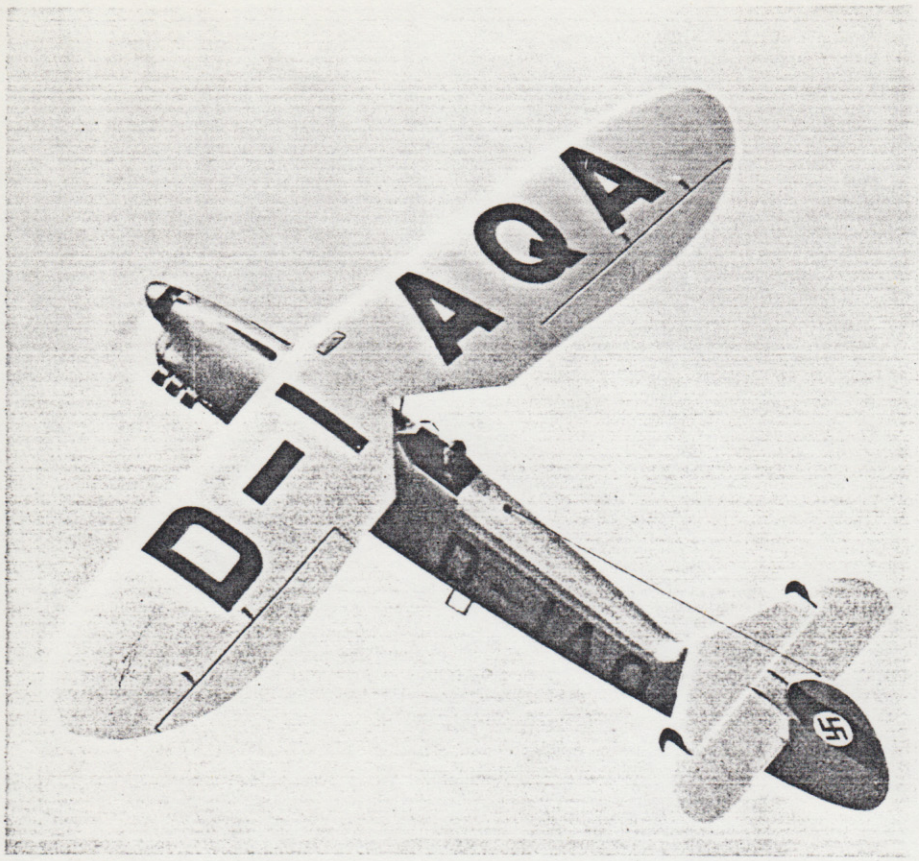


FOCKE-WULF Fw 56 „STÖSSER"

Text and photos are from the 1938 English language brochure of the Focke-Wulf Flugzeubau A.G. Bremen. The Fw 56 first flew in November 1933 and was offered for export in 1937.

The Fw 56 "Stosser" is a single-seat machine, equally adaptable for home defence force or for fighter training. For either purpose it can be equipped as required with two machine guns or with one machine gun and bomb releasing gear. Wireless apparatus can also be installed. Owing to its modest purchase price, small upkeep costs, and low fuel consumption, the Fw 56 makes fighter training a very economical proposition. The "Stosser" also makes an excellent fast touring plane when larger fuel tanks are installed.

The fuselage frame is a welded lattice structure of chrome-molybdenum steel tubing. The junction bolt-borings are bronze-bushed throughout, premature wear of the bores being obviated by a very low-set seating pressure. All connected fittings are similarly bronze-bushed to facilitate bolt replacement.

The engine mounting is of chrome-molybdenum steel, normalized after welding.

The fuselage frame is covered as far as the cockpit with Elektron sheeting. From the cockpit to the fuselage-end the covering is fabric stretched over a wooden former-frame.

All cowling sheets that have to be opened frequently are fitted with quick-fastening catches. The entrance flaps have slip-bolt fasteners that are particularly easy to operate, even in mitts.

