SUPER-DUPER TOWPLANE

By PETER M. BOWERS

It isn't often that we civilians get a tow behind a military plane, but Heasley Entz, another Seattle Pilot, and I got one recently that spoiled us for any other towplane after only one flight.

The ship was a Cessna L-19A, widely used by both the Army and the National Guard. The place was Ellensburg, Washington, where a glider meet was being held the day before annual flight breakfast and air show. We were trying to use a Cessna 120 as a towplane, but it had marginal performance when towing a TG-3, and overheated badly when towing anything, so the events requiring aero tow were cancelled. During the meet, the L-19 came in, along with some other National Guard ships bringing personnel in for the next day's show, and the operation ceased for awhile to watch it make some "helicopter" takeoffs in the 35-mile wind, and to make comments on its potential as a towplane.

After the meet, the glider pilots learned that the featured acrobatic acts for the air show had been cancelled due to a CAA crack-down on such things after a recent fatal stunt accident in Colorado. Heasley and I therefore offered to fill in with the two-ship glider act that we had used at a previous air show IF a suitable towplane could be provided. This remark was made with a long wistful look out the hangar door toward the spot where the L-19 was tied down.

The National Guard pilot was around looking at the gliders, so a conversation was struck up with him that finally led to the sixty-four dollar question —how about using the L-19 as a glider tug? Well, it was okay with him if it was okay with the General, so for a while it looked as though the matter would end there. However, further conversation with the meet officials disclosed the fact that the General would be at the breakfast the next morning, and would make a speech at the show.

Being civilians, and therefore immune to court martial for such a breach of procedure as by-passing "channels' 'and going straight to the top, we decided to take the problem directly to the General himself. Brigadier General Stevens, Adjutant General of the Washington National Guard, proved to be very interested in the idea, and after being briefed on towplane equipment and procedure, he authorized our use of the L-19, which was to be piloted by Lt. Thompson. He got so interested, in fact, that he decided to delay his departure after his address to watch the operation.

We had a complete tailwheel assembly of our own with a bracket for the hook welded on it that we substitute for the standard tailwheel of the ships that we normally use for towing, Pacers, Super Cubs, and the like, but at this time, it was still on the 120, which had taken off on a cross-country the evening before, and hadn't gotten back. So, we dreamed up a field expedient, and slipped the Schweizer hook directly onto the tail wheel axle, having to remove and replace only one castle nut and a washer. This was about the simplest hook installation imaginable, and had been used successfully on other ships, but not on ones with full-swivel tailwheels. Matters started to get complicated when the pilot on some early flights before the glider operation got the wheel swivelled, and broke the release line, but the matter was soon ironed out.

Heasley's TG-2 and my "Wolf" were due to be taken up on a double tow, but a 60 M.P.H. gust caught the "Wolf's" rudder from behind as it was being walked into position and split the rudder post, putting the ship out of commission, so I climbed into the back seat of the 2. We had briefed the pilot very carefully on the desired tow speed, and told him to make a normal takeoff such as a Cub would make. Alas, we did not know his ideas on what was "normal" for a Cub!

Everything started peacefully—we were off the ground before the tug, and Heasley was just getting the nose down to take some of the load off of the L-19 when all of a sudden, there it was a hundred feet above us, and a big loop of towline was curled back under our right wing. Heasley pulled the nose up again and hung on, and almost instantly the line was tight, even though at a 45 degree angle. We went up to the L-19's level like we were on auto tow, and then settled down to as smooth a flight as can be made in wind varying between 35 and 49 KNOTS (you convert 'em. I'm afraid to).

Because the "Wolf" was redlined for aero tow at 62 M.P.H., we had asked for a speed of between 50 and 60 M.P.H., and didn't change the request when the lighter ship dropped out. From the time we levelled off after the jump takeoff until we released, the airspeed needle hardly varied from a steady 55, even though we were bouncing around so much that the stick in the rear cockpit was just a blur. With flaps down,that L-19 seemed as steady as a rock, and even with the climb reduced by spoiler action from the glider because of the turbulence, we were climbing almost five hundred feet per minute. Of course, the wind helped, but we had over a thousand feet by the time we got to the end of the runway! We had no opportunity to determine the effect of the flaps on the slipstream, as the turbulence made it impossible for us to tell when we were in it.

The official figures released for the L-19 give it a top speed of 130 M.P.H. with it's 213 H.P. Continental, and a stalling speed of 54. However, it must stall a lot slower than that with those special flaps, because the airspeeds in the TG-2 are accurate, and the pilot of the L-19, who had about the same reading, would not fly that close to a stall in such turbulence.

Basically, the L-19 is a modified Cessna 170 with

(Continued on Page 17)