

SIKORSKY A LOCKHEED MARTIN COMPANY





# EXPECTATIONS. PERFORMANCE. LEADERSHIP.

#### THE ELEMENTS OF YOUR SUCCESS.

As a leader, you expect exceptional performance from yourself, from your associates and from the tools and equipment that drive all that you do.

These are the same elements of success Sikorsky Aircraft Corporation has embraced in developing the S-76D™ executive helicopter. Above all, the focus is on performance from the company that pioneered and perfected the modern helicopter.

For more than three decades, corporate executives and heads of state have recognized the S-76° series as the standard of excellence for personal transportation. The S-76 series, with more than 6.8 million flight hours of time tested value in rotor wing transportation, is the solid foundation of the new S-76D helicopter.

The S-76D helicopter brings together the advanced technology, comfort and safety you have come to expect from Sikorsky. It also embraces the highest level of proven helicopter reliability in today's marketplace: the ultimate combination of productivity and performance.

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# COMFORT AND CONVENIENCE

### For the Few Who Have Reached the Pinnacle of Success

The large, comfortable and quiet cabin has been refined to meet the exacting needs of the Fortune 500 business traveler. It can be configured to meet your personal requirements, as an extension of your office to add to your productivity. The S-76 helicopter's strengths include low internal acoustic levels and a smooth ride.

Sikorsky's active vibration control and Quiet Zone™ transmission technology assures that your flight is extraordinarily smooth and pleasantly quiet. The acoustically enhanced environment of the cabin allows you to conduct business conversations or just relax and enjoy the flight. Sikorsky can schedule a demonstration flight at your convenience, allowing you to personally experience the smoothest and quietest executive helicopter for yourself.

While the S-76D helicopter is quiet inside, your neighbors will also appreciate that it's quieter outside as well. In this version, Sikorsky introduces a cutting edge technology quiet tail rotor and improved main rotor blades for reduced acoustic levels.

The combined effect of these technologies results in a helicopter that meets the most stringent proposed noise standards.













# COMFORTABLE PERFORMANCE

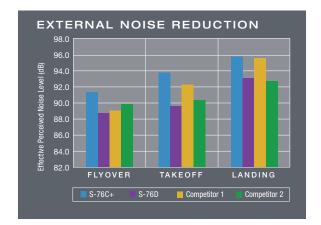
#### **Spacious Custom Interiors**

Sikorsky designers will work with you to develop a customized interior to tune the large airy S-76 aircraft cabin to your needs and desires. We offer a wide variety of cabinetry and seating configurations ranging from five to eight passengers.

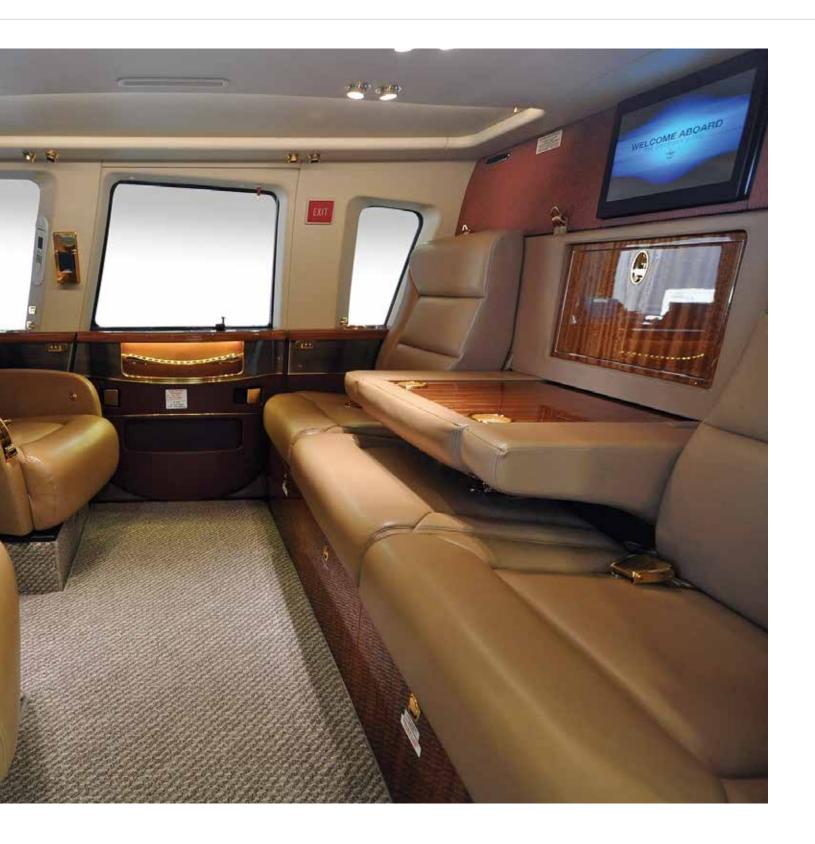
You can choose from a wide selection of fabrics, leathers, colors, amenities and features to make the S-76D helicopter cabin reflect your personal style.

