

BELL 427 Model Guide

BELL 427 is a Bell turboshaft helicopter. Family registry data show up to 7 passengers, up to 350 nm range and up to 138 kt cruise. The one example in the documents, N427PG (SN 56019), has two PW207D engines and 2,093.8 airframe hours at 15-Nov-2023. The library record lists it as piston, which conflicts with the other data, so verify the engine type.

KEY TAKEAWAYS

- Family-level maxima: 7 passengers, 350 nm range, 138 kt cruise, 16000 ft service ceiling. These are not figures for a specific aircraft.
- The example airframe (SN 56019) had 4,368 landings and 2,093.8 hours at 15-Nov-2023. Ask for the same status report for any aircraft you consider.
- Check compliance with ASB 427-21-44 (transmission oil check valve) and ASB 427-11-35 (servo clevis). Both cover early serial numbers.
- The maintenance program has 50, 150, 300 and 600 hour inspections. Conditional inspections apply after events such as hard landings or overspeed.

MAINTENANCE PROGRAM

The status report for N427PG shows periodic inspections at 50, 150, 300 and 600 hours, plus a 1200 hour / 24 month component inspection. Calendar limits also apply: many items are due every 12 months. Servicing and lubrication items recur at 50, 300 and 600 hours. Ask for a current status report that shows what is due and what is overdue.

SERVICE BULLETINS TO VERIFY

ASB 427-21-44 (Revision A) covers the transmission oil check valve, part number 209-062-520-001, on serial numbers 56001 through 56084, 58001 and 58002. Valves marked CORONA CA without a TQL marking are measured. A valve that fails is replaced. ASB 427-11-35 covers hydraulic servo clevis assemblies on serial numbers 56001 through 56077, 58001 and 58002. Confirm both are logged as complied with.

WEIGHT AND EVENT HISTORY

The status report lists an optional Increased Gross Weight kit of 6550 lbs (TB 427-02-08). Check whether it is fitted. It also lists conditional inspections for hard landing, sudden stoppage, main rotor overspeed (above 104% power on, or 107% power off), overtorque, lightning, engine one-engine-inoperative events and compressor stall. Review the logbook for any of these.

PERFORMANCE

Family Max Range Nm	350
Family Max Cruise Speed Kt	138
Family Max Service Ceiling Ft	16000

WEIGHT & BALANCE

Increased Gross Weight Kit Lbs	6550
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SAFETY NOTES

- If the transmission oil check valve under ASB 427-21-44 is not replaced, the bulletin requires re-inspection every 25 flight hours or 30 days. A cracked valve must be replaced before next flight.
- Any main rotor overspeed, overtorque, hard landing, lightning strike or sudden stoppage needs its conditional inspection. Look for evidence in the logs.
- The library record says piston, but the documents show PW207D turboshaft engines. Confirm engine type and records before purchase.