

Estes Sprint Egglofter

C Eggloft Duration Record-Holder

WEIGHTS: 44 G BASE
66 G WITH ENGINE
126 G WITH EGG

[There is an accepted notion that Estes and Centuri kits somehow cannot successfully be used in competition. This model shows that this "rule" certainly has its exceptions! —CBB]

This model set the current C Division record for C Egg Lofting Duration, with a flight of 196 seconds at VACUUM VII on 27 September 1980. Launched from a standard launch rod with a pop lug, the model had a straight, stable boost, did not "wag its tail" on the way up, and ejected at apogee. The weight of the egg inflated the 'chute immediately. After dropping 15 meters, the model started to rise and headed slowly over an open field, where the spellbound participants watched it touch down softly over *three minutes* later, its shiny plastic 'chute marking its landing place.

Several simple modifications to the standard Estes *Sprint* enhance its performance. A CMR ENC-92 egg capsule is used, its base built up with masking tape to fit snugly into the *Sprint* body. A CMR stand-off pop-lug provides guidance during boost; the standoff places the launch rod away from the bulge of the egg capsule. (The model "pops off" the pop-lug, which stays on the launch rod. To use a pop-lug properly, wrap tape around the top of the launch rod to keep the lug on the rod.) Slightly-oversize 1/32" plywood fins take the place of the standard balsa fins. The egg capsule is attached to the 18" Estes elastic shock cord; the other end of the shock cord is tied to 12' of 20-lb. braided nylon casting line ("squid line," available in any sporting department). The nylon line is run through two holes in one of the fins and then epoxied in place into the fin fillets.

The 28"-diameter parachute is made from 1/2-mil polyethylene (dry-cleaner bag) with 16 shroud lines. Make a small spill hole (about 2" diameter) in the center. Powder the 'chute well just before the flight.

That's all there is to it—just a few simple modifications between a stock kit and a US record!

Egg Lofting Duration is an NAR competition event in which a model, carrying a raw egg supplied by the judges and using a specified power class of engine, must be launched and recovered with the egg uncracked. Winners are determined on the basis of longest flight duration, from first motion on the pad to touchdown. A qualified flight is always a big thrill—and a disqualified flight is usually a good chuckle. Try it!

