

DIAMONDS IN THE SKY

by STERLING STARR

On Sunday, May 19, 1957, weather and circumstances were such as to permit a sailplane goal flight national record attempt from Bishop California to Escalante, Utah by a combination of wave and thermal soaring. Although the attempt was not successful, this flight did earn for me the final two legs of my Diamond C badge. In retrospect, this flight was not a great achievement, because the possibilities were not exploited to the fullest extent. However, it serves as an indication of the record flights which are possible under meteorological conditions similar to those existing on this particular day.

Saturday evening, the current wave-soaring clan gathered at Bishop for the ritual of waiting for the "Wave." Roger Ruch, Bob Schnelker and Sven Anderson had driven the long road from Los Angeles, and I, from San Diego. We were there on the basis of an American Airlines weather forecast for a lee wave condition from the Sierras on Sunday. All had made the trip several times before, only to be disappointed, and were beginning to wonder if the "Bishop Wave" were only the farewell gesture of Bob Symons as we departed after an unsuccessful weekend.

On this particular evening, however, there was an air of confidence. It was raining where we were in the Owens Valley east of the Sierras, and through holes in the overcast, lenticulars in the moonlight were occasionally visible. The cold front was expected to pass moving southeast during the night, and the winds aloft were expected to remain aligned parallel to the front for most of Sunday. This 240°-260° direction was perpendicular to the Sierra Range, ideal for creating a lee wave. Bob and Sven were planning to fly Bob's Schweizer 1-26, and Duke Mancuso had magnanimously loaned me his Schweizer 1-23 for the occasion. Roger, an American Airlines pilot, was chief weatherman, statistician and crewman. Both sailplanes had pressure oxygen breathing systems installed, and were otherwise specially equipped for high altitude flight. With an-

tipication, we dozed off in our sleeping gear.

Sunday dawned bright and clear. No lenticulars were visible, but a cap cloud on the Sierras, and bunches of roll clouds forming and dissipating downwind of the peaks from Lone Pine to Crowley Lake, were indications that a lee wave was in existence. Over a hurried breakfast, we discussed the possibilities of a distance flight downwind, east from the "Bishop Wave." There appeared to be good possibilities of encountering other waves, and we surmised that an unstable air mass behind the cold

Escalante, Utah, some forty miles east of Bryce Canyon National Park. Roger supplied the necessary maps and thermos since I was originally planning only a local wave flight, and had not come prepared.

The 1-26 with Sven aboard became airborne behind Bob Symons' Super Cub at 9:05 A.M., PDST, and was soon off tow and in lift over the Sierras, reporting 500 to 1,000 fpm. I turned on the barograph, got wrapped up in a parachute, oxygen and radio equipment, and finally the 1-23 sailplane, and was in the air at 9:35 A.M. Field elevation is 4,000 feet asl. Takeoff and climbout was to the north to about 10,000 feet asl, where we turned southwest toward Coyote Peak. Turbulence was mild compared to what I was expecting. We climbed beside roll clouds forming at 12,000 feet, and release was made in smooth wave lift at 13,500 feet, 2 miles west of Coyote Peak. Rate of climb was 700 fpm initially, diminishing to 100



Sterling Starr preparing Mancuso's 1-23 for his wave flight at Bishop, California.

front would provide terrific thermal soaring later in the day. An immediate call to American Airlines weather verified that winds were correct for wave activity. Furthermore, thermal triggering temperature in Las Vegas was expected to be reached at 7:00 a.m.!

While we assembled the ships, I considered the possibilities. With plenty of moral support from Roger, who had himself been contemplating such a flight, I finally decided to make a goal flight record attempt to

fpm at 20,000 feet. Anderson also reported over the radio difficulty in getting above this level. Penetrating upwind, or backing off to the east provided no improvement, so the slow rate of climb was endured. At 25,000 feet, I made a downwind turn, and moved into 700 fpm lift. I switched to 100 per cent oxygen at 28,000 feet, plugged in my electric socks, put on my gloves and closed the vent. My canopy immediately frosted except for the spaces where I had double win-