

INTERESTING GLIDERS

by PETER M. BOWERS



Photo: Peter M. Bowers

The Frankfort "Cinema," one of the long-time standbys on the American soaring scene, got its start in 1938 as a pure sporting machine, served in the early part of World War II as an Army training glider, and then returned to civilian life.

The original "Cinema I" was designed by Stanley R. Corcoran as a single-seater along conventional lines. Wings and tail surfaces were built up of birch plywood and spruce and the fuselage was welded steel tubing. The horizontal tail consisted of "Pendulum" elevators with no horizontal stabilizer, which was a fairly common design feature at the time. A few single-seater models were built, and the design was developed into the "Cinema II," a two-seater that was built by the Frankfort Sailplane Company of Joliet, Illinois.

Shortly before U.S. participation in World War II, the Army developed an interest in glider operations, and invited the industry to submit designs suitable for initial glider training. Frankfort made slight changes to the "Cinema II" to bring it up to the military standards and received two orders, first for three XTG-1 experimental test models and then 42 production TG-1A's. At the time these were in production, the Army was buying up privately-owned sailplanes from individual owners to add to the training force, so four of the single-seat "Cinema I's" were given the military designation of TG-1B and three "Cinema II's," also known as "Model B," became TG-1C. There are contradictory Army records that indicate a "Cinema PC-2" was purchased commercially and became the single TG-1D. These military designations were very simple and direct — "TG" meant Training Glider.

It was not long before the Army

was convinced that sailplanes were not the proper vehicles for teaching military pilots to fly, especially when the prewar soaring pilots who had become instructors, as well as some of their students, went off on cross-country soaring expeditions with the trainers. The sailplane types were declared surplus in 1943 and 44, and survived the war to form the backbone of the first postwar decade of soaring. Of the 53 military TG-1's, 12 survive today, 18 to 20 years after they were built.

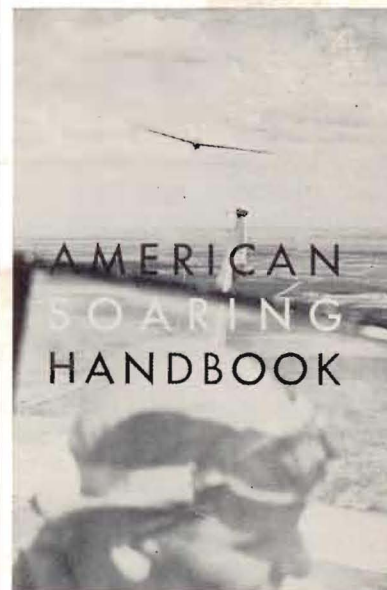
While there is no reason for it, it is interesting to note that the Frankfort designs, surplus or not, are most usually referred to in soaring circles as "Cinemas" just as the surplus Laister-Kauffman TG-4's are called "L-K's" or L-K 10's, their prewar designation. The two Schweizer models, on the other hand, are almost always called "TG-2" and "TG-3." This is logical in the case of the TG-3, which was strictly a wartime development for the military, but not for the TG-2, which had been in civil production since 1938 as the Schweizer SGS 2-8.

Cinema II (TG-1A) Specifications

Span	46' 3 1/4"
Length	23' 2 1/4"
Height	5' 1"
Wing Area	194.3 Sq. Ft.
Aspect Ratio	10.7
Empty Weight	500 lbs.
Gross Weight	920 lbs.
Top Speed	80 MPH
Sink Speed	3.2 Ft./Sec.
L/D	20 to 1

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