

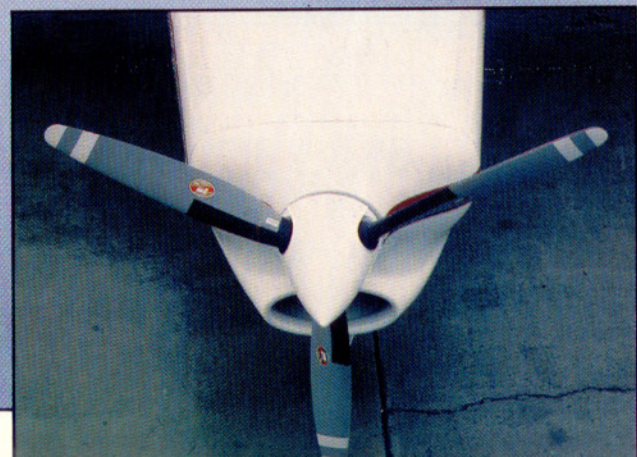
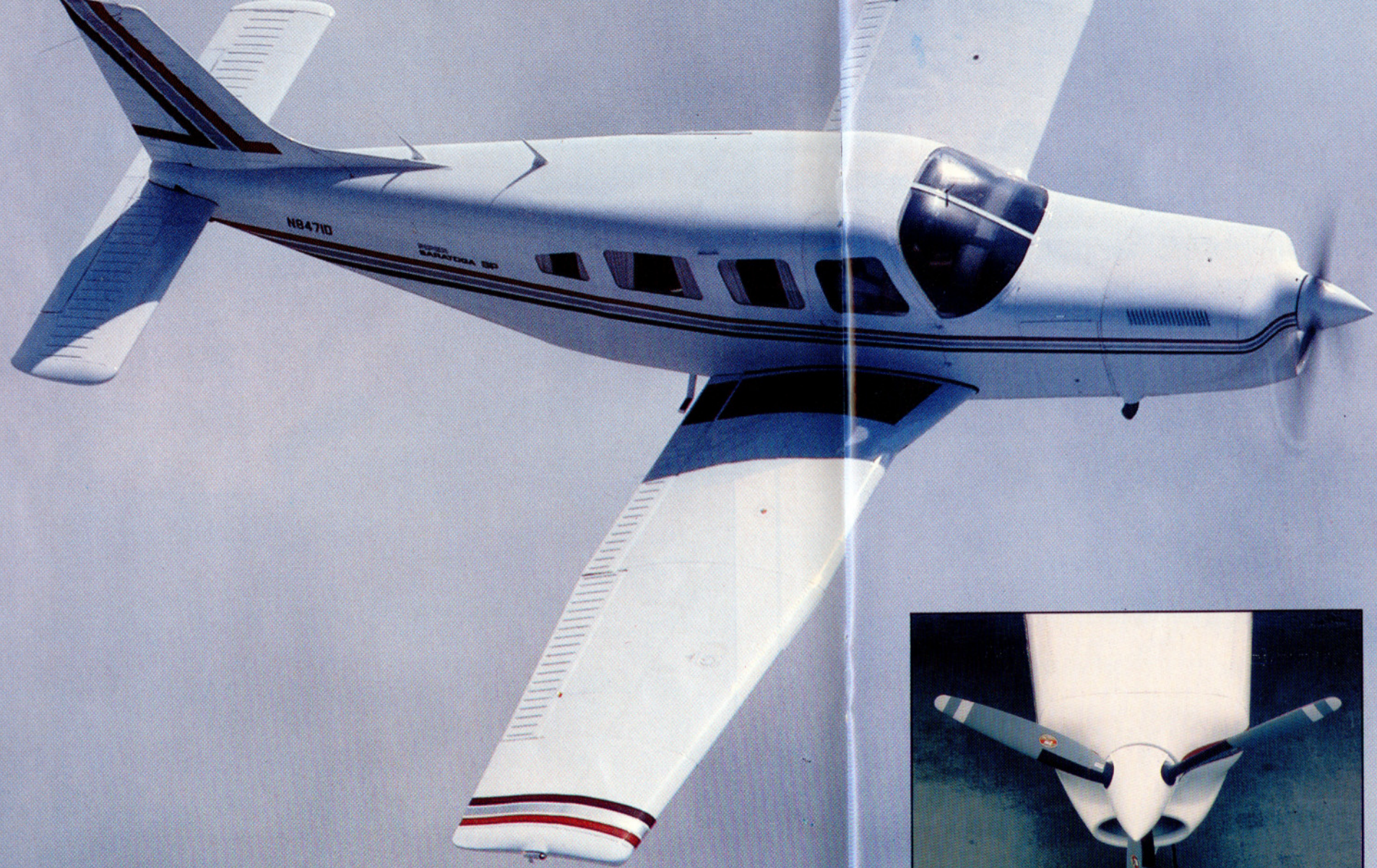


