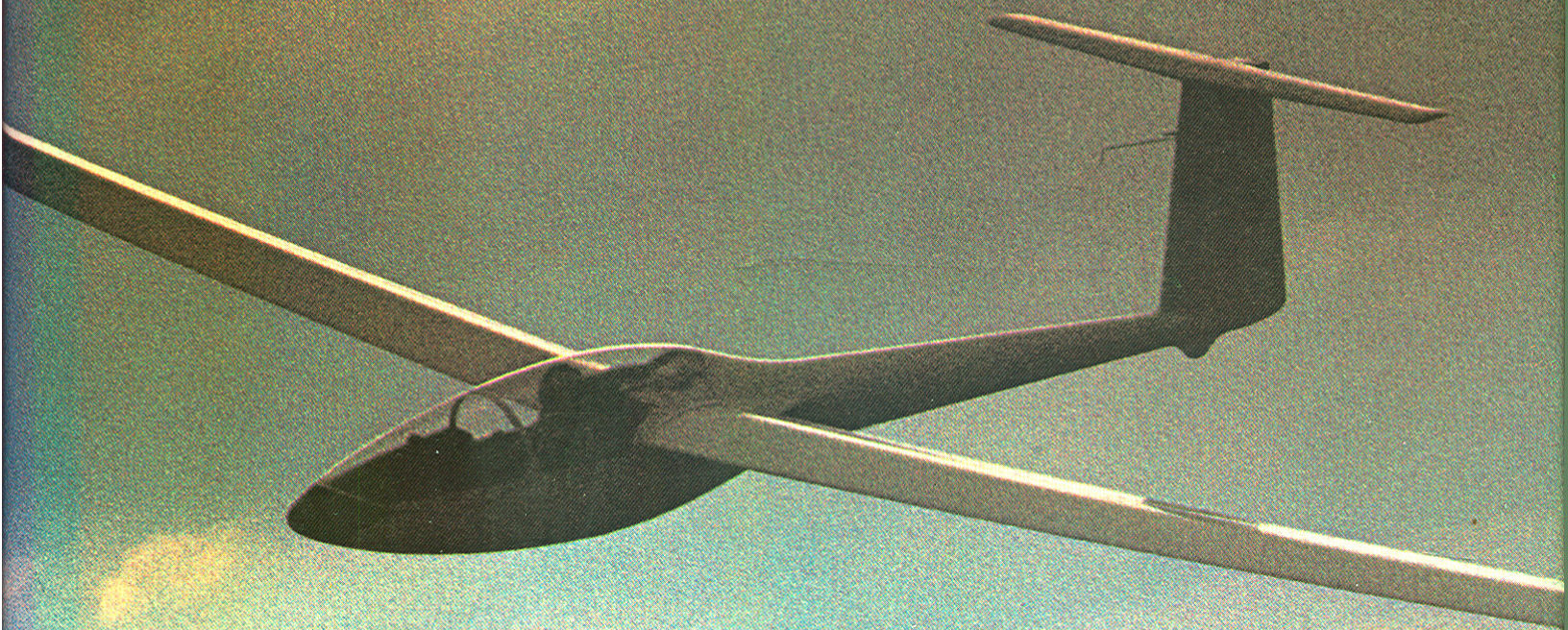


# Jane's World Sailplanes

and Motor Gliders / *Andrew Coates*



## FFA Diamant / Switzerland

The Diamant is, as is expected from the Swiss, a beautiful piece of precision engineering. It is a true all-glassfibre sailplane in that every part is made of that material (while most 'glassfibre' sailplanes use plywood and balsa in their construction). Only the flying control system and fittings are of other materials.

The fuselage and tail unit were developed at the Swiss Federal Institute of Technology in Zürich under the direction of Professor Rauscher. A prototype fuselage was built in 1962 and flew with Ka 6CR wings receiving the designation Ka-Bi-Vo.

FFA gradually took over development and manufacture of

the Diamant, starting with the HBV-Diamant 15 which used H301 Libelle wings and which first flew on 5 September 1964. Thirteen of this type were built. The Diamant 16.5 is generally similar to the HBV-Diamant 15 but has wings of increased span, designed and built by FFA. A total of 41 had been built when production ended. The Diamant 18 is generally similar to the 16.5 but has wings of 18 m (59 ft 0½ in). Accommodation is in a semi-reclining position beneath a forward-sliding canopy. Early models featured a side stick, mounted on the right hand side, but this was moved to the more conventional central position on later models.

**Data** Diamant 18  
**Manufacturer** Flug und Fahrzeugwerke  
**First Flight** February 1968  
**Wing span** 18.0 m (59 ft 0½ in)  
**Height** 1.35 m (4 ft 5 in)  
**Length** 7.72 m (25 ft 4 in)  
**Wing area** 14.28 m<sup>2</sup> (186 sq ft)  
**Wing section** Wortmann FX62-Z-153 mod.  
**Aspect ratio** 22.7  
**Empty weight** 280 kg (617 lb)  
**Max weight** 440 kg (970 lb)  
**Water ballast** None  
**Max wing loading** 30.8 kg/m<sup>2</sup> (6.31 lb/sq ft)  
**Max speed** 129 kt (240 km/h)  
**Stalling speed** 32.5 kt (60 km/h)  
**Min sinking speed at 39 kt (72 km/h)** 0.52 m (1.71 ft)/sec  
**Max rough air speed** 108 kt (200 km/h)  
**Best glide ratio at 54 kt (100 km/h)** 45

