

# PIPER TRI-PACER

MOST POPULAR OF THE SHORT-WING PIPERS IS ALSO A GREAT R/C MODEL

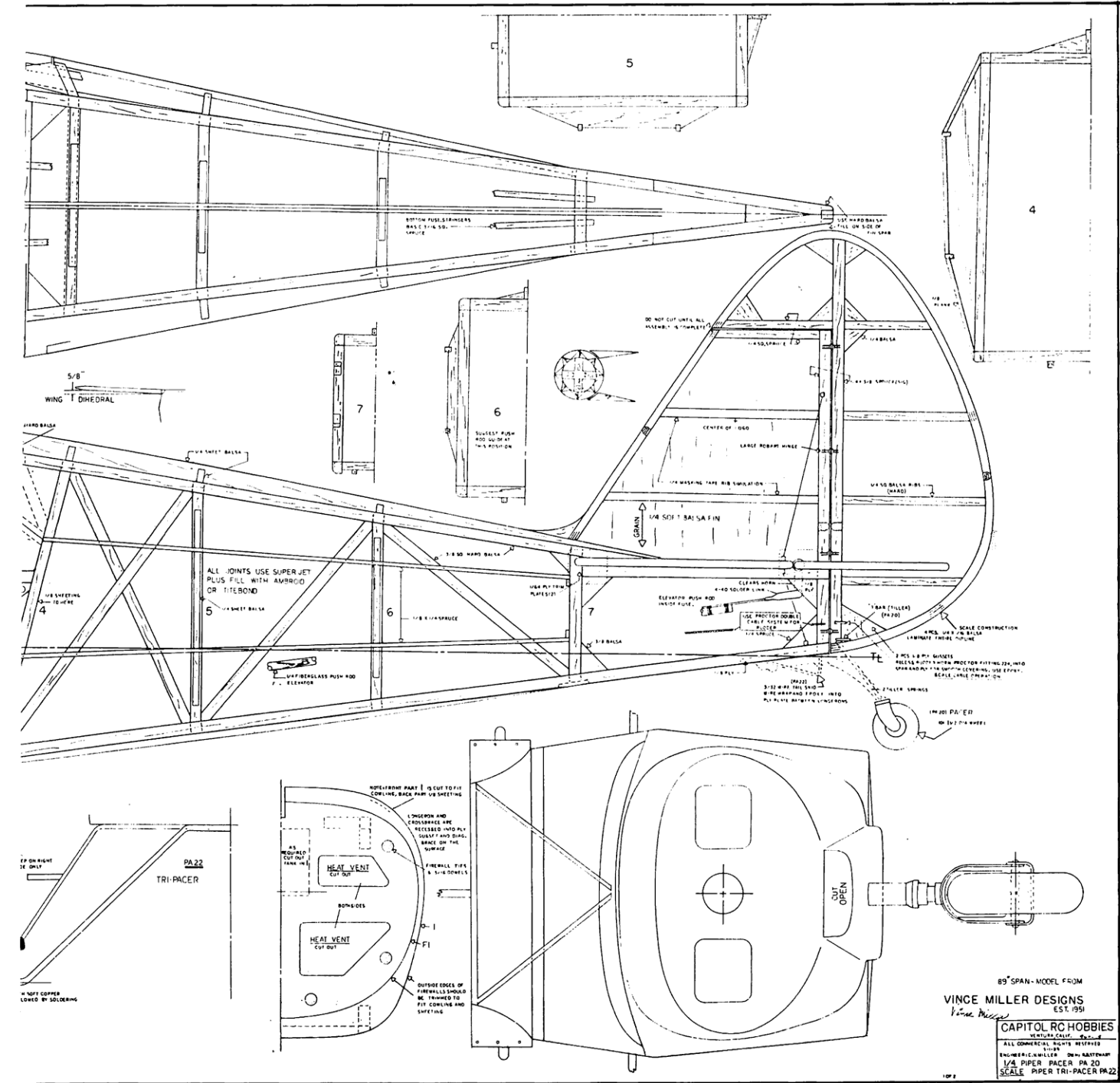
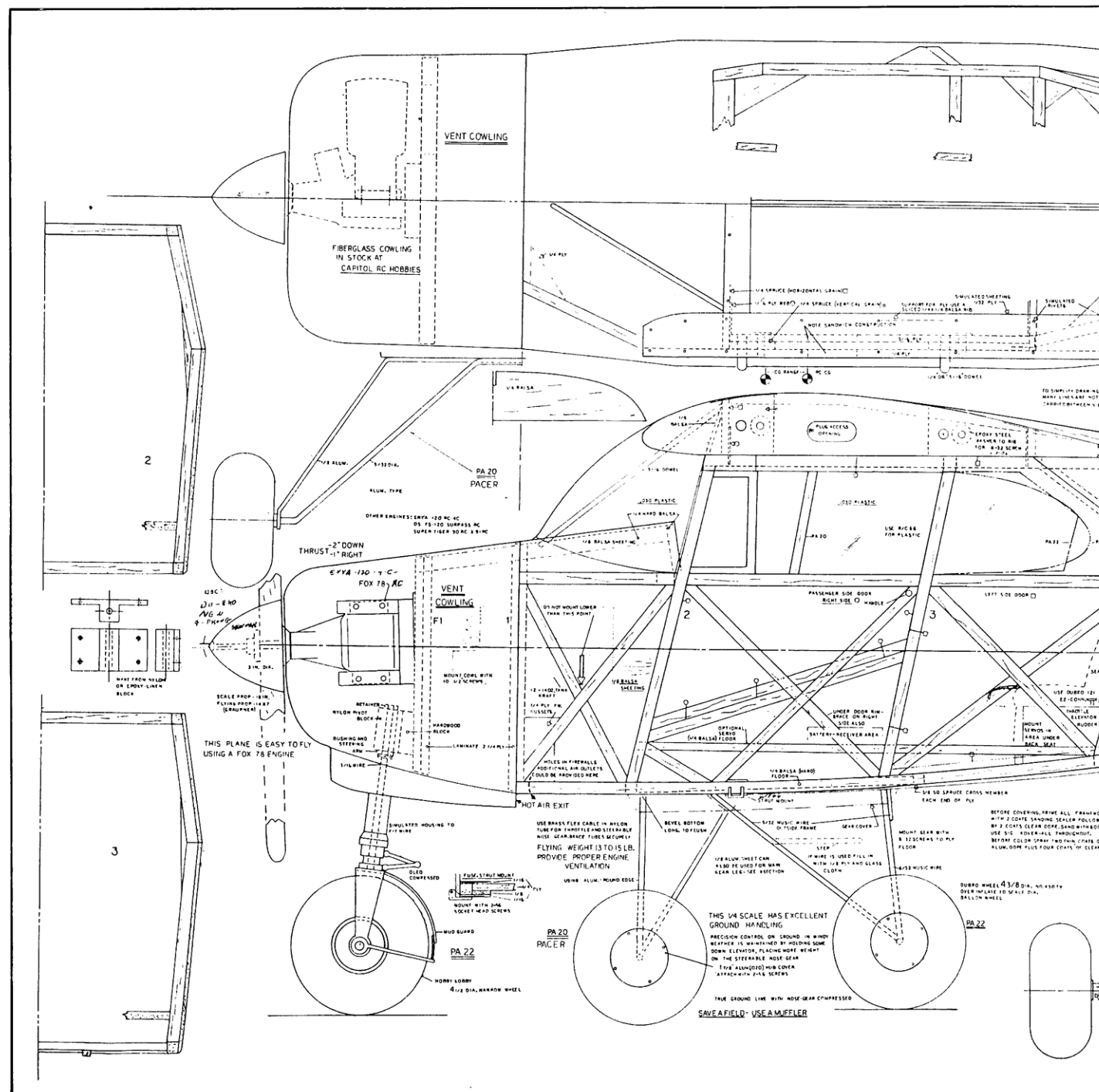
BY PETER PRICE



When "The Big One" ended in 1946, the expected big aircraft boom never materialized; in fact, it didn't even fizzle. This was fortunate for Piper because it was not prepared at all for the type of aircraft that would eventually be accepted by the new group of business flyers.

