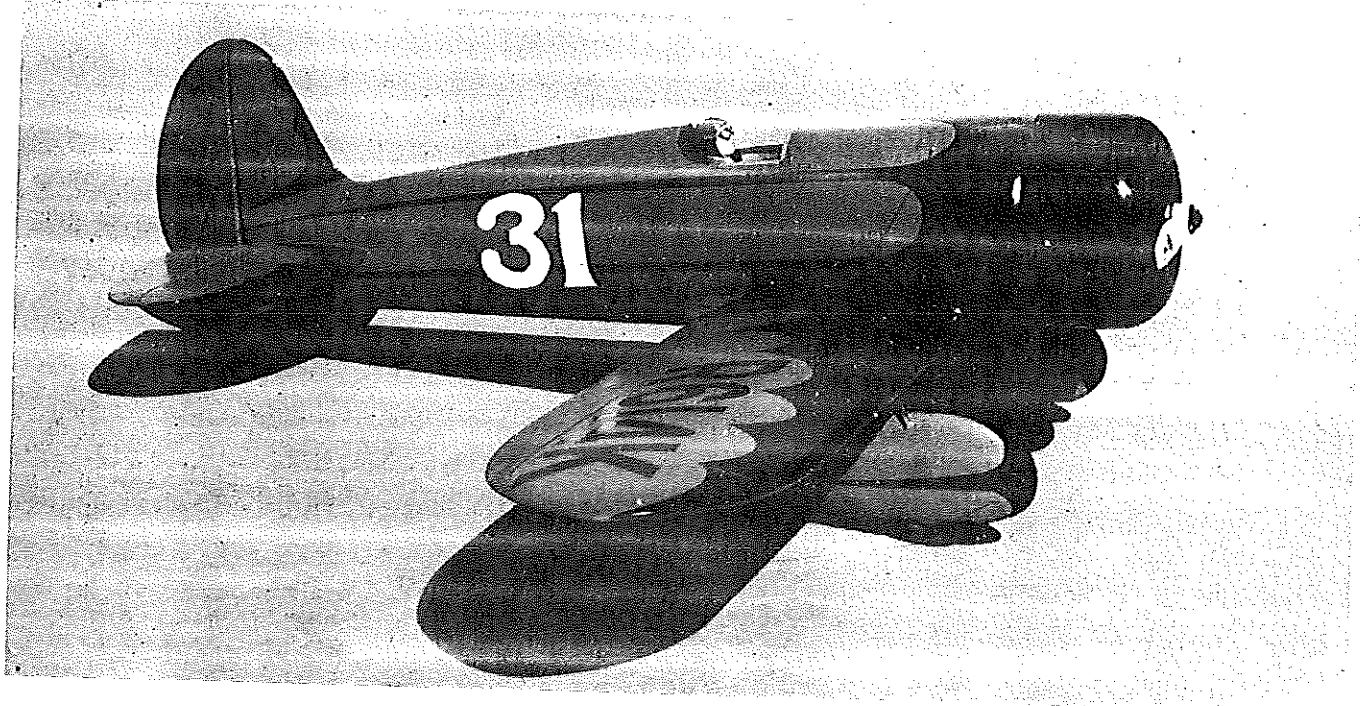


THE TRAVEL AIR "MYSTERY SHIP"

By DALE SEBRING . . . A combination of nostalgic scale and an interesting fuselage construction technique makes this a fascinating project. Radial engined Thompson Trophy racers would look great around the pylons.

• Race planes in general, and the Travel Air Mystery Ship in particular, have always appealed to me. It seems to embody all those brutish yet beautiful qualities that an airplane must have to be appealing and functional. This particular Travel Air represents the plane with which Doug Davis won the 1929 Thompson Trophy Race. The colors of bright red and black trim with white numbers are very attractive. There are several other color schemes that could be substituted, however, such as Frank Hawks' Model-R of 1931, the Texaco Number 13, which was finished in red and white, or the Shell Oil Model R which Jimmy Doolittle flew, finished in red and yellow.

