



2011 AH-6 OVERVIEW



AH-6i

LIGHT ATTACK/RECONNAISSANCE HELICOPTER

Designed to Perform

Pre-Paris Air Show Media Tour

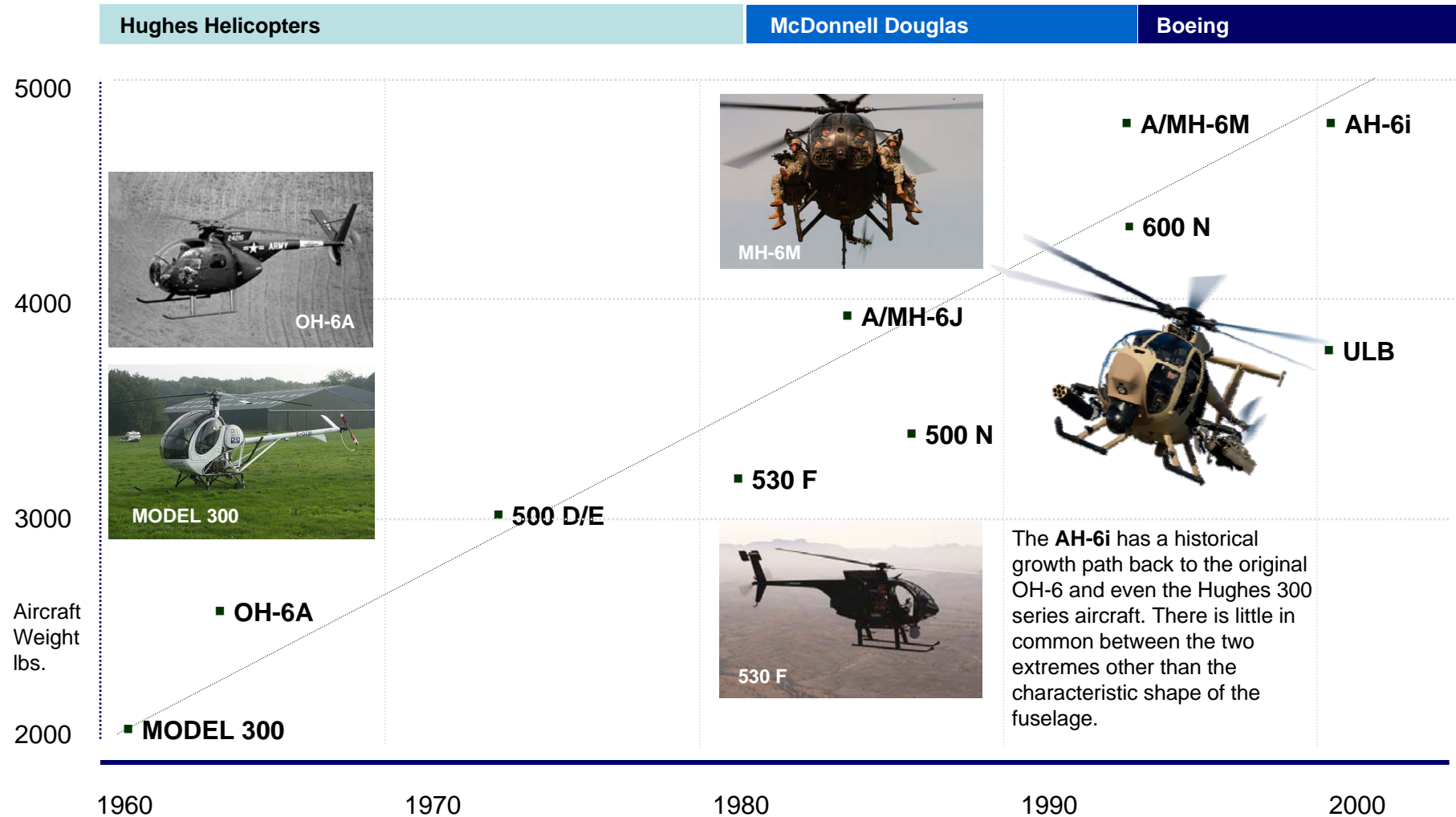
Mike Burke

Director, Global Strike Attack Rotorcraft Business
Development

10 June 2011

AH-6i Development History

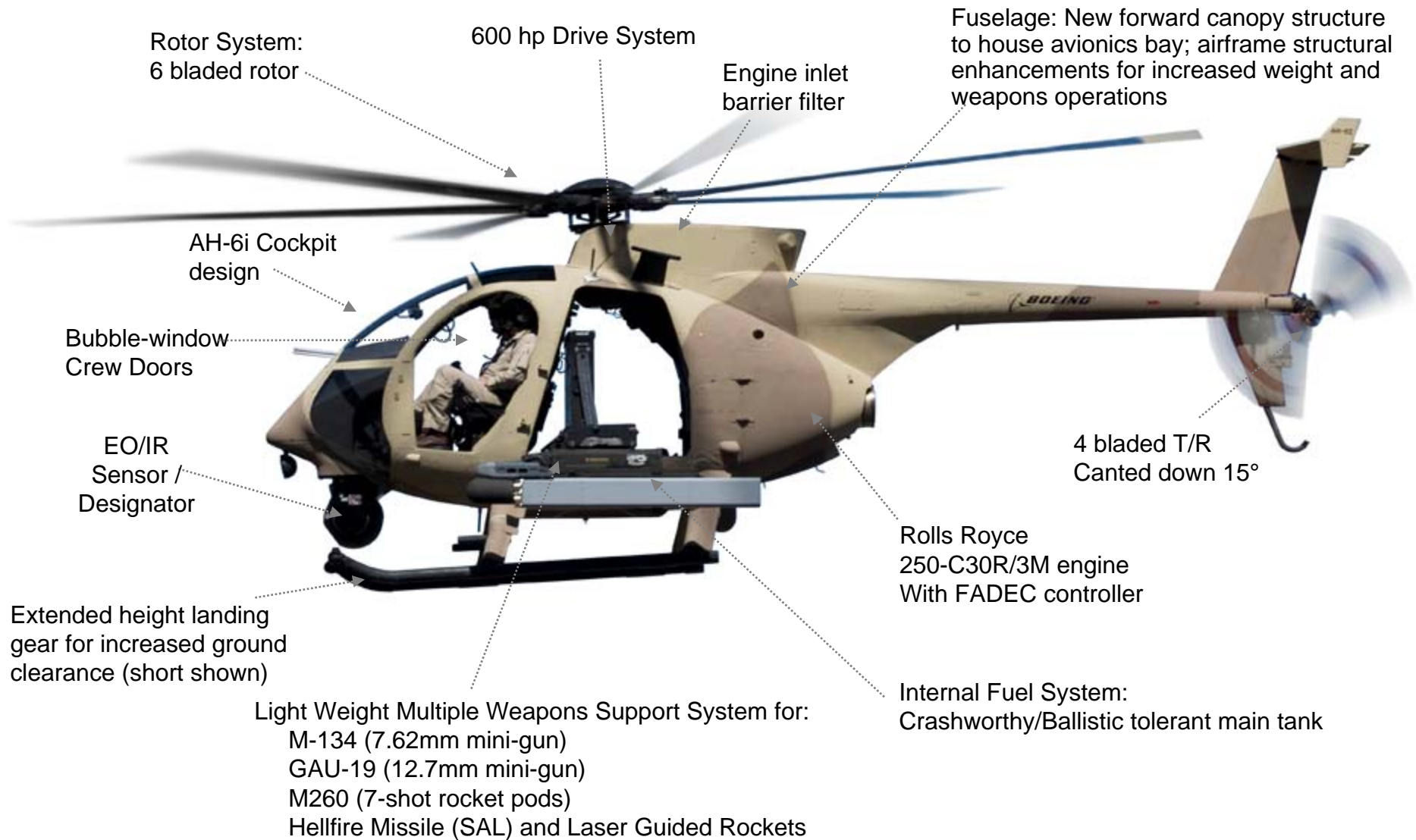
2011 AH-6i Overview



AH-6i – Proven Over Time

AH-6i Features

2011 AH-6i Overview

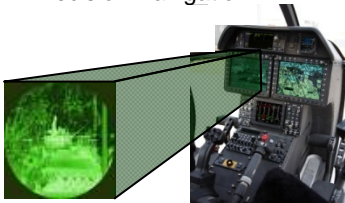


AH-6i Proven Systems

2011 AH-6i Overview

Advanced Glass Cockpit

- Increased Situational Awareness using Glass Cockpit
- Forward Looking Infrared (FLIR)
- Enhanced Displays
- Digital Map
- Precision Navigation