Entry and exit are easy through large, limousine-like cabin doors with electrically extendable steps. The unique ability of the S-76 helicopter to hold the rotor system still while running an engine to supply electrical power allows safe, comfortable loading and unloading into cabin.

Sikorsky's exclusive active vibration control and Quiet Zone transmission technology assure that flights are extraordinarily smooth and quiet in the cabin with acoustic enhancements that allow normal conversations.







# SAFE, POWERFUL, RELIABLE

#### **Superior Performance**

The superior performance of the S-76D helicopter is the culmination of more than 30 years of technology advancement for the aircraft. The result is a combination of attributes that will keep the S-76D helicopter best-in-class.

The S-76D helicopter benefits from a new Pratt & Whitney Canada engine. The PW210S twin turbines provide increased horsepower without increasing fuel consumption. The additional horsepower translates into improved take-off and landing performance.

The S-76D helicopter will perform Cat A takeoffs at gross weight on hot, humid days. All of this with the ensured reliability, ease of maintenance and the support of the world's leading engine manufacturer – Pratt & Whitney.

These advancements in engine technology also give the aircraft extended endurance of up to three hours. The result is a helicopter with excellent power-to-weight ratio and best-in-class fuel burn.

The PW210S engines' low fuel consumption contribute to lower carbon emissions. The engines incorporate dual channel Full Authority Digital Electronic Controls (FADEC) with state-of-the-art diagnostic capability. New all composite main and tail rotor blades incorporate Sikorsky's optional Rotor Ice Protection System\* (RIPS).

The aircraft's main rotor hub is a derivative of the rotor hub on UH-60 BLACK HAWK helicopters, a system that has flown successfully for millions of hours in every imaginable flight environment.

The S-76D brings it all together, a clean airframe, low drag rotor system and efficient, 21st century technology engines. A best-in-class rating for low fuel consumption. Low fuel consumption translates into fewer emissions.



\*Under Development



# MODERN COCKPIT TECHNOLOGY

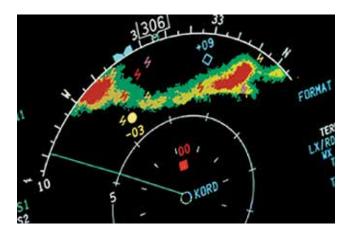
#### **Advanced Technology Ready When You Are**

The S-76D helicopter features state-of-the-art cockpit technology from Thales that is equal in sophistication with your corporate jet and today's modern airliners. In fact, the S-76D helicopter is the only aircraft to offer the Thales TopDeck\* avionics suite specifically designed for helicopters.

Easy to read, large-format liquid crystal displays have been consolidated in an efficiently designed console for improved visibility and field of view. Other features such as innovative trackballs for cursor control on the display units, customer defined custom checklist uploads and built in emergency procedures promote ease of use. A digital map with optional integrated Jeppesen approach plates is also available. The avionics suite enables additional situational awareness for the pilots, reducing workload and enhancing safety.

Proven in other aircraft installations, the sophisticated Thales TopDeck avionics package includes a four-axis, fully coupled autopilot to reduce workload and provide additional margins of safety. This technology allows for single or dual pilot Instrument Flight Rule (IFR) operations, a feature critical to safe operations in changing weather conditions.