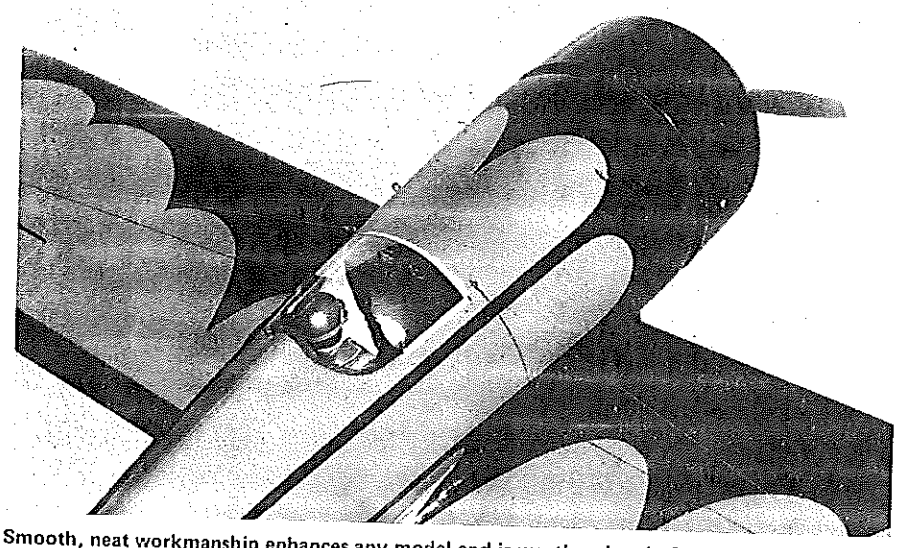
I won't get into much on construction details, as this is a relatively simple aircraft to build. However I would not attempt it as a first, scratch-built project.

I think a close examination of the plans will give you a pretty good outline of the construction and the details involved.

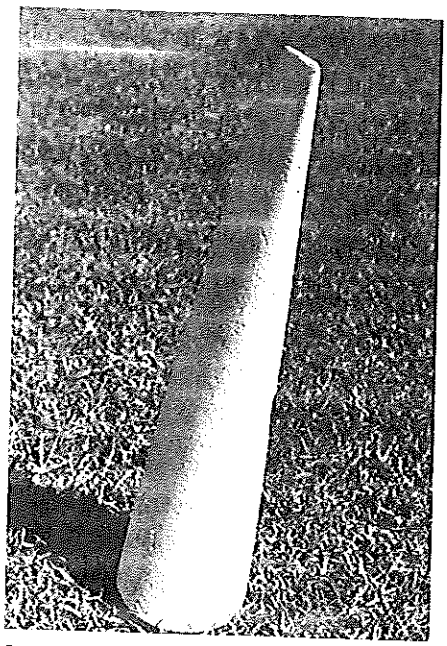
The wing is quite simple . . . 1/16 skin and ribs, and single top and bottom spars with webbing. Secure the landing gear blocks well. A little extra epoxy here won't hurt. They may take some added shocks later on. Hollow the wing tips, if you wish, to save a little extra weight.

The ailerons are torque tube actuated, which I feel are more positive and perhaps a little bit lighter than the standard push-rod and bellcrank system. They are also more attractive with no horns showing, and they are not that difficult to fabricate. Be sure to glass the center section of the wing with some glass tape and resin.

