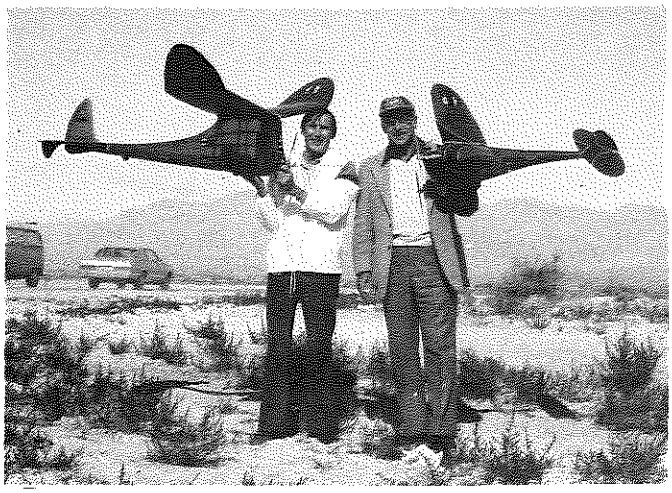


Bob Chambers (left) of Las Vegas, presenting Leon Shulman, recent Hall of Fame inductee, with Skyrocket in honor of the occasion. Bob holds a Zomby. Both models designed by Shulman.

Henry Struck still has his original Record Hound, in addition to his New Ruler and God knows what else. Photo taken at the SAM 7 Eastern States Champs at Westover AFB.

commercial work, such as manufacturing scrapers, a mixing device for adding the coloring to oleomargarine (in the thirties, a California law initiated by the butter industry forbade the coloring of oleomargarine, so it looked like lard and was therefore unappealing), and best of all, small gold dredges for those wishing to speed up gold mining.

The Meteor engine, which has been selected as this month's motor, was first produced in the late thirties. His first engines were sold in 1933 for airplanes, boats, and race cars. Although not extensively advertised, Meteor engines were good engines and had a fairly good reputation. Seventeen years later, Bob was producing a glow version of his ignition Meteor 23. At that time (1950), the engines were available in both styles, ignition or glow.

These engines could be run inverted, sideways, or upright, as the locking nut would allow easy movement of the tank to suit engine position. Matter of fact, the engine could be run at any angle with this neat locking device.

The engine came with a beam mount. The only mounting plate is shown in the front view. For an additional sum, beam type mounts could be purchased. Probably the surprising thing about this motor was the two-to-one mixture of gasoline and SAE 70 wt. oil. According to their figures the power output, weight, and speed of the ignition motor was essentially the same as the glow motor!

Meteor engines were usual in construction, being fabricated of pressed steel, brazed together. The crankcase required thirteen different pieces to be spot-welded together. Even the piston was die-stamped, requiring twelve machining operations to finish it. The ideas, although novel, were not entirely original, as the Crosley motor was made of sheet metal. Why did Hetherington make his engines this way? Bob said it was the challenge of making the most difficult engine.

For those hoping to find Hetherington in his shop, forget it. Bob had a stroke in 1978 which impaired his health. He retired shortly after that and closed the shop.

For the technically minded, the Meteor 23 featured a bore of .6875 inches and a stroke of .625 inches. Fuel intake is accomplished by the use of an automatic (or flutter) valve at the rear of the engine. The valve discharges directly into the bypass between the crankcase and the upper cylinder. This is the main reason for being able to run the motor in any position. Rated horsepower was 1/6 at 8000 rpm, using an 8x9 propeller. Weight was 6 oz. The engine could be

