



NORTHROP GRUMMAN

LOCKHEED MARTIN 
We never forget who we're working for®

Longbow™

Fire Control Radar and RF Longbow HELLFIRE™ Fire-and-Forget Missile for the Apache





PD079-072

Longbow

The Longbow™ system is manufactured by a Joint Venture of Lockheed Martin and Northrop Grumman. Integrated capabilities enhance Apache's lethality fourfold and survivability sevenfold. The mission equipment package is in production for the US and several international countries. Longbow makes a major contribution to the warfighting capability of the Apache. It is a proven force multiplier tested in rigorous independent operational evaluations. The Apache Longbow system was battle-proven in Operation Enduring Freedom and Operation Iraqi Freedom.



PD079-073

Fire Control Radar

The radar provides high performance with very low probability of intercept. Longbow's radar rapidly and automatically searches, detects, locates, classifies, and prioritizes multiple moving and stationary targets on land, air, and water in all weather and battlefield conditions to the maximum range of the Longbow missile. Target coordinates are automatically available to all sensors and weapons-enabling target confirmation, reducing fratricide,

and permitting rapid launch. Target data is also digitally available through the improved data modem for real-time transfer to other platforms and command posts. The self-contained Radio Frequency Interferometer (RFI) ensures rapid identification and accurate azimuth to enemy air defense units. High system reliability and two-level maintenance provide high operational availability with low support costs. The radar is fielded with the Apache AH-64D Attack Helicopter system in the US Army.

Top: Longbow Hellfire Missile

Bottom: Fire and Forget

Right: Multimode Radar Surveillance

Specifications

Fire Control Radar (AN/APG-78)

Range	8 km
Frequency	Ka band
Modes	Surveillance, targeting, RFI cued, terrain profiling, and air overwatch
Weather	Clear to adverse
Environments	All battlefield obscurants

Missile (AGM-114L)

Range	0.5 – 8 km
Guidance	Millimeter wave
Compatibility	Launch from multiple platforms
Commonality	Bus and warhead with HELLFIRE II
Weight	108 lb (49 kg)
Length	69 in (175 cm)
Diameter	7 in (17.8 cm)



PD079-073

Longbow HELLFIRE Missile™

The Longbow system incorporates a fire-and-forget RF missile, allowing the Apache to launch from defilade, increasing battlefield survivability. The missile is capable of locking on before or after launch and has been extensively tested in multiple countermeasures.

The M299 Launcher™ has a fully digital interface to the Apache and is capable of firing any HELLFIRE missile. The missile and launcher system is fielded by the US Army.

Longbow LLC
 Lockheed Martin
 Business Development
 5600 Sand Lake Road
 Orlando, FL 32819
 Phone: (407) 356-4464
 Fax: (407) 356-7199
www.lockheedmartin.com/mfc

© Copyright 2007 Lockheed Martin Corporation, Longbow and Longbow HELLFIRE Missile are trademarks of Longbow LLC. All rights reserved. S017-0001-09

Front top: PC013-016; Front bottom: PD079-071

Longbow LLC
 Northrop Grumman
 Director of Business Development
 PO Box 1693 MS 1680
 Baltimore, MD 21203
 Phone: (410) 765-2885
 Fax: (410) 993-3879
landforces@ngc.com