SIKORSKY S-76C+ Model Guide

SIKORSKY S-76C+ belongs to the Sikorsky S-76 family (S-76A, S-76B, S-76C, S-76D), a turboshaft helicopter line. At family level it offers up to 15 passengers, 1710 nm range and 427 kt cruise. The supplied documents give no C+-specific figures, so the limits below come from a multi-variant S76 handbook extract. The registry label 'single-engine piston' conflicts with the turboshaft, dual-engine data.

KEY TAKEAWAYS

- Handbook maximum takeoff and landing weight is 10800 lb (4898 kg). Cabin floor limit is 75 lb per sq ft and baggage compartment limit is 600 lb.
- Dual-engine takeoff and max continuous limits are 100% torque per engine and 845 C T5. The one-engine 2-1/2-minute limits are 115% transmission torque and 885 C T5.
- The handbook is an exam extract compiled from several variants and is not for operational use. Confirm C+ figures in the approved flight manual.
- Check compliance with ASB 76-65-67A (rotor spindle/cuff inspection) on any S-76 with a serial number up to 760822.

LIMITS AND LOADING

Maximum takeoff and landing weight is 10800 lb (4898 kg). Cabin floor loading is limited to 75 lb per sq ft (366 kg per sq m) and the baggage compartment to 600 lb (272 kg). Rotor limits with power on are 100% to 107% Nr with both engines running, or 96% Nr minimum with one engine inoperative. Transmission oil maximum temperature is 120 C.

TAKEOFF AND LANDING PROFILES

Category A takeoff uses a selectable critical decision point of 30 to 45 kt, with V2 set 10 kt higher (40 to 55 kt). Category B takeoff rotates at 50 KIAS and climbs at 55 KIAS. The alternate Category A landing distance is 1000 ft for all weight, altitude and temperature combinations. Worked example: 9000 lb at 5000 ft and +20 C needs 1100 ft for a Category B takeoff.

RECORDS AND INSPECTIONS TO CHECK

ASB 76-65-67A Rev A (July 18/12) requires a one-time crack inspection of rotor spindle/cuff and blade fold cuff assemblies, including spares. Assemblies with 1900 flight hours or more get NDI. Those with less get a visual check. All get white paint to aid the 25-hour visual inspection. The deadline was 150 flight hours or 90 days. Estimated labour is 4.5 man-hours.

SPECIFICATIONS

Max Takeoff Landing Weight Lbs	10800
Max Baggage Compartment Load Lbs	600
Transmission Oil Max Temp C	120

PERFORMANCE

Alternate Category A Landing Distance Ft	1000
Category A Landing Rate Of Descent Max Fpm	600
Alternate Category A Landing Rate Of Descent Max Fpm	300

V-SPEEDS

Category A Cdp Min Kts	30
Category A Cdp Max Kts	45
Category A V2 Min Kts	40
Category A V2 Max Kts	55
Category B Rotate Kts	50
Category B Climb Kts	55
Category A Landing Approach Kts	45
Alternate Category A Landing Approach Kts	60

WEIGHT & BALANCE

Max Takeoff Landing Weight Lbs	10800
Max Baggage Compartment Load Lbs	600

SAFETY NOTES

- ASB 76-65-67A: if cracks are confirmed, the spindle/cuff or blade fold cuff assembly must be removed from service.
- Avoid continuous operation between 52% and 68% N1. Operation above 100% torque or 100% N1 is for actual emergencies only, apart from required maintenance checks.
- The handbook extract is for examination use only and must not be used for any operational purpose.

AI-aggregated guide for the SIKORSKY S-76C+ · sources: SIKORSKY S76 Helicopter Operating Manual (#101750) · S-76 ALERT SERVICE BULLETIN (#100683) · generated 2026-11-24 · Reference only, not for flight. Check the original documents before relying on this guide.