Superior Payload

- Gross Take-off Weight 4700 lbs
- Adverse weather capable
- Internal Payload Bay
 - 1300 lb internal w/ full fuel
 - Pilot/Co-pilot seating
- External Stores
 - Dual weapons pylons (550 lb)
 - Two pylon stations per side

Sight / Targeting Sensor

- Zoom HD DTV
- 4 FOV IR
- Laser Pointer
- Laser Rangefinder/Designator



7.62mm Minigun .50 cal GAU-19



GFE

Hellfire Missiles 70mm FFAR



GFE

Enhanced Comm / Nav



Wulfsberg
RT5000/C5000



LN251
INU/GPS

Improved Performance

Rolls-Royce C30R/3M

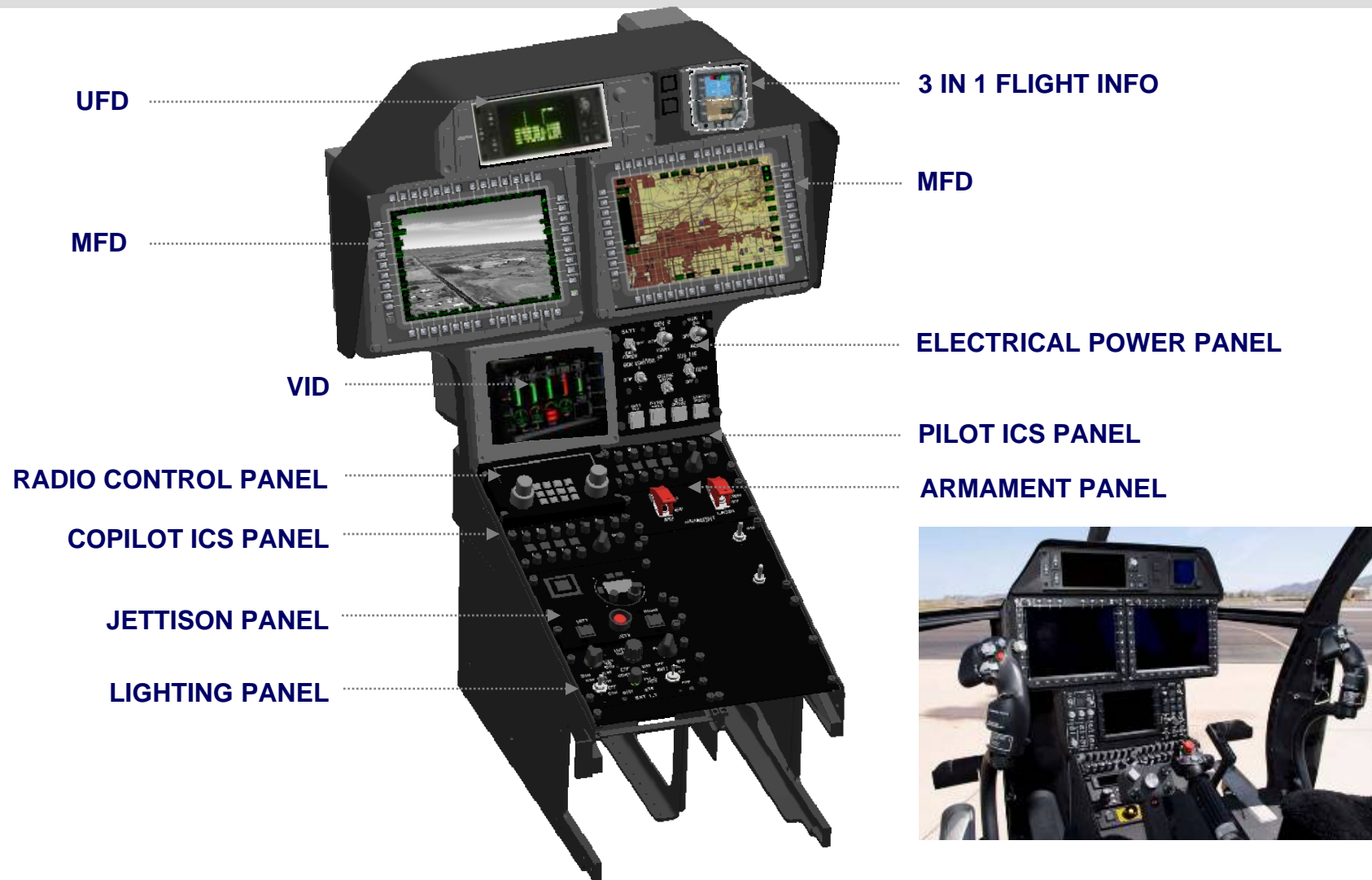
- Turbine (JP 8)
- FADEC Control
- Rotor Governing
- Computer Based Maintenance Tracking