The undercarriage consists of two cantilever compression legs with sturdy helical springs and oleo damping.

The wheels are braked by oil pressure, toe-operated from the upper end of the rudder pedals.

The tail skid has a renewable hard manganese steel rubbing shoe and a 40 atmos. compressed air shock absorber strut.

The tail plane, non-adjustable in the air, is of spruce structure with birch plywood covering. It is carried from the fin and braced from the fuselage. Change of trim arising from alterations in airscrew revs. or variations of load is met by adjusting the trailing edge of the elevator in flight.

The elevator sections, rigidly coupled by shaft, are fabric covered spruce structures. The elevator is aerodynamically and mass balanced. At the inner faces of the elevator balance, verticle edge-discs of light metal are provided, and these function as end-discs (with the corresponding advantages) while at the same time providing mass balance.

The fin is built integral with the fuselage. The top of the fuselage section forming the fin is a cowling panel that can be removed to provide access to the controls and to the tail plane structure.

The rudder is of fabric covered spruce construction with torsion-resisting plywood nose. It is aerodynamically balanced, and an automatically controlled trailing edge ensures directional stability.

The ailerons, which are aerodynamically and mass balanced, are fabric covered structures of steel tube at leading edge and duralumin. Their metal sectioned edges may be bent by hand.

Flap. In the wing top centre a flap is provided for shortening the glide. Its effectivity becomes noticeable at about 90 mph and increases as the speed of the plane decreases.

The wing is a structure of two spruce box-spars, and birch plywood, the covering being mainly birch ply, with occasional fabric. The main ribs, also...box type, engage the ailerons and struts. The remaining ribs are of the ordinary lattice type.

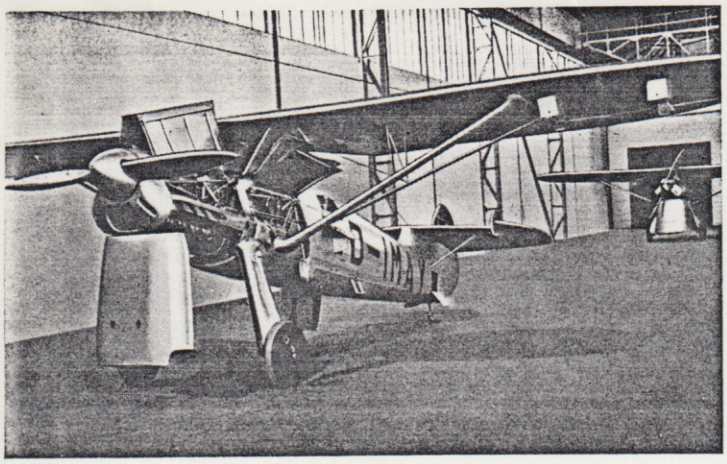
Strutting and bracing. The wings are each connected to the fuselage by a Vee-strut and by a pair of cabane N-struts. They are further supported by light vertical N-struts from the centre of the Vee-struts. The material used is chromemolybdenum steel. A wire is stretched from each rear cabane wing connection to the centre of the main strut, while leading and rear bracing wires are provided beneath the cabane.

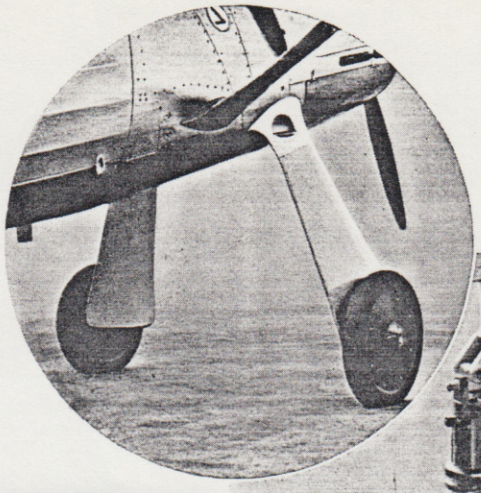
Engine. Argus As 10 C, 8-cylinder inverted Vee, air-cooled, 240 hp peak output at 2000 rpm.

