

## STEPHENSBURG

[EDITOR'S NOTE: *There have scattered reports of strong thermal activity in the middle of winter. In the past, we have been led to believe that soaring is over with the first frost, so maybe we have been overlooking something. Here is one story by Les Barton about winter thermals. How about giving us your own experience with them?*]

"Our New Jersey fields and hills, having proved themselves capable of reflecting thermals and winds at the New Jersey Glider meet, we boys with gliders looked forward to plenty of flying. Alack and alsa! nearly all the week-end winds were easterly, or lacking all together, as this direction is not suitable for our hills, flying was somewhat stalemated.

"Until January 8th, we had only one week-end of slope soaring, so we contented ourselves with practicing approaches and up hill landings. On the 8th, the wind was fairly strong NW, but, unfortunately, we got a very late start due to car trouble. I took off first and made a flight of 30 minutes, altitude 1,200 feet. There were plenty of thermals about but they were growing weaker, so I came down to give Stanley a crack at them, and he stayed aloft for an hour. He could have remained up there till dark, as the wind was giving him steady lift, however, we on the ground were cold and hungry so started to drive away with the trailer. He spotted us and came roaring down, setting the ship neatly near us. Stanley made several long cruises over the valley without loss of altitude. I have done the same thing at the valley below Schley field in the evening, and we attribute this to the evening thermals. In fact, Stan made a flight of 56 minutes one evening at Stephensburg with no slope wind at all.

"There are plenty of thermals in the winter. It is just a case of distinguishing between slope gusts and thermals. It seems to me the winter thermals are very narrow and hit sharply and one cannot climb as quickly in them, but they abound nevertheless. So, fellows, if the ground and air conditions permit, go out and try a little soaring and send your story to the S.S.A."

## WASHINGTON, D. C.

Edward Parkinson, a new member of the S.S.A., writes of something new in the way of glider club organization:

"Now to give you some information concerning the VMS-3R Glider Club: Our original plans were to buy a sailplane and form a glider club of fellows in the squadron that already have power plane licenses. We abandoned that plan for the following plan: to buy a good utility glider and make the membership in the club include every interested member in the squadron (Third Scouting Squadron Marine Reserves). By so doing, we figured it would supply everyone, who so desired, with a safe and economical way of learning the fundamentals of flight. Besides, this was a new experiment as far as Reserve aviation units are concerned. The club is in no way connected with

the Marine Corps other than the fact that its members are Marine Reservists.

"This winter we haven't had many nice week-ends when we were free to fly the glider. Nevertheless, the seven days we have flown it we have logged sixty-six ground tows and fifty flights. Just as soon as the weather permits, we expect to get started on our training schedule. Fortunately, we have Hybla Valley Airport as our gliding site. Hybla Valley is the finest site in this section. It has four long, smooth runways which make the field ideal for auto tows."

Following is a copy of the pledge that each member must sign:

VMS-3R GLIDER CLUB  
WASHINGTON, D. C.

## Pledge

(Date)

For the purpose of providing an opportunity to learn the principles of flight of heavier than air craft and promote gliding and soaring for the members of the organization known as Scouting Squadron Three Marine Reserve, I hereby agree to pay to the VMS-3R GLIDER CLUB the sum of Five Dollars (\$5.00) at the rate of One Dollar (\$1.00) quarterly until paid, beginning..... for which I am to receive five shares and membership in the club, each share entitling me to five free tows in the glider of the club. For additional tows, the club will charge dues sufficient to cover expenses of towing and maintenance.

I further agree to abide by all rules, by-laws, and regulations agreed to by a majority of the membership of the VMS-3R GLIDER CLUB.

If for any reason my service in Scouting Squadron Three Marine Reserve is terminated, I forfeit all interest and shares in said glider club.

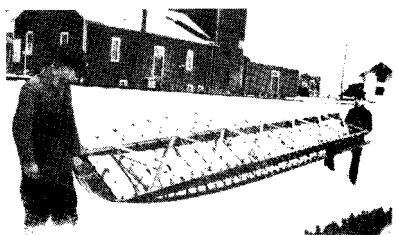
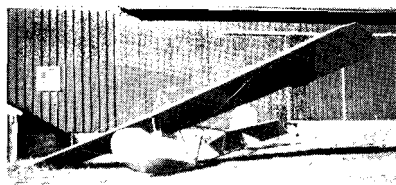
Signature .....

Witness .....

WISCONSIN

DALE

Leland Hanselman sent us a picture of their home-made primary with nacelle, which has made flights of 4 hrs. duration. Before the Frankfort meet last year, the three members of this group had never seen another glider, but now they are building a new ship with 40 ft. span that should really be able to go places.



## Our National Program

(Continued from page 1)

ment uninterruptedly these past eight years, has been made Private Flying Specialist.

Only by continuing to act on our own initiative can we persuade government authorities that we are worth helping. They must be convinced that we do not want to be carried along in luxury at the expense of the public, but are merely seeking the boost to get under way. We must prove that we have the ability and spirit to support ourselves and to repay amply any time and money spent on us.

We have been compiling a list of potential instructors whose names are being sent to groups who want to glide and soar. Sooner or later, those of you whose names appear on this list will be asked to help a new and inexperienced group. Upon your answer depends much of the success of our program.

## Higher Cruising Speeds

(Continued from page 9)

speed and higher wing loadings is the increase in minimum sinking velocity. It was shown that increasing the L/D ratio results in reducing the minimum glide angle. This in turn has a favorable effect upon the minimum sinking velocity. Therefore, it should be possible to maintain the present spans and reduce the wing areas, resulting in increased effective aspect ratios.

When all means for reducing the glide angle have been exhausted and higher speeds are desired than those which the minimum sinking velocity will permit, some artificial control of the minimum sinking velocity may be had in a critical moment by means of ballast. The normal wing loading may be specified to give a favorable sinking velocity for emergency demands. Ballast may then be added until the wing loading produces the desired speed. With this overload, the flight may proceed until a lower sinking velocity is desired, at which time the ballast may be released and the flight will then continue at a reduced speed.

Some effects of increased wing loadings on speed and minimum sinking velocity are given in Table II. Assuming for the purpose of illustration, it is practical to increase the normal wing loading of 3.75 lbs./sq. ft. to 7 lbs./sq. ft., note the increase in glide velocity at a glide angle of 1 in 36.4 from 46.1 miles per hour (Table I) to 63.0 miles per hour (Table II). By reducing the gliding angle to 30.82, the speed can be raised to 90.9 m.p.h. While the minimum sinking speed for this wing loading has been increased 37% over that of the original sailplane, it is still not excessive. To take a most unfavorable example, let it be assumed that, due to factors unfore-

(Continued on page 13)