In 1946, Piper had a Cub. Period. The next year it revamped its J-5 three-passenger Cruiser with a 100-hp engine and a more modern cowling. At this time, Piper still didn't have a four-passenger aircraft.

**Mr. Miller holds his Pacer — the taildragger version of the Tri-Pacer. Both can be built from the same plans.**



Folks in Piper's design department were burning the midnight oil every night, trying to come up with a good design. At one point, they even widened the fuselage of the Cruiser, and made a sort-of four-passenger aircraft which they called the "Family Cruiser." Although the Family Cruiser was never a commercial success and only a few hundred of them were manufactured, decades later, this aircraft is in great demand in Mexico and Alaska, and they're still hard to find.

The large 36-foot wingspan of the Cub, Cruiser and Family Cruiser, combined with the small engine with which they were powered, didn't exactly provide sparkling performance. Back in 1947, Piper wasn't selling nostalgia, it was trying to sell personal transportation, and the competition was light years ahead.

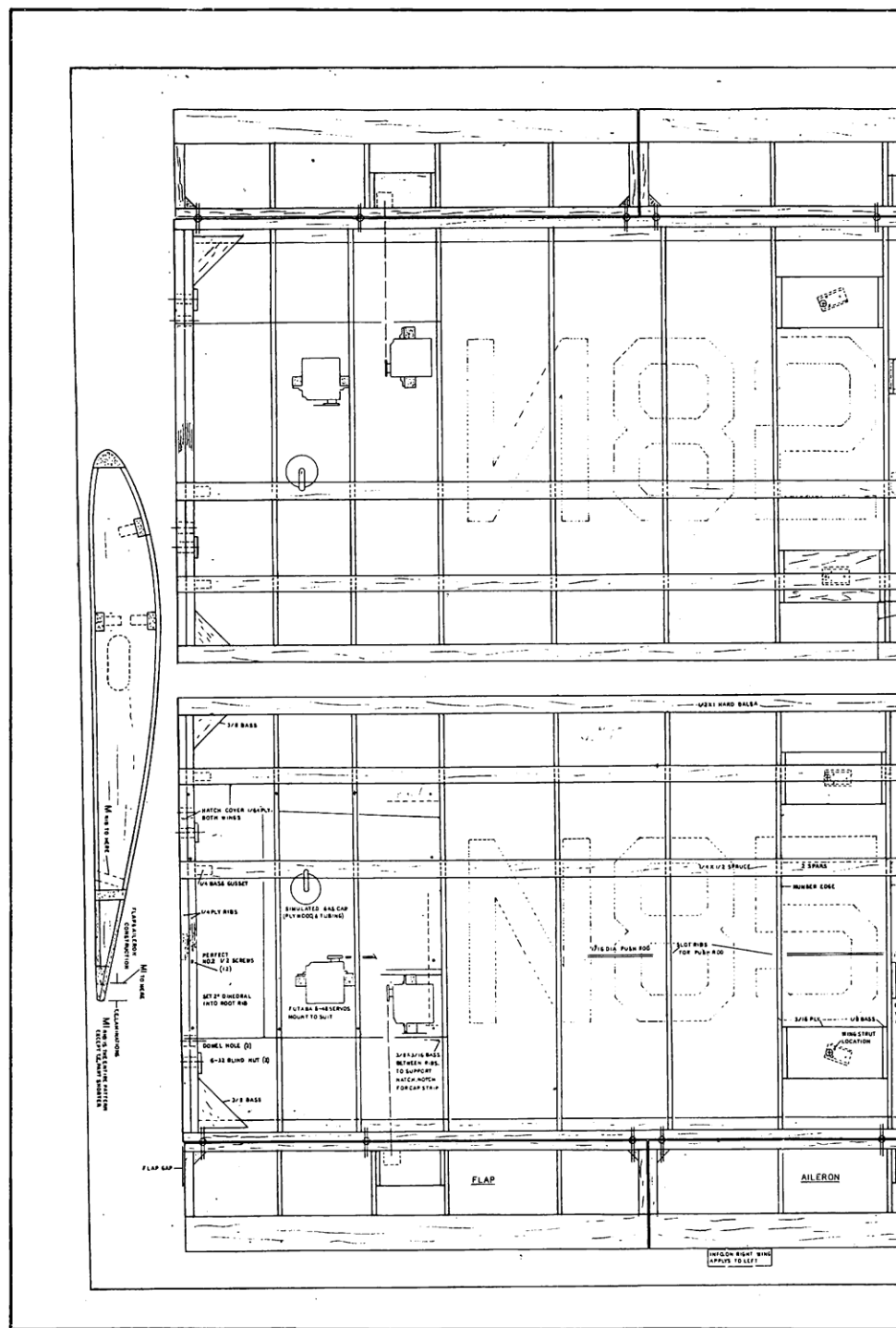
Beechcraft's new all-metal, low-wing, "V"-tail four-passenger "bullet" made Piper's offering look like a barnstormer from WWI, and the public wasn't buying Pipers. With a warehouse full of 65-horse engines, miles of steel tubing, and reams of cotton fabric, what does a company do, when on the verge of bankruptcy?