The Thales solution is a mature application designed for the helicopter. It is proven, reliable and fully supported by Sikorsky.







## SAFETY YOU EXPECT FROM SIKORSKY

### Safe, Reliable Flight in All Weather Situations

After more than 6.8 million hours in flight, the S-76 helicopter has an outstanding and enviable record for safety and reliability. The S-76D executive helicopter builds on that legacy with leading-edge safety features, including redundant systems for flight controls, avionics, cockpit displays and a health monitoring system that captures and records operational data. Now Sikorsky partners with Flightscape to provide an OEM supported Helicopter Flight Data Monitoring (HFDM) solution. HFDM can replay flight operations and supports JAR-OPS 3 compliance.

Coordinated through Sikorsky's Customer Care Center, these monitoring solutions combine solid support systems based on long-standing and proven maintenance programs, with state-of-the-art capabilities that are unique to the industry.

An Enhanced Ground Proximity Warning System (EGPWS) is standard on the S-76D executive helicopter. A combined FlightData Recorder (FDR) and Cockpit Voice Recorder (CVR) are also standard.

Because your need to travel can be anytime and in any conditions, the S-76D executive helicopter is designed and equipped for safe, reliable flight in all weather situations. Fly with peace of mind in any environment and over all terrain. The S-76D aircraft is protected against lightning strikes and sensitive avionics are shielded to protect against electromagnetic interference.

Additionally, passenger and crew survivability equipment includes an integrated Emergency Flotation System (EFS), with an Automatic Flotation Deployment System (AFDS) as an available option.

These safety and high reliability components are designed into the S-76D executive helicopter, significantly increasing aircraft safety.



#### **SAFETY COMES FIRST**

The S-76D is the result of years of continuous improvement based on real operational experience. We bring 21st century technology and improvements to a proven airframe that is supported by our broad experience with other Sikorsky products such as the UH-60 BLACK HAWK and the S-92. The S-76's outstanding safety record is further augmented with the excellence of Flight Safety International training and the talent and dedication of our customers.





#### **CUTTING EDGE FEATURES INCLUDE**

- 1 Honeywell EGPWS
- 2 Thales TopDeck\* avionics solution
- 3 Rotor Ice Protection System (Optional)
- 4 Ice diverting engine inlets

- 5 PW210S engines
- 6 Dual Channel FADEC with diagnostics
- 7 Goodrich Vigor™ HUMS
- 8 Cockpit voice recorder / flight data recorder

## EXCEPTIONAL SERVICE

At Sikorsky, our mission is to provide the best aircraft service in the industry.

We have over 90 years of experience supporting rotorcraft deployed globally in some of the most remote locations on earth. From battlefields to offshore oil platforms, Sikorsky has proven itself year over year to be a reliable and committed source for all services needed to keep your aircraft flying and safe.

Wherever your mission takes you, Sikorsky will be there with you.

We pride ourselves on gaining a deep understanding of your operations, aircraft, and missions so we can provide proactive service and solutions to maximize your aircraft availability.

Our support begins even before you purchase your Sikorsky aircraft. We engage with your team, understand your business needs and help you choose the appropriate aircraft and provisioning based on your mission. Our comprehensive service offering include:

### **Pre-Operation Services**TO ENSURE YOU HAVE WHAT YOU NEED

**Facility Planning Services** 

- Infrastructure
- Spares Planning
- Tooling and GSE

Pilot/Maintenance Training

Aircraft Delivery

# In-Operation Services TO ENSURE CONTINUED AIRCRAFT AVAILABILITY AND SAFETY

Flight Hour based Warranty Programs

(Total Assurance Program and Powertrain Assurance Program)

**AOG** Resolution

On Site Support

Spares/Depot Management

Overhaul & Repair

Aircraft Modification/Upgrade Services

**Publications** 

**Product Alerts and Bulletins** 

**Engineering Services** 

Pilot/Maintenance Training



#### Help is Just a Call Away 1-800-WINGED-S

Our new state-of-the-art Customer Care Center is the heart of our customer support.

