

How Does GLIDING EXPERIENCE Affect Power Instruction?

by George Downs

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[EDITOR'S NOTE: The University of Michigan Glider Club began operations at the Ann Arbor Airport in 1930. Since that time, out of the annual membership in the club of about fifty-five, fifteen to twenty have taken power instruction each year. Some have begun airplane and glider instruction at the same time. Some have had as much as four years of glider time before flying airplanes. A few have taken their power time first. The man who has taught most of these pilots the intricacies of power flying is George Downs. He has given instruction to about 150 glider pilots in ships ranging from 40 to 125 horsepower. He has held his breath watching Franklins taxi into a hangar full of airplanes, and he has taken off carrying six hundred feet of tow-line on the tailskid. There are few airport operators and airplane instructors who are better qualified than Mr. Downs to discuss the merits and shortcomings of glider training as an aid to power plane instruction.]

All of the glider pilots whom Mr. Downs has trained have flown Franklins. Very few of them have had any soaring experience, but many have been experienced glider pilots.]

Situated here in Ann Arbor, operating a flying service right alongside of the University of Michigan Glider Club operations, we have had an unusual opportunity to form some opinions on the merits of glider flying as a preliminary stage of powered flight training. Glider enthusiasts are prone to overrate the value of glider flight, while powered plane pilots are want to underrate it. In our humble opinion, and with apologies to all fence straddlers, glider flying has a definite value as a preparatory stage for powered flight—but we wouldn't give it better than about sixty per cent.

From our observations here, the amount of glider time a pilot has before beginning powered training has a direct bearing on his reactions to powered flight. For example, we get quite a few students for powered flight training who have had a semester in the Glider Club. Their glider air time probably would not exceed an hour. When they come to us, we find that they get air work rapidly, but we have to spend from one to two hours breaking them of glider take-offs and landings, i.e., hauling the nose up at an angle of forty-five degrees and landing at an angle of attack of minus five degrees. Included in this item of grief is the tendency of this type or stage of glider pilot to skid — out of a powered plane on an approach, at the lower altitudes, in trying to correct for drift or to get in position for a landing. Speaking of this same glider pilot, we will have to spend a little extra time showing him the

importance of smooth control operation and coordination; but this is more or less offset by his pre-knowledge of the principles of the control system and an acquired sense of orientation from his glider flying.

Now, students, the next exhibit is the fellow with four semesters of glider club training; say he has four or five hours in the air by this time. In general, this stage pilot has, by hook or by the grace of God, managed to learn to fly the gadget, instead of simply staying aboard and beating her over the back with his sombrero as the aforementioned one-semester glider pilot did. This type or stage of student, when starting powered training, will almost always cause his instructor to relax and do some high-speed resting, under the guise of instruction, for a few hours. Any reasonable amount of explanation and demonstration of the difference between powered flight and glider flight will suffice to put this student on the road to better-than-average progress. He will have most of the sins of the first exhibit, but his "flying" instinct is further developed and more flexible, so that he will adapt himself to a change in craft rapidly. O.K.—Now we'll take exhibit 3; on second thought, you take him, as this No. 3 man has over eight hours of glider time and is a source of pride and extreme worry to us. Anyone who will go out and get himself more than eight hours of air time in a glider (I don't mean soaring time) will, in our opinion, do anything, and what is more disconcerting to us—he will get away with it, too. We have had a few of these No. 3 students, and we will take this opportunity to say a few words to one of them some of you know.

You appeared here in Ann Arbor to take aboard a load of education from the University of Michigan. At the time you showed up at the field for some instruction on powered planes you had some twelve hours in gliders. While we had been observing the antics of the Glider Club here for a few years, we were totally unprepared for anyone with that much glider time. You were definitely a marked man (boy, at that time). We were using a "Fleet" then (a dandy airplane), and at two and one-half hours you were doing all the flying. That didn't seem reasonable to us so we stuck around for, I believe, one hour, when it became just too, too boring to ride with you and I got out (to the C.A.A.—this was before the eight hour law) and darned if you didn't keep right on flying around. Now keep this in mind, we have always been agin solos under eight hours, and turning you loose, with less, hurt us considerably, particularly when it took you a good many hours to develop some flat spots in your technique. Since your time, there have been some others who qualified for this stage of glider pilot and all of them, with only minor exceptions, have had the same flight characteristics as you exhibited. All of you have given us worry in overloads by your tendency to, in our timid opinion, stick your necks out in powered craft situations. We imagine your self-instruction on the gliders has created an impatience for, or of, instructors. Anything that occurs to you will have to be tried or investigated without benefit of consultation with your alleged instructor. You may even have tried telling him you wanted to do "snap rolls" when you had four hours' solo, and the old foggy nearly had apoplexy. That merely confirmed your opinions of powered plane instructors anyway, so you never mentioned it again, but just went ahead and tried things as they occurred to you. And the sad part of it was—you exhibit No. 3 fellows seemed always to get out of

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