



The "Screamin' Wiener" heads west at the start of the great flight.

Candill

Uncle Sam's Third

INTERNATIONAL GLIDER RECORD

Since the Wright Brothers

By PAUL MacCREADY, Jr.

International Glider Records held by the United States have been few and far between. The efforts of Orville and Wilbur Wright gave us the Distance Record (2021 feet horizontally) from 1902 until 1912 and the Duration Record (less than ten minutes) from 1903 until 1921.

Ten years later we recaptured the Duration Record for a brief period when Wm. A. Cocke, Jr., stayed aloft for 21½ hours.

In 1934 we held the Distance Record for one month when Richard duPont soared 158 miles.

Since that time the United States has held no International Glider Records until July, 1947, when Paul MacCready, Jr. exceeded the Goal and Return Record of 212 miles held by the Russians. Paul's round trip flight of 230 miles has already been approved by the National Aeronautics Association and forwarded to the Federation Aéronautique Internationale for final approval—Ed.

DURING the latter part of the 1947 National Soaring Contest at Wichita Falls, Texas, the weather became consistently good, with fairly strong and numerous thermals. Certain excellent flights with war surplus L-Ks and Pratt-Reads indicated that in this sort of weather the U.S. and European high-performance sailplanes did not have a great advantage.

All this boiled down to the fact that the overall plan of each flight (where to go and when) was much

more important for contest points than such details as having an exceptional variometer or sailplane or skill in locating and using thermals, or using proper bank and rudder coordination and airspeed.

During the earlier days of the contest the wind had been gentle becoming five to ten miles per hour at soaring altitudes, stronger closer to the ground, and generally from a southwesterly direction. Each day those who took the logical step and flew with the wind in an easterly direction, were usually let down by poor weather after 100 or 150 miles, while those who might have misunderstood the wind direction reported at the pilots' meeting in the morning, and hence journeyed toward the Southwest, found themselves in very good soaring territory for the whole flight, with the thermals getting stronger and higher as they progressed.

The most logical thing to do with this sort of weather seemed to be to try a goal and return flight toward the Southwest. With the existing rules, if we assume the thermals to be constant over a large area, and a sailplane to be capable of averaging 40 miles per hour through the air, then in a six-hour flight, a goal and return flight can only give more points than a straight goal flight if the wind is less than five miles an hour.

This fact, together with the greater chance for failure in a goal and return flight, indicates that such a flight is ordinarily not advantageous at a contest.

However, in our case, goal and return would be easier on the ground crew and the expense account.