Open around the clock, fully staffed with technical and logistics experts, the center is ready to receive your call for assistance. All customer needs are logged, assigned and rapidly solved. Solutions are communicated as fast as possible and cases remain open until the customer confirms resolution. This center is staffed with the sole purpose of solving your needs to keep your aircraft available and flying.

The Customer Care Center is also home to our fleet analytics team that provides pro-active fleet management services. Using the daily fleet HUMS data and proprietary advanced analytics, Sikorsky measures aircraft component wear very precisely. Predicting when a spare will be needed before its needed allows us to pre-position spares at forward stocking locations near the point of usage keeping your aircraft in the air.

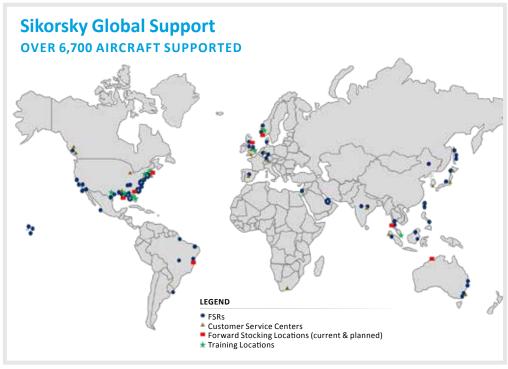


State-of-the-Art Customer Care Center is open 24/7/365 to support your aircraft from Fleet Management to AOG Resolution

Our Expanding Global Support Network provides improved access to services and rapid response to urgent customer needs



Providing global support regionally through Sikorsky-authorized service centers



### S-76D EXECUTIVE FLEXIBLE CABIN OPTIONS

#### **Executive Transport Cabin Configurations**

The large rectangular cabin of the S-76D helicopter with the Silencer<sup>™</sup> acoustic level reduction system can be custom configured to meet your requirements in style and comfort. Seating options are illustrated below. Our interior design and completion experts will assist in developing the interior that's right for you.



6 Place with forward cabin, aft view



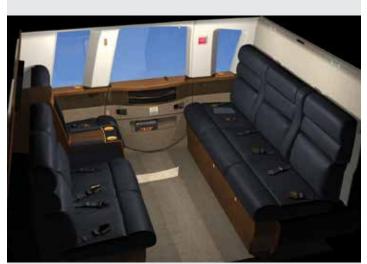
6 Place with forward cabin, forward view



6 Place with aft cabin, aft view



6 Place with aft cabin, aft view



7 Place cabin, aft view



7 Place cabin, forward view



8 Place cabin, aft view



8 Place cabin, forward view

### S-76D EXECUTIVE CONFIGURATION AND OPTIONS

#### **Basic Configuration**

The new S-76D helicopter builds on the proven success of over 800 S-76 series aircraft delivered. Propulsion is supplied by two Pratt & Whitney Canada PW210S engines with dual FADEC and expanded diagnostics.

The redesigned instrument panel features the integrated Thales TopDeck® avionics system with four large format flat panel displays. The open architecture panels can display attitude indicator, navigation, digital map, flight plan management, systems data monitoring, warning advisory system and other performance management elements. The Collins Pro Line 21 dual nav/comm and Goodrich Vigor™ HUMS complete the suite. Cockpit data is provided by a solid state air data system featuring dual AHRS and dual air data computers. The S-76D aircraft can be certified for single pilot IFR and, to ensure safety, all S-76D helicopters are equipped with EGPWS, combined

cockpit voice recorder / flight data recorder, and 406 MHz ELT. TCAS1 is also available as an option.

The four, flaw tolerant main rotor blades feature an all-composite spar, wider chord, enhanced air-foil and integrated tip caps. Quiet Aircraft Technology Designation standards are achieved through a new tail rotor blade design .

The large, rectangular cabin and 38-cubic foot baggage compartment can be custom configured for many mission applications. Speed, long range and a smooth level ride are ensured by the fully articulated rotor system and Active Vibration Control system. The elegantly clean airframe, retractable landing gear and 284 gallons of usable fuel complete the basic configuration.