In an attempt to save the company, the bank assigned a bankruptcy manager to oversee affairs at Piper. After a thorough assessment of the situation, he gave the orders to build an aircraft which could be used not only as a trainer, but also as a sport aircraft — using only the materials on hand.

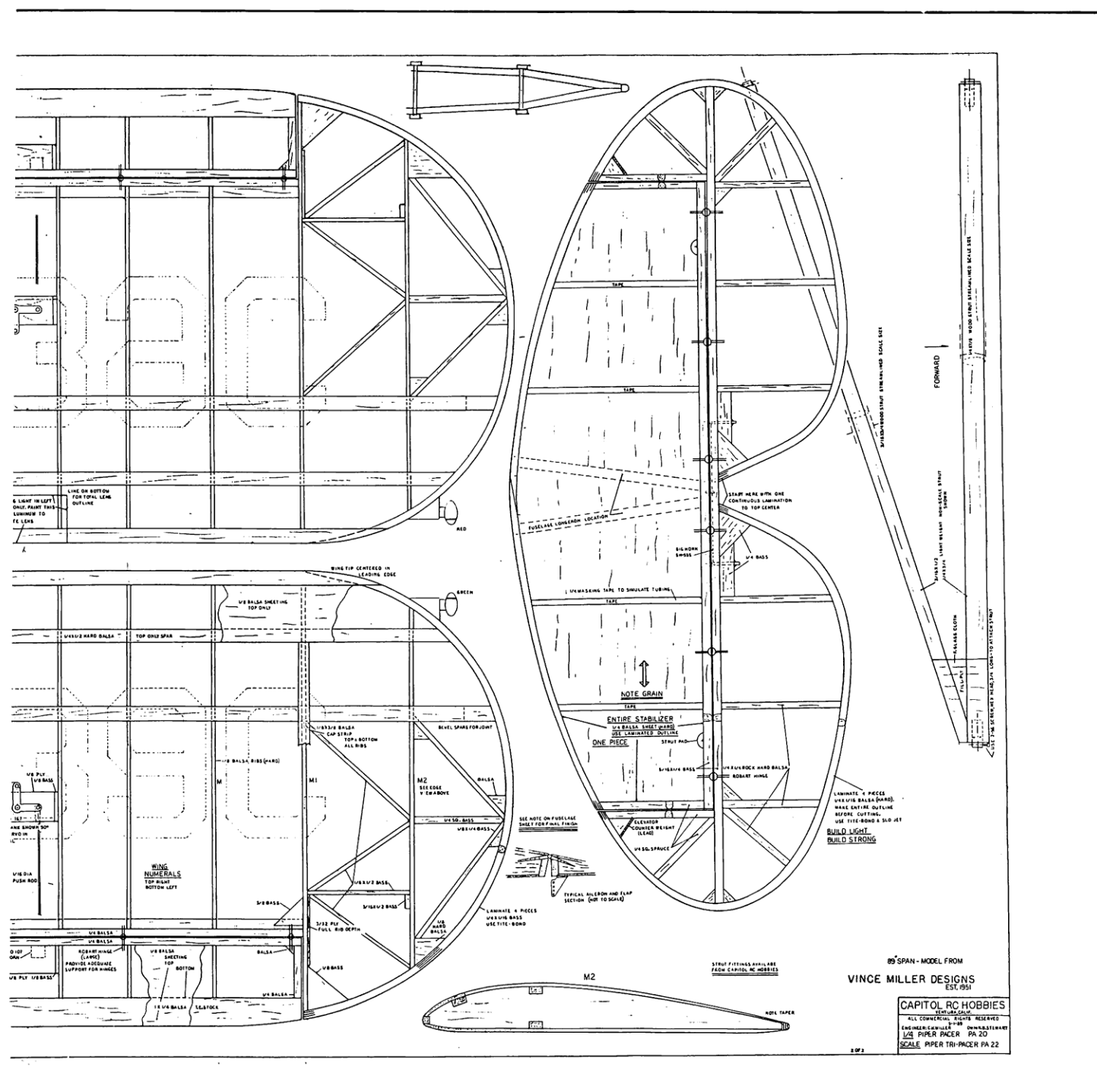
So the Vagabond was born. It was your original generic-type airplane, with shortened Cub wings, a solid landing gear which used oversized tires for ride-and-bounce control, and side-by-side seating, with the pilots using control sticks. All of the above materials were already in Piper's stock; but oleo struts and control wheels had never been in the inventory, so the Vagabond was designed *without* them.

