



soaring.

Lewin B. Barringer

THERMALS

THE TEXAS EXPEDITION

fore landing in front of the administration building. Towing back to Wichita Falls in the afternoon, we flew through rough air half way until Red towed me up to 7,000, where it was perfectly smooth.

On the 21st, we had a solid overcast with an ENE wind of 10-15 m.p.h. I made six experimental flights on the last of which I climbed to 1,150 ft. before releasing. On a few of the flights I encountered slight lift when headed into the wind, but my longest flight was only 7 min.

Friday, April 22nd, we had a clear, cool day, with the barometer at 30.30, highest temperature 73° and the wind continuing from the east at 5-10 m.p.h. With this direction on the field we could use only about 3,800 ft., so the maximum altitude attained before releasing was 900 ft., with a minimum of 700. On the first tow I caught a weak thermal (0 ft./sec.) and spiralled three turns in it when down to 150 ft. above the ground—duration 5 min. On the second flight, at 11:04, I caught another weak thermal at 500 ft. over the northwest corner of the field, with which I could just maintain altitude for some time before it gradually increased to 5 ft./sec., and I climbed it to the haze (inversion) line at 2,500—duration 24 min. On the third flight the rope broke when I was 200 ft. up.

On flight No. 4 at 11:45, I caught a thermal immediately after releasing at 800 ft. and climbed in it at 6-10 ft./sec. to 3,300, again at the haze line—duration 20 min. Flights 5 and 6 lasted 25 and 31 min., respectively. On each I caught a thermal of 0-4 ft./sec. at 450 ft., with maximum altitude attained of 2,500 ft.

On the seventh and last flight of the day, made at

2:15 in a calm, I encountered numerous thermals up to 7 ft./sec., and reached a maximum altitude of 3,600 ft. After 1 hr., 20 min., I landed purposely to check the reception of the radio meteorograph, which turned out to be very poor, due to local interference.

The 24th was a non-flying day of high winds, but on Sunday, the 25th, I made six flights. There was a heavy overcast at about 2,000 ft., with occasional rain—wind SE 8, barometer 29.98, temperature 74°, relative humidity 92. On the first flight at 12:15 p.m., I released at 800 ft. and, when down to 700, caught a thermal and, with a maximum ascent of 2 ft./sec., climbed to 1,500. Encountered some light rain—duration 23 min. On the second flight, I held my altitude for 8 min. on weak lift until a downpour hit me and increased my sinking speed to 7 ft./sec. With the visibility almost zero, I landed near the hangars after 11 min. aloft.

I did not fly again until the rain let up at 2:20. With a stronger wind of 15 m.p.h., I climbed to 1,000 ft. before releasing. Finding only very weak lift, I landed after 5 min. At 3:20 we could see large towering cumulus clouds building up some miles to the NW, but encountered a stagnant local condition and the longest of the next four flights was only 6 min.

After this, I unfortunately caught a very unpleasant throat and nose infection, which put me in the hospital for several days, during which the weather did not look very promising. The next flying was done on the 28th by Ted Bellak, who, never before having flown a high performance sailplane, spent two days getting used to it by making 26 practice flights. On the third day he caught a thermal of 3 ft./sec. immediately after releasing and spiralled to 1,500 ft., drifted NE and caught another which took him to 2,900—duration 30 min.

Sunday, May 1st, I had recovered enough to do a bit of flying. Before my first take-off at 1:30, a partial overcast of high cirrus had broken up and a few ragged cumuli appeared. The wind was blowing 24 m.p.h. from the SSE, the barometer was at 29.85, temperature at 83, humidity at 73. With this wind and using 4,000 ft. of wire sent down by the Detroit Glider Council, I gained the best altitude yet, 1,300 ft. Caught only very weak thermals but was able to hold altitude for 5-6 minutes while proceeding $\frac{3}{4}$ of a mile headed into the wind—duration 15 min. (Continued on Page 11)

Pete Bonotaux, left, attaches towline to the Minimoa.

David Combs