Continued on page 86

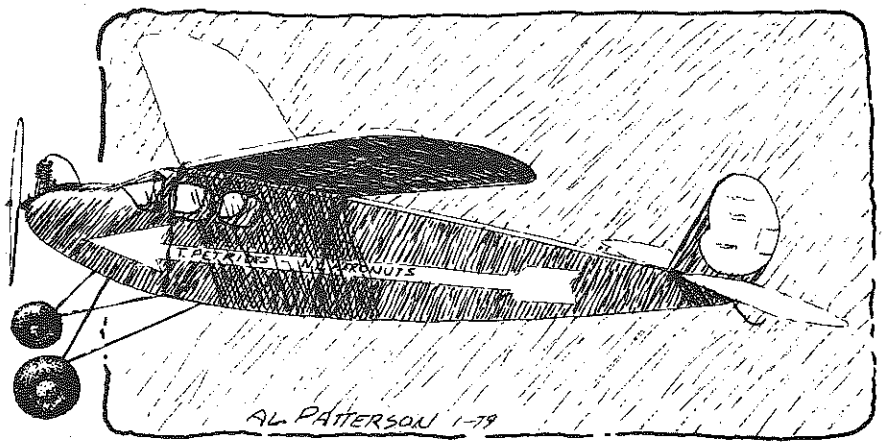
PRIVATEER

OLD TIMER Model of the Month

Designed by: Thracy Petrides

Drawn by: Al Patterson

Text by: Phil Bernhardt



• Thracy Petrides' "Privateer" is one of those Old Timers that, in spite of having pleasing lines, good design proportions, simple construction, and a well-known designer to its credit, rarely (if ever) appears on the modern O.T. scene. We've had our eye on the Privateer for some time, with the intent of using it as the O.T. model of the month; now that more people know what it looks like, maybe these ships will start showing up at the field.

The Privateer's construction is conventional in every respect, and for the most part, looks pretty good. The only change we'd recommend is to continue the stab leading edge and spar through the rear fuselage block, as the present stab construction looks too weak to be practical. Also, keep the tail end as light as you can. The Privateer has a longer-than-normal tail moment, and any excess weight in the tail will require gobs of nose weight to balance. With this in mind, you might want to consider omitting that hard (also spelled h-e-a-v-y) 1/4-inch sheet under the rear tail block, and maybe even hollowing out the block itself.

The Privateer is about the easiest of all Old Timers to convert to R/C; use the present fin and stab spars for the hinge lines. We'd also suggest using 1/8 x 3/8 hard balsa, or even spruce, for the forward wing spars and webbing these with 1/16 sheet balsa, to withstand the occasional just-for-fun loop.

