



Le Deane Studio

The Schweizer 1-21 and the author at the end of the flight from Wichita Falls, Texas, to Tucumcari, New Mexico.

America's 1-21

By DICK COMEY

Reprinted from AIR TRAILS

TWIN streams of misty water plumed back from long slender wings as the silver sailplane maneuvered gracefully over the grandstand at the Cleveland Air Races. Emil Lehecka, 1938 National Soaring Champion, was putting on a rare exhibition of artistic beauty doing loops, chandelles, and wing-overs while thirty gallons of water ballast carried in the new ship's wings streamed in long white contrails against the blue sky. It was one of the most unusual and dramatic sights afforded the spectators at the air classic at Cleveland during the 1947 Labor Day weekend, and it brought forth a powerful, spontaneous applause.

What lay behind this demonstration and why was this ship designed to carry almost three hundred pounds of water in the wings?

Ernest and Paul Schweizer had been talking, dreaming, designing, and building gliders for the last fifteen years and looking forward to the day when they could create a really first class sailplane. As soon as the war was over they consulted top ranking glider pilots, and active work on the 1-21 project was begun.

An all metal ship with an empty weight of 470 lbs. and a span of fifty-one feet was the result. Actual

construction of the prototype started in the fall of 1946. It was ready for its maiden flight on June 20, 1947. That afternoon it was swung out of the Schweizer Factory and onto the Chemung County Airport at Elmira, New York.

Frank Hurtt, chief test pilot, made a quick flight by auto tow.

The ship handled so nicely on this first brief hop that it was decided to dispense with other preliminaries and proceed with longer flights by airplane tow. Frank made the first take-off as easily as though he had been flying the sailplane all his life. The tow pilot later reported that the drag of the 1-21 on the line was so slight he had to keep looking back to make sure Frank was still there.

They were soon up 3,000 ft. The release handle was pulled and for the first time the new ship was really on its own. A series of routine glides was made to check the effectiveness of the controls at various speeds. Everything was normal, and when Frank noticed his variometer begin to show a rate of climb, he couldn't resist the urge to spiral and try a little soaring. Before long the fine aerodynamic qualities of the 1-21's flush-riveted wings became apparent and