

PLANS FOR THE HP-11



by RICHARD E. SCHREDER

A constant stream of requests for information, plans and parts to build duplicates of the HP-11 gave convincing proof that there was a pent-up demand for an all-metal sailplane of top performance.

I tried to get two established sailplane companies to fill the requests but they were unable to take on any new projects. Reluctantly, I decided to go ahead.

The resulting plan is a facility geared to supply the home-builder soaring-enthusiast with plans and such component parts as he cannot find or make locally. Making money is the last consideration as there are many easier ways to do so with far fewer headaches.

Enough changes have been made to the HP-11 to rename the current version the HP-11A. These changes are as follows:

1. Improvement of fuselage lines.
2. Simplification of construction wherever possible.
3. Change from fixed wheel to simplified retractable wheel.
4. Incorporation of hydraulic shock absorbers for better pilot protection in hard landings.
5. Simplified five-minute assembly and disassembly.
6. Provision for rocket-launching motor.
7. Use of an automatic-retracting tow release.

I am rushing to completion a personal copy of the HP-11A to test a rocket motor which is currently available. This exciting motor is small, very light and produces 185 lbs. of thrust. This easily retractable unit has the potential to launch the HP-11A to 2000 feet in 70 seconds on one gallon of kerosene. Best of all, the engine price

Photo opposite: Dick Schreder flying his HP-11 sailplane at the 1963 EAA Fly-In. This is the ship he flew to 3rd place in the 1962 U. S. Nationals with a 469-mi. flight, to 3rd place in the 1963 World Championships with a 382-mi. flight, and to 4th place in the 1963 U. S. Nationals.

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is low enough so that anyone can afford it. If successful, we will offer it for approximately \$500.

No advertising has been done as the initial rush of orders has all but swamped us. The following persons have completed or are building HP-11's or HP-11A's:

1. Dick Schreder, Bryan, Ohio (completed)
2. Bill Coverdale, Waynesville, Ohio.
3. Dean Fleming, Adrian, Mich.
4. Heinrich Preiss, Windsor, Ontario (completed)
5. Charles Bonds, Weston, Ont.
6. Stan Tombs, Binghamton, N.Y.
7. Joe Perrucci, Binghamton, N.Y.
8. Jim Stone, Endwell, N.Y.
9. Slim Jost, Dale Anderson and John Felabaum, Toledo, Ohio.
10. Otto Zauner, Vineland, N.J.
11. William Holbrook, Cumberland, Md.
12. Lcdr. V. Hugus, Guantanamo, Cuba.
13. Norman Gowin, Buffalo, N.Y.
14. Dave Webb, Fabreville, Que.
15. A. E. Gude, Jr., Rockville, Md.
16. Everett Williston, Florissant, Mo.
17. Tiner Lapsley, Stillwater, Ok.
18. Jim Carpenter, Clarkson, Ont.
19. Bob Bienenstein, Allen Park, Mich.
20. Raymond Robertson, Yorktown Heights, N. Y.
21. Victor Peres, Erie, Pa.
22. Burton Meyer, Chicago, Ill.
23. Rudy Wolf, Adrian, Mich.
24. Fred Robinson, San Fernando, Calif.
25. Hans Berg, Lasalle, Ont.
26. Edward Romiens, Windsor, Ont.
27. Andre Krutchkoff, Bedford, Mass.
28. Reinhard Gohs
29. Philip Paul, Dayton, Ohio
30. Dick Schreder, Bryan, Ohio.
31. George Redzich, Saskatoon, Sask.

32. Joseph Conrad, Harrisburg, Pa.

There is considerable EAA interest in the HP-11A project and many members who saw the HP-11 at the 1963 EAA Fly-In at Rockford have written for information.

I plan to have the HP-11A at the 1964 U. S. Nationals at McCook, Nebraska, and the 1964 EAA Fly-In at Rockford.

A 1"=1' side view drawing of the HP-11A (reproduced above—Ed.) suitable for framing is sent to each home-builder for inspiration and daydreaming.

(Editor's note: Dick's prototype HP-11 was completed early in 1962. The April, 1962, issue of Soaring carried a brief article on the HP-11 by Dick which outlined the design features and included a 3-view drawing with specifications. Basically, these are as follows: span, 52 ft.; wing area, 104 sq. ft.; aspect ratio, 26; airfoil 65 (sub 3)-618; aileron span, 8 ft. (each); aileron droop (with flaps), 15 degrees; flap span, 16 ft. (each wing); flap deflection, 10 degrees up, 90 degrees down for dive brakes; empty weight, 384 lb.; wing loading, 5.77 lb./sq. ft. at 600-lb. gross, 8 lb./sq. ft. at 832-lb. gross using 164 lb. of water ballast in removable 2"-dia. tubes in the wings; expected performance at 600-lb. gross, 42 to 1 L/D max at 55 mph, 1.54-ft./sec. min. sink; and at 832-lb. gross, 40 to 1 L/D max at 70 mph, 1.84 ft./sec. min. sink. Actual performance is probably in the 35-40 to 1 range, depending on quality of finish, sealing and fairing. Plans for the HP-11 are available for \$150 from the Bryan Aircraft Co., Bryan, Ohio, and a complete kit costs \$2795. The kit includes all skins, ribs and bulkheads formed and hydroformed. Man-hours to assemble varies from 1000 to 3000 depending on completeness of kit ordered. Home-builders may license completed HP-11's in the experimental category as amateur-built under C.A.R. Part. 1.)