Well, the Vagabond flew, but that was about it. The manager then decreed that any Piper dealer who wanted to remain a Piper dealer, after the current crisis was over, would be required to stock/purchase Vagabonds in numbers, or else it would be goodbye dealership!

The manager's plan worked and Piper survived, but the Vagabond didn't. However, the four-passenger version of the Vagabond, called the Clipper, did. The Clipper had two control sticks, one each for the pilot and his copilot, and a smallish slab-type bench seat in back. The wings were Cub wings, from which almost seven feet had been cut, leaving a Clipper a wingspan of 29 feet, 3.75 inches, in an attempt to increase the aircraft's speed a bit. The fuselage was also shortened, and the resulting aircraft had a nice look about it.



The aircraft features removable wings for ease of transportation.



At the moment, though, what the buying public wanted was an airplane with a little more performance than a four-passenger Piper with only 100 horses, so it was back to the drawing board for the designers.

Enter the Pacer. It was still the same airplane, but they'd put in a 135-hp engine, and replaced the control sticks with auto-type "steering" wheels. This Pacer was a much better aircraft than anything that Piper had put out before, but there was still something wrong with it; the public still wasn't buying enough of them, so the Piper dealers were stuck with them in stock.

Finally, the people at Piper woke up, realized that it was no longer 1939, and decided that the new aviation pilot wanted an aircraft which was easier to takeoff and land than the Pacer.

By this time, Cessna had already converted their 170 to the 172 by substituting a tricycle gear, and sales of the new configuration skyrocketed. The Cessna 120/140 was converted to the Cessna 150 with a 100-hp engine and a tricycle gear, too.

Seeing Cessna's great success, Piper took the Pacer, reversed the main gear, added a nose gear and called the new model the Tri-Pacer. Boy, these Piper mar-

keting people were sure clever!

The first Tri-Pacers were powered with 135-hp Lycomings, and during their tenure — which lasted into the early 1960s — Piper transitioned first to the Comanches, then later to the Cherokees.

Oops, there was still a problem at Piper. They looked around and found that Cessna had built the 150 with which to train student pilots, who would then, hopefully, earn their private pilot license and purchase a new 172. Piper desperately needed a two-passenger trainer to keep up with Cessna in this area.