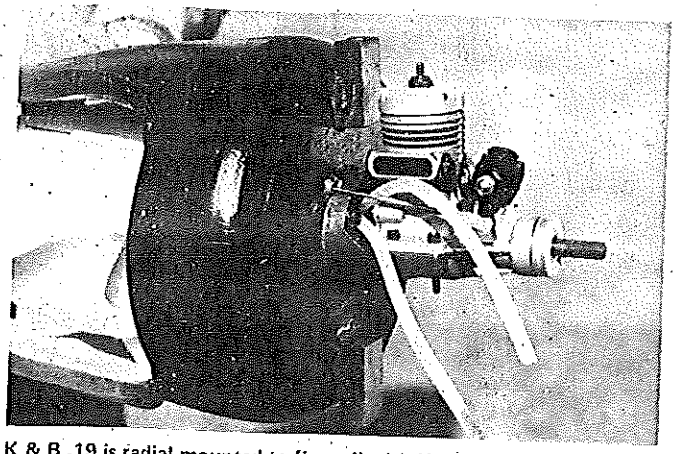
The fuselage is a little different from the usual. A simple plug is carved from styrofoam, over which you shape the



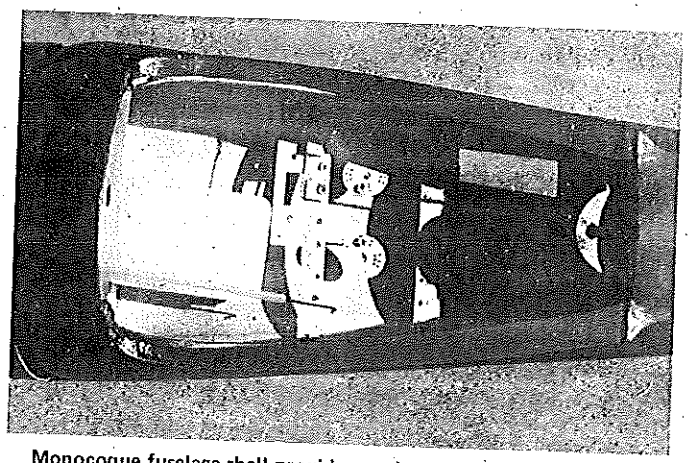
Smooth, neat workmanship enhances any model and is worth points in Sport Scale. It's quite apparent in this photo of the Travel Air. All-up weight without radio is just under 2-1/2 lbs.



Styrofoam plug for molding balsa fuselage skins. Finish needn't be super-smooth.



K & B .19 is radial mounted to firewall with Kraft-Hayes mount. Hardwood blocks take cowl mounting screws.



Monocoque fuselage shell provides unobstructed interior, is quite strong, yet extremely light. Tank is packed in foam.

fuselage sides in half shells, and later join them on their center lines. This plug need not be real smooth or neat, just a rough approximation as shown on the plans, will be quite adequate. When the desired shape is achieved, two sheets of 1/16 balsa fuselage skin are soaked in a water and ammonia solution so they will become very flexible, then wrapped around one side of the plug and secured with an ace bandage or something similar. Use large enough sheets to permit trimming to the centerline later. Allow to dry until completely cured (overnight), then the other fuselage side can be formed in like manner. At this time you can also fit the bulkheads to see if they are lined up properly. When satisfied, disassemble the fuselage shells and then separate the two 1/16 balsa skins. Doing one shell side at a time, the two 1/16 skins are laminated with contact cement.

Spray both facing areas with a cement, such as 3M 77. With two extra hands to help, spread the outer skin, roll the inner skin a little tighter, and set it inside the outer shell. Spread carefully, then place back on foam plug and press skins together. Trim the two halves for a neat glue joint along the center line.

Fuselage construction can then go ahead by joining the two shells and installing the bulkheads at the same time. The front bulkhead laminations are 1/4 inch balsa, which is sanded to conform to a semi-radius cross-section. This shape will lead to the firewall which is 1/8 plywood, to which your motor mount is secured.

I used a Kraft-Hayes 19 size motor mount to fit the Veco 19 which I used in the aircraft.