Whoops, almost forgot; the Privateer

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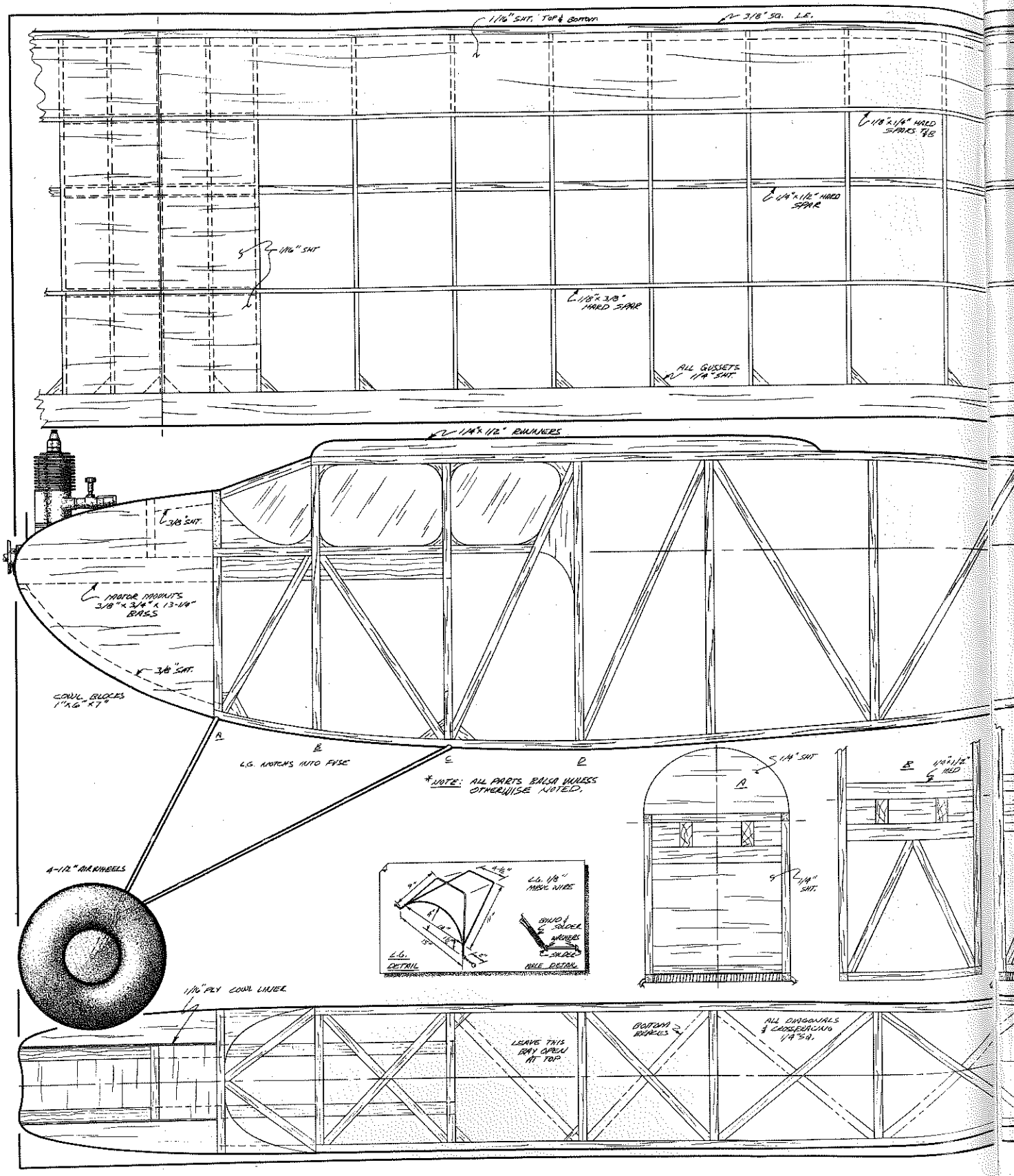
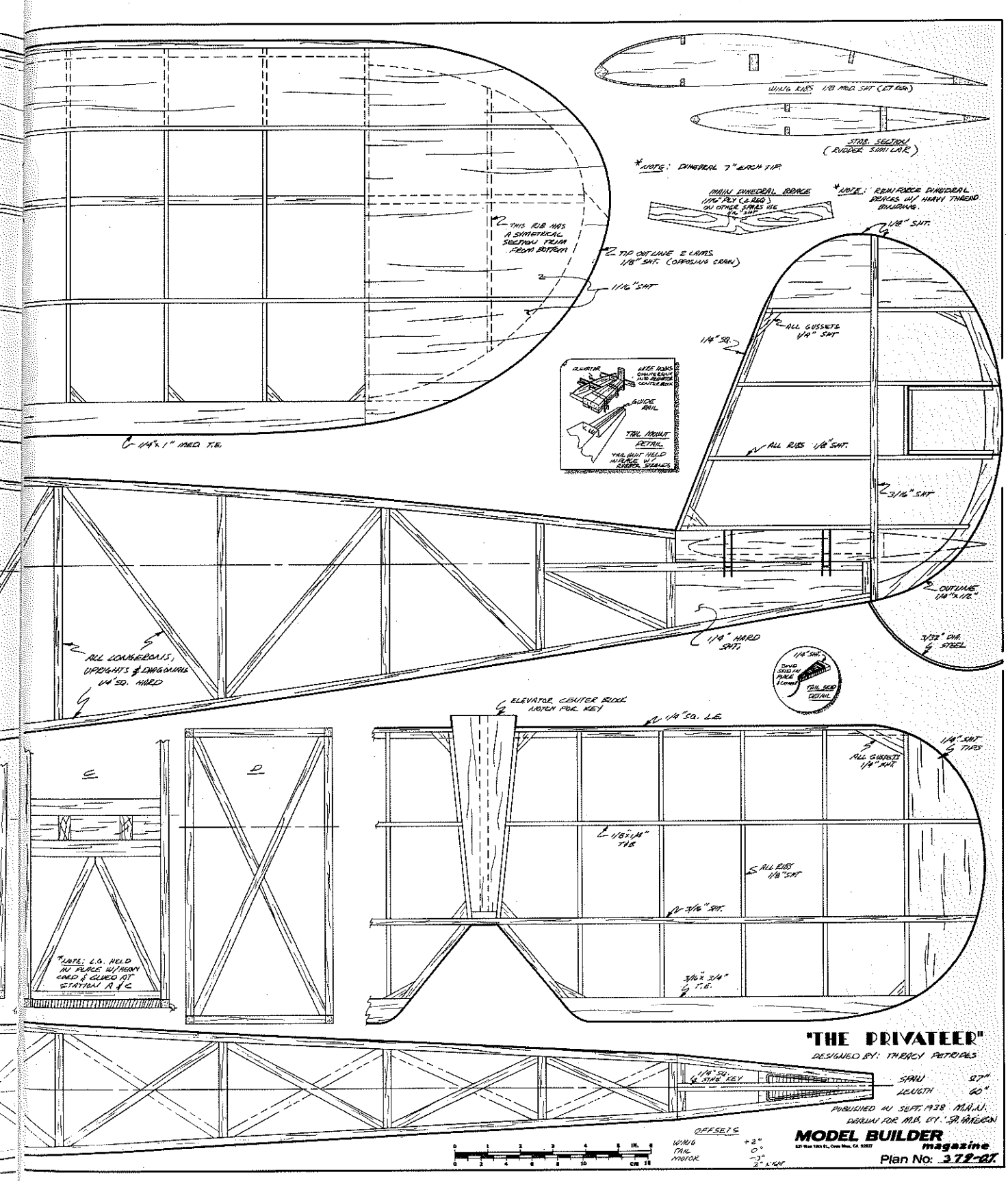

