

ance of the Sisú is quite outstanding. At airspeeds above 55 mph the older R-J-5 was no match for a Sisú. However, when it came to thermalling, the R-J-5's longer wings and lighter wing loading did give it some advantage there.

According to my cruise calculations, I compute that Al Parker should have been able to average a maximum crosscountry speed of approximately 45 mph plus wind, considering his average climb rate of 349 fpm. If he flew as I do, he

probably flew at somewhat less than that for maximum cruise in order to conserve altitude. If he averaged 95 percent of theoretical maximum, his average crosscountry speed was about 43 mph plus wind. Since he averaged 61.5 mph for the flight, his average tailwind must have been approximately 19 mph. Some allowance should be made here for the extra distance that the flight's ground track made good over the straight line distance credited. However, in this case it ap-

pears to amount to only approximately 6 percent of the credited distance.

After performing this analysis of Al Parker's flight, I conclude that Al skillfully flew his superb sailplane, the tailwinds were not strong and except for the unusually long convective duration encountered that day, the thermals were only moderately strong for that part of the country. I believe that Al both can and will be able to exceed this record within the next year or two.

The Weather During Parker's Flight

TED LANGE, U. S. Weather Bureau

On the morning of July 31, 1964, a cold front extended from a low pressure center in Southwestern Canada southward into extreme Eastern Montana, Central Wyoming, Northern Utah, on into Eastern Nevada, and moved very little during the day. A warm front extended

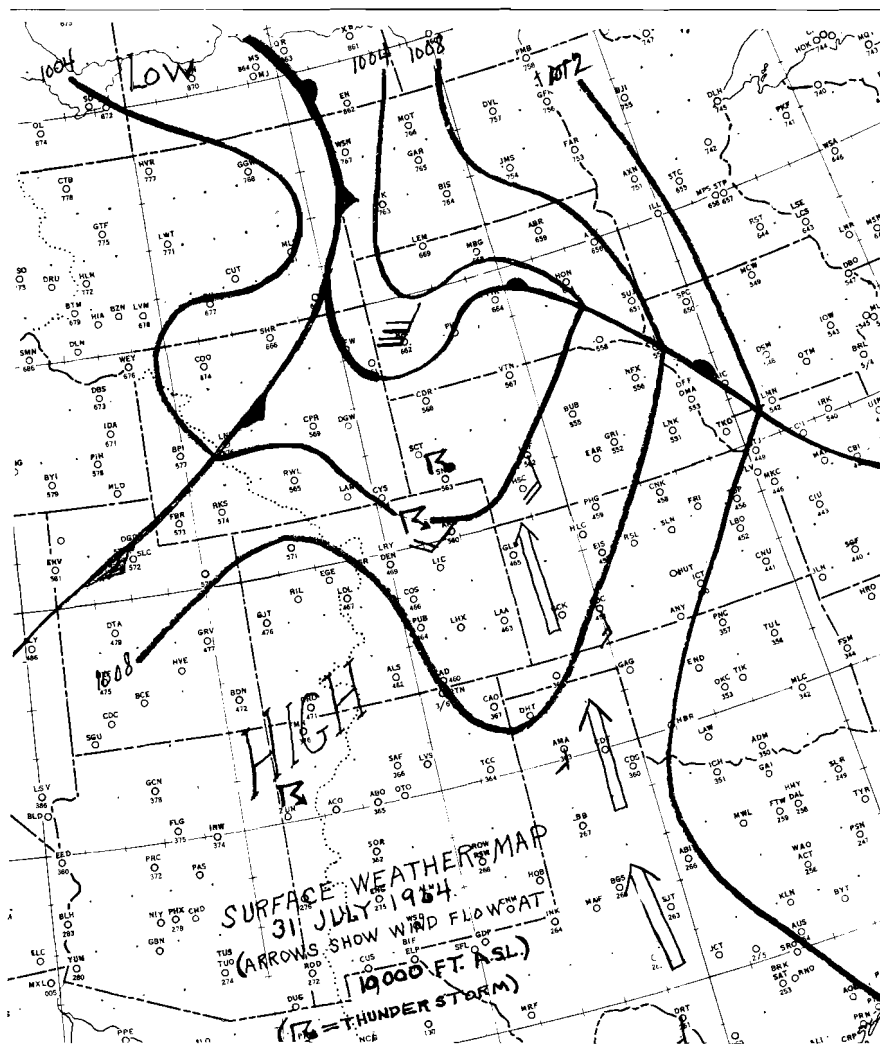
from Missouri through Nebraska, joining the cold front in extreme Southeast Montana, and moved a little northward during the day. A low pressure trough stretched from Eastern Colorado southward into Eastern New Mexico and extreme West Texas and became more pro-

nounced in Eastern Colorado during the afternoon. The so-called "dewpoint front" or "Marfa front" was not in evidence this day because the circulation had carried moisture into New Mexico, Arizona, Utah and Colorado, to the South of the cold front.

Winds aloft maps indicate that winds over West Texas northward into Western Nebraska up through 6,000 feet above sea level, were generally southerly about 25 knots, dropping to 15 to 20 knots during the afternoon with some tendency from the South-Southeast. From 7,000 through 15,000 feet above sea level, winds were southerly 15 to 20 knots with a tendency from the South-Southwest about 20 knots in Northeastern Colorado and Western Nebraska during the late afternoon.

The air mass in Western Texas, New Mexico, Eastern Colorado, Western Kansas and Western Nebraska was convectively unstable. Pseudo-adiabatic charts indicate that thermal began during the mid-morning and increased in strength and number during the day. This was especially so northward into Eastern Colorado and Western Nebraska. During the afternoon, thermals should have been strong and numerous to about 10,000 feet above sea level, occasionally going to 15,000 feet, and eventually resulted in a few thunderstorms in Northwestern Colorado and Western Nebraska during the late afternoon and evening. Maximum afternoon temperatures reached into the 90s in West Texas and Eastern New Mexico, but rose to around 100 degrees in Eastern Colorado, Western Kansas and Western Nebraska.

Weather observations made July 31, 1964, show that cumulus clouds with bases 6,000 to 7,000 feet above ground level developed during the



Map prepared by John Aldrich, U.S. Weather Bureau.

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