AH-6i – Light Attack/Reconnaissance Platform – State-of-the-Art technology

AH-6i Pilot Vehicle Interface

2011 AH-6i Overview



AH-6i Cockpit – Combat Proven, Easy to Read, NVG Compatible

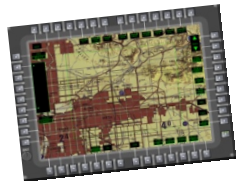
AH-6i Navigation System

2011 AH-6i Overview



LN251 Inertial Navigation System/Global Positioning System (INS/GPS)

Military Qualified. All-attitude Navigation System
Radio Frequency (RF) Global Positioning System (GPS)



Boeing Integrated Digital Map

No additional LRUs required and map can be uploaded from a flash drive (thumb drive). Routes can be preplanned and loaded or modified/added through the display.



L3 Standby Flight Instrumentation System



Qualified HARCO Air Data Computer



APN-209 Radar Altimeter with Mil-Std-1553


Used to provide AGL Altitude
Tied into the Communication/Navigation Mil-Std-1553 bus

AH-6i Navigation System – Qualified, Proven, Accurate

AH-6i MX-15D 9 Sensor Imaging/Laser Payload Options + IMU


2011 AH-6i Overview

Spotter Color (#4) and Low Light (#5) Cameras



108X

2 Megapixel Color HD




111X

Electron Multiplied CCD

Automatic Video Tracker
Multi-Mode

GPS Receiver



Laser Spot Tracker (#6)


Laser Illuminator (#7)
Precision 860 nm
Narrow or Ultra Narrow Beam
Class 4

Inertial Measurement Unit (IMU)


Laser Rangefinder/Designator (#8/#9)
Diode Pumped
1064/1570 nm
2 m Resolution
Class 4/(1M,3B)

Zoom Daylight Color (#2) & Low Light (#3) Cameras


Megapixel Color HD



1.5X




38X




77X
(2x Digital Zoom)

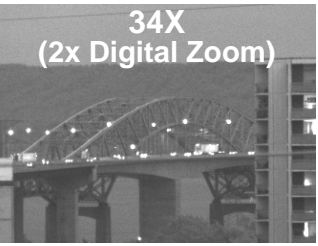
Electron Multiplied CCD



1.3X






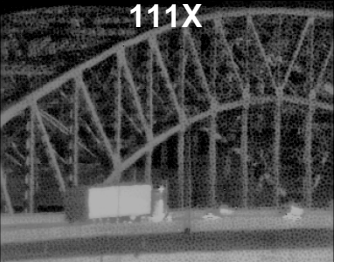
17X



34X
(2x Digital Zoom)

Continuous Zoom

Thermal Imager (#1)
640x512 Pixel Mid-Wave IR

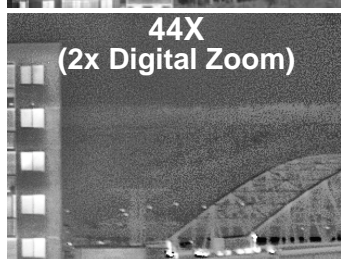





1.5X 7.4X 37X 111X

AH-6i MX-10D 6 Sensor Imaging/Laser Payload Options + IMU

2011 AH-6i Overview

Thermal Imager (#1)
640x512 Pixel Mid-Wave IR



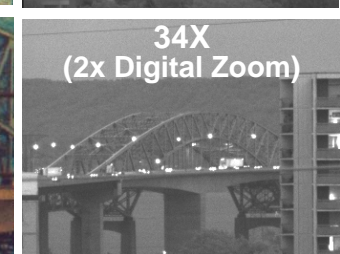
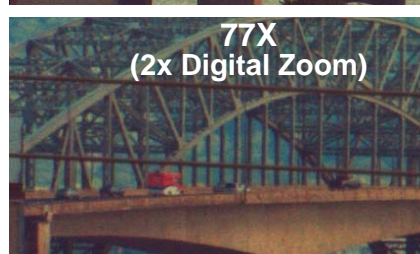
GPS Receiver