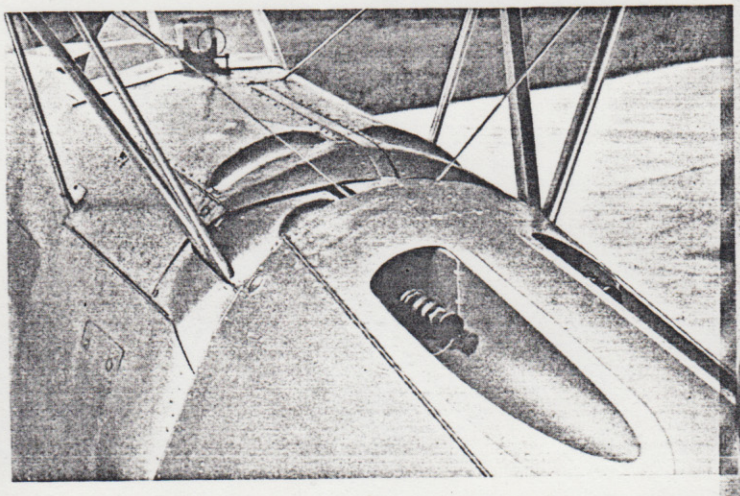
The main and auxiliary fuel tanks, total capacity 22 imp. gals., are made in one piece of aluminum, and are fastened under the fuselage frame ahead of the pilot's seat, taking the line of the fuselage. If the main tank becomes exhausted, the auxiliary or emergency tank may be switched on to provide another half-hour's flying (at 1800 rpm).

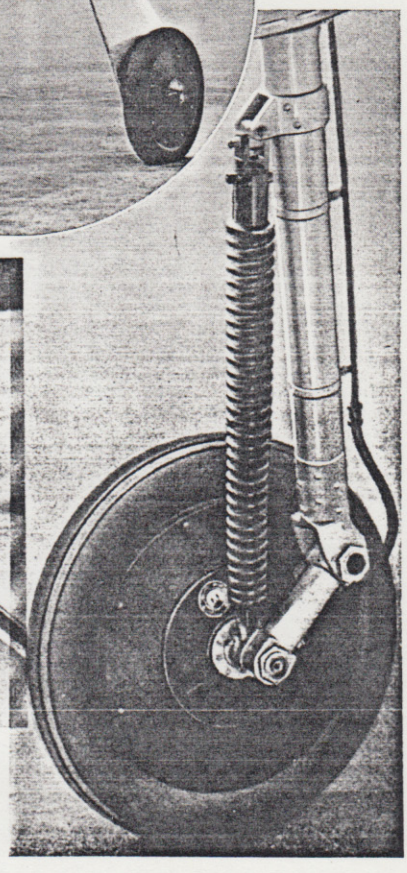
The oil tank is made of welded Elektron sheeting and holds 3 gallons.

