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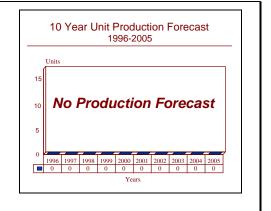
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Aerospatiale Omega - Archived 8/97

Outlook

- No launch order, program dormant.
- No production forecast.



Orientation

Description. Tandem seat, single-engine, unpressurized, military primary/basic trainer.

Sponsor. Omega is privately sponsored by Aerospatiale.

Contractors. Societe Nationale Industrielle Aerospatiale, Paris Cedex, France. Design and manufacture

performed by Aerospatiale subsidiary Societe de Construction d'Avions de Tourisme et d'Affaires (SOCATA), Aerodrome de Tarbes-Ossun-Lourdes, Tarbes Cedex, France. **Status.** Flight tests of the Omega prototype began in mid-1989. The prototype was converted from an Epsilon testbed aircraft powered by the TP319 turboprop engine. The testbed was the original Epsilon prototype, and was fitted with the new engine in 1985.

Total Produced. One prototype of the Omega, a converted Epsilon.

Application. Primary/basic military training.

Price Range. Estimated at \$1 million in 1991 US dollars.

Technical Data

Design Features. Cantilever low wing monoplane with conventional tail section. Aircraft is composed primarily of light alloy construction materials. Airframe is approximately 60 percent common with the Epsilon piston trainer.

Dimensions	<u>Metric</u>	<u>US</u>
Length overall	7.81 m	25.62 ft
Height overall	2.68 m	8.79 ft
Wingspan	7.92 m	25.98 ft
Weights		
Weight empty, equipped	860 kg	1,896 lb



Max T-O weight	1,400 kg	3,086 lb
Performance		
Never-exceed speed ^(a)	519 km/hr	280 KTAS
Max cruising speed ^(b)	463 km/hr	250 KTAS
Service ceiling	9,145 m	29,996 ft
Max range	1,408 km	760 nm
Propulsion		

Omega (1)

Societe Turbomeca TP319 twin-spool free turbine turboprop engine derated to 268 kW (360 shp), driving a Hartzell two-bladed, constant speed propeller. Maximum continuous power rating is 448 ehp.

^(b)At 4,573 m (15,000 ft)

^(a)Up to 4,878 m (16,000 ft)

Variants/Upgrades

Not applicable

Program Review

Background. The Aerospatiale/SOCATA TB 31 Omega first flew in April 1989. The prototype was converted from an Aerospatiale Epsilon testbed aircraft powered by the Turbomeca TP319 turboprop engine. This aircraft was the original Epsilon prototype, and first flew with the turboprop powerplant in November 1985. After completing 18 flights, the aircraft was returned to Turbomeca's Pau facilities for modifications.

The original Epsilon, powered by a 300-hp Lycoming piston engine, was produced for the French Air Force, with 150 now in service. Two dozen were produced for export customers including Portugal and Togo. For details, see the Aerospatiale Epsilon report in this binder.

The Omega is fitted with a Hartzell propeller with a larger diameter than that of the piston model, and also carries a crew oxygen system. Although the TP319 was derated to 300 shp for initial tests aboard the aircraft, it is expected that a production standard version of the trainer would use a powerplant derated to 360 shp.

<u>Recent Activity</u>. Aerospatiale had hoped for a French Air Force order but this has not occurred. Proposals were submitted in 1987 in which the aircraft's unit cost was lower than those of the Swiss-built Pilatus PC-7 and the EMBRAER EMB-312, the other candidates for the service's trainer requirement. The service subsequently selected the EMBRAER candidate, thus necessitating the use of company funding to produce an Omega prototype.

In the spring of 1991 SOCATA teamed with the US firm Sabreliner Corp to offer the Omega for the US Air Force/US Navy Joint Primary Aircraft Training System (JPATS) program. This candidate is no longer in the running.

Funding

Not available.

Recent Contracts

None.

Timetable

Dec	1979	First flight of piston powered Epsilon
Jul	1983	Initial deliveries of piston-powered Epsilon
Nov	1985	First flight of Epsilon TP319 testbed aircraft
Apr	1989	First flight of Omega prototype

Jun	1991	SOCATA and Sabreliner announced teaming for JPATS
Dec	1991	Omega began US demonstration tour

Worldwide Distribution

Not applicable.

Forecast Rationale

No Omega production is anticipated as previous attempts to sign up a launch customer have proven unsuccessful.

Ten-Year Outlook

No production forecast.

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