Sikorsky S-92 Search and Rescue Helicopter
The best value solution for saving lives
Best SAR Solution

In today’s environment, civil, paramilitary, and government helicopter operators confront performance imperatives and budget realities that have never been more demanding.

These operators have new and emerging opportunities and requirements to perform. They need and want the newest technology and the best, most reliable equipment available to perform multiple missions, including search and rescue, airborne law enforcement, or cargo but can’t afford to overpay for a system that is costly to own and operate.

Sikorsky has responded with the S-92 helicopter: the ideally sized and priced search and rescue helicopter system these customers are seeking. Cost-effective to own and operate, the new-technology S-92 delivers a fully modern cockpit with an automatic flight control system and weather radar; unprecedented cabin size and versatility; an impressive record of reliability; and the complete backing and support of Sikorsky Aircraft – the search and rescue innovator.

The all-weather capable S-92 is available now as the off-the-shelf platform of choice for search and rescue missions worldwide. It’s a powerful search and rescue tool, so when people are relying on you, you can rely on the S-92.

THE BOTTOM LINE

New technology. Better value.
The best choice for the search and rescue mission.
Sikorsky S-92.
Decades of Delivering Hope

Building on Our SAR Heritage

In the world of vertical flight, one name stands above the rest. Long known for setting the standard of excellence for the world’s civil and military helicopters, Sikorsky Aircraft has exceeded operator expectations with the S-92 helicopter.

The all-weather capable S-92 is the latest in a family of Sikorsky helicopters that have been delivering hope around the world for six decades, fulfilling Igor Sikorsky’s vision of the helicopter as a life-saving tool. For the challenging requirements of search and rescue, casualty evacuation, homeland security, airborne law enforcement and more, customers continue to turn to Sikorsky and its unmatched legacy of search and rescue experience and effectiveness.

The high-technology S-92 is certified to the latest FAA/JAA Part 29 regulations, while incorporating benefits such as active vibration control, composite blades, and an array of the most advanced safety features that are a generation ahead of competitive helicopters. It’s the ideal helicopter for people in need because it was designed to get in and get people out, safely and reliably, mission after mission, rescue after rescue.

THE BOTTOM LINE | Sikorsky has combined modern certified technology and a legacy of search and rescue excellence in the S-92, an affordably priced helicopter available now.
A RICH SAR HERITAGE

Sikorsky Aircraft’s legacy of lifesaving began more than 60 years ago with the world’s first airborne rescue, and continues today. The S-92 incorporates the latest advances in search and rescue technology.
Speed, stability and responsiveness are all key components to search and rescue effectiveness, and, again, the S-92 helicopter delivers on all counts.

The S-92 cockpit design reduces pilot workload, and has exceptional handling qualities and maneuverability during approach, hover and landing. Smart and simple to operate, the S-92 features the Rockwell Collins/Sikorsky Avionics Management System, which presents audio cues along with intuitive flight symbology and systems data on four fully redundant Multi Function Liquid Crystal Displays with a fifth display optional. Especially beneficial is the SAR Automatic Flight Control System (AFCS) functionality, which integrates weather radar, thermal imagers and other search sensors. The cockpit also offers an unmatched field of view.

The S-92 combines the agility to fly in and out of tight spaces with the power needed to fly in challenging environments while carrying heavy loads. It also meets the single-engine inoperative requirements of JAR Ops 3.

**The Bottom Line**

The S-92 offers superior technology that delivers unmatched search and rescue mission effectiveness.
Automatic Approach to Hover/ Automatic Departure

**Approach 1**
- 1.2 kts/sec deceleration
- 200 ft/min down
- RAD ALT on 200 ft
- IAS mode on 80 kts

**Approach 2**
- 1.2 kts/sec deceleration
- 200 ft/min down
- RAD ALT on 200 ft
- IAS mode on 80 kts

**Hover**
- VHLD on 0 kts
- RAD ALT on 50 ft

**Depart**
- 1.2 kts/sec acceleration
- 200 ft/min up
- RAD ALT on 200 ft
- IAS mode on 80 kts

Phases:
- **Phase 1**: Aircraft position loaded into FMS and both Flight Directors
- **Phase 2**: Deceleration to 80 knot windspeed
- **Phase 3**: IAS Hold engaged
- **Phase 4**: Radar Altitude Hold engaged at 200 feet
- **Phase 5**: APR2 Mode engages

Superior SAR Displays: Pilots benefit from the S-92 Universal Flight Management System with Multi Mission Management System, which provides search patterns to multi-function displays.

The S-92’s Automatic Flight Control System reduces pilot workload, provides excellent stability, and greatly improves flight crew situational awareness during SAR operations.
Whether you need to perform a complex rescue operation or deliver food and water, the S-92 helicopter is the ideal aircraft, with the robust flexibility and performance required for the search and rescue mission.

