# Lockheed Martin Your Mission Is Ours.

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SIKORSKY





S-701 BLACK HAWK MULTI-MISSION HELICOPTER

When Versatility & Survivability Matter











## **OVER 100 YEARS OF INNOVATION**

Proud of Our Legacy...Excited About Our Future



I always believed that the helicopter would be an outstanding vehicle for the greatest variety of lifesaving missions."

lgor I. Sikorsky Legendary Aviation Pioneer Founder of Sikorsky







## A MILITARY HELICOPTER FROM BIRTH

Black Hawk Helicopters are Designed for Combat Conditions



# **SPECIFICATIONS**

#### PERFORMANCE (Estimated)

Maximum Cruise Speed */**	160 kts	296km/hr
Economy Cruise Speed (99% Vbr)	128 kts	237 km/hr
Maximum Range (no reserve)	312nm	578km
Maximum Rate of Climb (full fuel, 15 000 lbs)	3,500 ft/min	17,8 m/sec
Maximum Ceiling (AEO)**	20,000 ft	6,097 m
Hover Ceiling - OGE **	11 000 ft	3,353m
Hover Ceiling - IGE **	15,000 ft	4,572 m
OEI Service Ceiling	6,780 ft	2,067 m

<sup>\*</sup>Standard day, see level; \*\*Configuration: 2 pilots, full fuel, 13 troops on board ( 18 000 lbs )

#### **FUEL CAPACITY**

Baseline Fuel Capacity	360 gal	1,362 L
Internal Aux	2 x 200 gal	1,514L
External Fuel (Ferry Flight)	4 x 200 gal	3,028 L

### **CABIN DIMENSIONS**

Utility Configuration	2 Pilots, 2 Cabins Crew Mem	2 Pilots, 2 Cabins Crew Members and 12 Troops	
Cabin Length	12.58 ft	3.84 m	
Cabin Width (on floor)	6.00 ft	1.82 m	
Cabin Width (at door)	7.00 ft	2.13 m	
Cabin Height	4.52 ft	2.95 m	
Cabin Area	88.00 sq-ft	8.18 sq-m	
Cabin Volume	396.00 cu ft	11.21 cu-m	
17 Tia-down Rings			

17 Tie-down Rings

Cargo floor rated at 300 psf (1,464 kg/m2)

Two storage compartments (20.34 cu-ft) over fuel cells

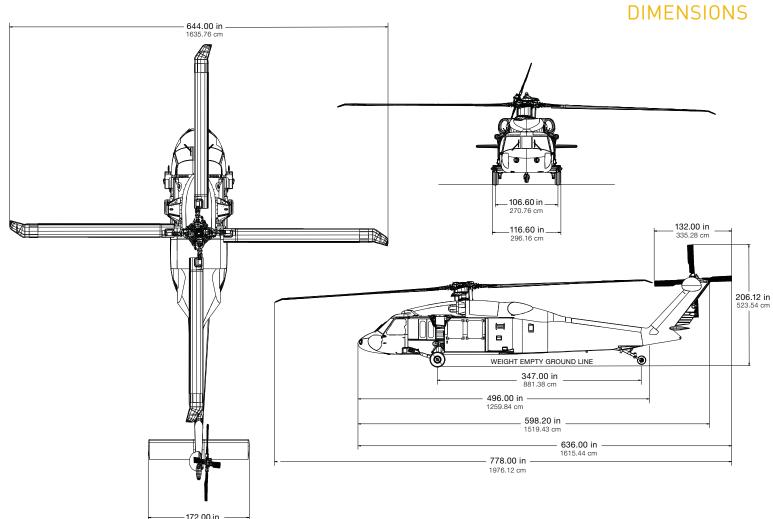
#### WEIGHTS

Empty Weight (excludes 11 cabin troop seats, 207 lb)	11,853 lb	5,376 kg
Maximum Take-off Gross Weight	22,000 lb	9,979 kg
Maximum Take-off Gross Weight with Sling Load	23,500 lb	10,659 kg
Maximun Sling Load Weight	9,000 ib	4,082kg

### POWER PLANTS (power of each engine, ISA conditions)

Quantity/Type	Two (2) - T7	Two (2) - T700-GE-701D	
2.5 Minute OEI Contingency	2,000 shp	1,471 kW	
10 Minute Takeoff Power	1,994 shp	1,467kW	
30 Minute Intermediate Power	1,902 shp	1,399 kW	
MAX Continuous Power	1,716 shp	1,262kW	





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## **SURVIVABLE**

Every BLACK HAWK is built to Military Standards for High Mass Retention which ensures cabin volume integrity with 20G forward, 20G down 10G up, 18G lateral forces applied, making the BLACK HAWK survivable in the most rigorous combat conditions.