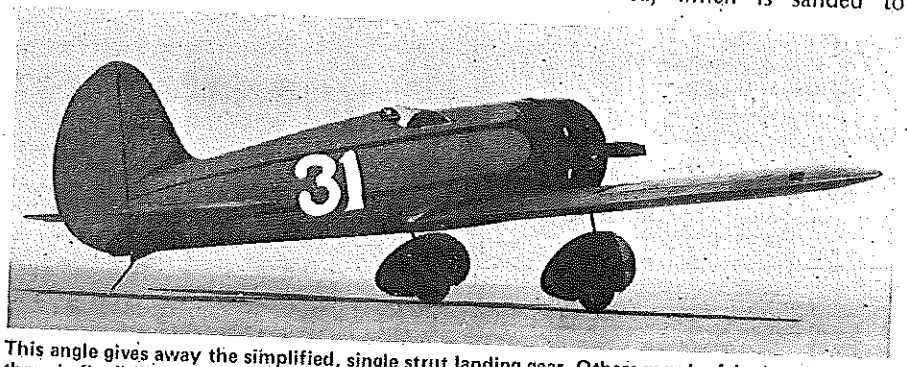
The tail surfaces are a simple procedure. Balsa cores of 1/16 sheet are cut to the correct outline and then stringers and caps are glued to these cores, top and bottom. They are then sanded to the correct cross-section. This makes for a simple yet strong and light-weight structure.

The landing gear is bent up from 1/8 music wire. One end is fitted to the hardwood blocks in the wings. The other end fits into the wheel pants, which are carved from balsa and ply laminations.

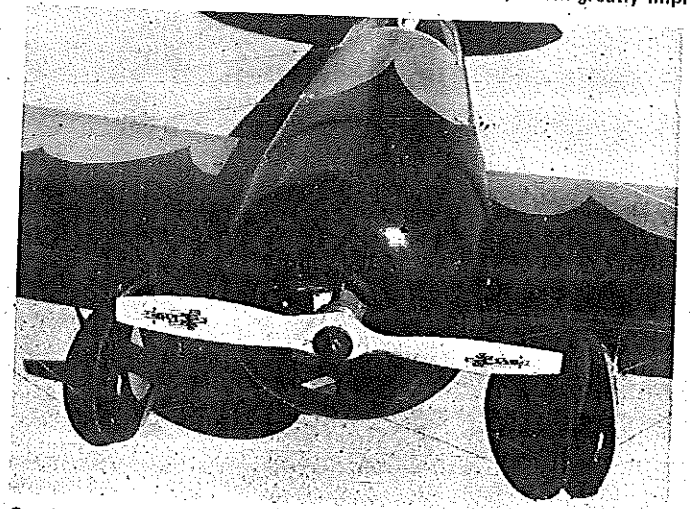
The cowl is constructed from fiberglas. I happened to find a metal bowl which was the correct shape and diameter. This was used as a mold to which three layers of 6 oz. fiberglas cloth was layed up with polyester resin. This made for a very strong, yet light weight cowl.

This model was covered with red Permagloss Coverite. It seemed to work out quite well because it was only

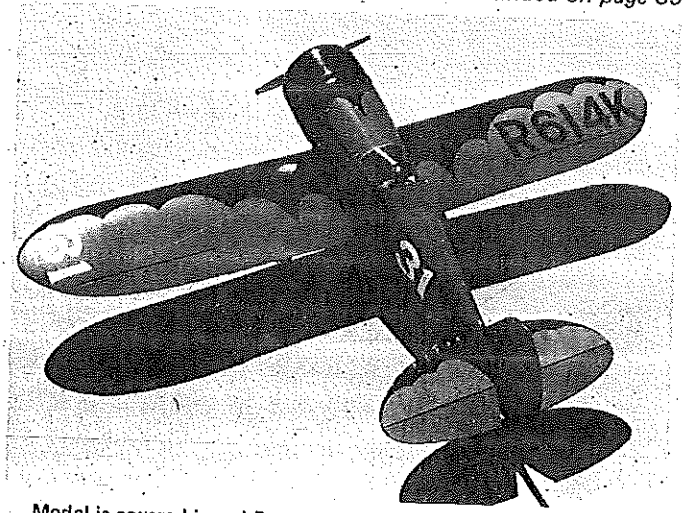
Continued on page 89



This angle gives away the simplified, single strut landing gear. Others may be faked, as long as there is flexibility in the set-up. Tailskid is steerable, which greatly improves ground handling.



