

CITATION S550 TRANSFORMED



**Clifford**  
DEVELOPMENT



## CLIFFORD TRANSFORMS

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*“After the Clifford conversion, The Citation S550 is still a single-pilot light jet, but with the range of a medium jet.”*

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TEST PILOT | FIRST FLIGHT AFTER CLIFFORD STC INSTALLATION





# CITATION S550

A unanimous "WOW!" Pilot after pilot agrees: the Citation S550 is a whole new airplane after installing the Clifford STC with new Williams FJ44-3A engines. Comments such as, "I'm astounded at how much less fuel it uses" and "It's not just faster - it's a rocket ship!" are the norm. The Clifford STC starts with the Williams engines, but encompasses a 36-point improvement package including digital engine display and other airframe enhancements that remake your Citation S550 into a quiet, fuel-efficient, high-performance jet that will take you well into tomorrow.

## How can it go faster yet burn less fuel?

Modern engine technology has advanced way beyond what was available when your Citation S550 was born. The Clifford STC delivers an impressive 14% increase in optimum cruise speed, with a 32% reduction in fuel burn. See speeds at MMO with fuel burns of less than 450 lbs per side or long-range cruise speed with fuel burns of less than 300 lbs per side. You get 78% more range to go 2,515 nm nonstop, and enjoy greater cruise efficiency en route. And with a rocket-like 28-minute climb to FL430, suddenly you're promoted to the best and fastest ATC routes. But even all these improvements don't tell the entire cost-savings story. Your direct operating costs are dramatically cut by 24%, meaning that this is one investment you can count on to get you in the black within an impressively short period of time.

## So quiet, Stage 4 is only the beginning.

One of the biggest challenges facing the aviation community today are environmental concerns, both carbon emissions and noise. The Clifford STC turns your Citation S550 into a Stage 4 aircraft, which has the enormous benefit of providing a far better working environment for passengers. But it gets better. There's a significant 10 dB drop requirement to get from Stage 3 to Stage 4, but the Clifford STC is measuring at a whopping 32.4 dB drop. So, if and when a Stage 5 is announced - well, let's just say you can quietly keep doing your thing.

## One of the safest airplanes flying just got safer.

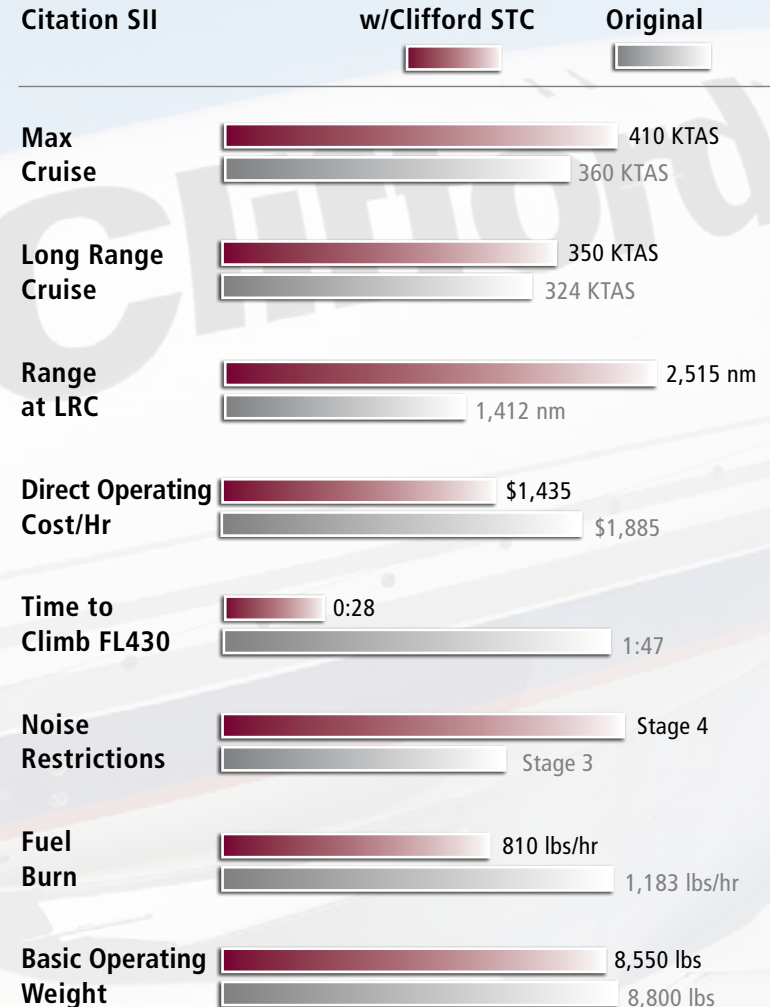
The Williams FJ44-3A engines have over 4 million accident-free flight hours and are the power of choice for world-record holders such as the Virgin Atlantic Global Flyer. The enormous performance gains the Citation S550 gets with these engines gives you a significantly enhanced margin of safety.