Automatic Video Tracker
Multi-Mode

Daylight Color (#2) & Low Light (#3) Cameras
Megapixel Color HD Electron Multiplied CCD



Continuous Zoom



Inertial Measurement Unit (IMU)
Tactical Grade

Laser Designator (#6)
1064 nm, Class 4
Compatible with NATO & US weapons

Eye Safe Laser Rangefinder (#4)
Erbium Glass
5 m Resolution
Class 1

Laser Illuminator (#5)
Precision 852 nm Narrow Beam
Class 3B

AH-6i Weapons System

2011 AH-6i Overview

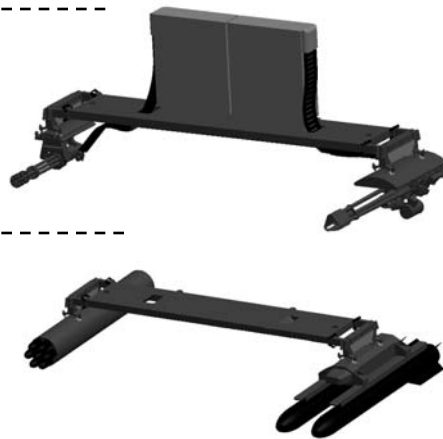


Capable of employing:

- **7.62mm MiniGun**

- **.50cal GAU-19**

- **70mm FFAR**
 - Precision Guided Rockets Option
- **SAL Hellfire**



Missions:

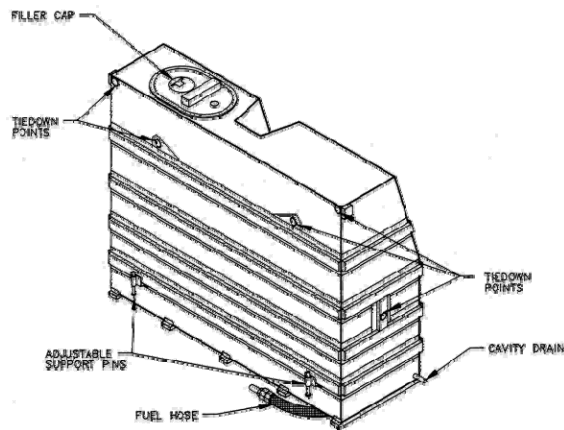
- Light Attack
- Close Combat Attacks
- Security & Escort
- Insertion
- Anti-personnel
- Reconnaissance
- Precision Delivery
- Combat Search & Rescue

AH-6i Weapons – Operationally Qualified, Multiple Stores, Easily reconfigurable

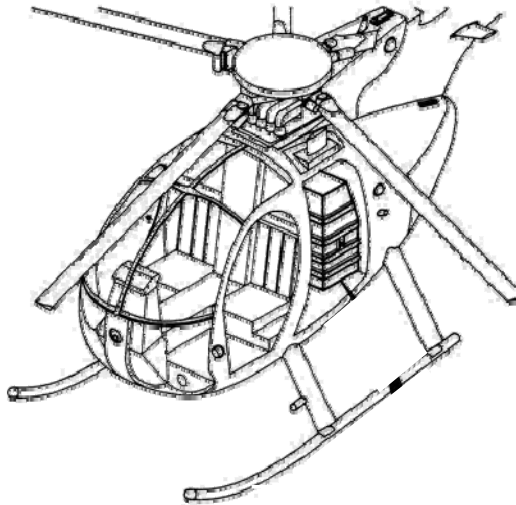
AH-6i Fuel Systems

2011 AH-6i Overview

Optional



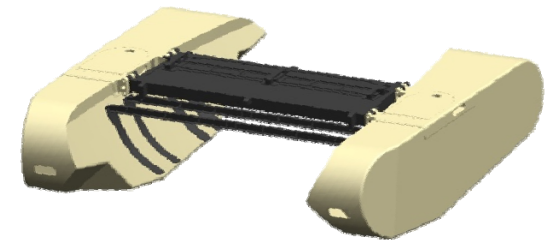
Goliath tank 60.0 gal



Configuration Options

Main tank.....61.1 gal

Optional



External tanks 62.4 gal

AH-6i Fuel System – Extended Range, Operational Flexibility

AH-6i Performance

2011 AH-6i Overview

Hellfire Mission (2 ea LH & RH, 2 pilots, full internal fuel, all doors off)

