SIKORSKY

S-70™ BLACK HAWK®
MULTI-MISSION HELICOPTER

When Versatility & Survivability Matter
Over 3400 BLACK HAWK variants are in use today and have flown over 10 million hours. The BLACK HAWK has proven itself in the most austere environments providing an operational readiness rate of over 85% in combat conditions.

RUGGED, VERSATILE & ALWAYS MISSION READY

BLACK HAWK® is a registered trademark of Lockheed Martin Corporation
A MILITARY HELICOPTER FROM BIRTH

Black Hawk Helicopters are Designed for 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.

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.
KEY DISCRIMINATORS
Capability and Performance Make for a Successful Mission

S-70 BLACK HAWK

Combat proven GE T701D Powerplants provide superior one engine out performance

Spall Resistant windshield and cockpit structure provide protection to pilots and aircrew

Gunner Window with crew served weapon pintle mount

Digital Cockpit for reduced pilot workload

Crashworthy Design Structure retains high mass components at high load factors

Crashworthy Load-limiting Troop Seats offer quick reconfiguration in under 15 minutes

Cargo Hook is mission ready for rapid connection of external load up to 9,000 lbs (4,082 kg)

Durable, All-Terrain Landing Gear System energy absorbing up to 30 fps

Crashworthy Pilot and Co-pilot Seats with 5 point restraint system.

Built-in Maintenance Platforms enable technicians and aircrews to easily access engines, flight controls and tail rotor areas

Wide cockpit and cabin openings allow for quick and safe exiting of the aircraft

Spall Resistant windshield and cockpit structure provide protection to pilots and aircrew

Night Vision Device compatible Cabin and Cockpit

Longitudinal Keel Beams prevent plowing into the ground in mishaps

Tail Wheel provides increased safety and protects the Stabilator in confined area landings.

Wide cockpit and cabin openings allow for quick and safe exiting of the aircraft

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

BLACK HAWK Helicopters are designed to operate in Hot/Sandy environments.

BLACK HAWK Helicopters are designed to operate in Cold/Icing conditions.

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

ROADMAP TO 2060
Modernization Planning Vigourously Supported

FLEXIBLE FUEL CONFIGURATION
Expand Your Range Up to 825nm

QUICK CABIN RECONFIGURATIONS
Transport to SAR to Attack in Under 3 Hours

LOW RISK
Off-the-Shelf 100% On-time Delivery
MILITARY DESIGN ADVANTAGES

Designed for the Harsh Conditions of Combat

Safe & Agile

The tail wheel allows for greater safety in the event of high flare landings and greater maneuverability on the ground.

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

- 360° Bank Capability
- Anhedral tip reduces blade vortices
- 60% increase chord width
- 500 lbs increased payload lift
- Blade Indicator Monitor (BIM) Reduces Maintenance

Energy Attenuating, 3-Wheeled Landing Gear

- 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 (V RoC) and Angle of Bank

- Air Lift Transportable

Easily Transportable & Storable - Deployment <4 Hours

- Stabailler fold
- Tailpylon fold
- Tail pylon fold
- Blade fold

Air Lift Transportable

Easily Transportable & Storable - Deployment <4 Hours

- 60° Bank Capability
- Anhedral tip reduces blade vortices
- 60% increase chord width
- 500 lbs increased payload lift
- Blade Indicator Monitor (BIM) Reduces Maintenance

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

*Additional Options Available*
## SPECIFICATIONS

### PERFORMANCE

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard day sea level, maximum gross weight (GW)</td>
<td>22,000 lb (unless otherwise noted)</td>
</tr>
<tr>
<td>Maximum Speed (V&lt;sub&gt;ne&lt;/sub&gt;)</td>
<td>163 kts 302 km/hr</td>
</tr>
<tr>
<td>Maximum Cruise Speed (V&lt;sub&gt;h&lt;/sub&gt;)</td>
<td>145 kts 268 km/hr</td>
</tr>
<tr>
<td>Economy Cruise Speed (99% V&lt;sub&gt;br&lt;/sub&gt;)</td>
<td>128 kts 237 km/hr</td>
</tr>
<tr>
<td>Maximum Range (no reserve)</td>
<td>268 nm 496 km</td>
</tr>
<tr>
<td>Maximum Rate of Climb</td>
<td>2,020 ft/min 10.26 m/sec</td>
</tr>
<tr>
<td>Maximum Ceiling</td>
<td>20,000 ft 6,097 m</td>
</tr>
<tr>
<td>Service Ceiling</td>
<td>15,000 ft 4,572 m</td>
</tr>
<tr>
<td>Hover Ceiling - OGE</td>
<td>6,200 ft 1,890 m</td>
</tr>
<tr>
<td>Hover Ceiling - IGE</td>
<td>10,270 ft 3,130 m</td>
</tr>
<tr>
<td>OEI Service Ceiling</td>
<td>6,780 ft 2,067 m</td>
</tr>
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### FUEL CAPACITY

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Baseline Fuel Capacity</td>
<td>360 gal 1,362 L</td>
</tr>
<tr>
<td>Internal Aux</td>
<td>2 x 200 gal 1,514L</td>
</tr>
<tr>
<td>External Fuel (Ferry Flight)</td>
<td>4 x 200 gal 3,028 L</td>
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</table>

### CABIN DIMENSIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Configuration</td>
<td>2 Pilots, 2 Cabins Crew Members and 11 Troops</td>
</tr>
<tr>
<td>Cabin Length</td>
<td>12.58 ft 3.84 m</td>
</tr>
<tr>
<td>Cabin Width (on floor)</td>
<td>6.00 ft 1.82 m</td>
</tr>
<tr>
<td>Cabin Width (at door)</td>
<td>7.00 ft 2.13 m</td>
</tr>
<tr>
<td>Cabin Height</td>
<td>4.52 ft 2.95 m</td>
</tr>
<tr>
<td>Cabin Area</td>
<td>88.00 sq-ft 8.18 sq-m</td>
</tr>
<tr>
<td>Cabin Volume</td>
<td>396.00 cu ft 11.21 cu-m</td>
</tr>
<tr>
<td>Tie-down Rings</td>
<td>17</td>
</tr>
</tbody>
</table>

Cargo floor rated at 300 psf (1,446 kg/m²)
Two storage compartments (20.34 cu-ft) over fuel cells

### WEIGHTS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empty Weight (excludes 11 cabin troop seats, 207 lb)</td>
<td>11,853 lb 5,376 kg</td>
</tr>
<tr>
<td>Maximum Take-off Gross Weight</td>
<td>22,000 lb 9,979 kg</td>
</tr>
<tr>
<td>Maximum Take-off Gross Weight (external load and with Firefighting water tank installed)</td>
<td>23,500 lb 10,659 kg</td>
</tr>
</tbody>
</table>

### POWER PLANTS (Sea Level Standard)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Quantity/Type</td>
<td>Two (2) - T700-GE-701D</td>
</tr>
<tr>
<td>2.5 Minute OEI Contingency</td>
<td>1,972 shp 1,471 kW</td>
</tr>
<tr>
<td>10 Minute Takeoff Power</td>
<td>3,910 shp 2,916 kW</td>
</tr>
<tr>
<td>30 Minute Intermediate Power</td>
<td>3,738 shp 2,788 kW</td>
</tr>
<tr>
<td>MAX Continuous Power</td>
<td>3,356 shp 2,502 kW</td>
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</table>
“I always believed that the helicopter would be an outstanding vehicle for the greatest variety of lifesaving missions.”

Igor I. Sikorsky
Legendary Aviation Pioneer
Founder of Sikorsky