

THE EAGLE ERA



**some important
questions are answered
about the newest bird
in the sky.**

Write for your personal copy of a complete dossier on the exciting Eagle 1.



EAGLE 1

an
adventure
into the
freedom of
flight . . .

THE EAGLE SPREADS ITS WINGS

Perhaps only once in a generation an airplane is introduced which is so different in concept and design that it captures the imagination of everyone who sees it. The Eagle 1 is that airplane.

This all-new airplane represents the greatest single advance in general aviation since the advent of the all-metal airframe. The Eagle is a space-age vehicle. It shuns the traditional, representing advanced state-of-the-art processes and materials. Constructed of plastic reinforced with fiberglass, the Eagle 1 achieves a substantial increase in structural integrity over metal airplanes. Its aerodynamically clean lines are unbroken by rivets, seams or skin laps. Here is an aircraft designed to perform better and faster than any other in its price category.

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EAGLE 1



(Q) What category is the Eagle 1 certified in?

(A) The Eagle 1 is certificated under FAR Part 23 normal category. However, the static and structure load tests were conducted under FAR Part 23 utility category criteria.

(Q) Is the Eagle 1 really made of plastic?

(A) The Eagle 1 is constructed of space-age plastic reinforced with fiberglass. Advanced state of the art processes and material are used in the fabrication of the airplane.

(Q) Are the materials used in the Eagle 1 stronger than conventional all-metal airplanes?

(A) Tests have been conducted which show that the structural integrity of the Eagle 1 is substantially higher than metal airplanes in the same weight categories. Fatigue is virtually non-existent with the Eagle's construction techniques.

(Q) Are the materials used in the Eagle 1 subject to temperature variances (i.e.) heat and cold?

(A) We have tested the materials used in the Eagle 1 from minus 65° F to plus 170° F with no adverse effects or deformation of structure.

(Q) What G loads was the airplane subjected to in your static test program?

(A) Wings were subject to loads of over 8.0 G's. The airframe was subjected to loads of 4.4 G positive limit and 6.6 G ultimate.

(Q) Does the Eagle 1 have ribs and frames like the metal airplanes do?

(A) No. It is a classic monocoque design with the exterior skins acting as stress and load bearing members.

(Q) Are the wing spars made of the reinforced plastic?

(A) Yes, but they are shear webs rather than conventional spars. There are five webs in each wing panel with metal bonded to them in the center section and at the wing panel attach points. The wing skins act as the stress or load bearing structure.

(Q) Is the Eagle 1 corrosion resistant?

(A) Yes. The materials we use in the construction of the Eagle 1 are completely corrosion resistant. On some metal airplanes in our category it costs extra money to get corrosion proofing. The exterior finish molded into the airframe surface is also highly resistant to weathering.

(Q) Where are the radio antennas located?

(A) They are located inside the fuselage. This gives the Eagle 1 a clean aerodynamic airframe with a minimum of drag. Also, the non-metallic construction improves transmission and reception of radio signals.

(Q) Does the airplane have fuel tanks or bladders, and does the fuel system require special management?

(A) No. Fuel is carried inside the wing structure. The Eagle 1, like most modern airplanes, has a "wet wing". The wing fuel is fed into a fuel accumulator located in the wing center section, and from there to the engine. The Eagle incorporates a simple on-off fuel system.

(Q) What access is there to the engine?

(A) Removal of the top and bottom engine cowls entirely exposes the engine, its electrical exhaust, fuel and oil systems. Ease of accessibility will reduce the engine maintenance costs and time.

(Q) What is standard equipment? What is optional equipment?

(A) We have minimized the optional equipment and have included as standard virtually all of the equipments which are expensive extra cost options on the competitive airplanes in the Eagle's category. (See equipment list for details of the Eagle's standard equipment).

WINDECKER MODEL AC-7 (EAGLE 1)

SPECIFICATIONS

Weights

Gross Weight	3,400 lbs.
Empty Weight	2,150 lbs.
Useful Load	1,250 lbs.

