

BELL 505 JET RANGER X Model Guide

The BELL 505 JET RANGER X is a Bell turboshaft helicopter. Its Arrius 2R engine is made by Safran, and it has a Garmin G1000H cockpit display. The supplied data has no range, speed, weight or seat figures for this model. This guide covers what the documents do show: the normal checklist and three service bulletins to verify before buying.

KEY TAKEAWAYS

- No performance, weight or seat data was supplied for this model. Get those figures from the Rotorcraft Flight Manual (BHT-505-FM-1).
- ASB 505-18-09: an HMU AUX CTRL caution may leave the engine unable to increase power above 13000 feet Hp. Confirm Part II (Safran modification TF 91) is done.
- ASB 505-20-17: one-time check of the flap restraint support for clear coat, after mast nuts were found below minimum torque.
- TB 505-20-26: improved battery ground bracket installation, compliance at customer's option. Ask whether it was done.

SERVICE BULLETINS TO CHECK IN THE LOGBOOK

Look for logbook entries showing compliance with ASB 505-18-09 (Part I and Part II, including flight manual temporary revision TR-5) and ASB 505-20-17. Also check whether TB 505-20-26 was done. Applicability depends on serial number, so match the helicopter's serial number against each bulletin.

WHAT THE NORMAL CHECKLIST TELLS YOU TO INSPECT

The checklist covers: fuel anti-ice additive when OAT is 4°C or below, rotor blade freedom, and mass and balance in limits. At start-up it checks the MFD exceedence logs (should show none), the chip and fire tests, and the audio test. It also checks battery voltage of at least 25.7 V and idle at 63% NP. Generator voltage should read 28V ± 0.5V. Watch the MGT limits at start.

SAFETY NOTES

- ASB 505-18-09: if the HMU main metering valve freezes at or above 13000 feet Hp, fuel flow could decrease but not increase.
- ASB 505-20-17: mast nut torque was found below minimum on some helicopters because clear coat was applied on the flap restraint support.
- The checklist states that only checks and procedures in the RFM are approved.