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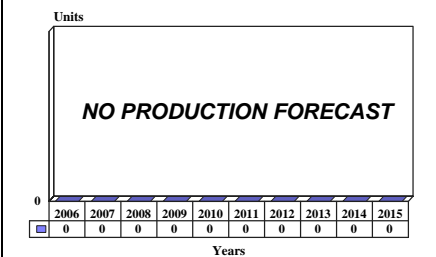
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Aermacchi M-290TP RediGO - Archived 8/2007

Outlook

- Aermacchi has production rights to the RediGO
- The company has never announced any RediGO sales since assuming the program from Valmet

10 Year Unit Production Forecast 2006 - 2015



Orientation

Description. Two- to four-seat, military and commercial, single-turboprop-powered basic/primary flight training aircraft.

Sponsors. The RediGO was originally sponsored by Valmet, and is now sponsored by Aermacchi.

Status. Valmet production ended in 1995. In early 1996, Aermacchi took over all production and sales rights for the RediGO.

Total Produced. Two L-90TP prototypes and 29 production aircraft have been produced. One of the

prototypes, which was powered by a Turbomeca TP319 turboprop, was destroyed in an accident in August 1988.

Application. Primary/basic military and commercial flight training, aerobatic training, night and instrument training, weapons and tactical training, liaison, and search and rescue.

Price Range. Estimated at \$1.6-\$1.8 million in 2001 U.S. dollars.



M-290TP REDIGO

Source: Aermacchi

Aermacchi M-290TP RediGO

Contractors

Prime

Aermacchi SpA	http://www.aermacchi.it , Via Ing P Foresio, 1, Venegono Superiore, 21040 Italy, Tel: + 39 0331 813111, Fax: + 39 0331 813450, Email: info@aermacchi.it , Prime
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Subcontractor

Hartzell Propeller Inc	One Propeller Place, Piqua, OH 45356-2656 United States, Tel: + 1 (937) 778-4200, Fax: + 1 (937) 778-4321 (Three-Blade Propeller)
Rolls-Royce Corp	http://www.rolls-royce.com/northamerica , PO Box 420, 2001 S Tibbs Ave, Indianapolis, IN 46206-0420 United States, Tel: + 1 (317) 230-2000, Fax: + 1 (317) 230-6763 (250-B17F Turboprop Engine)

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Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 22 Commerce Road, Newtown, CT 06470, USA; rich.pettibone@forecast1.com

Technical Data

Design Features. Cantilever low-wing monoplane cowlings. The tricycle landing gear is electro-hydraulically actuated. Seating is side-by-side, with composite-fiber-reinforced plastic is used in wingroot rear seats removable for baggage and light cargo fairings, the dorsal fin, the tailcone, and engine storage.

	<u>Metric</u>	<u>U.S.</u>
Dimensions		
Wingspan	10.60 m	34.76 ft
Length	8.53 m	27.97 ft
Height	3.20 m	10.49 ft
Wing area	14.78 sq m	159.09 sq ft
Weight		
Max T-O weight		
Trainer	1,350 kg	2,974 lb
Armed	1,900 kg	4,185 lb
Performance(a)		
Max speed at 10,000 feet	352 kmph	190 kt
Climb rate	695 m/min	2,280 ft/min
Service ceiling	7,620 m	25,000 ft
TO run	150 m	492 ft
Landing run	182 m	597 ft
Max range	1,400 km	758 nm

Propulsion

RediGO (1) Rolls-Royce 250-B17F turboprop flat-rated to 336 kW (450 shp), driving a Hartzell three-blade, constant-speed, reversible-pitch propeller; or
 (1) Turbomeca TP319 turboprop flat-rated to 313 kW (420 shp), driving a Hartzell three-blade, constant-speed, reversible-pitch propeller.

Armament

Six underwing hard points. Each inner point is capable of 250 kilograms (551 pounds); the other four can carry 150 kilograms (331 pounds) each. Maximum external stores load is 800 kilograms (1,764 pounds).

(a)At maximum takeoff weight of 1,350 kilograms (2,974 pounds), ISA, SL.

