

# Asiago GP2

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The Asiago GP2 was a sailplane for training purposes in soaring and acrobatics. It was designed in 1937, by Maurizio Garbel and Ermenegildo Preti of the Research Institute for Soaring flight (Centro Studi ed Esperienze per il Volo a Vela, CVV) of the Royal Polytechnic of Milano and it was built on commercial scale by Aeronautica Lombarda in Cantù.

General characteristic:

Wing Span .....	13,70m
Length .....	6,50m
Wing surface .....	12,70sqm
Aspect ratio .....	14,8
Empty weight .....	120kg
Useful load .....	90kg
Total weight .....	210kg
Wing load .....	16,5kg/sqm
Load factor .....	9
Min. sinking speed .....	0,80m/sec
Gliding ratio .....	1:20

## DESCRIPTION

**WING:** The Asiago was a high winged plane with a monospar wing sustained by a single steel strut. The spar was formed by two strips of laminated spruce and covered laterally with plywood. The leading edge was also covered with plywood and thus resisted torsion stresses. In the central part of the wing the aerofoil GO 535 was maintained constant while in the trapezoidal portion was smoothly changed to the NACA M6. The ailerons were rather big and rotated on ball bearings.

The ratio of the differential command was 1:25 and together with the ball bearing suspensions of all hinges and pulleys gave the transversal command a soft touch usually unobtainable in those days. Almost all metal parts were of Dural.

**FUSELAGE:** The front part of the fuselage had a hexagonal section,

rounded up in the front and becoming rhomboidal in the rear. The fuselage was completely covered with plywood. The pilot seat was very comfortable, being purposely designed to give the least fatigue in long flights. The barograph was placed behind the head of the pilot inside the fuselage. The landing could have been done by the utilization of a normal skid or by a central wheel. The tail skid was of spatula type with a tennis ball as shock absorber. The control lever was of Dural to avoid disturbing the compass and it was mounted in ball bearings.

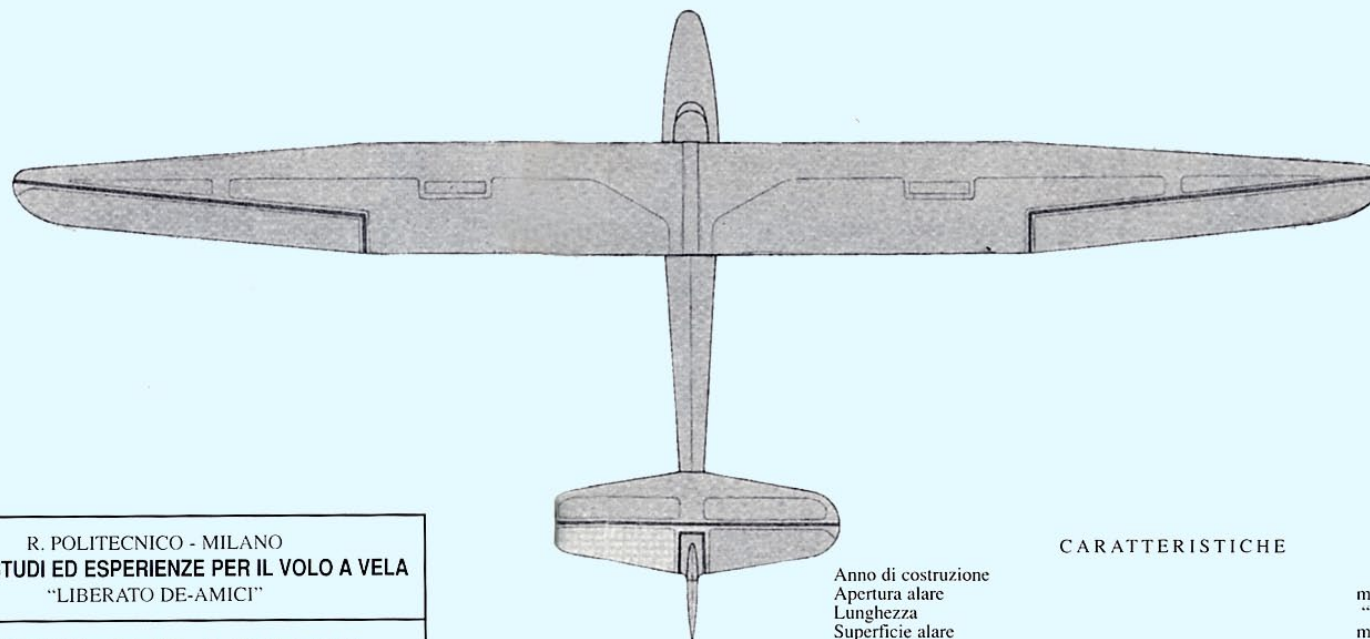
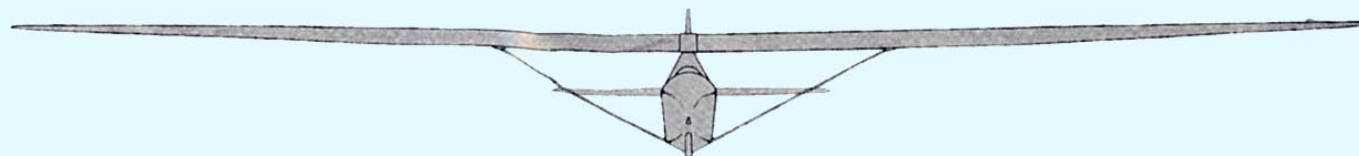
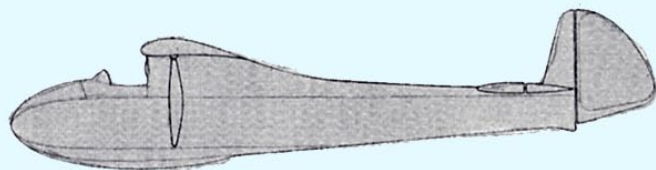
**TAIL:** The cantilever tail plane was designed to improve the aerodynamic performance of the sailplane. All cables were inside the fuselage.

To rig the Asiago took less than 8 minutes, just time to fix 15 bolts.

The Asiago was registered by the Registro Navale e Aeronautico in the category of "Aerobatic Sailplanes." Leut. Col. Umberto Nannini, Chief Inspector of Soaring Flight, flew the Asiago and tried it for aerobatics. His opinion was

"An ideal ship for our school of thermal soaring and aerobatic flights, that we should quickly introduce in all private soaring Clubs."

The great merit of this sailplane was its very low cost, due to the simplicity of its design, and it was produced on a commercial scale.



Tav. n. <b>2</b>	R. POLITECNICO - MILANO CENTRO STUDI ED ESPERIENZE PER IL VOLO A VELA "LIBERATO DE-AMICI"
	<b>APPARECCHIO C.V.V. 2 ASIAGO</b>
Progetto di G. PRETI e M. GARBELL	

Anno di costruzione  
Apertura alare  
Lunghezza  
Superficie alare  
Allungamento  
Peso a vuoto  
Carico utile  
Peso totale  
Carico alare  
Velocità di discesa  
Rapporto di planata

CARATTERISTICHE

	1937
m	13.70
"	6.50
m <sup>2</sup>	12.70
	14.80
kg	130.-
"	80.-
"	210.-
kg/m <sup>2</sup>	16.50
m/sec	0.80
C <sub>p</sub> /C <sub>r</sub>	20.-

