

SIKORSKY S-76B Model Guide

SIKORSKY S-76B is one variant of the Sikorsky S-76 helicopter family (S-76A, S-76B, S-76C, S-76D). The registry lists the family as turboshaft-powered, but this model's library row is tagged piston, so confirm the engine type from the aircraft's records. No variant-specific specs were supplied. Family figures below are 'up to' context only.

KEY TAKEAWAYS

- The S-76 family is listed as turboshaft-powered; the library row's 'piston' tag conflicts with that, so verify the engine type.
- A 2007 FAA AD requires a one-time ultrasonic inspection of certain main rotor shafts on S-76A, B and C helicopters.
- Family-level maximums reach 15 passengers, 1710 nm range and 427 kt cruise; they are not S-76B figures.
- The S-76 fleet often flies offshore at very high utilization, so check how hard a given aircraft has been used.

WHAT THE DATA COVERS

The registry describes the S-76 family only. Its maximums are up to 15 passengers, 7200 kg MTOW, 1710 nm range, 427 kt cruise and 45000 ft service ceiling. These are the best values across all variants, not S-76B limits. Get the S-76B's actual limits from its flight manual and weight and balance records.

MAIN ROTOR SHAFT AD 2007-11-05

The AD applies to S-76A, B and C helicopters with certain main rotor shafts (P/N 76351-09030 or 76351-09630-041) in listed serial ranges. It was prompted by cracking during shaft manufacture. It required a one-time ultrasonic inspection within 75 hours time-in-service, by a Level II or III qualified inspector. Check the logbooks for compliance and the installed shaft's P/N and serial number.

EXHAUST PROLONGATOR REPAIR KIT

Alpine Aerotech publishes a repair-and-overhaul kit for the S-76 exhaust prolongator, covering S76B and C models, as an economical repair when the assembly wears out. It adds no weight to the aircraft. The supplement says repairs to the kit items are not permitted. Ask whether the prolongator has been repaired and which part number is fitted.

PERFORMANCE

Family Max Range Nm	1710
Family Max Cruise Speed Kt	427
Family Max Service Ceiling Ft	45000

SAFETY NOTES

- Main rotor shaft cracking could cause separation of the main rotor and loss of control; confirm AD 2007-11-05 compliance for the installed shaft.
- If an ultrasonic inspection finds a crack, the AD requires replacing the shaft with an inspected, airworthy one before further flight.
- Utilization can approach 200 hours per month on offshore aircraft, so review total time and the history of fatigue-critical parts.