## **VERSATILE**

One Helicopter. Many Missions. Every **BLACK HAWK** offers unparalleled performance in a variety of configurations so when the mission suddenly changes, the BLACK HAWK can adapt, quickly.

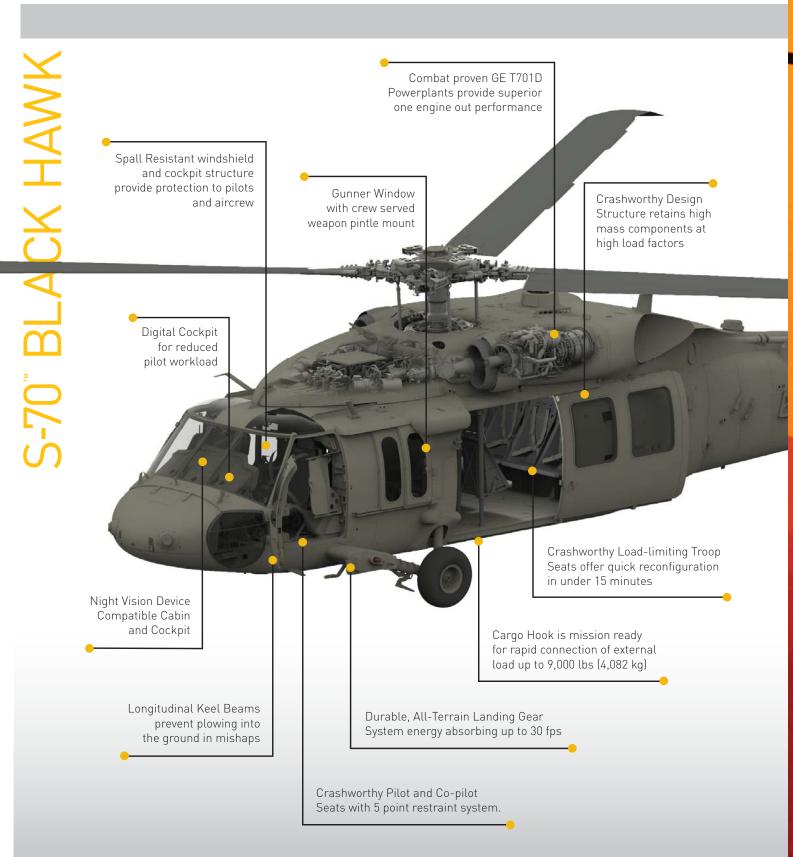


### **DEPENDABLE**

BLACK HAWKs have flown over 2.4 Million hours in recent Combat. 365, 24/7 you can count on the BLACK HAWK to be mission ready! Day or Night, Rain or Snow, Extreme Hot or Severe Cold, Anytime, Anywhere. Proven.

## **KEY DISCRIMINATORS**

Capability and Performance Make for a Successful Mission





### S-70i™ BLACK HAWK CUSTOMIZATION OPTIONS

#### MISSION EQUIPMENT

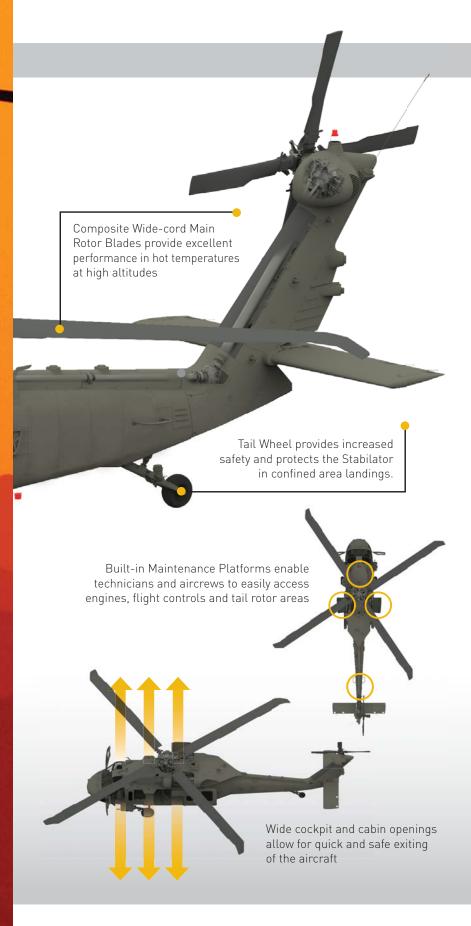
- Extended Landing Gear
- External Electric Rescue Hoist
- Medical Interior
- Engine Inlet Barrier Filter
- Power Sonic Loudhailer
- High-Powered Search Light
- Electro-Optical/Infrared System
- Environmental Control System
- Wireless Communications
- Moving Map System
- Mission Planning System
- Color Weather Radar

