



## THE WEIHE

The Weihe, a design of Hans Jacobs of the German Research Institute for Soaring Flight, first appeared in the German contest in 1938. The design features quick assembly fittings. Equipped with the powerful D. F. S. dive brakes, it has a terminal velocity of 118 mph. These brakes give it a sinking speed of 9 fps at 50 mph and 6 fps at 40 mph. Its maneuverability considering time (7.2 secs.) to roll from 45 deg. left to 45 deg. right bank at 20% above stalling speed appears slow when compared to the Schweizer 1-23 (4.1 secs.) of Tiny Mite (3.3 sec.). However, the helix angle is nearly identical for these three craft. The Weihe possesses the nice soft characteristics of ships with slow stalling speeds and good stick motion for speed control. It stalls at 31.5 mph and has a stick motion of 1.5 inches between stall and 80 mph with a 170 lb. pilot. It was from this sailplane that the Olympia was developed. The characteristic long fuselage is evident on both of these ships. At the beginning of the war the Weihe was in mass production and was used as a trainer by the German Air Force. Currently only one is flying in this country; see the pictures of Shelly Charles at the Mid-South Contest. The performance of the Weihe speaks for itself, more golden "C" legs have been won with it than any other single design.

## ANOTHER SAILPLANE CATALOGUE ITEM SEE PERFORMANCE CURVES BACK COVER

MEASUREMENTS	
Span .....	59.1 feet
Length (Overall) .....	27.2 feet
Height (Overall) .....	7.15 feet
Fuselage Width (Overall) .....	1.97 feet
Fuselage Height (Overall) .....	5.12 feet
Fuselage Cross-Sectional Area .....	5.4 sq. feet
AREAS	
Wing Area (With Aileron) .....	198 sq. feet
Aileron (Total) .....	41 sq. feet
Spoilers (Total) .....	5.5 sq. feet
Stabilizers .....	10.9 sq. feet
Elevator .....	13.4 sq. feet
Horizontal Area .....	24.3 sq. feet
Fin .....	4.2 sq. feet
Rudder .....	9.5 sq. feet
Vertical Area .....	13.7 sq. feet
WEIGHTS	
Empty .....	508 lbs.
Pilot .....	160 lbs.
Extra Equipment .....	70 lbs.
Total .....	738 lbs.
Pilot/Empty .....	.315
WING	
Wing Platform .....	Tapered
Sweepback .....	2.5°
Dihedral .....	2.0°
Root Chord .....	5.25 feet
Half Span Chord .....	3.31 feet
Tip Chord .....	1.48 feet
Aspect Ratio .....	17.7
Taper Ratio .....	3.56
Load Factor .....	8.0
AIRFOIL SECTIONS	
Wing Root .....	G o 549
Wing Half Span .....	G o 549
Wing Tip .....	M 12
Horizontal Tail .....	G o 409
Vertical Tail .....	G o 409
Angle of Incidence to Fuselage .....	3°
Washout .....	6.5°
Winch Tow .....	56 mph
Auto Tow .....	56 mph
Airplane Tow .....	68 mph
Aerobatics .....	Not Certified
PERFORMANCE	
Glide Angle (Maximum) .....	31.5
Minimum Sink .....	2.9 fps
Airspeed at Best Glide .....	47 mph
Airspeed at Best Sink .....	40 mph
Maximum Design Speed .....	133 mph
Wing Loading (Test Flight) .....	3.73 lbs./sq. ft.
Span Loading (Test Flight) .....	0.211, 1bs/sq. ft.
CONSTRUCTION AND MATERIALS	
Wing—Wooden Structure, etc. .....	Wood
Fuselage .....	Wood
Horizontal Tail .....	Wood
Vertical Tail .....	Wood
Landing Gear .....	Skid
AERODYNAMIC CHARACTERISTICS	
CDmin .....	0.017
Efficiency Factor .....	Above 90%
(Not linear in C sub L squared vs. C sub D).	

## ● Why Two-Place?

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no ship you'd better get a two-place quick before she catches on with what gives, because after you are on the hook it is too late. If you have a two-place you CAN say, "Well, come on along." In a few cases it works.

It is wonderful to sit around and dream about what could be done with a 40-to-1 two-place with a 1.5fps sink; and maybe some day some enterprising philanthropist will put such a ship in production in this best of all lands. But in the meantime we have a lot of good two placers available. Get them out and fly them. If you haven't tried it you'll find it's a lot more fun than anything you are doing!



Eugart Yerian loads another passenger at Memphis.