Sized for the ultimate in maneuverability and flexibility, the S-92 offers the largest cabin of any helicopter in its class. The cabin is 20-feet long (6.10 m) and six-feet high (1.83 m) — tall enough for passengers and crew to stand and move comfortably. It rapidly converts to perform a variety of missions, including SAR, airborne law enforcement, cargo, evacuation, mass casualties, and more. In a casualty evacuation configuration, the S-92 accommodates 16 NATO litter patients and two attendants.

Easy to configure, the S-92 provides standard seating for 10 and optional seating for up to 22 people. It features a 50-inch right-side sliding door, which is large enough to easily accommodate a standard Stokes litter with unrestricted rescue hoist access.

The hoist can lift 600 pounds (272 kg) and is electrically powered and controlled, providing 290 feet (88.4 m) of usable cable with a spotlight. An optional left-side sliding door is also available, as is an optional 10,000-pound (3,629 kg) cargo hook for external lift operations.

The S-92 also includes a nearly 7-foot-wide rear ramp that accommodates 700 pounds (317 kg) and enables quick and easy cargo loading and offloading. The ramp compartment also provides additional stowage space. The S-92 is the only helicopter in its class capable of flying at maximum speed with the ramp door open, enabling crews to rapidly egress or drop lifesaving equipment to those in need.

**THE BOTTOM LINE**  The S-92 offers a uniquely spacious cabin to maximize mission flexibility and search and rescue effectiveness.
Born to the SAR Mission


Even in the toughest scenarios, Sikorsky's S-92 helicopter outperforms other aircraft. The S-92 features an advanced rotor system, and 5,000+ installed horsepower twin turboshaft engines for exceptional range.

It can fly programmed search patterns for one hour, 175 nautical miles (324 km) from shore, and then hoist six survivors aboard and return to base with 30 minutes of reserve fuel. Optional internal auxiliary fuel tanks are available for even more range. It has ample power reserves to work with heavy loads in high-density altitudes.

When severe weather strikes, the S-92 will weather the storm with ease, keeping crew and passengers secure. The aircraft is FAA and JAA certified to fly in known icing conditions with optional protection for the main rotor and tail rotor, and features standard protection for the engine inlets, windshield and air data system.

**THE BOTTOM LINE**  The S-92 offers outstanding power, range and features, making it the ultimate SAR helicopter.
Sikorsky offers a robust menu of standard and optional equipment that allows operators to customize the already well-equipped S-92 helicopter and further enhance mission effectiveness.

**Cabin**
- Up to 22 side-facing utility seats
- Left-side sliding door

**Communications/Navigation**
- HF radio*
- Weather radar*
- Fifth multi-functional display
- Secure communication
- 360° search radar

**Search and Rescue**
- Right- and left-side bubble windows*
- Forward Looking Infrared (FLIR)*
- SAR Automatic Flight Control System (AFCS)*
- Dual rescue hoist with spotlight
- Digital map
- Internal auxiliary fuel
- Wire strike protection
* Standard equipment

**The Bottom Line**
The S-92 offers SAR operators proven optional equipment for increased mission effectiveness.
Proven Safety

Safety That’s a Generation Ahead

The only effective mission is a safe mission, where crews are kept out of harm’s way. The S-92 helicopter leads the safety category with fully redundant systems and features that are a generation ahead. Safety was designed into the S-92, making it the first helicopter to meet stringent safety requirements established by the FAA and JAA.

The S-92’s fuel system is self-contained and meets the highest crashworthiness standards. Energy-absorbing seats and landing gear are designed to minimize the effects of a hard landing.

The aircraft’s array of preventative safety features are equally impressive, and include redundant systems for flight controls, avionics, cockpit displays, electrical systems and engine controls, health and usage monitoring to capture and record operational flight data, plus certified bird-strike protection and turbine burst protection.

The Enhanced Ground Proximity Warning System (EGPWS) is standard equipment on the S-92. Additionally, Sikorsky initiated the art of flaw-tolerant design, which maximizes the reliability of S-92 parts for the highest possible degree of component safety.

Of course, the S-92 delivers all-weather safety for any condition, any time, and in any environment – so whether crews are flying in the desert, over a mountain, or across an ocean, they may fly with peace of mind day and night.

The S-92’s weather-related safety assurances include weather radar, optional main and tail rotor ice protection, lightning protection and High Intensity Radiated Field (HIRF) protection so that critical electronic systems are protected from Electromagnetic Interference.