Cowl molded over 6 inch stailess steel bowl. Balanced, ready-to-use Zinger props are gaining popularity with top west coast fliers.



Model is covered in red Permagloss Coverite, needed only the black trim paint to finish. Ship is stable and easy to handle in the air.

It is difficult to keep hose and pipe connections from leaking in a stationary steam powerplant installation, and impossible in a light aircraft structure subject to all the strains and stresses of aerobatic maneuvers. Work on the Goshawk was abandoned in favor of a new Rolls-Royce engine, superior to any liquid cooled engine yet designed.

(To Be Concluded)

T-Air. . . . . . *Continued from page 12*

necessary to mask off the appropriate areas and spray the Aero gloss black dope for the trim. The numbers were also masked off and sprayed.

Radio installation should present no problems. Just keep all components as far forward as possible to maintain a good C.G. without adding ballast.

I used a Veco 19 engine and a Kraft 4 oz. tank. I see no reason why larger engines, up to a 25, could not be used, but I wouldn't go much larger than that.

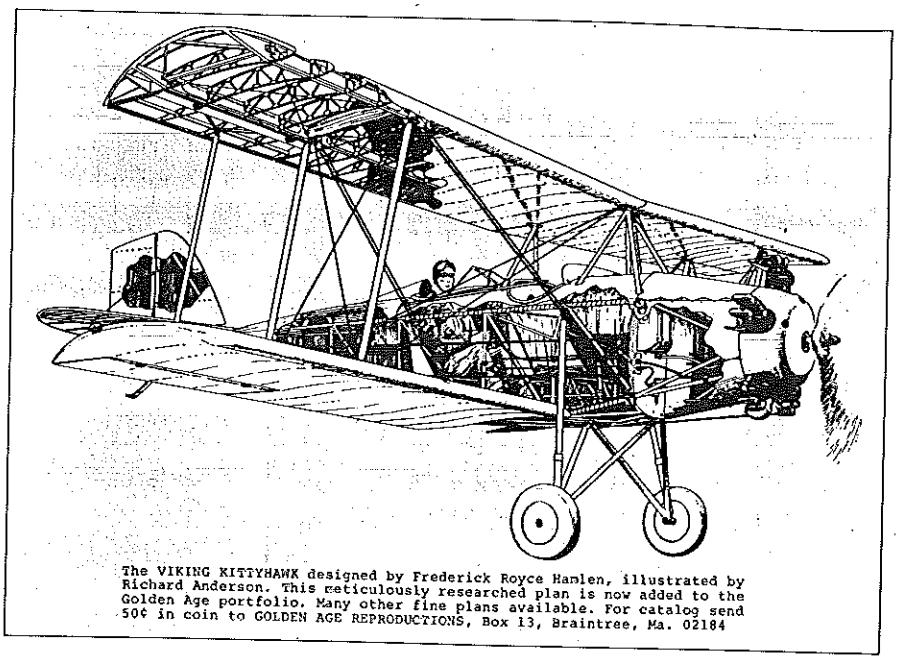
This aircraft is *very* responsive in flight . . . especially to elevator, and will perform snap rolls, faster than you can blink. It presents no problem on landing and takeoff. It is quite easy to fly. I hope you enjoy building and flying your Travel Air as much as I have. ●

NAMBA . . . . . *Continued from page 15*

roll after each heat, please remember my background and bear with me. I will quite gracefully accept criticism, especially since I have some of my own to make further along.