# TURBO SARATOGA SP

*Piper's biggest single  
offers an alternative  
to the big-cabin market.*

BY EDWARD G. TRIPP



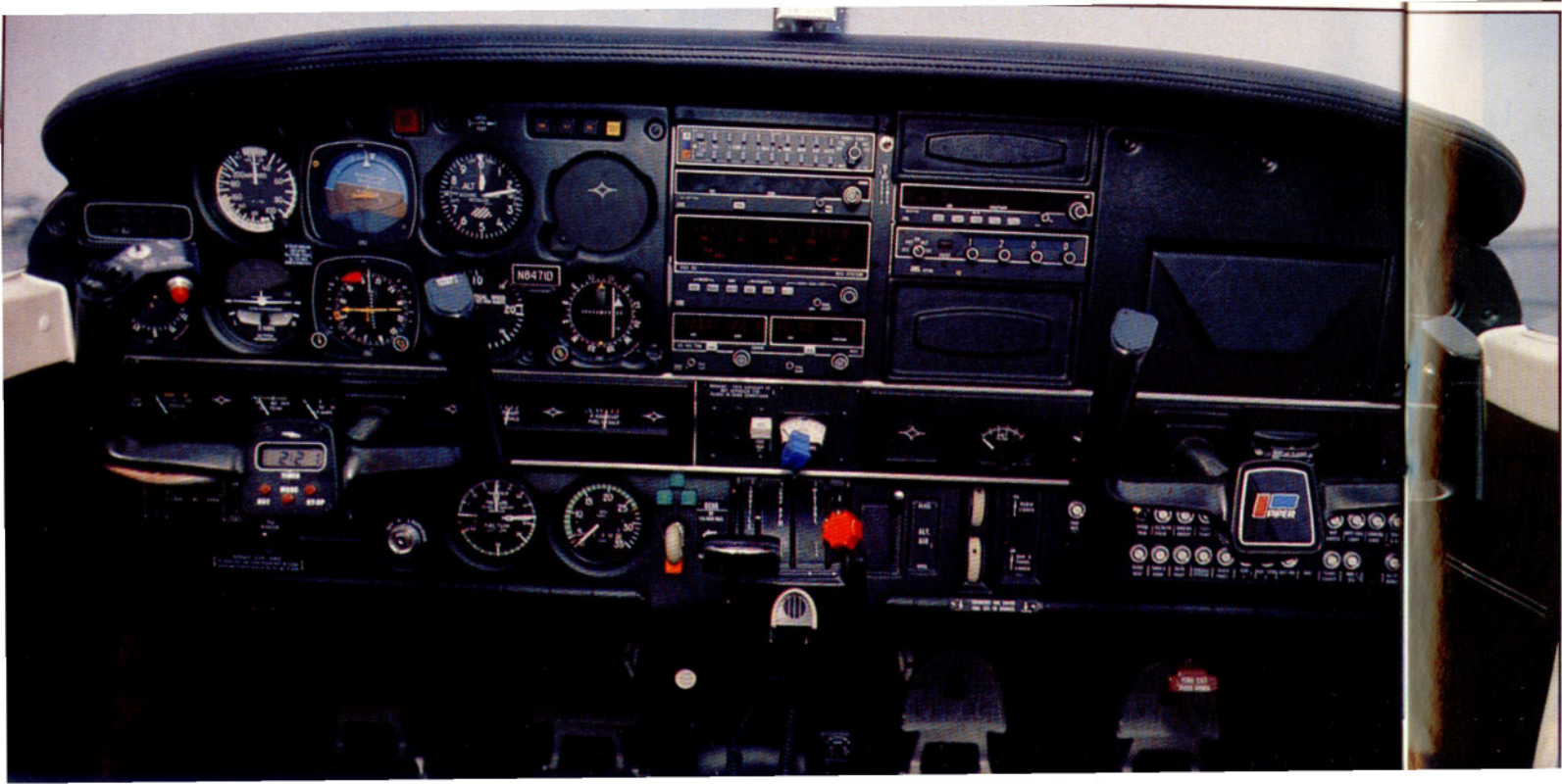






**TURBO  
SARATOGA  
SP**





**Piper Turbo Saratoga PA-32R-301T**

Base price \$112,580

Price as tested \$170,245

AOPA Pilot Operations/Equipment

Category\*: IFR

**Specifications**

Powerplant	Avco Lycoming TIO-540-S1AD, 300 hp @ 2,700 rpm
Recommended TBO	1,800 hr
Propeller	Hartzell 3-blade, constant speed, 78 in dia, (2-blade standard)
Length	28 ft 2.4 in
Height	8 ft 2.4 in
Wingspan	36 ft 2.4 in
Wing area	178.3 sq ft
Wing loading	20.6 lb/sq ft
Power loading	12 lb/hp
Seats	6
Cabin length	125 in
Cabin width	49 in
Cabin height	49 in
Empty weight	2,072 lb
Empty weight, as tested	2,388.5 lb
Max ramp weight	3,617 lb
Useful load	1,539 lb
Useful load, as tested	1,228.5 lb
Payload w/full fuel	927 lb

Payload w/full fuel, as tested	616.5 lb
Max takeoff weight	3,600 lb
Fuel capacity	642 lb (612 lb usable)
	107 gal (102 gal usable)
Oil capacity	12 qt
Baggage capacity	
Front	100 lb, 7 cu ft
Aft	100 lb, 17.3 cu ft

**Performance**

Takeoff distance, ground roll	960 ft
Takeoff distance over 50-ft obst	1,420 ft
Max demonstrated crosswind component	17 kt
Rate of climb, sea level	1,120 fpm
Max level speed, sea level	166 kt
Max level speed, 17,000 ft	195 kt
