of the storm or atter would mean a dive, excessive if I came to in still be in the pride the storm

aight. It seemed ages—I was getng were much too would take it no il that I thought lly we hit a comned in an easterly e compass swingiderable time the tes I thought we at because of the one of the winw that we were

titude where the en getting quite at could not find and it registered yself-how did I it certainly looks t must be on the t direction but I all lift had disfrom the airport suddenly saw the did I feel silly. e altimeter had really at twelve physical strain, I lown to warmer ie and I indulged to execute.

as was cracked, as very loose and to the enforced ving butts were as the streamline int was off and coat of varnish.

we were above at least twenty ent we squarely



## Development of the TG-1A Glider

By Stanley R. Corcoran

VICE PRESIDENT, FRANKFORT SAILPLANE CO.

THE STORY of the TG-1A begins with the Cinema Sailplane, which in turn dates from my model building days in Hollywood, and in particular with one model airplane I built to order, but for which I was never paid.

That was in 1935, when I was still in high school. I had started building and selling model planes as an easy way of increasing my spending money, and in my senior high school year opened a model shop. One of my customers, a glider pilot, let a small account drag on too long to suit me, and finally offered to square it by teaching me to fly his glider.

I had two sessions with him at an airport in a Franklin glider. Then we went to Shannon Hills near San
Bemardino. I caught the knack of ridge soaring on my
first tow, but after about ten minutes I noticed everybody waving their arms, so I came down. My instructor informed me that the waving was not a signal
to land, so I took off again and ridge soared a little
over two hours. That was enough to start me dreaming
of what my sailplane should be, and I began planning
what turned out to be the Cinema I.

Knowing about what I wanted in the way of performance, my first step was a detailed study of all existing gliders for which I could get accurate data. From these I selected the specifications which I believed

would give me the results I was after. They were:

Span	45 feet
Length	
Root chord	5 feet
Tip chord	2½ feet
Aspect ratio	10.7
Wing area	190 sq. ft.
Wing section	
Weight	315 lbs.

The short length and light weight made the ship highly maneuverable; it could make a continuous series of 360° turns at the rate of one complete revolution every four seconds. This made it possible to work very small thermals, which on many occasions spelled the difference between forced landing and continuing the flight. Sinking speed at 35 mph was about 2½ fps. This fact, combined with its high maneuverability, made it possible to gain altitude very rapidly when working thermals, which more than offset its relatively low cruising speed of about 45 mph.

I took the Cinema I to Elmira in 1938 while still a novice at soaring and cross-country flying. My first flight was 183 miles, much better than I had dared hope. My next two flights were 146 and 202 miles respectively, for an average of 177 miles that year. Peter Riedel, with a flight of 225 miles, took top honors