

S-70 BLACK HAWK MULTI-MISSION HELICOPTER

When Versatility & Survivability Matter









## A MILITARY HELICOPTER FROM BIRTH

Black Hawk Helicopters are Designed for Combat Conditions







## **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.

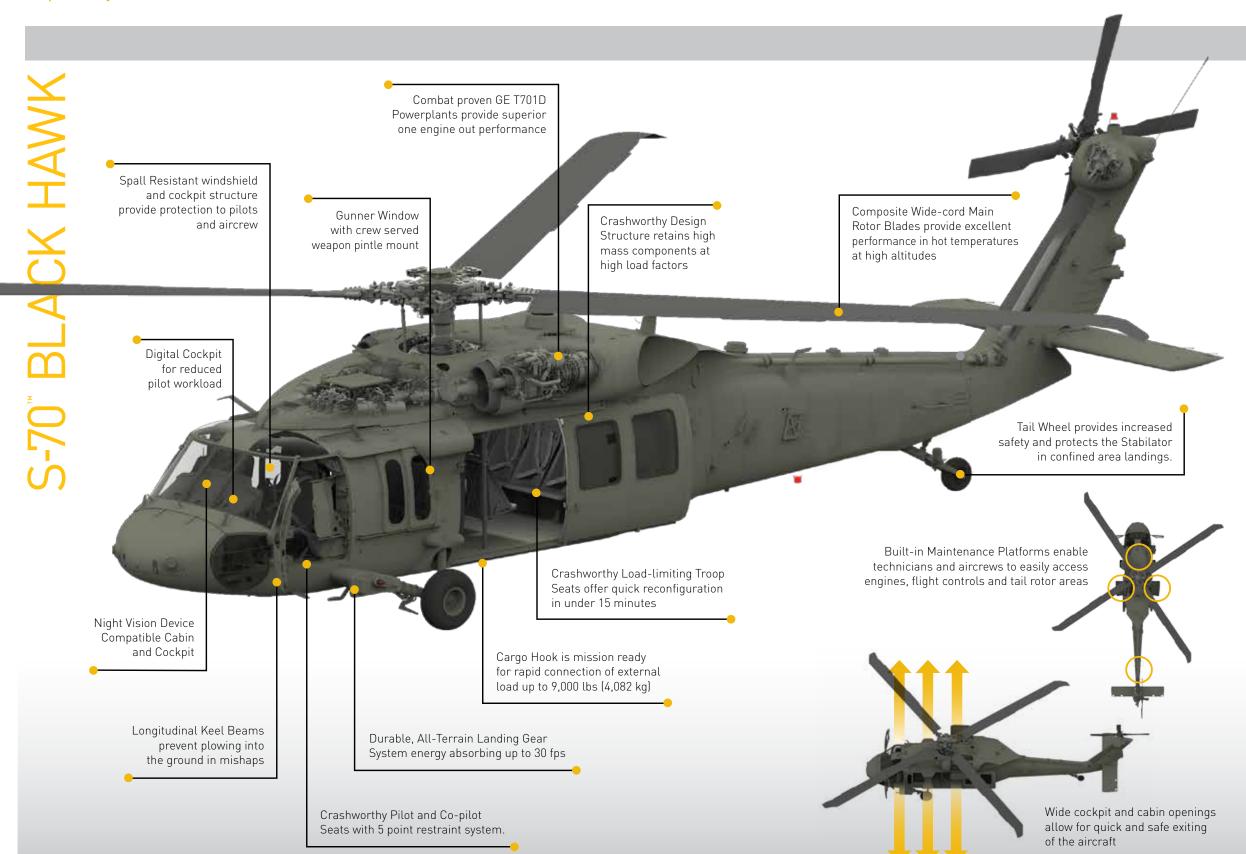


## **DEPENDABLE**

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



### **KEY ADVANTAGES**



USEFUL LOAD 10,350 lbs (4,695 kg)



**RANGE** 

Baseline 281 nm (520 km) Ferry 825 nm (1528 km)



MAX CRUISE SPEED 145 kts (268 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. BLACK HAWK Helicopters have proven capability in places where other aircraft cannot operate.

