

# DIAMOND C GOAL FLIGHT IN NATIONALS

by C. A. MOELLER

The first free distance day of the 1959 Nationals, July 7th, produced a torrent of soaring miles: 35 sailplanes flew a total of 6036 miles, an average of 173 miles per ship. A cold front had passed during the night and was off the coast by morning, with forecasted good convection and cumulus; but with some divergence south of Elmira. This looked like my first opportunity to try for Gold distance and Diamond Goal, with the hope of getting far enough to gain experience and confidence for future tries for these awards.

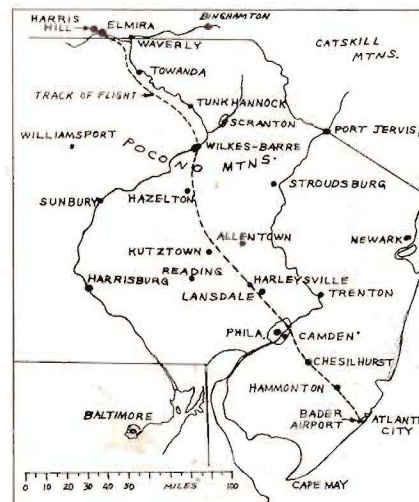
My cross-country experience in soaring consisted of a silver C triangle in May, a 92 mile out-and-return and a 109 mile triangle in the Contest a few days back. While terrain favored an eastward flight, I chose to fly downwind to the SE and declare Badger Airport at Atlantic City, N.J., 230 miles, as my goal. I could have declared Hammonton, New Jersey, 203 miles, but decided to "go for broke" with more contest points as bait. This decision nearly back-fired as will be seen later. Having made my declaration on the take-off card, I awaited my noon take-off by watching many sailplanes get away under nice white cu's, and wondering where I would end up that afternoon. I decided to deviate from a straight course in order to follow the best looking cu paths, provided the general heading was followed.

At 1208 I release over beautiful Harris Hill at 3700 feet msl and soon skim along a cloud street at 4000 feet. Near Waverly a good "cumal" gives me nearly 5000 feet

and a street to Towanda, 35 miles out. The street ends but soon is there again for another 15 miles. This is the life! In my 25 years of power flying I never had such a communion with the elements or fully appreciated the view which now unfolds so subtly. Near Tunkhannock the clouds thin out, but "cumals" come along at 5-10 mile intervals. Soon the coal mining area slips under my sturdy 1-23G and I naturally think of all the "black diamonds" in the huge piles of coal awaiting shipment. I wonder, too, if the dark acres are creating thermals in the bright sun. If so, I am not getting in them, as my altitude is not too encouraging. Below to the left a 1-26 is circling steadily. I am amazed that out of 35 sailplanes, I have seen but one after a few miles out of the Elmira area. Of course—this is not a fixed task, — each pilot is choosing his own direction in the hopes of out-guessing the other fellow.

The terrain ahead is a densely wooded expanse, the Pocono Plateau, with scarcely any place to even assemble a sailplane, other than the highway. Being definitely "chicken" I veer southward toward more-open landscape and oscillate between 3500 and 4500 feet in small turbulent lift until near Hazelton a 300 fpm climb puts me at 5800 feet and insures my clearing the remaining ridges for the next 25 miles. Good lift continues as the rolling patchwork fields of the Pennsylvania Dutch farms slide in under the nose.

The last few scraggly cu's suggest a continued southward course, but



Map showing track of flight from Elmira, N.Y. to Atlantic City, N.J.

lift is now more elusive and the time is 1600, with 110 miles to go. It appears necessary now to head directly on course and keep over dry-looking fields. Ten miles below Kutztown a very welcome "drymal" takes me to 6600 feet, the highest of the flight. This is immediately followed by strong intervals of sink for 19 long minutes down to 2,900 feet at Harleysville, the low point of the flight. During this sink the goal fades, but I continue to keep over likely-looking terrain and munch on a sandwich. A series of moderate "drymals" keeps things under control for the next forty minutes, followed by a good one to 6500 feet where the entire Philadelphia area is sprawled out twenty miles ahead. Cutting over the eastern side of the city I encounter one weak "drymal" good for a 500 feet gain to 5000 feet. Well, at least I can complete my crossing of Pennsylvania and land in New Jersey, and probably reach Gold distance. At this stage I vividly recall Bernie Carris's sage advice to stay high and fly down-wind. I readily accept this as quite fundamental and subscribe to it heartily. However, I neglected to ask him how one stays high, or up at all, in the waning day.

The hopeful aspect is the clear blue sky with strong sun and lack of haze, except for local smoke at Philadelphia. Near Camden, at 1805, a beautifully smooth thermal gives 350 fpm to 5400 feet, but the glide carries to 3400 feet before a ripple is felt. This next "drymal" is a perfectly ROUND one of 180 fpm topping at 6000 feet, so smooth that once centered, the 1-23G stays in the groove all the way without any control corrections or variation in climb

The Schweizer 1-23G which the author flew on his Diamond C goal flight.

Photo: Peter M. Bowers