Cruise speed/Range w/45-min rsv, std fuel (fuel consumption)	
	@75% power, best power
	10,000 ft
	164 kt/720 nm
	(99 pph/16.5 gph)
	20,000 ft
	176 kt/730 nm
	(99 pph/16.5 gph)
	@65% power, best power
	10,000 ft
	150 kt/910 nm
	(84 pph/14 gph)
	20,000 ft
	(160 kt/920 nm)
	(84 pph/14 gph)

@55% power, best power	
10,000 ft	136 kt/950 nm
	(73.8 pph/12.3 gph)
20,000 ft	145 kt/940 nm
	(73.8 pph/12.3 gph)
Max operating altitude	20,000 ft
Landing distance over 50-ft obst	1,725 ft
Landing distance, ground roll	732 ft

**Limiting and Recommended Airspeeds**

V <sub>x</sub> (Best angle of climb)	82 KIAS
V <sub>y</sub> (Best rate of climb)	92 KIAS
V <sub>a</sub> (Design maneuvering)	134 KIAS
V <sub>fe</sub> (Max flap extended)	112 KIAS
V <sub>le</sub> (Max gear extended)	132 KIAS
V <sub>lo</sub> (Max gear operating)	
Extend	132 KIAS
Retract	110 KIAS
V <sub>no</sub> (Max structural cruising)	154 KIAS
V <sub>ne</sub> (Never exceed)	197 KIAS
V <sub>SI</sub> (Stall clean)	63 KIAS
V <sub>so</sub> (Stall in landing configuration)	60 KIAS

*All specifications are based on manufacturer's calculations. All performance figures are based on standard day, standard atmosphere, at sea level and gross weight, unless otherwise noted.*

*\*Operations/Equipment Category reflects this aircraft's maximum potential. See June 1982*

*Pilot, p. 93.*