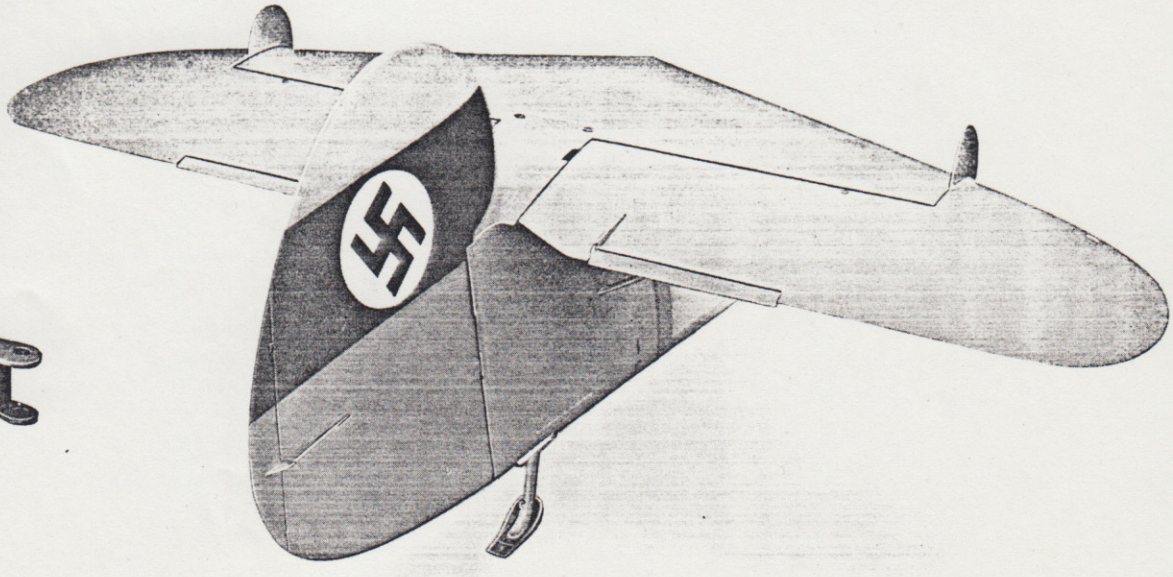
Fuel Conduit. The fuel is fed by through-piping.

