Landing on the beach is a simple matter.

Benton Harbor—Decoration Day, 1937

Soaring SITES II FUTURE POSSIBILITIES OF THE MICHIGAN SAND DUNES

by ARTHUR B. SCHULTZ
Photographs by the Author

"The principal impressions that I brought back from this Second Annual Midwestern Soaring Meet were: The ease with which one can operate from a soft, narrow beach, and the excellence of the site for preliminary soaring training. As a place for duration qualifying for both C and Silver C licenses, it has no equal among the soaring sites developed or discovered so far in this country. The smoothness of the slope wind coming in off the water, coupled with the convenience of the seemingly endless beach on which to land, make it as safe a soaring terrain for beginners as can be imagined." So states Lewin B. Barringer in the October SOARING.

A continuous record of successful expeditions and soaring contests stands to justify this statement. Two years ago last Labor Day, the first soaring flight over Sleeping Bear was made. Since then, over fifty pilots, bringing twenty-one different gliders, have accumulated nearly four hundred hours of soaring time. Twenty-three "C's" have been earned, and over a dozen five-hour "Silver C" duration qualifying flights are on record. There have been no serious accidents.

It is only natural that such an outstanding showing should lead to its consideration as an alternate site for the holding of national contests. As a site for a utility contest, it is certainly the best in the country. As a site for high performance ships, it offers slightly less appeal.

The sand dunes have a few fundamental meteorological limitations which bring this about. The most important is the lack of thermal conditions suitable for cloud hopping from a slope soaring start. Unless resort is made to airplane towing a few miles back inland, where the cumulus clouds begin to form, chances of making cloud hopping flights from the sand dunes seem rather slim.

Another meteorological limitation is that of temperature inversion. After the ice has melted away, it takes all summer for the lake to get anywhere near warmed up—which it never does. During June, July and August, the warm breezes blowing across the lake become chilled from contact with the lake and form a very stable temperature inversion. A wind velocity of 20 to 30 miles per hour is often necessary to overcome this high degree of stability and permit of slope soaring flights, thus soaring during this period is entirely dependent on strong winds, which are infrequent and of short duration during these months.

Art Rahn in his Westpruessin sailplane at Point Betsie, near Frankfort.

In the early spring and in the fall, however, the reverse is true, the upper air being cold and the lake relatively warm, thus providing a very favorable thermal condition.

These meteorological limitations naturally restrict the flexibility of the dates during which a soaring contest can be held there. The summer is the most unfavorable time for soaring the sand dunes, but fine thermal conditions exist from September on. Of course, contests should not be held later than September so that school groups (which largely represent the utility class) can participate. Judging from the two Midwest Soaring Contests held so far during that month, September seems to be the best time for a successful contest.

Soaring slopes are now available for the following winds: NE, N, NW, W, SW, and S. During September, soaring flights can be made on any day the wind is blowing 10 to 12 miles per hour from any of the above directions. Wide beaches below all these slopes make launchings and landings a very easy matter. All beaches are readily accessible from the highways.

The certainty of having plenty of soaring weather, coupled with the ease of relaunching after being forced down, removes all inducement for the new pilot to "hang on" or to approach the tree tops too closely on his first flights, thus greatly diminishing the chances for accidents.

Launching equipment in the past has always consisted of the tow car and wire, launching cross wind by the