Aermacchi M-290TP RediGO

Variants/Upgrades

In addition to the trainer version, other RediGO versions include a target tug with winch gear, a survey aircraft, and a coastal patrol version with a Honeywell RDR-1400C radar pod under the wing.

Program Review

Background. Valmet of Halli, Finland, completed a Finnish Air Force order for 30 piston-powered L-70 trainers in 1982, and proceeded to develop a turboprop-powered variant of the two/four-seater. Following the loss of the prototype aircraft, designated L-80TP, further modifications and design changes were made and the aircraft was redesignated L-90TP. Valmet intended to develop a true low-cost turboprop trainer that would be effective in most military aircraft training roles. The L-90TP would reduce the time needed to qualify pilots and could transition a pilot to an advanced turbofan-powered trainer more quickly by eliminating a portion of the ab initio and intermediate aircraft training hours in a Western military syllabus.

An L-90TP prototype flew in mid-1986, and Valmet actively promoted the aircraft at the 1987 Paris Air Show. The aircraft, also known as the RediGO, is a low-wing design and has been marketed in either two- or four-seat configurations. In appearance, the RediGO resembles a number of single-engine, retractable-gear, general aviation aircraft.

“European” Version. In December 1987, Valmet announced that the second RediGO prototype had been fitted with a Turbomeca TP319 turboprop engine in order to enhance the aircraft’s overall sales potential. The Finnish manufacturer had planned to market this

model alongside the Allison-powered version. The Turbomeca engine offered improvements in level speed and rate-of-climb as compared with the original model. The TP319-powered variant was destroyed in a crash in August 1988 at an air show in Belgium. However, the accident was attributed to pilot error. A TP319-powered production version was never launched.

Valmet Production Ended. In December 1994, Valmet announced that it would halt production of the RediGO trainer after the completion of 31 aircraft (including the prototypes). The company planned to concentrate on maintenance work, as well as subcontracting to Saab. The last RediGO produced by Valmet was delivered in 1995.

Aermacchi Takes Over Rights to the RediGO

In early 1996, Valmet signed a deal with Aermacchi that transferred RediGO production and sales rights to the Italian manufacturer. Aermacchi renamed the aircraft the M-290TP RediGO.

Valmet is currently known as Patria Aviation.

In July 2003, the Italian company Finmeccanica acquired a 67.2 percent share of Aermacchi. Through its subsidiary Alenia Aeronautica, Finmeccanica had already owned a 27.4 percent stake in Aermacchi.

Timetable

<u>Month</u>	<u>Year</u>	<u>Major Development</u>
Jul	1986	L-90TP prototype first flight
	1987	Valmet announced alternate TP319-powered version
Aug	1988	TP319-powered prototype destroyed in accident
Jan	1989	Finnish Air Force ordered 10 RediGO trainers
Sep	1991	Finnish certification of Allison-powered version
Dec	1991	Initial deliveries to Finnish Air Force
	1995	Valmet halted production
Jan	1996	Aermacchi took over RediGO production and sales rights

Worldwide Distribution / Inventories

Eritrea Air Force	8
Finland Air Force	9
Mexico Navy	9

Aermacchi M-290TP RediGO

Forecast Rationale

Since taking over the program from Valmet, Aermacchi has never announced any sales of the RediGO. Though the aircraft may still be part of the Aermacchi product line, the company no longer lists it among its products on its corporate website.

Over the years, Aermacchi has studied several possible improvements for the RediGO, including an upgraded

engine, an improved oxygen system, an anti-icing system, a more powerful environmental control system, crashworthy seats, and a crew escape system.

Nevertheless, it is quite possible that the last RediGO has been built. Pending further news, no forecast for additional RediGO production is issued.

Ten-Year Outlook

ESTIMATED CALENDAR YEAR PRODUCTION

Aircraft	(Engine)	thru 05	High Confidence Level				Good Confidence Level				Speculative		Total 06-15	
			06	07	08	09	10	11	12	13	14	15		
VALMET														
L-90TP	250-B17F	30	0	0	0	0	0	0	0	0	0	0	0	0
L-90TP	TP319	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Production		31	0	0	0	0	0	0	0	0	0	0	0	0