- Cargo Hook
- 1000 gal Water Tank w/
  Integrated Retractable Snorkel
- Triple Patient Litter System
- Flight Following SATCOM
- Rotor Brake
- Manual Blade Fold Kit
- Helicopter Emergency Lighting System
- AFC Mark on Top for SAR
- Commercial Radios w/ Emergency Services Communication

#### **WEAPONS SYSTEM**

- HELLFIRE Missiles
- 70mm Unguided Rocket
- GAU-19 12.7mm Machine Gun
- M3M .50 cal Cabin Floor Mounted Machine Guns

- M-134 7.62mm Machine Gun
- Weapons Management System
- Day/Night Heads Up Helmet Display



### **KEY ADVANTAGES**



USEFUL LOAD

10,350 lbs (4,695 kg)



RANGE

Baseline 312 nm (578 km) Ferry 825 nm (1528 km)



MAX CRUISE SPEED 160 kts (296 km/hr)



HOT TEMP/HIGH ALTITUDE

**Superior Performance** 



**EXTERNAL LOAD** 

9,000 lbs (4,082 kg)



AIR TRANSPORTABLE C-5, C-17, C-130, IL76



CABIN SEATING
12 + 2 Aircrew



CABIN ACCESS
68 in (1.7 m)



CABIN VOLUME
396 cu ft (11.2 cubic m)



### **DESIGNED FOR EXTREMES**

Equipped to Operate Safely Wherever Your Mission Takes You



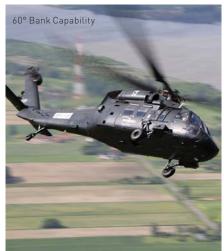
Designed to demanding Military Standards, the BLACK HAWK exceeds Civil requirements for operations in extreme temperatures.



### **Evasive & Maneuverable**

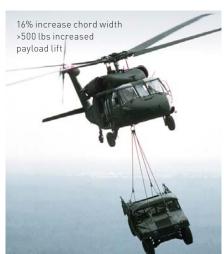
Ballistically Tolerant with a High Vertical Rate of Climb (VRoC) and Angle of Bank

• 3rd Generation Composite Wide Chord Main Rotor Blades provide improved tactical performance.









### Air Lift Transportable

Easily Transportable & Storable - Deployment <4 Hours









## MILITARY DESIGN ADVANTAGES

Designed for the Harsh Conditions of Combat

### Safe & Agile



Energy attenuating, non-tricycle, wheeled landing gear designed for unprepared landing zones and sloped areas:

- Absorbs energy in the event of a mishap/hard landing thereby protecting occupants from high loads.
- Landing Gear withstands sink rate of 30 fps with airframe 38 fps making it more than 5x safer than commercial aircraft..
- Allows for taking off and landing in significantly higher sloped terrain and/or unprepared surfaces.





BLACK HAWK Helicopters have proven capability in places where other aircraft cannot operate.

## ONE AIRCRAFT, MANY MISSIONS

Adapt Quickly, Respond Effectively



#### **BORDER PATROL**

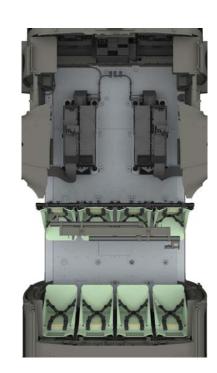
- Water Rescue
- Port Surveillance
- Armed Air Patrol
- Ship Capable Operations





#### ATTACK BLACK HAWK

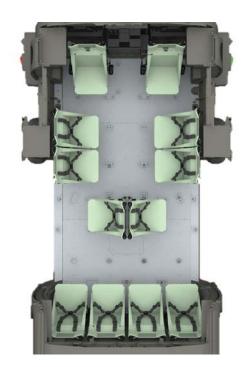
- Close Air Support
- Highly Accurate Targeting
- Qualified Weapons Systems
- Various Armament/Fuel Configurations





### **FIREHAWK**

- 1000 Gallon Water Tank
- Rapid Water Fill in 60 sec. Any Source
- Search and Rescue Ready
- Insert/Extract up to 13 Firefighters





#### **HEAD OF STATE**

- Flown and Trusted by 11 Nations
- Protection for Dignitaries
- Combat Crashworthiness/Survivability
- Durability for Austere Environments



BLACK HAWK® Helicopters Have a Long Legacy of Innovation Dedicated to the Support of Your Mission







