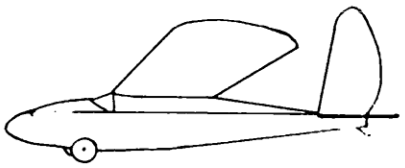
Old Timer of the Month

Design by: **Joe Weathers**
Drawn by: **Al Novotnik**
Text by: **Bill Northrop**



Classy Class "C" Glider

• The name Elbert J. Weathers always rings a bell of familiarity with old time Old Timer modelers. Best known for his many published gas model designs that never failed to jump out of the rut that was current at the time, he also had that rare talent of coming up with unusual, but always practical and very functional rubber and glider designs.

Actually, this writer doesn't recall at the moment any other glider design by the late Joe Weathers than the one we are presenting this month, but this one has long been etched in our mind, since it first appeared in the August 1939 issue of *Flying Aces* magazine. Even for 1939 it was an unusual design for a glider, with its boxy fuselage, low aspect ratio wing, a huge rudder that would seem to be able to cause some spiral stability problems (but apparently didn't), and of all things. . .wheels yet. . .two of 'em. . .one on each side!

But the thing about this glider (*Flying Aces* called it "Classy Class 'C' Glider") that captured the imagination was the story of its escapades, as described in the article.

This glider, designed and built in 1933, has since been duplicated by me four times. You see, "fly away" losses have kept me busy making new copies of this sweet little job.

Unofficial flights made to date have been clocked at 21, 28, and 33 minutes, respectively. . .all after launching with the regulation 100-foot towline. On the 33-minute hop, the ship "thermaled" to a breathtaking high altitude over San Diego, then landed later on the floor of a service station. In making that sit-down, believe it or not, the ship flew through the 36-inch width open doorway with its 30-inch span!

On another occasion, the model flew out of sight over Mission Bay (which was largely nothing more than desolate sand bars back in those days). *I thought it was lost, but an obliging citizen eventually notified yours truly as to its whereabouts. Strangely enough, it was found almost at the spot I had been standing on when it sailed away over the bay! Obviously, it had made a round trip over-water flight and returned to dry land!*

A really grand send-off was given the last of these jobs I built. It was attached to a government Weather Bureau altitude balloon that was set to burst at 55,000 feet. You guessed it! Nothing has been heard of it since.

Well, chances are the last one was dragged down by the remnants of the balloon after bursting, unless they figured a way to release it at the moment the balloon burst. However, it is certain that you should not even think about flying one of these gliders now without a dethermalizer, and the design is such that a stab platform and D/T setup will be easy to install.

Construction of the whole model is pretty much standard, but there are a few points that might need clarifying. Strangely enough, Joe did one thing opposite to normal. He built the wing onto the fuselage, but attached the tail surfaces with rubber! We'd sorta opt for making them both removable, especially for D/Ting the tail. He built the wing in one piece, partially cut the LE, TE, and main spar at a point *between* ribs, raised the tips for the 1-1/2-inch dihedral, then glued the joints and sprung the top stub spar into place. This would seem to leave rather an awkward situation when it comes to covering. We've shown a rib at the dihedral break.

The rudder trailing edge is just begging to be made up of laminated strips. . .either four of 1/32 or two of 1/16, and we'd prefer to make a splice joint at the leading edge of the stab, D/T or not. The photo from which the line sketch was made discloses a strut, probably about 1/16 x 1/8, from the middle stab rib up to the lower rudder rib. It hits the rudder rib about 1/3 back from the leading edge.

Speaking of 1/3, that's about where you may want to start with your balance point, 1/3 of the wing chord back from the leading edge. Balancing is mentioned in the text, but as usual for those days, it didn't say *where*! Not only that, you're instructed to glue the correct amount of nose weight *behind* the noseblock, and then remove or add as necessary to get a flat glide. Gluing the weight to the *back* of the noseblock after the plane is all covered and ready to fly has to be the neatest trick of the week!

Ya know, after all these years, it just occurred to us that maybe, just maybe, Joe Weathers designed this model for rubber power. Make that noseblock removable, add an eight to ten-inch prop, and attach a wire landing gear to drop those wheels down about five inches. . .hmmmm. . . .•