



The turtle-back is sharply defined here. An outstanding trim design sets the airplane off quite well.

It's No Mirage!

FOR TWO YEARS in a row, one of the most popular airplanes at the Rockford Fly-In has been a beautiful red and white biplane, the likes of which has seldom before been seen. Perhaps therein lies the reason for its name . . . "Mirage." Actually, one has to look twice to make sure that it is real!

How to describe it? It's smooth, flush, plush, shining, gleaming, sparkling . . . all of these words together do not tell the story as well as if you could just gently run your hand across any surface of the airplane.

The "Mirage II," N-94F, is the end product of the craftsmanship of William C. Leighnor, EAA 8583, of

3401 N. Walnut, Hutchinson, Kans., and his friends. It's obvious that it wasn't built for the cost of the average homebuilt because more than skill, hard work and perseverance went into the airplane. The total outlay is around the \$8,000.00 figure. Still, it is far below what a comparable commercial product would cost.

Basically, the "Mirage II" was built from the plans for a Stolp-Adams SA-100 "Starduster." Much of the modifications result in changes of external appearance and are due to the installation of the 150 hp Lycoming O-320 engine. Added to this is a unique engine cowling, a large polished spinner and engine-exhaust thrust augmentors.

But, the most outstanding feature of the "Mirage II" is the fairing of everything on the airplane. The entire top of the fuselage is fiberglass from the cowl to the bottom of the fin. The remainder of the fuselage is fabric covered as are the wings. The wing struts project through holes in the fuselage fiberglass shell and are perfectly filleted with fiberglass paste. This gives the impression of the fuselage, struts and wing all being one integral unit.

The cowl is a snug-fitting wrapper formed of fiberglass and with a full frontal opening. Streamlined cowl "bumps" encircle the cowl similar to that of the Cessna 195.

A high turtleback sweeps downward sharply to meet the fin. This provides for the headrest and trackage for the trim but relatively simple sliding canopy which did not need to be blown. It also appears to be completely weather-tight.

The landing gear was modified slightly and seems to belie the bulkier size of the airplane. With the long



The landing and taxi lights are enclosed in a blown protective lens. Rubber booting surrounds this as well as the interplane strut cuffs. Note the way in which the flying wire clevis goes into the cuff.

fiberglass wheel-pants, the "Mirage II" has the appearance of a bird sitting on a perch.

This biplane is the second effort by Bill Leighnor. His first "Mirage" was a 190 cu. in. class, midget-racing aircraft. It was completed and entered the competition at a time when the big prize money was no longer put up, so it never really had a chance to prove itself. It is active as a sport aircraft in Michigan.



The "Mirage II" features the most perfectly filleted struts and formed cuffs of any airplane.



A first impression is that the "Mirage II" has a radial engine because of the large cowl and frontal opening.

Showpiece that it is, the "Mirage II" can perform equally as well. It carries a full electrical system, radio and night-flying equipment, and a controllable-pitch Hartzell propeller. With that engine and propeller combination, it far out-performs most of the homebuilt aircraft.

It will be many years before the "Mirage II" ceases to be a top attraction wherever it lands, and it will continue to reap many awards for its superb workmanship, finish and ingenious modifications. Bill Leighnor and his crew deserve a lot of credit for turning out this magnificent airplane, the pride of America's homebuilt aircraft fleet! *

EAA Offers Life Membership

OVER A PERIOD of years, the EAA has been receiving an increasing number of requests for a life membership in the organization. It is believed by those persons urging the adoption of a life membership that it would help to establish a degree of permanency of the EAA in the minds and attitudes of other interested persons.

Your Board of Directors investigated numerous life membership programs, employed by other organizations of international prominence, to help them establish an attractive program of our own. After great deliberation, we feel we have developed a life membership that is pleasing to all. Basically, the life membership program is as follows:

1. A life membership may be purchased for \$200.00 per member.
2. A life membership card will be issued to the member. A card with the member's EAA number prefixed by an "A" will be issued to the member's wife upon his request.
3. An initial issue of an EAA lapel pin will be made with each life membership.

4. The member's name will appear in a special place in *SPORT AVIATION*.
5. The member's name will be engraved on a special plaque to be displayed in the EAA Air Museum Foundation.
6. The life member will receive, from the date of his membership, all issues of *SPORT AVIATION* plus any other publication that may become included in the future.

Be among the first to join this exclusive membership group. Apply for your life membership today. We are pleased to announce that the following have already become life members of the Experimental Aircraft Association:

CORNELIUS DUTCHER, EAA 12074, Phoenix, Ariz.

HERBERT COMBS, EAA 1481, Bedford, Ind.

DAVID GAUTHIER, EAA 1997, Seattle, Wash.

MARVIN HOPPENWORTH, EAA-2519, Cedar Rapids, Iowa. *

Helmets And Goggles

WITH THE RISING interest in open-cockpit sport aircraft, there is also a rising demand for the old helmet and goggles.

Headquarters is receiving an increasing number of inquiries for a source of supply for these items. Up to now, the only known source for them in this day and age is in a motorcycle shop. White cloth helmets are quite commonplace among the cyclists, and these work out very fine for summer flying. They usually come with an

emblem affixed, but this can easily be removed. Goggles may or may not be available from these motorcycle supply stores.

Occasionally one can find helmets and goggles advertised in aviation trade papers, but they are among the rarer items to be found.

If anyone knows of a good source of supply for both leather and cloth helmets, as well as goggles, Headquarters would appreciate being informed of it. *