They thought they found a solution: Take the Tri-Pacer, remove the back seats

and back window, take the big engine out of it and replace it with a 110-hp Lycoming. Well, it was a great idea, but not a great airplane. A few were sold to Piper dealers who were waiting patiently for the promised new line of all-metal trainers and sport aircraft, including twin-engine and retractable-gear, high-performance singles.

When Piper came out with the Comanche, it was an instant success. Horsepower ranges would go from 180 to 400 hp, before the line was flooded out. Because Piper had also designed the Cherokee and the Arrow, decided to discontinue manufacturing the Comanche, fearing it would compete with their newer designs.

It was in the early sixties that Piper's promise of a new trainer was fulfilled, and the first all-metal, low-wing modern-designed Cherokee 140s appeared. Once again, though, Piper had hedged its bets. They called their 140s "2 plus 2s," which was actually doubletalk meaning that, while the aircraft really couldn't fly with four *adults* aboard, it would manage to do so with two tiny children, in addition to the pilot and other passenger, but you'd better not take more than an extra handkerchief for luggage.

In spite of this limitation, the Cherokee was a good airplane. It had "Hershey Bar"-shaped wings — big, fat, and stubby, with a wide landing gear, a flying tail, and good visibility, it was very difficult to stall, and impossible to spin. Piper manufactured quite a number of these Cherokees, and they were sturdy, excellent training airplanes, though not as economical to fly as the Cessna 150.

About the same time, Piper, now economically much healthier, purchased the Stinson Company in order to obtain the new twin-tailed Stinson multi-engine aircraft. Bit by bit, Piper revamped the Stinson by replacing the twin tails with one big one, among other modifications, and called their new Piper Twin, the Apache. This time, Piper had succeeded with its design, for the Apache was probably one of the best multi-engine trainers they'd ever produced, and it was used extensively for multi-engine training in flight schools all over the world.

A few years later, Piper built a beefed-up version of the Apache with much bigger engines, and named it the Aztec. Aztecs were purchased in large quantities by firms needing rugged, fairly fast, very dependable twin-engine aircraft. They were a reliable form of transportation for missionaries in undeveloped countries.

Now, however, they're the large-capacity twin often used by dope smugglers, often with interiors stripped, and stuffed with extra gas tanks and as much dangerous cargo as they can hold.

Shortly after the Cherokees began to be successful, Tri-Pacers were dropped from the production schedule, and they became a glut on the market. For years afterward, you could pick up a "Flying Milk Stool" for a few thousand dollars because their image was one of a rather dumb-looking, fabric-coated, antique-appearing plane in a world, then, of all-metal speedsters.

Today, the Tri-Pacer is finally having its day in the sun. Aircraft restorers are looking for any one of the Piper short wings. With today's high cost of aircraft, these old planes are all wonderful bargains, with prices ranging from \$6,000 to \$20,000. Many of these thirty-year-old aircraft put out better performance than some of the new kit planes, and at half the price.

For a number of reasons, the Tri-Pacer makes one of the best R/C scale aircraft around. It's just a great-flying model. Many years ago, Sterling brought out its famous kit of the Tri-Pacer and, although it had only three controls, what a flyer it was. Later, Sterling brought out a smaller version, but it was never as popular as its big brother. I believe that these two aircraft are still available, and I'd definitely recommend the large Sterling kit as an ideal first aircraft for any newcomer to our sport of R/C flying — it flies that well!

Berkeley also came out with a kit of the Tri-Pacer some years ago, and I'm happy to tell you that Bill Effinger just released an enlarged version of the Tri-Pacer, plans only, recently.

Sureflite took its popular foam Cub, and made a Tri-Pacer out of it.

There's also a Vagabond which is available from that master modeler, Wendell Hostetler.

The plans in this issue are from the talented pen of Vince Miller and, although it's been around for a long time, it remains one of the best sets of 1/4-scale plans for the Tri-Pacer.

I've seen many different versions of the Tri-Pacer which have been built from Miller's designs, and they've all flown very well.

Write to: Vince Miller Designs, P.O. Box 24333, Ventura, CA 93003. When 1990 comes around, write to: Vince Miller Designs, 53 Yucca Drive, Sedona, AZ 86336. ●