Performance

Top Speed @ S.L.	210+ mph
Cruise, 75% power @ 7000 ft. (best power mixture)	204 mph
Cruise 65% power @ 12,000 ft. (best power mixture)	202 mph
Optimum Range @ 10,000 ft. 84 gallons with 45 minute reserve	1,230 miles
Rate of Climb @ S.L.	1,220 ft/min
Service Ceiling	18,000 ft.
Take-Off	
Ground Run	855 ft.
Total over 50 ft. obstacle	1,690 ft.
Stall Speed (power-off)	
Flaps Up, Gear Up	71 mph
Flaps Down, Gear Down	66 mph

Engine

Continental Fuel Injection	10-520-C 285 BHP @ 2700 RPM
Propeller, 2 Blade Constant Speed (dia.)	84 in.

Wing Area and Loading

Wing Area	176 sq. ft.
Wing Loading at Gross Weight	19.3 lbs/sq. ft.
Power Loading at Gross Weight	11.9 lbs/HP

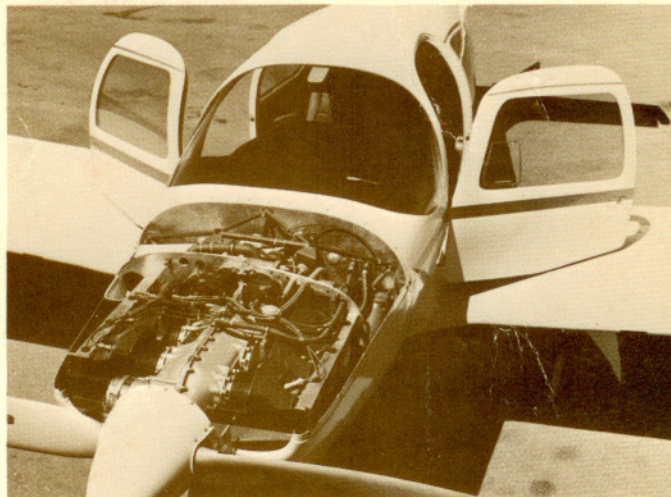
Dimensions

Fuselage Length	28.5 ft.
Wing Span	32 ft.
Maximum Height	9.5 ft.
Cabin Length, includes rear utility shelf	130 in.
Cabin Width, at entrance door windows	50% in.
Cabin Height	
Front Seats	40.5 in.
Rear Seats	42.5 in.
Entrance Doors, (2) one each side of airplane	38 x 35 in.
Luggage Compartment Door	15½ in. x 23½ in.

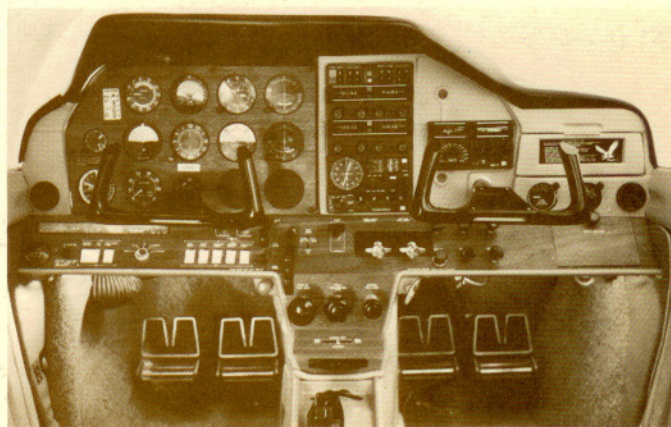
Fuel and Oil Capacity

Fuel Capacity	84 gals.
Oil Capacity	12 qts.

Due to company policy of continuing product improvement, Windecker reserves the right to make changes in specifications, performance, and equipment without prior notice.



Engine accessibility is quick and easy. Most of the engine inspection areas can be seen by removal of the one-piece top cowl. A wide door on each side provides passengers with ease of entry and egress.



The Eagle is one of the first general aviation airplanes to conform to the new SAE standards for flight instrument panel arrangements. All operating controls and switches are in easy reach of the pilot.



The rugged nose landing gear incorporates a gear door which functions as a cowl flap when the gear is retracted.



The main landing gear is completely enclosed in the retracted position to maintain the clean drag-free lines of the Eagle I.



The plastic reinforced-with-fiberglass construction of the Eagle and the close manufacturing tolerances result in superior fairing of the flaps with the adjacent wing and fuselage areas.