## The Clifford STC is available in all sectors of the United States right now.

Just make an appointment at the location most convenient for you, and your aircraft will be back to you in just two months. It really is that easy to get a "brand new" jet working for you.



## CITATION S550 COMPARISON



S550 data from BCA Handbook and Cessna S550 flight manual  
S550 FJ44 data from Flight Test Associates (Mojave, CA) flight test results





## THE CLIFFORD S550 CITATION: A BETTER AIRPLANE 36 WAYS

1. New Williams FJ44-3A Engines @ 3000 lbs thrust\* with 4000 hr. TBO
2. Lower ground idle speed for quieter, more efficient ground operations
3. Shorter landing distances without T/Rs due to lower idle thrust:  
125 lbs per side vs. 450 lbs on JT15D-4
4. Full Authority Digital Engine Control (FADEC) for "fly-by-wire" engine control
5. Dual FADEC Airdata sources added
6. Dual ignition exciters on each engine, JT15D-4 has only one
7. Engine sync is electronic with no mechanical parts to maintain
8. New Ametek digital engine display: Fuel, RAT (ram air temp.) and Standby N1
9. Annunciator panel moved to glare shield
10. Heavy duty BFG brakes, new wheels and tires
11. New bleed-air inter coolers and control valves designed to handle the FJ44-3A
12. No major structural modifications required – uses the existing factory engine beams
13. FIR (FADEC Interface Relays) are modular and interchangeable
14. More mass airflow for better ACM spool-up and heat at altitude
15. Mach warning box removed and replaced with digital controller
16. Gear Warning based on airspeed not Power Lever position
17. Micro Switching removed from power levers, now all digitally controlled
18. New larger center pedestal can hold A/P components and 2 FMS size controllers
19. Throttle quadrant moving parts rebuilt to overhauled standards
20. Starter/Gen cooled with fan bypass air — increased life on S/G brushes
21. Carbon Fiber aft cowls
22. FADEC System certified to new July 2007, P2T2 Standard
23. Removal of Peri-seals to more reliable bellows seals within engine compartment
24. Same size fuel and hyd fittings changed to AN and MS so lines cannot be crossed
25. New low-maintenance sealed lead acid battery (Hawker 44ah battery included)
26. Improved Instrument panel cooling for longer component life
27. New current technology Fuel Flow transmitter
28. New E/L and instrument panels as required (no patched instrument panels)
29. New quick donning O2 masks for the cockpit, for a future service ceiling increase
30. Removal of EPA equipment, requires lower maintenance
31. Pylon skins increased to 0.032 for longevity
32. OEM aluminum S/G cables replaced with copper for better starts
33. Installation configuration allows for an average 2.5" forward CG shift
34. STC designed to be installed as a kit by others, all part approvals, installation instructions, Flight Manual with new performance charts for Continued Airworthiness included
35. Flight Testing performed by industry recognized professional test pilot organization with computerized data acquisition, allowing real-time performance charting and accurate Flight Manual supplements with new performance charts
36. S/G ground point relocated to reduce corrosion and grounding issues

\* Thermo-dynamic thrust. Flat rated to 2820 lbs, sea level, 79 degrees F.