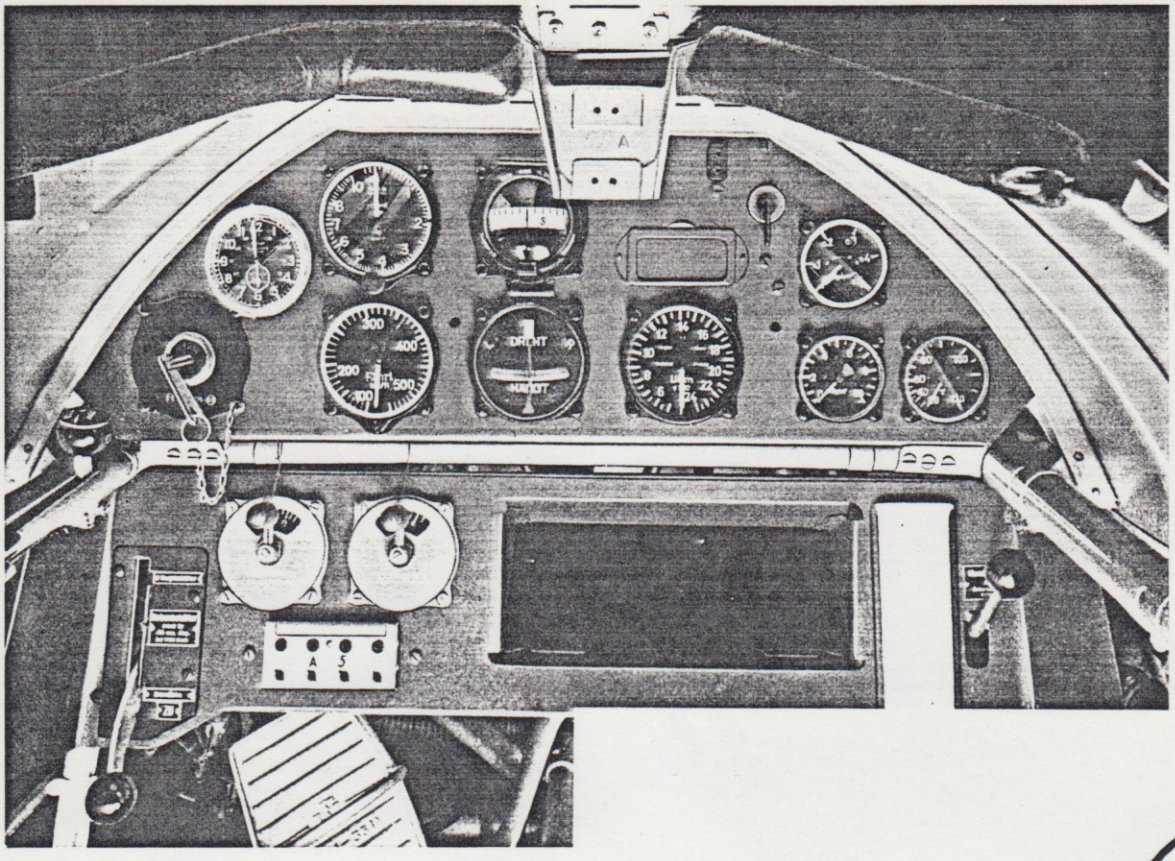


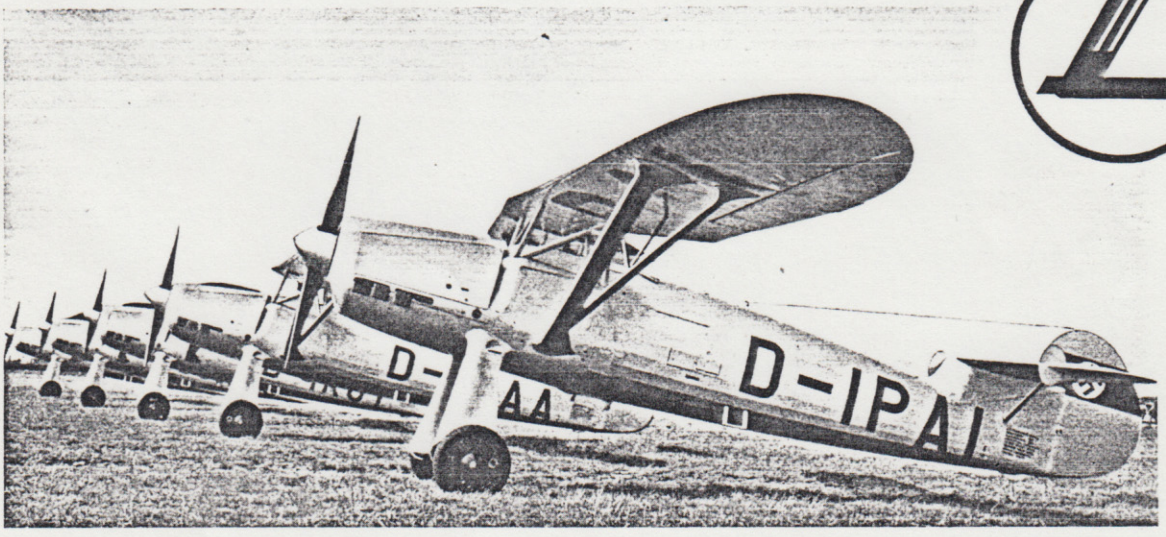








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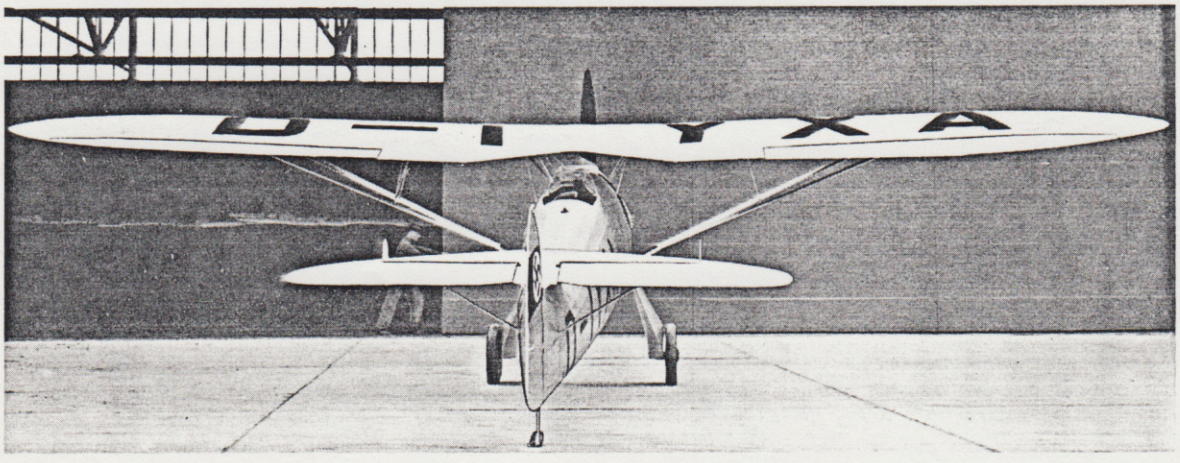
