

Skywagon Showdown

Turbo-Charged Piston Cessna 207



Soloy Turbine Cessna 207



VS.

○ Engine:	High compression, air-cooled Piston	Turboprop
○ Propeller:	3 blade, 80" dia.	3 blade, 95" dia., full feathering, w/ auto feather
○ Electrical:	60 amps @28 volts	150 amps @28 volts
○ Max. Gross Weight:	3800 lbs.	4000 lbs.
○ Useful Load:	±1600 lbs.	±1840 lbs
○ Fuel:	AVgas	Jet(#1 Diesel)
○ Take-off Power:	310 BHP	418 SHP (at the propeller)
○ Floats:	Not eligible	Certified on both straight and amphibious floats

👂 **Noise:** The poorly muffled exhaust, combined with high propeller RPM (2700 @takeoff) make the piston 207 one of the loudest of light airplanes.

The Turbine 207's low propeller RPM (1810 max., 1450 min.) and the inherently quiet exhaust of the Allison engine, make it one of the quietest. Take-off, climb, and cruise noise are greatly reduced.

✈️ **Engine Out:** The piston 207 at maximum gross weight with engine off has a relatively high rate and angle of descent.

In the Turbine 207, the engine out flight characteristics are greatly improved. In the event of a power loss the 'auto feather' system adjusts the propeller pitch towards feather reducing propeller induced drag. This is particularly beneficial in the event of power loss on takeoff.

The pilot can fully feather the propeller which significantly reduces drag, resulting in a low descent rate (about 840 feet per minute at 101 knots IAS). From 10,000 feet above the terrain, the pilot can reach a landing site nearly 20 miles away compared to 13 miles in the piston C207.

Low speed controllability is substantially increased through the use of vortex generators which improve the flow of air across the Turbine 207's ailerons at high angles of attack. The result is positive wing leveling and directional control at the slowest of flight speeds, even in a stall.



450 PAT KENNEDY WAY S.W. OLYMPIA, WA 98501
 PHONE: (360) 754-7000 FAX: (360) 943-7659
 e-mail: soloy@soloy.com website: www.soloy.com

SOLOY TURBO-PROP CESSNA 207

FEATURES AND SYSTEMS

TURBO-PROP POWERPLANT: Soloy's rugged, patented "Turbine Pac" utilizes the 420 hp Allison 250-C20S turbo-shaft engine in combination with the propeller reduction gearbox, engine/gearbox frame and other components engineered and manufactured by Soloy. By locating the engine's combustion air inlet at the back of the engine compartment, Soloy's unique installation provides maximum protection from foreign object damage. Soloy's beefy gearbox, frame and mounting system add to the durability of the installation resulting in a turboprop airplane ideally suited to dirt runways and water operations.

PROPELLER: Hartzell 3-bladed, full feather, constant speed with auto feather. Propeller control system has taxi range and flight range functions. Non-reversing. Diameter 95 inches. Maximum RPM 1810.

AIRFRAME: Cessna Model 207 Stationair 7 and 207 Stationair 8.

SEATS: Stationair 7-Seven/Stationair 8-Eight. Easily removable for conversion to cargo hauling.

ELECTRICAL SYSTEM: 28 Volt, 150 Amp starter generator.

FUEL: Jet and qualifying Diesel No. 1.

FUEL CAPACITY. 80 gallons total, 73 gallons usable.

AUXILIARY FUEL: Optional, 54 gallons total, 52 gallons usable. Auxiliary fuel system employs wing bladders installed just outboard of standard tanks which gravity feed into standard tanks. No valves. No pumps.

CABIN HEAT Standard heater employs exhaust duct heat exchanger. Optional "Arctic Heater" supplements the standard heater with engine compressor bleed air and fan.

LANDING GEAR: Cessna oversize wheels with or without fairings.

FLOATS: PK. Seaplane, PK. Amphibious

SLOW SPEED CONTROL ENHANCEMENT: Wing "vortex generators" greatly improve aileron control at very slow speeds. Aileron control is positive even in a deep stall.

EXTERNAL NOISE: The turbine engine is inherently quiet, producing very little exhaust noise. In the Soloy system, the propeller turns very slowly, i.e., approximately 1200 RPM for taxi, 1810 RPM for takeoff and cruise. Consequently, the Soloy Turbine Cessna is very quiet in all areas of operation.

SERVICE: Available worldwide from Soloy Dealers and Allison Engine Service Centers. As the primary light helicopter engine of the western world, service for the Allison can be found wherever helicopters operate.

SPECIFICATIONS

Maximum Gross Weight, All Configurations	4000 lbs., 1800 kg.
Empty Weight, Wheels, 8 Seats	2175 lbs., 979 kg.
1 Seat, Utility	2060 lbs., 927 kg.
Seaplane, 8 Seats	2545 lbs., 1145 kg.
Amphibious, 8 Seats	2860 lbs., 1287 kg.
Fuel Capacity, Standard, Usable	73 gal., 276 lt.
Auxiliary Fuel, Usable (Optional)	52 gal., 197 lt.
Fuel Burn Rate, Normal Cruise	
@ 10,000 ft, 3048 meters	24 gph., 91 lph.
@ 20,000 ft, 6096 meters	18 gph., 68 lph.
@ loiter power, 5,000 ft, 1524 meters	15 gph., 57 lph.
Service Ceiling	25,000 ft., 7620 m.
Stall Speed, Flaps Down, Flight Idle Power	58 kts
Takeoff Distance, Wheels, Ground Roll	736 ft., 233 m.
50 ft Clearance	1370 ft., 418 m.
Landing Distance, Wheels, Ground Roll	714 ft., 218 m.
50 ft Clearance	1412 ft., 430 m.
NOTE: Floatplane takeoff and landing distances have not been formally measured, but are impressively short.	
Max Climb, Wheels	1640 fpm., 500 mpm.
Floats	1570 fpm., 478 mpm.
Normal Cruise, Wheels, 10,000 ft., 3048 m	160 kt TAS
Floats, 10,000 ft., 3048 m	140 kt
External Sound, Max Cruise Power 1000 ft, 305 m. overhead	
Sound	69.4 decibals
Sound Pressure59 microbars
Noise	7.7 sones

NOTE: Performance specifications are at max gross weight standard day. Specifications are typical and may vary with individual aircraft.

SOLOY AVIATION SOLUTIONS , 450 Pat Kennedy Way S.W., Olympia, Washington 98501, (360)-754-7000, FAX (360)-943-7659
e-mail: soloy@soloy.com website: www.soloy.com