

# SOARING

## *The Essence of Private Flying*

I FEEL that any discussion of private flying would be incomplete if the subject of gliding and soaring were not brought up.

Starting, in its present form, in this country back in 1928, gliding activities grew by leaps and bounds until they were perforce curtailed by the recent war. Those of you who may have been present at some of the more recent soaring contests at Elmira, and who are familiar with the activities of the many clubs, groups, and private operators all over the country, can realize the magnitude and importance of this basic phase of private flying.

To me, two things stand out. First, the fact that motorless flight is basic or elementary flying—flying reduced to its fundamentals; and second, it is a form of flying which attracts youth. These two things in combination, properly guided and coordinated, can provide the means of producing an age of youth firmly grounded in the fundamentals of good flying which should mean much to the future of private aviation.

Soaring, on the other hand, requires an approach to perfection in flying. It is the aviator's post-graduate course, requiring a precision unapproached in general power flying. Soaring depends on altitude, since altitude is your source of power and your fuel supply. Acquisition of and maintenance of altitude are functions of angles of glide and sinking speeds. These in turn, depend on the Lift/Drag ratio and wing loading. While theoretically these figures are fixed for any one sailplane, they refer to straight flight with all controls in neutral. Every control movement, every deviation from straight steady flight at the proper airspeed, adversely affects these figures. Every displacement of the bank ball from its center position, every deviation from the correct air speed is just the same as throwing money—your precious altitude—down the rat-hole. That is the reason that our outstanding soaring pilots are usually men who are skilled instrument pilots, such as Bob Stanley of Bell Aircraft and Captain Shelley Charles of Eastern Air Lines, for it is a well-known fact that one flies much more precisely on instruments than visually.

During the war years, the gliding enthusiasts, hampered as they were, like all other non-military activities, have held their groups together working and planning for the time which is now upon us; and we can expect to see them, like June, "bustin' out all over!" This development is going to be pretty general throughout the country, too, because gliding and soaring, once thought to be a sport which, like skiing and tobogganing, was confined to the hills, has been well proven to be pretty much independent of terrain. Automobile, winch, and airplane tow have taken the place of hills as a means of getting initial altitude—the first charge of fuel for our gliding fuel supply. Thermal currents take the place of the hillside currents as the means of sustaining soaring flight. Thus, an airport or any open field which would be suitable for a private flying field, has become a potential glider port.

When you run across these glider groups, give them a break; help them when you can. They are pioneering in a science which aims toward perfection in aerodynamics and piloting technique, and a sport which is unexcelled.

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