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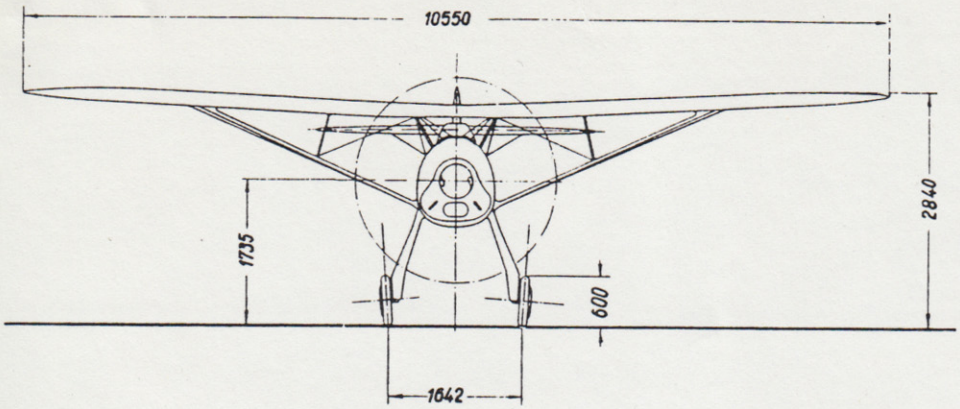
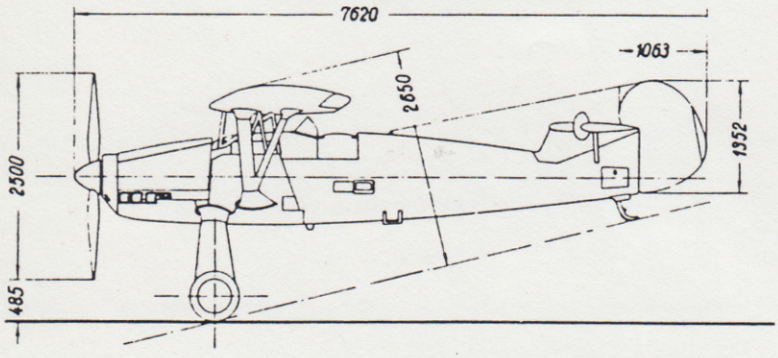
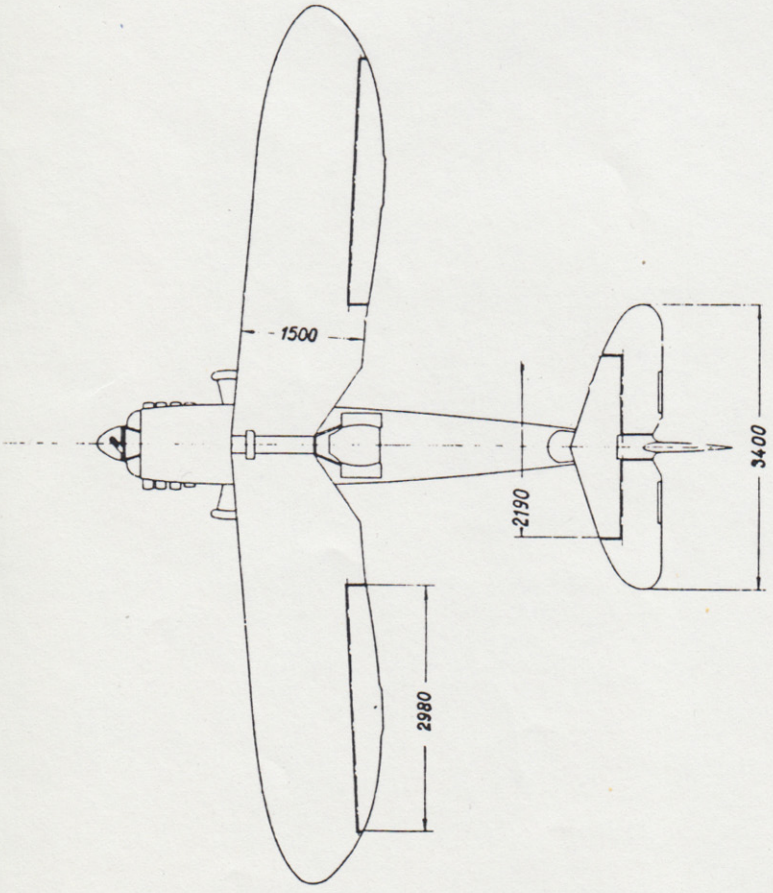