AH-6i - 3,876 lbs

Maximum Cruise Speed	KTAS Sea Level ISA	126
	6000 ft. 35 deg C	108
Maximum Permitted Speed	VNE (KCAS) at Sea Level	130
Maximum Range (Internal Fuel)	Sea Level ISA	290 km (157 nm)
	6000 ft. 35 deg C	324 km (175 nm)
Maximum Endurance (Internal Fuel)	Sea Level ISA	1.9 hr
	6000 ft. 35 deg C	2.0 hr
Maximum rate-of-climb	Sea Level ISA	2,019 fpm
	6000 ft. 35 deg C	1,650 fpm
Max Service Ceiling (predicted)	Density Altitude	20,000 ft
HIGE (Hover-in-ground Effect)	Standard Day	>14,000 ft
	35 deg C	9,925 ft
HOGE (Hover Out-of-ground Effect)	Standard Day	12,350 ft
	35 deg C	6,550 ft

AH-6i – Performance Specifications

AH-6i Performance

2011 AH-6i Overview

**M134D 7.62mm mini gun w/2000 rds LH & 7 shot
rocket pod RH , 2 pilots, full internal fuel, all
doors off**

AH-6i - 3,722 lbs

Maximum Cruise Speed	KTAS Sea Level ISA	126
	6000 ft. 35 deg C	111
Maximum Permitted Speed	VNE (KCAS) at Sea Level	130
Maximum Range (Internal Fuel)	Sea Level ISA	292 km (158 nm)
	6000 ft. 35 deg C	331 km (179 nm)
Maximum Endurance (Internal Fuel)	Sea Level ISA	1.9 hr
	6000 ft. 35 deg C	2.1 hr
Maximum rate-of-climb	Sea Level ISA	2,162 fpm
	6000 ft. 35 deg C	1,811 fpm
Max Service Ceiling (predicted)	Density Altitude	20,000 ft
HIGE (Hover-in-ground Effect)	Standard Day	>14,000 ft
	35 deg C	10,850 ft
HOGE (Hover Out-of-ground Effect)	Standard Day	13,525 ft
	35 deg C	7,500 ft

AH-6i – Performance Specifications

AH-6i Spectrum of Support

2011 AH-6i Overview

BASIC

Organic Traditional Support Service Components

Push Package

- Individual transactions for spares & repairs
- No performance metrics
- Customer manages supply chain
- Customer maintains full configuration management
- Customer provides O/I/D level maintenance
- Customer provides organic training
- High Administrative burden for Customer and Suppliers

- Spares
- Support Equipment

- Depot Repair
- Spares
- Support Equipment

- Logistics Support Representative
- Depot Repair
- Spares
- Support Equipment

- Contractor Field Service REP
- Logistics Support Representative
- Depot Repair
- Spares
- Support Equipment



PBL

Performance Based Support Performance Availability

Performance Based Logistics

- Product Support Integrator (PSI)
- Long term performance contract
- Performance metrics at highest level
- Configuration control
- Total logistics support (spares, SE, training, R&M, Tech Support)
- Supplier provides all I/D level maintenance
- Public Private Partnerships

- Maintenance Augmentation Team (MAT)
- Contractor Field Service REP
- Logistics Support Representative
- Depot Repair
- Spares
- Support Equipment

FULL SPECTRUM OF SUPPORT

Increasing Government Risk

Decreasing Government Risk

AH-6i PBL – Increased Readiness; Reduced Cost

AH-6i Summary

2011 AH-6i Overview

AH-6i Key Benefits



- Responsive to a Wide Range of Missions
-
- Reliable
-
- Maintainable
-
- Basic Configuration available within 24 Months of Contract Award



AH-6i – The “Total Mission” Solution



AH-6i

... the Modern Light
Attack/Reconnaissance Helicopter

Light Attack/Reconnaissance

COMBAT POWER

