

An "Imperial" soars above Oregon's wheatfields.



Bob Denny, best dressed winter weather pilot. The sky-diver goggles keep eyes from tearing.



FM's new soaring column . . .

## Lightly Loaded

Why run with the towline?

or, Crash by the Pair!

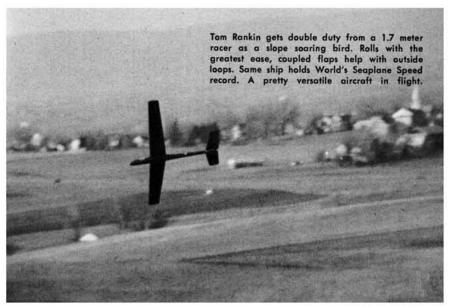
♦ Elmira, New York. 20 miles! What a heck of a sign to plant in front of me on a business trip. Immediately I let go of the steering wheel and tried to fly the car with the gearshift.

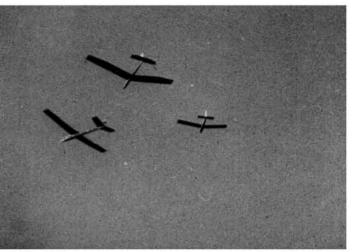
Since it's nearly 300 miles from home, I never get up in this neck of the woods very often. As a teenage kid I can remember my nose flattened on the glass as my Mother drove right on by. I had soaring in my blood even then, but one must never slow the car down on a vacation trip, on account of you won't get to the dumb destination if you do. Somewhere to the north we met her friend Louise and her son. Came the return, we hit upon a wonderful solution. We piled both the school teachers in one car, while my brother and I hopped happily into the other with Don Griffen. I don't know if it was much of an improvement. Elmira

went flashing past at exactly 96 on the speedometer. He was full of fun, but destined to go down on his 1st mission as a B-24 Squadron Leader over Germany.

Anyway, the years passed and once more Elmira went sliding by. I could almost taste the sailplanes. My business upstate would not take more than a day, so I laid plans to have my car break down on the return, just about in front of the Soaring School. I've had a fair amount of hours in lightplanes, but I'd never gotten the chance to try out a glider before. A thunderstorm had just passed through as I buckled myself in, so the air was dead and devoid of lift. This did not really matter to me however, as on your first check ride in a new type aircraft, you have enough other situations to master, without trying for the endurance record.

Lesson number one came before we left the ground. A teenage kid tried to race an incoming Schweizer across the

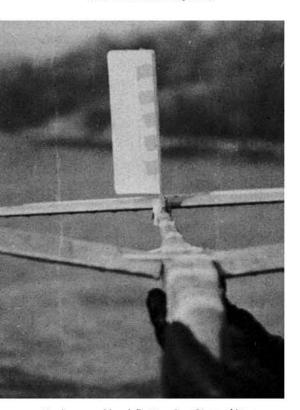




Off the slope, three for a speed race.

strip, lucked out and got belted in the backside by the wingtip. His very irate father climbed out of the cockpit and really ate that kid out. Luckily he was not hurt. It caught him in mid stride, threw him into a loop and he seemed the worse for wear.

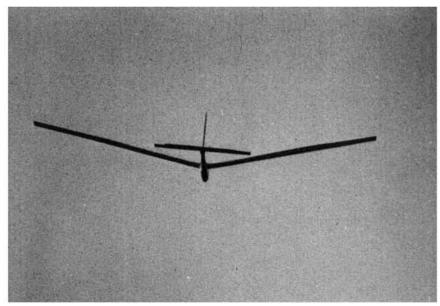
I was most anxious to get the feel behind a towplane. We were to lift off from field elevation, and tow to 3,500 feet behind a Piper Super Cub. I had fooled with glider tows behind free-flights as far back as 1948 with modest success. The Sept. 1948 issue of M.A.N. carried my "Flea-Fright" designs, a seven foot Super Cyke aircraft towing a six foot soarer. I had reasoned that others with the same idea had failed because they tried to tow from the tail of the towplane, and the free-flight (Continued on Page 43)



Hard over rudder deflection. Ben Givens ship as viewed down the fuselage shows amount needed.



Three's a crowd. Bit of formation flying proved fun. Tom Rankin, Ben Givens, Harry Remmers.



"Dirty Bird." Ben Givens majestic ship passes.



Will Ray Smith fit the 14 footer in a Volks?

## **Lightly Loaded**

(Continued from Page 21)

soarers would balloon off and turn away, pulling the towplane's tail high. diving it in. To avoid this, I gave both designs a V-tail, hooking the towline to the wing pylon instead, a point much closer to the C.G. and less prone to disrupt the flight path. The glider in turn had a timer in the nose, releasing the line after 20 or 30 seconds. It worked! Or I was devilishy lucky. Given low power. I managed to keep both in the same sky until release, though it did appear to be a little much for a Hornet type, when Cyke job, 40 feet of fishline, swaying glider and this idiot all ran through the circle of the ukie at the same moment.

But that was 21 years ago, and things are better now. Others have tried it with R/C designs with better success. Given the right design, the right technique, R/C release, the radio corrections required, it is easily possible to master the situation.

These thoughts were in my mind as we readied for take-off. I had been cautioned to hold position just above the towplane, not too high, and straight behind his fuselage. The Schweizer comes unstuck way before the towplane, but you just level off a few feet off the runway and hold position as the towplane circles aloft.

**FLYING MODELS** 

It is just like a dream in slow motion. The towplane almost seems stationary throughout the climb, and only the slightest corrections seem necessary. The important thing to remember here, and in all such R/C model experiments, is that AILERONS ARE NOT USED on the tow. All attitude changes are made through rudder alone (instead of aileron and rudder) with elevator used of course to hold proper altitude in relation to the towplane. The instructor had me try a very mild bit of aileron on a coordinated rudderaileron turn, and the net effect of this is to bank away from the towplane, pulling his tail with you. A very lethal maneuver.

To put it to use in a model then, all we need is a slow, power-packed tow-plane with gentle characteristics, a well trimmed soarer, with perhaps a faster than normal glide path. A normal take-off (long runway) is made, with the glider launched behind. All left-right corrections made with rudder alone (on tow only) with elevator used to hold a position just slightly above the tow-plane. Take it easy on the turns and consider every inch of altitude as money in the bank.

This story ends in the middle, for little is known and much to be done. I hope it gives you the incentive to dust off a likely looking airframe in the basement and team up with a buddy for an airshow of your own this coming season.

And, meanwhile, I'll be thinking up another excuse to drive up towards Elmira's Harris Hill again.

... Don McGovern