

CESSNA 550 Citation II Model Guide

The CESSNA 550 Citation II is a twin-turboprop business jet powered by Pratt & Whitney Canada engines. It is certificated for single-pilot operation, and the 1988 AOPA flight report calls it an airplane that puts less pressure on a pilot than a light piston single. The library and registry records for this model are empty, so the figures below come from that flight report and from supplier, FAA and regulator documents. The flight-test figures are from one 1988 demonstration flight and are not a certified performance table.

KEY TAKEAWAYS

- Single-pilot certificated. Fuel handling is simple: each engine feeds from the wing on its own side, and crossfeed is needed only in engine-out operation.
- In the 1988 test takeoff at 12,200 lb, 1,330 ft elevation and 35 degrees C, balanced field length was 3,600 ft. V1 was 101 kt, rotation 102 kt and V2 109 kt.
- The Honeywell electronic flight instrument and global navigation package in the test airplane needs substantial detailed training. Confirm which avionics a given airplane has.
- The standard air-cycle air conditioning leaves the cabin warm and the flight deck hot on the ground on a hot day. Freon air conditioning was an option, and an R134a retrofit is documented.
- Aftermarket support is documented: FAA MMEL Rev 11 (05/01/2024), Cleveland wheel and brake conversion, stretcher STC, LED wing light kits and an air conditioning STC.

OPERATION AND HANDLING

The 1988 AOPA report says handling qualities were given as much attention as economy and performance, and the cockpit is designed for single-pilot approval. Start the engines with the starter button and introduce fuel when N1 reaches 8 percent. Main gear tread is 17.6 ft, so taxi down the yellow line on pavement. The aircraft is approved for sod field operations. Controls are light. The only time you are rushed to trim is on acceleration after takeoff, and a climb to 180 kt needs substantial retrimming.

SYSTEMS, AVIONICS AND CABIN COMFORT

The tested airplane had a Honeywell electronic flight instrument system with flight director functions and a global navigation system. The report says full training is needed to operate it safely. The FAA Flight Standardization Board report notes a Universal EFI-890R avionics retrofit (STC ST03947AT) evaluated in Model 550 serial numbers 550-0001 through 550-0505 and 550-0550 through 550-0800. Standard air conditioning is an air-cycle machine. The Keith Products R134a vapor-cycle system (STC SA2698SW) is documented for the Citation 550, and its manual lists a service bulletin for refrigerant conversion to R134A.

REGULATORY AND TYPE RATING NOTES

The FSB report lists the 550 (Citation II, and Citation Bravo depending on serial number) under TCDS A22CE with pilot type rating CE-500. The Model 551 Citation II (the SP version, a separate model under TCDS A27CE) is listed in a New Zealand type acceptance report with maximum takeoff weight 12,500 lb, 11 seats maximum and JT15D-4 engines. Do not assume those 551 figures apply to a 550. The FAA Master Minimum Equipment List for 500-series Citations, which includes the 550, is at Revision 11, dated 05/01/2024.

DOCUMENTED MODIFICATIONS AND SUPPORT

Documented options include a Cleveland Wheels & Brakes conversion kit (Parker 199-164, STC SA1297GL for Models 500 and 550). It is for aircraft with 10 inch main wheels and power anti-skid, and it uses phosphate ester hydraulic fluid. A stretcher and attendant seating kit is available under STC SA52RM and SA126RM, and it installs on the existing seat rails. A Whelen Sunbeam LED wing light kit (LSM-500-176, released 2-20-25) covers 550s

SPECIFICATIONS

Main Gear Tread Ft	17.6
Fuel Capacity Per Wing Gal	373

PERFORMANCE

Balanced Field Length Ft	3600
Test Elevation Ft	1330

V-SPEEDS

V1 Kts	101
Rotation Kts	102
V2 Kts	109
Best Engine Out Climb Kts	143
Initial Climb Kts	180

WEIGHT & BALANCE

Test Takeoff Weight Lbs	12200
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SAFETY NOTES

- Before every takeoff, brief the engine-failure case. In the test, an engine failure below V1 (101 kt) meant abort, and above it the takeoff continued.
- Single-pilot operation is permitted, but the report says a solo pilot may want another pair of hands and eyes during takeoff. Do not fly the avionics suite without detailed training.
- Hot-day ground operation with the standard air-cycle air conditioning leaves the flight deck hot, so check the cooling system condition and whether an upgrade has been installed.
- The brake and wheel conversion kit applies only to models with power anti-skid and 10 inch main wheels. It requires phosphate ester hydraulic fluid. Confirm the installed brake and hydraulic fluid type before servicing.

with dual or single taxi light configurations. Check which kit matches the airplane's light setup.

AI-aggregated guide for the CESSNA 550 Citation II · sources: Cessna 550 Citation II (#4658) · Flight Standardization Board Report (#4637) · Master Minimum Equipment List (MMEL) (#4645) · CESSNA Medical Stretcher & Attendant Seating (#4309) · PARTS LIST 199-164 CONVERSION KIT (#4677) · Maintenance Manual (#3818) · Installation Instructions for Citation Sunbeam LED Wing Landing/Taxi/Recognition Lights (#4687) · Type Acceptance Report TAR 10/21B/23 – Cessna 501-551 (#4678) · generated 2026-10-14 · Reference only, not for flight. Check the original documents before relying on this guide.