

GOING FOR DISTANCE

In the March *Soaring*, Dick Schreder introduced some of the comments he had solicited from numerous well-known soaring pilots on how best to break the world soaring distance record of 535.169 miles (861.272 km.) set by Dick Johnson in the RJ-5 sailplane on August 5, 1951. Anyone having thoughts on this subject is invited to send them to Dick Schreder at 1150 Nebraska Ave., Toledo 7, Ohio. Each month, the comments of a few more pilots will be published, as space permits. Some follow.

Dick Johnson's Comments

About how to exceed *my* record. I do not know that I should try to tell somebody how to do this or not. Not that my words will ever make any difference, because if someone is slightly inclined, and has a little luck, he is probably going to break it whether I try to tell him how or not.

All that I see that is required is a reasonably strong tail wind, say 20 knots or more, and good thermals for about seven or eight hours. The stronger the thermals, the less wind required. Rudy Mozer's account of his 396-mile flight from Adrian, Michigan, emphasizes that suitable conditions occur occasionally almost anywhere. The plains of Central Canada or the United States are probably just as good as those of West Texas on occasions. Summer days in West Texas may offer more good days, but the best day each season there may not be as suitable as the best in California, Arizona, Idaho or anywhere enough downwind run exists.

I like the plains of West Texas because there the wind blows with suitable velocities quite often during July and August, and the thermals go to rather respectable altitudes. It appears that the reason that the serious distance attempts made there by Harland Ross (1958), Dick Schreder (1959) and others did not result in long flight distances is that they were made during July or August on wet or high precipitation years. The precipitation here, as almost anywhere, is cyclic in nature. I was lucky to have made my attempt during a suitably dry year, and thereby had the benefit of better thermals along the downwind course than did those who tried later.

The West Texas precipitation was

subnormal in general during the years of 1950 through 1955. Then in the spring of 1956 the rains literally came. Central Texas experienced floods - something almost forgotten after the long drouth. Since then the Texas soaring has not been as good as that which everyone had become to believe was *normal fabulous Texas soaring!*

The wet cycle has been going for six years now and it appears that the seventh is under way. If the drouth occurs in seven-year cycles, as the pattern generally runs, then in 1963 Texas should again be a good place to try for distance. When the dry weather comes, I will be out in West Texas somewhere, with some wiry passenger in Adastr's rear seat, trying to beat Victor Il'tchenko's multi-place record of 516 miles.

Graham Thomson's Comments:

Dick Johnson's record has proved to be a tough nut to crack. For a while there was a rumor that a Czech (I think) pilot had topped it, but since the FAI apparently declined to "homologate" (what a horrid, pedantic word!) it one has to assume they were not satisfied that the flight met all the requirements.

Inasmuch as I have yet to crack the 400-mile mark I feel a little diffident about saying how to fly more than 535 miles. However, from this part of the country there is one particularly appealing possibility.

Take-off might be from Inyokern (for the very practical reason that towing is available there) on a spring or early summer day, with waves forecast.

As I see it, one would follow the waves downwind as far as possible and then switch (hopefully) to thermals. The track might be, roughly, in the direction of Gallup, but clearly this would depend on the direction of the airstream.

Unfortunately, it has been my experience that one frequently has to wait until afternoon for waves to develop fully, but I have been to 32,000 before lunch on one occasion and I think a record attempt would just have to wait for the right day. (As if this were not always the case!)

Rudy Allemann's Comments

About the world distance record question. The place is, of course, the southwest. A lucky pilot might beat

Johnson's record from West Texas but the chances are not likely. As you know the RJ-5 is still performing near the top and the differential between high speed capabilities is minimized with tailwinds on distance flights. Johnson had extremely good conditions but how often are they that good or better?

A better chance appears to be the technique that John Ryan is exploring in the SISU; high altitude, strong thermal soaring across Arizona and New Mexico. His one attempt, that I know of, came close.

Another excellent possibility is that of improving on Dr. Joachim P. Kuettner's flight of March 20, 1952. As you might know, he climbed to 36,000 feet while wave soaring south from Bishop and then turned east. He worked southward against a westerly wind component, and regained altitude seven times in additional wave lift.

His actual distance covered was 435 miles or 374 miles straight in only four hours, after a 2 P.M. release. He was flying a TG-3A! If he could average nearly 100 miles per hour, think what an HP-11 could do.

Actually the increased speed might not help as much as the better glide angle. More important is that longer flight times are possible. Kuettner admits to at least two mistakes which cost him over 30 minutes. Also, he spent some time just flying south from Bishop. We now know (thanks to Mancuso, Bickle, etc.) that the flight could be started in the south.

To me, this would be a most thrilling and most sure way of breaking the record. If conditions are right, one could cruise at high altitude all the way to the Sangre de Cristo Range in New Mexico just by following the best topographic features. Recall that my best thermal flight in a 1-26 of 300 miles was roundly beaten by Helmut Roemer in a 1-26 using the wave technique.

Alas, conditions here in the Northwest are not so favorable. Perhaps there is a far out chance. Our thermals are weaker but the day lasts longer. A 10-hour flight is quite feasible.

Unfortunately, we are boxed in by forested mountains. Even 300 miles is unique and takes plenty of guts up here. Bob Moore made Diamond distance by slope soaring across northern Idaho. But the trees and no meadows make slope soaring at Bishop seem like child's play.

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