monocoque construction. The wing has a two spar full cantilever construction and is also covered with plywood. This ship is a single place machine.

SPECIFICATIONS	PERFORMANCE
Span: 52 ft.	
Length: 19.2 ft.	Cruising speed: 65 m.p.h.
Wing area: 114 sq. ft.	
Wing profile: Goettingen 549	Landing Speed: 44 m.p.h.
Weight empty: 583 lbs.	Towing speed: 150 m.p.h.
Gross weight loaded: 792 lbs.	Gliding angle: 1:27
Wing loading: 6.9 lbs./sq. ft.	Sinking speed: 3 ft./sec. at cruising speed

Below are listed, from the magazine *"Samolet"*, the Russian record soaring flights from August, 1936 to July, 1937:

1936

August 22—Soaring pilot Ovsyannikoff established the Russian altitude record of 4275 meters (14,000 ft.), in a BC5 sailplane.

August 31—Pilot Korotoff, in a seaplane glider, the KAI-1, flew an airline distance of 335 km. (209 miles).

September 1—Kartasheff established an all Russian distance record of 502 km. (313.75 miles) in a GN 7.

September 14—Kartasheff, in a GN 7, broke his previous distance record with a flight of 530 km. (331.25 miles).

October 21—Master Soviet Soaring Pilot, Ilchenko, with passenger Loguinoff, made a goal flight of 133.47 km. (83 miles), from Sultan-Sarai, Crimea to Djiploff on the Sea of Azov, in a KIM-2 two-place sailplane.

1937

May 5—Master Soaring Pilot Rastorguyeff established a world distance record of 539 km. (335.3 miles), from Moscow to Devitza, in a "GN 7."

May 12—Rastorguyeff broke his international distance record in his "GN-7", with a flight of 602.22 km. (374.2 miles).

May 27—Rastorguyeff again breaks the world distance record with a flight of 652.256 km. (405.29 miles), in the "GN-7", flying from Moscow to the Sickle and Hammer Farm, Province of Stalingrad, 100 km. southeast of Saratov, on the river Volga. Duration of flight, 8 hours, 18 minutes.

May 27—Pilot Ilchenko and passenger Emerik established a world's distance record of 407 km. (253.3 miles) for two-place machines, in a "KIM-3".

June 30—Pilot Fydoroff reached an altitude of 12,105 meters (39,946 ft.), having released from airplane tow at an altitude of 8,500 meters (28,050 ft.).

Power Soarer

(Continued from Page 1)

Taxiing out to the end of a runway, you keep out of the way of a landing transport and wait for the green light of the control tower before pushing the throttle forward. Taking off gracefully, you retract your wheels and fly away from the airport toward some likely looking cumulus clouds. At fifteen hundred feet your variometer suddenly jumps from seven feet per minute to twelve. Immediately you start to spiral, as you shut off the ignition switch, apply the propeller brake until it stops in the up and down locked position, and then pull the retracting level. The rate of climb drops back to five feet per minute, but there is now no noise, no vibration, nothing but the silence, the beauty, of soaring flight.

Five hours later and one hundred and eighty miles from home, you run out of thermals. At 1,000 feet you pull up your propeller, start the engine and head for a nearby airport. A few minutes later you circle the field, drop your wheels, pull on the flaps and come in to land. Your sailplane is stored overnight in a hangar and, next day, you fill up your tank and fly home.

We believe that the handwriting is on the wall that small aircraft engines applied as auxiliary units to sailplanes will do much to make soaring a popular sport by making it thoroughly practical for the average, busy individual.

The Soaring Test Pilot III

(Continued from Page 7)

back, but she just stopped in a vertical position. I said to myself, "Oh, oh, she's going to spin!"—but she didn't. The ship seemed to slide down backwards, tail first, and then it suddenly whipped over. The safety belt actually cut my stomach.

I spiralled for altitude and tried another loop. I dived even more this time and pulled back and over she went for the nicest loop you ever saw. As she came out, I held the stick back and let her go over for another loop, and did five consecutive loops this way.

After spiralling for altitude, I started in again, and did nine more loops. I found, by just holding the stick back and working my rudder to keep the ship from hunting, that she would keep right on looping. All I had to do was to point the ship at some object each time I came out of a loop. I sighted the nose of the ship on a large rock, sticking out of the ocean.

I then flew down to Redondo and circled over the city a few times and headed back to the hill, where I made a few more loops in a different location, and found the reason why the ship looped so nicely with the stick held back all the time was that, each time I came out of a loop, the wings would hit the up draft and be pushed over easily for the next loop.

Heading for the take-off point, I made a number of loops and ended up by doing a spin. I landed right back on the same spot where I took off, to find Stan all smiles, happy that his ship was still in one piece, and to find that it could be stunted with the best of them.

Stan then took off and flew to Redondo, at an altitude of over 2,500 feet, and later reached the best altitude of the day by flying to 3,500 feet. After about an hour and a half, he decided to come in, as the sun was down and it was getting dark. It took him twenty minutes to lose his altitude and he landed right up to a handkerchief I was holding out for him. Our total flying time for the day was 5 hours and 20 minutes.

MICHIGAN

(Continued from Page 9)

I was using wrong rudder in trying to get off, and the wing had seven holes, which should have been patched before trying it. Yes, and it needed adjustment in the landing wires.

Luckily, there was one young transport pilot on the field who was interested in gliders and readily gave us a hand. His name is John Flannery and he was the youngest transport pilot in U. S. A. in 1933. Next day he flew it and showed me what was wrong with my flying. On this day, I made three good high flights, and got another tasty scare.

On the first of these three, I was so busy on the climb that I failed to notice the slowing ground movement with increasing altitude. Above fifty feet for the first time in a Primary makes all the difference in the world, and upon releasing, when the glider slows down to its normal cruising speed, I was never so lost in my life! No ground movement and nothing out in front on which to gauge a horizon—woho. It wasn't till after this that I found gliding to be what is claimed for it. It's in me to stay and there's no praise good enough to describe the supremely pleasant thrill ever present in the sport. Always something new to learn and always new goals to shoot for.

Two of the members made a few attempts at ground runs after this, and an outsider, who had some time on a Waco, slipped it into the ground and washed out the skid for us. Within a week, we had a new one installed and mounted the air once again. Flannery and I piled up some flying time on it and, for some mysterious reason, couldn't induce the other members to try it. Alibis and more alibis. A few of them made a slip, and we found that they were scared of the thing but refused to admit it. They had invested money in it, worked away on it, watched it fly, but still would not try it. Interest waned among the members, but it began to attract outside inquiries. We were ready to solo the first of one of these when fall weather cracked down on us and nearly wrecked the machine, where it was tied down out in the open. In the meantime, Flannery, Oswald Lahti (a young private pilot), and myself rolled up about a hundred flights. Finally, the bad weather subsided and we dismantled a sorely battered glider, to store it for the winter in a garage.

Very shortly, we will order shipment of the first of two Northrups, which we now have on order. A private hangar will be our next step, and we'll be ready to mount the fresh spring breezes once again for the third year in succession. It is our aim to roll up a new high score and afford many other boys, of limited means, the opportunity of learning to fly the way that they should. Gliding is a thrilling sport, and valuable flying training all in one. It is my sincere belief that this publication will have occasion to record one of the most active and expansive seasons this country has ever known.