16. Bertil Dahlqvist with two very successful Swedish Wakefield designs, a 1939 Ellila, and a 1939 Borje Stark Joseph.

14. Australian Ford Lloyd is real proud of his Krupp Bowden Winner with an O.S. 20 four-cycle for power.

mite was in heavy use, acceptance of the engine was very limited in the Midwest and East Coast, both of which looked to be good sales prospects. Sales were not forthcoming and Jim Brown soon found himself in the uncomfortable position of being completely tied up for all of the Little Dynamite output.

This brought about a new variation of the Little Dynamite, a down-draft carburetor version called the Thermite. This was the first of a series of engines starting at .36 cu. in. and going all the way to .60.

Close comparison of the two engines show great similarities particularly in the machining of head fins and general workmanship. The Little Dynamite timer, which had proved satisfactory, was employed on all Thermite engines.

Like all Jim Brown engines, this was a quality machining project. Although none of the Jim Brown engines ever attained national recognition, the Brown engines were noted for their lasting qualities, starting features, and ease of adjustment. It might be noted at this time, Jim Brown put out the Vivell 49 for Earl Vivell, another local distributor which could easily trace its ancestry to the Thermite engine. The only problem with the Vivell was the high compression making the engine a real finger-buster. Jim outdid himself on the engine!

All Jim Brown products featured one-piece aluminum alloy crankcase with a backplate screwed to the case. The cylinder fins were machined from steel as was the cylinder liner. The simple assembly setup consisted of four machine screws bolted to the lower case. The most noticeable feature of Brown engines was the adequate crankshaft support employing Johnson bronze bearing. Very few crankcase leaks here!

40 YEARS AGO, I WAS. . .

The following from Robert Wynne, 4124 96th Ave. S.E., Mercer Island, Washington 98040, has been around since August of 1982. This columnist has waited until he found a spot for the writeup so let's see what Bob has to say about the good old days:

"After World War II, I went to Saudi Arabia for ARAMCO at Dhahran. Located near the ARAMCO community was a small air force detachment at the Dhahran Airport (about seven miles distant). The Saudi Government (SAG) wouldn't allow any free flight model flying (at least we were told) so this left only Indoor and Control line. Space for indoor flying was non-existent. For at least eight months of the year, daylight flying was definitely out as high temperatures were the rule for every day. This led to the obvious; night flying.

"Two lighted areas were available, the ARAMCO Recreation Field in the middle of the Dhahran community or the airport where airplanes were parked at a lighted headstand. With complaints about noise from the community and the Air Force not raising any objections, the airport site was a natural choice.

"Supplies were a real problem for ARAMCO employees. Everything had to go through SAG customs. These officials were extremely curious about every pack-

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15. A great deal of interest has been generated by the Munich Museu. Gerhard Everwyn and Max Mittermier being interviewed on TV.

OLD TIMER Model of the Month

C-RAIDER

Designed by: M. La Torre

Text by: Bill Northrop

• We went all the way into April of 1942 for this one, but it's SAM legal, as its designer, M. La Torre, flew it to First Place in Class C Junior at the 1940 Eastern States Contest. It certainly shows strong Maurice Shoenbrun influence, having lines similar to his "Gladiator," and in fact, Maurice drew the original plans for La Torre's design, called the "C-Raider." You could call it a simplified Gladiator. Both modelers were members of the famed Sky-Scrappers Club.

The construction is pretty much standard to any moderately-experienced builder of traditional gas model aircraft. One suggestion. . .the instructions say that a basic fuselage box is built first, with the top longeron being that which is closest to the thrust line. After this, the "cabin" is added to the top, and the bulkheads and stringers are added to the bottom. For better fuselage integrity, we'd suggest building each side complete with all three longerons (Note the built-in hardwood bearers for the motor mounts). The uppermost "cabin" longeron is joined to the main fuselage with verticals at Stations 1, 2, 3, and 4, with the remainder of this longeron sort of "hanging loose." Next, join the sides with cross-