		Fw 56
		Drei-Seiten-Zeichnung

Fw 56 Schuleinsitzer





DIMENSIONS

Span 35 feet, Overall Length 25 feet, Overall Height 8½ feet, Wheel Track 5½ feet, Tyres High Pressure 600 x 100 mm, Fuel Tank Capacity 22 imperial gallons, Oil Tank Capacity 3 imperial gallons.

AIRSCREW

Diameter 8½ feet, Number of Blades 2, Direction of Rotation - Right, Structure - Wood.

SURFACE AREAS

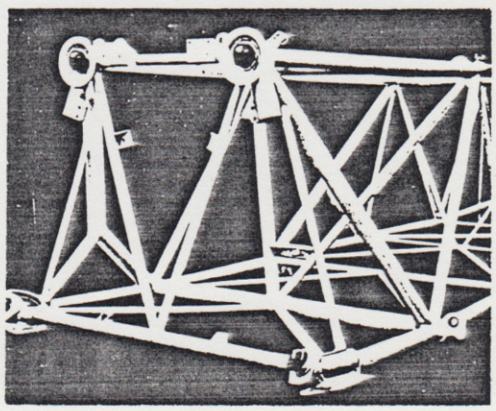
Wing with Ailerons 150 sq. ft., Ailerons 22½ sq. ft., Tail-plane and Elevator 27.8 sq. ft., Fin and Rudder 11.8 sq. ft., Dihedral 5°, Sweepback 3°, Aspect Ratio 1:7.8.

WEIGHTS

Weight Empty 1474 lbs, Disposable load 693 lbs, Flight Weight 2167 lbs.

GUARANTEED PERFORMANCES

Top Speed 167 mph, Cruising Speed at 1800 rpm 153 mph, Landing Speed 56 mph, Take-off run in still air - 186 yards, Landing run in still air - 247 yards, Service Ceiling 20,000 ft., Climb to 3500 ft. in 2.2 mins., 7000 ft. in 4.7 mins., 10000 ft. in 7.8 mins., 14000 ft. in 11.9 mins., 17000 ft. in 17.9 mins. Initial rate of climb 28 ft./sec. Wing Loading 14.4 lbs/sq. ft., Power Loading 9 lbs/hp. Flight Range 231 miles at 1800 rpm, Fuel Consumption 14.6 gals. per hour. Highest permissible Speed of Dive 300 mph.



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