S-76D VIP EQUIPMENT	EXECUTIVE	DELUXE
Cabin call system with ringer	•	<b>A</b>
Traffic Advisory System displayed on the MFD (TCAS1)	•	<b>A</b>
Satellite communications system with cockpit dialer and cabin headset	•	<u> </u>
Digital moving map on Thales MFD	•	<b>A</b>
DME, 2nd- Collins DME Proline 21 DME-4000	•	<b>A</b>
Upgraded Active Vibration Control System (AVCS)	•	<b>A</b>
Color weather avoidance radar-Primus 880	•	<b>A</b>
Executive paint finish	•	<b>A</b>
Deluxe VIP Interior Group including:	•	<b>A</b>
– Silencer <sup>™</sup> interior system with secondary acoustic package	•	<b>A</b>
– Ultraleather or ultrasuede interior panel upholstery	•	<b>A</b>
– Cockpit cabin divider with sliding windows	•	<u> </u>
– Eight individual reading lights and air outlets	•	<b>A</b>
– Wood/veneer/leather/metal decorative details	•	<b>A</b>
– Tinted cabin windows	•	<b>A</b>
– Cabin carpeting	•	<b>A</b>
Lightning strike sensor- LSZ 860	•	<u> </u>
Single retractable boarding step	•	
Air conditioning system (R135a coolant)	•	
Forward-facing, four-place executive divan	•	
Aft-facing, four-place divan with folding tables and armrest	•	
Forward facing, four-place divan with folding tables and armrest		<b>A</b>
Aft facing executive swivel seats		<b>A</b>
XM Weather Data Link		<b>A</b>
Jeppesen electronic charting		<b>A</b>
Retractable cabin boarding steps (right and left hand)		<b>A</b>
Cockpit Cabin Climate Control system (C4)		<b>A</b>
Emergency flotation system		<b>A</b>
Automatic deployment system for flotation		<b>A</b>
Bulkhead windows (Large RH and LH)		<u> </u>

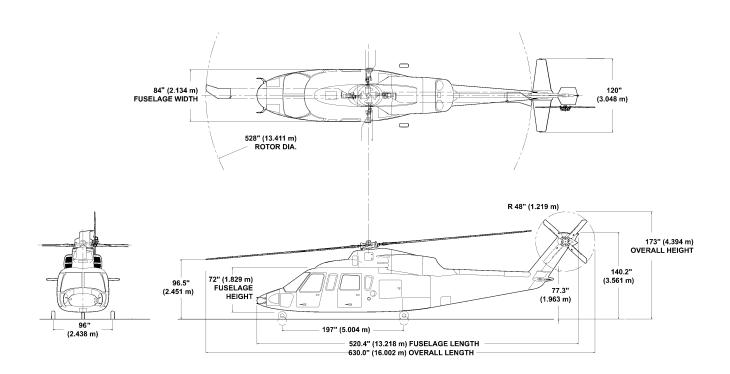
This is not a comprehensive list of options; please consult with your sales specialist to develop a configuration and interior plan to meet your mission needs.

### S-76D EXECUTIVE SPECIFICATIONS

#### Standard Day, Sea Level at maximum gross weight unless otherwise noted

Maximum speed (VNE)	155 kts	287 km/hr
Maximum cruise speed (Vн)	155 kts	287 km/hr
Long Range Cruise Speed (VBR)	152 kts	282 km/hr
Hover ceiling, In-Ground Effect	10,540 ft	3,213 m
Hover ceiling, Out-of-Ground Effect	4,930 ft	1,503 m
One Engine Inoperative Service Ceiling	8,235 ft	2,510 m
Range - long range cruise speed @ 4,000 feet		
- with 30 minute reserve	398 nm	737 km
- no reserve	472 nm	874 km
- average speed	152 kts	282 km/hr
- average fuel flow	600 lb/hr	272 kg/hr
Maximum takeoff gross weight	11,875 lb	5,386 kg
Empty weight, base aircraft*	6,963 lb	3,165 kg
Useful load, internal*	4,912 lb	2,233 k

<sup>\*</sup>Weights will vary by specific mission configuration



# WE'RE ENGINEERING A BETTER TOMORROW

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