**THE BOTTOM LINE**  Sikorsky’s S-92 is the safest helicopter in its class.
“... an outstanding improvement in fundamental helicopter technology”
American Helicopter Society, 2003, upon conferring the Howard Hughes Award for industry-leading, flaw-tolerant design

“... the greatest achievement in aeronautics”
National Aeronautic Association, upon award of the prestigious 2002 Collier Trophy (left)

Sikorsky S-92 cutting edge safety features include:

1. High-visibility cockpit
2. High-Intensity Radiated Field protection (HIRF)
3. Health and Usage Management System (HUMS)
4. Enhanced Ground Proximity Warning System (EGPWS)
5. Crashworthy seats for all occupants
6. Fuel sponson design keeps fuel away from passengers, but does not interfere with SAR mission
7. Suction fuel system prevents hazardous fuel spray
8. Energy absorbing landing gear
9. Built-in corrosion resistance
10. Bird-strike protection at maximum aircraft speed
11. Lightning strike protection
12. High energy turbine burst protection
13. Flaw-tolerant design
14. Optional FAA/JAA certified Rotor Ice Protection System (RIPS)

All-Weather Capable
With the optional FAA and JAA certified Rotor Ice Protection System (RIPS) installed, the S-92 can launch in any weather.
Economics were a prime consideration in the design of the S-92, making it unique as a thoroughly modern helicopter that is exceptionally cost effective to own and operate.

So in addition to achieving superior range and fuel efficiency when compared to competitive helicopters, the S-92 has the lowest direct maintenance cost — by far — of any helicopter in its class. Because this helicopter was designed for longevity, the S-92’s maintenance features have been embedded into its structure and avionics. The flaw tolerance designed into the S-92 for safety also
Cost Effective To Own and Operate

<table>
<thead>
<tr>
<th>Direct Maintenance Cost is 30% lower</th>
<th>Maintenance man-hours per flight hour are 23% lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,373 per flight hour</td>
<td>$975 per flight hour</td>
</tr>
<tr>
<td>S-92</td>
<td>S-92</td>
</tr>
</tbody>
</table>

An independent study (Conklin & de Decker) shows that the S-92 has much lower operating costs than other helicopters in its class. Numbers shown are in 2005 US dollars.

allows original parts to remain in service much longer than with other aircraft models, lowering direct material and operating costs.

In addition to a damage-tolerant design, these cost-saving features will deliver value day in and day out for the life of the aircraft: on-condition engines, rotors, avionics and airframe; HUMS diagnostics; simplified and maintainer-friendly access for inspections; maximized field-level repair; and reduced support equipment.

**THE BOTTOM LINE** The Sikorsky S-92 is more cost effective to own and operate than any other helicopter in its class.
Superior Service

Only Sikorsky combines solid support systems, based on long-standing and proven maintenance programs, with state-of-the-art capabilities that are unique to the industry.

Fast. Knowledgeable. On site and on time. We keep operators flying, with around-the-world and around-the clock-service and a comprehensive program that includes spare parts, overhaul and repair, training, on-site technical and logistics representatives, ground support equipment, publications and more.

Sikorsky also offers full motion flight simulation, maintenance training, engineering support, and will assign your program a single point-of contact to simplify the support process across-the-board.

An important aspect of our S-92 helicopter support program is the unique on-condition maintenance system, which minimizes the requirements to schedule component removals and overhauls.

**The Bottom Line** | The S-92 worldwide customer service team will work with your support personnel to increase flight readiness, improve ease-of-use, and reduce costs.
Among Sikorsky’s outstanding customer service programs are S-92 flight training on ultra-realistic Level D flight simulators, and maintenance training using an actual full aircraft maintenance trainer.
The S-92 helicopter features two General Electric CT7-8A turboshaft engines with integral particle separator and pneumatic starting system. In addition, the aircraft includes a Honeywell 36-150 auxiliary power unit for on the ground or in the air emergency power.

The main rotor system is a four-bladed fully articulated system, designed to meet FAA flaw tolerance standards. The standard avionics package features Rockwell Collins Proline Communication and Navigation Radios, four portrait-oriented Multifunctional Display (MFD) units, and two Display Control Panels (DCP) units, which control the navigation mode selection and provide adjustment of the reference parameters. The aircraft includes a digital automatic flight control system and a coupled flight director.

The basic fuel of 760 gallons (2877 liters) is stored in two external sponsons with self-sealing breakaway valves.

