



Ted Smith looks on as an employee of the Ted Smith Aircraft Company tests the comfort of the firm's sleek Aerostar 320/400. The prototype was rolled out Sept. 22 and was scheduled to begin flight tests late last month. Company expects to devise from four to nine models, ranging from two-place trainer to twin jet, from same basic airframe

PHOTO BY DON DOWNIE

Ted Smith Announces Aerostar Line

The man who is generally regarded as having started a whole new trend in business aircraft concepts nearly two decades ago claims to have done it again.

Ted R. Smith, creator of the twin-engine Aero Commander line now owned by Rockwell Standard Corporation, has developed a new design identified as the Aerostar. According to Smith, aerodynamic design and manufacturing economics have been combined into a single development to produce a totally new, four- to nine-model line of aircraft that will range from a two-place trainer priced at about \$5,000 to a 450 m.p.h., six-place twin jet in the \$250,000-\$300,000 price range.

Because of the design and production program laid out by the Ted Smith Aircraft Company in Northridge, Calif., the Aerostar line can be produced for 30% less than most current general aviation aircraft, Smith claimed. Static testing of the airframe is being conducted to exceed certification requirements of Part 23 of the Federal Aviation Regulations, he added.

Smith organized the aircraft company, which he serves as president, in 1963 on the philosophy that it should be concerned not only with the development of an aircraft, but with the idea that it would embody new concepts in the aircraft manufacturing operation. The certification program for the Aerostar was scheduled so that, even before the first flight, the only data required to complete FAA approval would be the actual flight data, Smith said. He figured that certification was about 85% to 95% complete by late September.

First prototype of the Aerostar line, the Aerostar 320/400, was rolled out that month and was scheduled to be test flown during October. A six-place, twin-engine piston-powered, midwing model, it reflects the refinement of

proven aerodynamic features, according to Smith. Everything on the airframe except certain antennas and rotating beacons is flush-mounted. Baggage may be stored in four areas totaling 55 cubic feet. The instrument panel is canted 12° to eliminate parallax problems and instruments and switches have been grouped on the basis of studies on efficiency, the human factor element and logic.

Avionics equipment will be factory installed and included in current price projections, Smith said. Aerostar interiors will reflect the "personal luxury car" concept styled for aviation by a nationally known industrial design firm, he added.

In the immediate offing are prototypes of the Aerostar 500 and 600P, Smith disclosed. The 600P will be the first of the pressurized units, designed to give a cabin altitude of 8,000 feet at a flight level of 25,000 feet above sea level.

Rapid development of the full line of Aerostar models will be made possible in part by the great number of airframe components common to all, Smith said. Such structures as the nose cone, nacelles, windows and forward cabin section have been developed to adapt to a basic airframe. Wings, empennage, aft fuselage, cabin sections and cockpit sections, and landing gear will be common to all models.

The Aerostar design will permit savings in engineering, tooling, labor and parts inventory, according to Smith. It will also reduce service problems such as fatigue cracks, loose attachments and similar conditions, he claimed.

It has been reported that Rockwell Standard Corporation has an option to acquire the entire Aerostar line, on an all-or-none basis, which may be exercised when one or more of the planes reaches certification (see May 1966 PILOT, page 48). □