## ONE AIRCRAFT, MANY MISSIONS

Adapt Quickly, Respond Effectively



#### **BORDER PATROL**

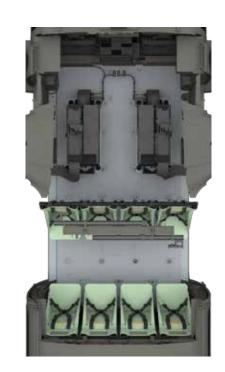
- Water Rescue
- Port Surveillance
- Armed Air Patrol
- Ship Capable Operations





#### ATTACK BLACK HAWK

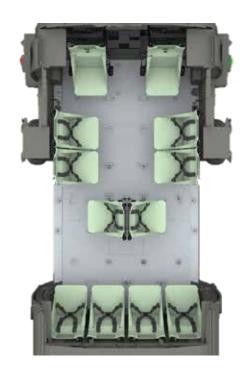
- Close Air Support
- Highly Accurate Targeting
- Qualified Weapons Systems
- Various Armament/Fuel Configurations





#### **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









## 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:

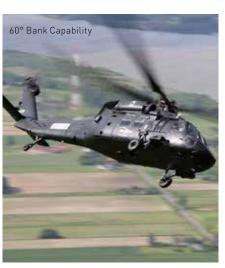
- Absorbs energy in the event of a mishap/hard landing thereby protecting occupants from high loads.
- Landing Gear withstands sink rate of 30 fps with airframe 38 fps making it more than 5x safer than commercial aircraft...
- Allows for taking off and landing in significantly higher sloped terrain and/or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



#### **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









## S-70™ 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

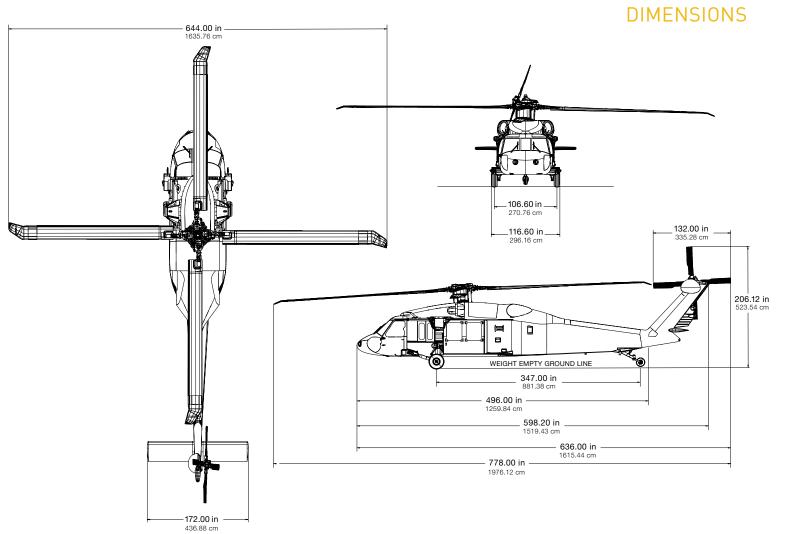
#### **WEAPONS SYSTEM**

- 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







# SPECIFICATIONS

| PERFORMANCE (Estimated)                                    |   |             |
|--|---|-------------|
| Standard day sea level, maximum gross weight (GW)          | 22,000 lb (unless otherwise noted)            |             |
| Maximum Speed (Vne)  | 163 kts                                       | 302 km/hr   |
| Maximum Cruise Speed (Vh)                                  | 145 kts                                       | 268 km/hr   |
| Economy Cruise Speed (99% Vbr)                             | 128 kts                                       | 237 km/hr   |
| Maximum Range (no reserve)                                 | 268 nm  | 496 km      |
| Maximum Rate of Climb                                      | 2,020 ft/min                                  | 10.26 m/sec |
| Maximum Ceiling  | 20,000 ft                                     | 6,097 m     |
| Service Ceiling  | 15,000 ft                                     | 4,572 m     |
| Hover Ceiling - OGE  | 6,200 ft                                      | 1,890 m     |
| Hover Ceiling - IGE  | 10,270 ft                                     | 3,130 m     |
| OEI Service Ceiling  | 6,780 ft                                      | 2,067 m     |
| 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 Members and 11 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 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                              | 23,500 lb                                     | 10,659 kg   |
| (external load and with Firefighting water tank installed) |   |             |
| POWER PLANTS (Sea Level Standard)                          |   |             |
| Quantity/Type  | Two (2) - T700-GE-701D                        |             |
| 2.5 Minute OEI Contingency                                 | 1,972 shp                                     | 1,471 kW    |
| 10 Minute Takeoff Power                                    | 3,910 shp                                     | 2,916 kW    |
| 30 Minute Intermediate Power                               | 3,738 shp                                     | 2,788 kW    |
| MAX Continuous Power                                       | 3,356 shp                                     | 2,502 kW    |

## **GLOBAL SUSTAINMENT & PRODUCT SUPPORT**

Availability Enabled by an Integrated Support Network



On Site Support



Parts Positioned Around the Globe



Original Equipment Manufacturer Parts and Repairs



Advanced Fleet Management and Logistics Tools



Training



24hr Customer Care Center



Engineering Services



Integrated Vehicle Health Usage Monitoring System (IVHUMS)



## **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."





## Lockheed Martin Your Mission Is Ours.

6900 Main Street, Stratford, Connecticut 06615 USA +1 (800) WINGED-S (946-4337) International +1 (203) 386-3029 www.lockheedmartin.com/sikorsky