In spite of the lack of victory rolls, I was impressed. Any of our events, be they airplanes, cars, boats . . . either power or sail, or sailplanes that draw this large a number of contestants, in this case over 100, is impressive. I was glad to see the quality of the workmanship, and the degree of professionalism and preparation on the part of many of the contestants. In practice, it was pretty obvious who had done their homework and who hadn't

I noticed immediately that this was a well-organized event, being run by people who knew and cared what they were doing. The necessary equipment was there, from public address system, to timing devices, to generator, and it all worked, which also comes under the heading of being well prepared. A printed race schedule was available for EACH contestant; there was no doubt as to what day your events would take place, who you would run against, or the sequence of races during any given day. The CD and his assistants set and kept a reasonable pace, and when minor problems did occur, they were discussed with the persons involved, a decision was made, and racing continued. As the saying goes, you can't argue with success, and the fact that 114 persons competed with 230 boats in 190 heats certainly signifies a successful operation.



The VIKING KITTYHAWK designed by Frederick Royce Hanlen, illustrated by Richard Anderson. This meticulously researched plan is now added to the Golden Age portfolio. Many other fine plans available. For catalog send 50¢ in coin to GOLDEN AGE REPRODUCTIONS, Box 13, Braintree, Ma. 02184

Safety was also a prime consideration, as it should be at all of our events. The only delays were when some over-eager spectators had to be firmly but nicely asked to sit back a bit to prevent any possible unpleasantness.

Could it be that the smooth running is due to some unpublicized rule that he or she who does not cooperate is drowned?

When the roostertails settled and the wakes subsided, the final resulting winners were: (places and score)

A Mono

1	Glen Myrberg	1500
2	Doug Hole	1400
3	Gary Johnson	1400 (Time)

B Mono

1	Rodger Hooks	1600
2	Glen Myrberg	1500
3	Bruce Wren	1425

C Mono

1	Jim Whitlatch	1600
2	Sally Stewart	1225
3	Judy Prigley	1125

A Hydro

1	Bob Atchley	1500
2	Ralph Henry	1400
3	Leonard Feeback	1300

B Hydro

1	Frank Farm	1600
2	Gene Adams	1600
3	Glen Paykoff	1500

C Hydro

1	Jim Whitlatch	1600
2	Joe Bruzzese	1500
3	Dannie Jones	1025

Scale Hydro

1	G&P Racing Team	1400
2	Leonard Feeback	1200
3	Pal Jennings	1125

Sport 40

1	Ralph Henry	1600
2	Steve Muck	1300
3	Tom Di Leo	1225

40 Deep V

1	Dick Aubert	47
2	James Love	43
3	Larry Reynolds	41.5

60 Deep V

1	Judy Prigley	45
2	Douglas Nystrom	31
3	Don Reutlinger	30.5

One of the highlights of the race was Joe Bruzzese's record-breaking run in the third round of C Hydro. Joe, a dentist from Las Vegas, Nevada, broke the then existing record of 1:29.5, held by Ed Fisher of Seattle, Washington, with a new time of 1:28.1. This is a new International record of which Joe is understandably proud, and which he set with an Octura Models 'Wing Ding' powered by an OPS-60 engine reworked by Hap Williams of Livermore, California. Control was with a Kraft Systems radio. Our congratulations are added to those of the crowd at Legg Lake.

Special congratulations also to Frank Farm, from Hawaii, who must be the one to place highest of their group. A most congenial group they were too, about fourteen of them, though I felt it would have been more fitting that they come over by ship. But concessions have to be made to time. Just don't forget my mangos next time, Paula.

As mentioned earlier, I have some questions . . . or criticisms. First, speaking as a landlubber, I would have welcomed more information. I will stress that I was fortunate to know a number of the boaters there, and even those who I did not previously know were most helpful with information and carefully and completely answered all my questions. Even the dumb ones.

But Legg Lake being the type of place it is, many of the spectators were there not primarily because the race was there. They were general public, there for their picnic, stroll through the park, or simply to get some relief from the rather hot days we experienced over this weekend. Many stayed to watch, and for them I feel that some commentary over the PA system would have made the day more interesting, and who