1/16" SHT. Top & Bottom
3/8" SQ. L.E.
1/8 x 1/4" HARD SPARS T/B
1/4" x 1/2" HARD SPAR
1/16" SHT
1/8" x 3/8" HARD SPAR
ALL GUSSETS 1/4" SHT.
1/4" x 1/2" RUNNERS
3/8" SHT.
MOTOR MOUNTS 3/8" x 3/4" x 13-1/4" BASES
3/8" SHT.
COWL BLOCKS 1" x 6" x 7"
A
B
C
D
L.G. NOTCHES INTO FUSE
*NOTE: ALL PARTS BALSA UNLESS OTHERWISE NOTED.
4-1/2" AIR WHEELS
1/4" SHT.
A
1/4" SHT.
B
1/4" x 1/2" HARD
L.G. DETAIL
4-16"
L.G. 1/8" MUSIC WIRE
WIND & SOLDER WASHERS
SOLDER
AXLE DETAIL
1/16" PLY COWL LINER
LEAVE THIS BAY OPEN AT TOP
BOTTOM BRACES
ALL DIAGONALS & CROSSBRACING 1/4" SQ.



FULL SIZE PLANS AVAILABLE — SEE PAGE 110

The maneuver can be done as tight as a Ukie stunt pattern, or opened up. In either case, it is possible to do consecutive verticals, limited only by the pilot's ability to keep a heading.

Takeoffs are point-getters. There is no noticeable breakaway. With neutral stick, the Duster simply bores tail-up down the runway and leaves the ground at some unknown moment. There is absolutely no tendency to ground-loop.

Landings in windy weather are best made by flying right down to the ground for a two-point wheel landing. In calmer weather it is a little safer to attempt a three pointer.

One more suggestion. When you go to the local field with your Duster, take some poles, barbed wire, and a Model T coil. Everybody wants to get a close look at "that there double-winger." •

Privateer . . . . . *Continued from page 51*

was published in the September 1938 issue of *Model Airplane News*, so it qualifies as an Antique. It has about 990 square inches of wing area, so a .40 is about the biggest glow or converted glow engine that can be used for R/C events. At 8 oz./sq. ft. wing loading, it would have to weigh a minimum of 55 ounces. And, as usual, the balance point was not shown on the original plans; a good starting point would be about four inches behind the leading edge of the wing.

If any readers have or know of a Privateer that is now flying, how about sharing a photo with us? •

HL R/C . . . . . . *Continued from page 27*

bute to our sport as we currently know it.

First, hand-launching will teach us to become a lot more sensitive to the air, our invisible ally. Thermals are reasonably rational creatures, the more you know of their habits, the more enjoyable you'll find the sport of soaring to be. And there ain't a quicker way to master thermals than by riding them from the ground up! I guarantee that you'll learn more about flying *below* a hundred feet of altitude than you will above it, once you've become accustomed to it.

In low lift, every mistake counts . . . and it happens right there in front of you! If you're the kind of pilot who tries to "lead" the thermal with his airplane, refusing to drift with the lift as the thermal moves away, or insisting that the thermal move east simply because the wind where you're standing is moving east . . . hand-launch flying will soon cure you. If you circle too wide in tight lift, or too steep in soft lift, hand-launch flying will soon cure you. If you're one of those luckless souls who never hit a bump on their contest flights until just after they turn final, hand-launch flying may just give you the confidence you need to ride that bump to a max!

But here's what I personally hope for out of hand-launch competition: *design improvement among small airplanes.*