### S-92 Search and Rescue Mission Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Standard</th>
<th>Available Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 utility seats - side facing fold-up (provisions for up to 22 seats)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Right-side full height aft-sliding door</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Enhanced Ground Proximity Warning System (EGPWS)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Single rescue hoist with spotlight</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Forward looking Infrared (FLIR)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SAR Automatic Flight Control System (AFCS)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>HF Radio</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Direction finder</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Searchlight, Nightsun II</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Bubble windows (right-side and left-side)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Louhdhailer</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>VHF/UHF/AM/FM, Global Wulfsberg Flexcomm II with guard receiver</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Flight Management System with MMMS</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SATCOM</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Weather Radar (Honeywell 701)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Sea tray</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SAR crew swivel seats (right-side and left-side, fore and aft tracking)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Automatic Deployable ELT (ADELT)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Emergency flotation system</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>21 person capable life rafts (right-side and left-side)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Traffic Collision Avoidance System (TCAS)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Health and Usage Management System (HUMS)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>22 utility seats</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Dual rescue hoist with spotlight</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Night Vision compatible (NVG) cockpit</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Cargo hook</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Internal auxiliary fuel</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Digital map</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>360° search radar</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Air conditioning</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Rotor Ice Protection System (RIPS)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Wire strike protection</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CASEVAC - Up to 16 litters</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Cabin centerline cargo winch and cabin/ramp floor roller system</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
Multiple Cabin Configuration options

With its exceptionally large cabin, the S-92 helicopter delivers a range of interior options to maximize flexibility and value for search and rescue operators.

- **Standard Search and Rescue (SAR)**
  - 10 passenger

- **Search and Rescue with 19 fold-up utility seats**
  - and right-side sliding door

- **Search and Rescue with internal auxiliary fuel tank**

- **Search and Rescue with 22 fold-up utility seats**
  - and right- and left-side sliding doors

- **Search and Rescue with dual internal auxiliary fuel tanks**

- **Casualty Evacuation (CASEVAC)**
**S-92 Specifications**

*Standard Day Sea Level at 26,500 lb/12,020 kg gross weight*

<table>
<thead>
<tr>
<th>Specification</th>
<th>165 kts</th>
<th>306 km/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum speed (V_{ne})</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum continuous cruise speed</td>
<td>151 kts</td>
<td>280 km/hr</td>
</tr>
<tr>
<td>Long range cruise speed</td>
<td>136 kts</td>
<td>253 km/hr</td>
</tr>
</tbody>
</table>

Mission range at long range cruise speed

- Range, MTOGW, standard fuel, 30 minute reserve      | 457 nm  | 847 km    |
- Range, MTOGW, 30 minute reserve, standard fuel plus 370 gallons internal auxiliary fuel | 759 nm  | 1,406 km  |
- Mission radius of action, standard fuel, 30 minute reserve, 2 survivors, 1 hour time on station | 241 nm  | 447 km    |
- Mission radius of action, standard fuel, 30 minute reserve, 2 survivors, mission radius of action, standard fuel, 30 minute reserve, 2 survivors, 241 nm  | 189 nm  | 350 km    |

Service ceiling                                      | 14,525 ft | 4,427 m |
Hover ceiling out-of-ground effect                   | 6,698 ft  | 2,042 m  |
Hover ceiling in-ground effect                       | 10,912 ft | 3,326 m  |

Maximum takeoff gross weight, civil configuration

- Internal load                                       | 26,500 lb | 12,020 kg |
- External load                                       | 28,300 lb | 12,837 kg |
- Useful load                                         | 9,775 lb  | 4,434 kg  |

Maximum external load                                 | 10,000 lb | 4,536 kg  |

Weight empty                                          | 16,725 lb | 7,586 kg  |
Operating weight empty                                | 17,572 lb | 7,971 kg  |

Maximum fuel load, (internal, standard)               | 5,130 lb  | 2,327 kg  |
Maximum fuel load, (internal, auxiliary 370 gallons)  | 7,628 lb  | 3,460 kg  |

**Dimensions**

- Height: 3.88m
- Height: 5.26m
- Height: 17.7m
- Width: 5.12m
- Length: 16.10m
- Height: 3.35m
- Width: 4.32m
- Length: 17.17m
- Height: 1.10m
- Width: 4.71m
- Length: 20.40m
- Height: 3.18m
- Width: 5.12m
- Length: 17.17m
- Height: 1.73m
- Width: 4.71m
- Length: 20.40m
There are those who fly.
And those who fly Sikorsky.

For the world's most successful search and rescue operators, Sikorsky is the only way to fly. As the world's premier provider of rotorcraft, Sikorsky goes above and beyond to deliver a complete helicopter experience. Sikorsky not only sets the standard for rotorcraft excellence and safety — we exceed it with:

- Innovative solutions
- A proven family of high-performing helicopters
- Superior value
- Unparalleled service and support.

In the world of vertical flight, one name stands above the rest. Sikorsky.

For a confidential consultation, demonstration, or for more information about Sikorsky’s S-92 helicopter, please contact our search and rescue marketing specialist.
There are those who fly.
And those who fly Sikorsky.