

Dual instrumentation is provided both pilot and copilot by Piper Navajo. Weather radar is included in center-mounted radio installation shown above. Elevator, rudder and aileron trim wheel are conveniently grouped on throttle quadrant

## A New!

Piper announces production of its heaviest twin, the Navajo, is now in progress. Turbocharged engines are offered as option. New eight-place aircraft priced at \$89,500

The Navajo, Piper Aircraft Corporation's new six to eight place twin now is ready to join in the competition for sales in the corporate and commuter airline field. Late in August, Piper, along with announcing that the Navajo was in production, revealed specifications and performance data on the largest airplane in its 1967 line.

Larger and more powerful than the six-place Aztec C, the Navajo-designated as the P-31-300-has a top speed of up to 260 m.p.h., cruising speeds to 247 m.p.h. and a range of 1,685 miles, the manufacturer claims. Gross weight is listed as 6,500 pounds.

is listed as 6,500 pounds. Piper has placed a price tag of \$89,-500 on the newest Indian in its tepee. It joins the *Twin Comanche* (\$34,990) and the *Aztec C* (\$54,990) to complete Piper's twin-engine offering. One oldtimer, the *Apache*, has been dropped from the Piper line. It was the first multi-engine plane offered by the Lock Haven, Pa., manufacturer. A total of 2,171 *Apaches* were sold during the 12 years it was in production.

In announcing the new twin, Piper said the Navajo "represents a significant price breakthrough as it brings the cost of a new modern twin-engine eight-place airplane well below the \$100,000 mark." Navajo production is expected to reach one per day early in 1967. Current twin production of the Piper plant is five Twin Comanches and Aztecs per day.

The Navajo is offered with a choice of two power plants: a 300 h.p. Lycoming IO-540-K normally aspirated engine, and a 310 h.p. TIO-540-A engine. When the latter engine is incorporated in the aircraft, the plane is known as the *Turbo Navajo*; the turbochargers



Navajo is designed for corporate, private and commuter airline use. Eight-place twin has cruising range of up to 1,685 miles on 190 gallons of fuel. Notice the large windows at each passenger position, with additional aft windows on both sides

## Indian At Lock Haven

	SPECIFICATIONS		
the second se	OLAVAN	TURBO NAVAJO	
Engines (Lycoming)	10-540-K	T10-540-A	
H.P. and r.p.m.	300 at 2,700	310 at 2,575	
Gross weight (lbs.) takeoff	6,200	6,500	
Gross weight (lbs.) landing	6,200	6,200	
Empty weight-standard (lbs.)	3,603	3,759	
Useful load-standard (lbs.)	2,597	2,741	
Wing span (ft.)	40.67	40.67	
Length (ft.)	32.63	32.63	
Height (ft.)	13	13	
Propeller diameter-max. (in.)	80	80	
Fuel capacity—standard (gals.)	190	190	
	PERFORMANCE		
Top speed (m.p.h.)	224 (sea level)	260 (15.500	ft.)
Cruise speed (75% at sea level) (m.p.h.)	198	201	
Altitude cruise speeds (m.p.h.)	210 (6,400 ft.)	247 (23,500	ft.)
Flans extended stall speed (m n h.)	70	71	
Normal takeoff ground run (ft )	1 080	1 066	
Short field takeoff ground run (ft )	930	890	
Normal takeoff distance over 50' (ft)	2 350	2 270	
Normal landing ground roll (ft)	1 725	1 725	
Short field landing ground roll (ft )	1 115	1 115	
Best rate of climb speed (m.n.h.)	108	110	
Best rate of climb (ft./min.)	1.440	1.395	
Best single engine rate of climb	270	245	
Service ceiling (ft )	20,500	26 300	
Single engine absolute ceiling (ft)	7.000	16,400	
Fuel consumption (gal /hr.) (total)	31.4	35.6	
75% power 2,400 r.p.m. (to be	U.I.T	00.0	
confirmed)			

provide full sea-level power to 15,000 feet and 75% power to 23,500 feet. Piper claims that the *Turbo Navajo's* 247 m.p.h. maximum cruise speed at 75% power at 23,500 feet is the highest cruise speed of any six to eight place piston-powered aircraft. Its 71 m.p.h. stall speed is considerably lower than any other aircraft in its class, Piper says.

The Navajo is offered with three basic interiors—Standard, Commuter and Executive. The Standard carries six persons and the Commuter eight. The Executive contains a separate crew, compartment, a conference room seating four with facing seats and two foldaway tables, a refreshment unit and a lavatory.

The cabin is almost 16 feet long; actual measurements are 15 feet 10 inches from forward cabin wall to the rear of the cabin. Another feature which is expected to please the passengers is the large windows—one window for each of the six passenger positions, larger windows for the crew. In addition, there are smaller windows aft on each side. The cabin temperature is thermostatically controlled and is individually adjustable at each sidewall outlet. Heat is provided by a 35,000 BTU Janitrol gasoline-fired heater. Cool air comes from a scoop located in the dorsal fin. Additional cool air can be circulated through the heating system ducts. The Turbo Navajo engine's turbo-

The *Turbo Navajo* engine's turbochargers operate continuously and are equipped with safety devices to prevent overboost. Full takeoff power is automatically maintained up to 15,000 feet through a density controller which automatically adjusts manifold pressure between 38 and 42 inches.

Construction of the Navajo is allmetal throughout with Fiberglas components used for some purposes, such as the cowling and wing tips. Wings are spliced at the center with heavy steel plates and attached to the fuselage in four ways. There are attachments to the side of the fuselage, at the front and trailing edge, in addition to the heavy splice joint.

One of the unusual characteristics of the Navajo is a  $V_{mc}$  (minimum engine out control speed) of 85 m.p.h. This gives the plane an Accelerate/Stop distance of 2,120 feet.

## Aviatrix Sets New Altitude Mark

Frances S. Bera of Long Beach, Calif., flew a stock twin-engine Piper Aztec Turbo C to a record-setting altitude for lightplanes—40,194 feet—on July 16. This was the last day the National Aeronautics Association had given the aviatrix exclusive sanction for the attempt. Confirmation of the new record was made three weeks after her flight, which took place at the Long Beach Airport.

This altitude mark exceeded the 1960 record for that aircraft classification established by Jerrie Cobb. Miss Cobb flew a twin Aero Commander to 36,932 feet. It also exceeded Walter Cable's 39,334-foot flight in a Cessna 210, the highest mark for a stock lightplane in the Federation Aeronautique Internationale record book.

In preparation for the flight, Miss Bera took a three-day course in highaltitude technique at Castle Air Force Base. She was taken to a simulated altitude of 43,000 feet in a pressure chamber to learn the use of a special pressure demand oxygen system. "The Air Force Instruction allayed my fears," Miss Bera said. "I'm convinced all pilots should have this kind of training in the age of high-altitude flights," the veteran pilot, flight examiner and aircraft saleswoman continued.

The new record will become official after NAA certification has been forwarded to FAI in Paris.

Fran Bera and the Aztec in which she set a new world altitude record

