliable and easily maintained. It features advanced built-in test that isolates to the circuit card or module.

Missile

The AGM-114L Longbow Hellfire missile is a true fire-and-forget missile that engages targets up to 8 km. Once launched, the missile is autonomous using its millimeter wave seeker to guide to the target. The missile features both lock-on-before-launch and lock-on-after-launch modes. The system has been extensively tested against a variety of countermeasures. The Longbow Hellfire shares the same bus and warhead with the Hellfire II (AGM-114K) and same bus with the Blast Fragmentation Hellfire II (AGM-114M).

Launcher

The M299 Launcher is fully digital and provides the capability to fire any Hellfire missile.

Specifications

Radar

Range	8 km
Frequency	Ka band
Operating Modes	Ground and air surveillance and targeting, and terrain profile
Features	Automatic detection, classification, location, and prioritization of tactical targets
Operating Conditions	Clear/day, night, smoke, fog, dust, rain, snow, and countermeasures

Longbow Hellfire™ Missile (AGM-114L)

Range	8 km
Guidance	Fire-and-forget millimeter wave
Operating Conditions	Clear/day, night, smoke, fog, dust, rain, snow, and countermeasures
Commonality	Bus and warhead with Hellfire II
Weight	49 kg (108 lb)
Length	175 cm (69 in)
Diameter	17.8 cm (7 in)

Longbow International Lockheed Martin

Director of Business Development
5600 Sand Lake Road
Orlando, FL 32819
Phone: (407) 356-4808
Fax: (407) 356-2925
www.missilesandfirecontrol.com

© Copyright 2003 Lockheed Martin Corporation. M299Hellfire Launcher and Hawkeye TSS are trademarks of Lockheed Martin Corporation. Longbow and Longbow Hellfire are trademarks of Longbow LLC. All rights reserved. S013-0001-09
Front top: TS0333-30-04.1; Front bottom: TS0333-30-04.2

Longbow International Northrop Grumman

Director of Business Development
PO Box 1693 MS 1685
Baltimore, MD 21203
Phone: (410) 765-9783
Fax: (410) 981-5351