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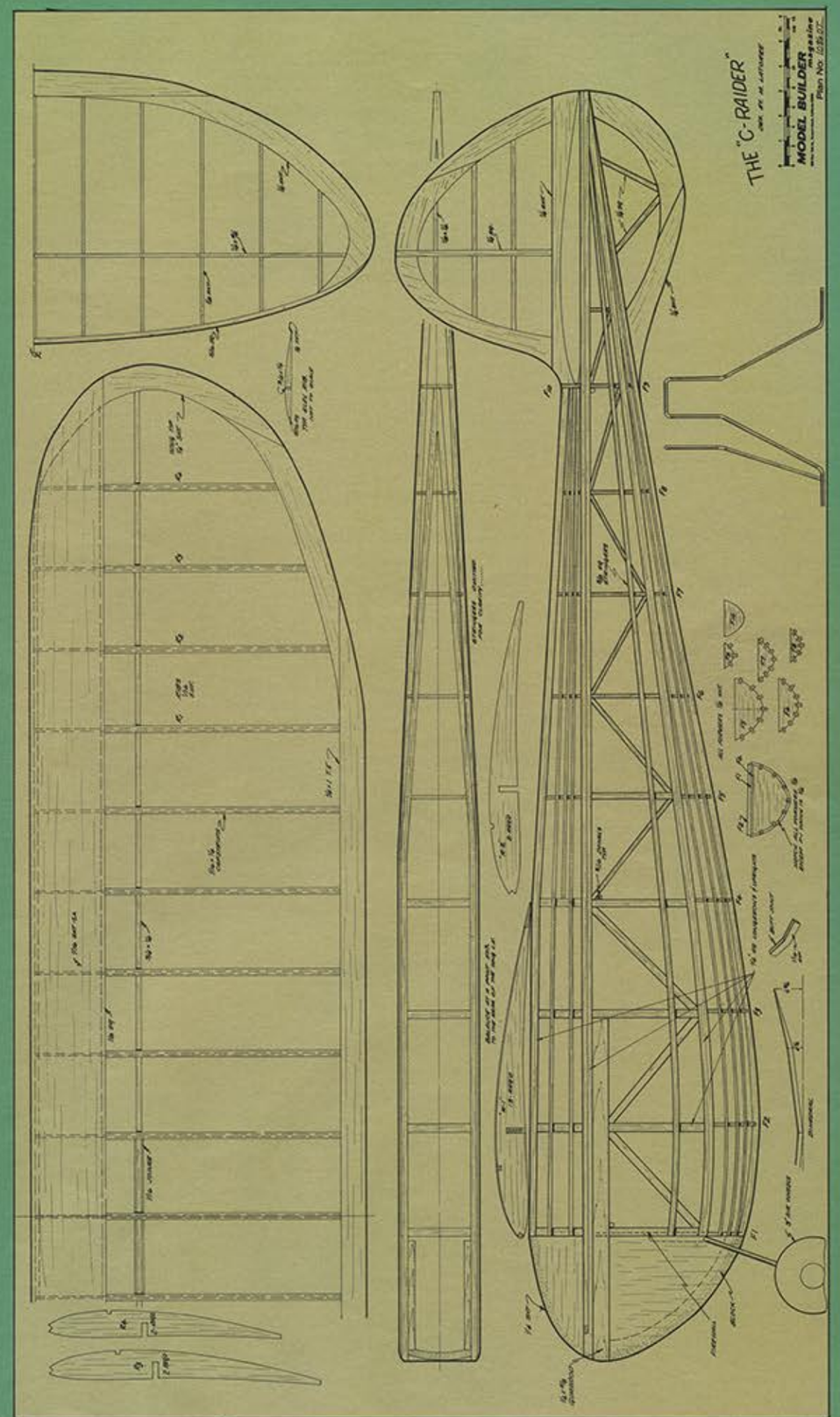

pieces glued to the thrust-line and bottom longerons, including the tapering and joining of these longerons at the extreme tail end. Now install former F-10. At this point the top "cabin" longerons can be pulled together and joined at F-10, followed by adding the sloping verticals at Stations 5 through 8. After this, the remaining bulkheads and stringers can be added in normal fashion.

It is also noted that something has to be done about resting a V-dihedral wing center-section on a flat fuselage top. If you're going to leave the top of the fuselage cabin open, the first four crosspieces can be lowered enough to clear the "V." Otherwise, cut V-shaped crosspieces and notch each one to receive the top center stringer which can now be extended to Station 1. Third option is to add 1/4-square rails to the top longerons to form a wing saddle.

Flight trimming, according to the article in the April 1942 issue of *M.A.N.*, calls for balancing at 50 percent of the wing chord, a large eight-hand glide circle, and a fairly tight power turn to the left. •