

THE OLYMPIA EON

A Sailplane Catalogue Item

This is the basic sailplane which was entered in the design competition against the Orlik, Mu 17 and several others. It was designed as the sailplane which would be used in the Olympic Sailplane Competition in 1940. Jacobs, the designer of the Buzzard, Weihe and Reiher laid out this design as the D. F. S. Meise. Following the World War II, it was redesigned to British C. of A. requirements. In doing this, the ship picked up over 80 pounds.

The outstanding feature of this Olympic design is its beautiful handling at all speeds.

In spite of the moderate performance of this ship, it must not be considered obsolete. By reducing the waviness of the airfoil, the profile drag coefficient was reduced from 0.0128 to 0.009. Such an improvement on the airfoil would result in a maximum glide ratio of 27.9.



For 3-view see back cover

MEASUREMENTS IN FEET

Span	49.3
Length (Overall)	23.9
Height (Overall)	5.23
Fuselage Width (Overall)	1.97
Fuselage Ht. (Overall)	2.95

AREAS IN SQUARE FEET

Fuselage Cross-section	5.9
Wing Area (With Aileron)	161
Aileron (Total)	23.6
Flaps (Total)	None
Spoilers (Total)	3.65
Stabilizer	15.1
Elevator	10.2
Horizontal Area	25.3
Fin	3.76
Rudder	7.75
Vertical Area	11.50

WEIGHTS IN POUNDS

Empty	435
Pilot	130
Extra Equipment	30
Total	595
Pilot-Empty	0.219

WING

Wing Platform	Tapered
Sweepback	0° at 25% C
Dihedral	2.5°
Gull	None
Root Chord	4.76 ft.
Half Span Chord	3.28
Tip Chord	1.81 ft.
Aspect Ratio	15
Taper Ratio	2.64
Load Factor	9.6

AIRFOIL SECTIONS

Wing Root	Go. 549
Wing Half Span	Go. 549
Wing Tip	Go. 676
Horizontal Tail	sym.
Vertical Tail	sym.
Angle of Incidence to Fuselage	0.5°
Washout	7.0°
Winch Tow	to 50 mph.
Auto Tow	to 50 mph.
Airplane Tow	65 mph.
Aerobatics	No

PERFORMANCE

Glide Angle (Maximum)	24.5
Minimum Sink	2.29 fps
Airspeed at Best Glide	
Angle	41 mph.
Airspeed at Best Sink	34 mph.

Maximum Design

Speed	130 mph.
Wing Loading (Test Flight)	3.7 psf
Span Loading (Test Flight)	9.225 pds./ft. 2

CONSTRUCTION AND MATERIALS

Wing—Wooden Structure, etc.	Wood
Fuselage	Wood
Horizontal Tail	Wood
Vertical Tail	Wood
Landing Gear	Skid & Wheel

AERODYNAMIC CHARACTERISTICS

Drag coefficient (effective parasite)	0.018
Efficiency Factor	81%

• Karl-Erik Ovgard

(Continued from Page 1)

and 26,000 feet, respectively, but this time with the intention to better the Swedish altitude record by a flight to between 30 and 35,000 feet. He had been cautioned not to exceed the latter limit because his A-14 oxygen mask would become marginal a few thousand feet higher. He was last seen climbing fast after release by Bob Symons at about 15,000 feet. When he failed to return in the afternoon, an air search was organized which, with the aid of the Air Force Rescue Organization, the CAP and Sheriff's Air Squadron, lasted for three days and covered a vast area. Unfortunately the wreckage of the glider with the pilot's body in it was eventually found near Independence in Owens Valley, some forty miles south of Bishop.

Careful examination of the wreckage and the damaged barograph record disclosed that an altitude of the order of approximately 37,000 feet had probably been attained, although post flight calibration of the instrument was impossible. Somewhere on the descent, presumably in an uncontrolled dive or spin, the horizontal surfaces and much of the wings of the sailplane broke or twisted away; they have not yet been found. There was definite evidence of anoxia and severe bodily injuries, but how much of the latter were suffered on impact or earlier in the course of some violent motion in the air has not been ascertained. It is likely that he was dead or unconscious before impact. Subsequently developed pictures which the pilot had taken on this flight showed the instrument panel with a maximum altimeter reading of

32,500 feet, with the oxygen supply pressure gauge apparently reading low.

The inference therefore is that at some altitude moderately higher than this he may have suffered hypoxia and since this ship was not equipped with shoulder straps, he may have slumped over the controls. This analysis is, however, not conclusive inasmuch as other bits of evidence are still being scrutinized and the findings of the CAB have not yet become available.

In the meantime, the lessons to be learned from this most unfortunate accident, the first fatal one in the Bishop wave, can perhaps be formulated as follows: Oxygen awareness cannot be overemphasized. Familiarity with limitations of the equipment is imperative. It may not always be possible to keep the sailplane from climbing higher than intended and the effect can be insidious. A shoulder harness may be a life saver. Radio equipment can be very helpful. Solo flights to high altitude lack the advantage of having a co-pilot and helper along in case of trouble with equipment, navigation or strategy.

It is not certain which if any of these points were of critical importance in Ovgard's case or whether other conditions such as canopy icing, malfunction or maladjustment of equipment or excessive violence of the atmosphere played a role, but there can be no doubt that extreme care and elaborate indoctrination and preparations are mandatory for all those who wish to venture into this new frontier realm, which still holds many mysteries.

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