Flight Design CTLS Model Guide

Flight Design CTLS is a piston-engine light sport aircraft. Registry data for its CTLS-ELA family shows up to 2 passengers, up to 121 kt cruise, up to 1080 nm range, up to 600 kg MTOW and up to 14000 ft service ceiling. These are family maximums, not figures for one variant. Check the exact numbers in the POH for the aircraft you are buying.

KEY TAKEAWAYS

- Family-level registry maximums: 121 kt cruise, 1080 nm range, 600 kg MTOW, 14000 ft ceiling, 2 passengers. Confirm against the aircraft's own manual.
- Two service bulletins matter most: fuel filter exchange (ethanol fuel) and wire insulation protection (short circuit risk).
- The AOI describes a ballistic recovery system (Junkers Magnum Rescue System) and a carbon monoxide detector. Check both are fitted and in date.
- Ask for the logbook entries showing which service bulletins were done, with date and signature.

FUEL FILTER BULLETIN (ETHANOL)

Fuel with high ethanol content, combined with long downtime, can degrade the original plastic fuel filter behind the instrument panel. It can discolor or even deform it. Aircraft with serial numbers lacking a letter prefix are affected, as are those before D-09-02-10 or F-09-02-01. Ask whether the aluminum replacement filter is fitted and whether the exchange is logged.

WIRE PROTECTION BULLETIN (DEC 2019)

A short circuit occurred when damaged wire insulation touched grounded steel. The bulletin lists specific CTLS, CTLS-LSA and CTLS-ELA serial numbers and required action within 10 hours. The job takes about 1 hour. Check whether your serial number is listed and that completion is in the log book.

DOCUMENTS AND CONFIGURATION

The Aircraft Operating Instructions reached Revision 8 (05 Aug 2009). Revisions added the PowerFin propeller and changed the flight load factor limit from -1.5g to -2g. The parts catalog shows Classic and Advanced panels and Neuform or Kaspar three-blade propellers. Confirm which configuration and manual revision match the aircraft.

SAFETY NOTES

- Until the fuel filter bulletin is done, use fuel with at most 1% ethanol (such as 100LL). Drain ethanol-blended fuel if the aircraft will sit longer than 2 weeks.
- If the fuel filter looks deformed, the exchange must be done before the next flight.
- Non-compliance with the wire protection bulletin could cause further damage, injury or death. Compliance was required within 10 hours.

AI-aggregated guide for the Flight Design CTLS · sources: Aircraft Operating Instructions (AOI) (#101752) · Service Bulletin SB-SECS-CT2k-03 (#101214) · Service Bulletin (#101854) · Parts & Assembly Manual (#101853) · generated 2026-10-18 · Reference only, not for flight. Check the original documents before relying on this guide.