

1941, and the first was delivered to Wright Field for static test in December. The first flight of an XTG-4 was in February, 1942. One hundred and fifty production models were ordered as TG-4A, and a single commercially-built model was bought as the TG-4B. The factory built three commercial L-K 10B's after the military order was completed.

Changes in the glider program resulted in all the "sailplane" types of training gliders being declared surplus in the middle of the war, so practically the entire production of TG-4's became available to private owners. The L-K 10B, now known as the "Yankee Doodle Two," received an Approved Type Certificate in October, 1944, and very little rework was required to make the L-K 10A/TG-4A conform to the certification. The ships were snapped up quickly by the soaring activity and formed the most numerous single American model until passed by the Schweizer 1-26 kit model in 1958-59, 15 years after the L-K's first became available.

SPECIFICATIONS

Span	50'
Length	21' 3"
Wing Area	166 Sq. Ft.
Aspect Ratio	15.06
L/D	23:1
Empty Weight	475 Lbs.
Gross Weight	875 Lbs.
Wing Loading	5.27 Lbs.
Stall Speed	37.4 MPH
Placard Speed	126 MPH
Sink Speed	3.2 Ft./Sec.

Almost as soon as the surplus TG-4's hit the market the modification programs began. Some were relatively simple, and the CAA went along with most of them as long as they did not affect the basic structure or produce adverse aerodynamic characteristics. The first and simplest was to improve the messy military nose contour by rounding out the windshield in the manner of the original Lawrence Tech models, and various owners went at the "Bunny-Nose" problem differently as shown in the photographs.

The most extensive modification was known as "Flat-Topping," in which the entire superstructure above the upper longerons was deleted and the pilot, who stuck above the structure, was enclosed in a blown or moulded plexiglass bubble. This modification in itself was of little benefit unless accompanied by improvements in the nose contours and wing roots. The original Flat-Tops went so far as to remove some of



Figure 6. "Poor Man's Bunny Nose" formed by building up new windshield frame but using flat sheet of plexiglass instead of more expensive blown or moulded type. Note wrinkles in original moulded fiber nose fairing.



Figure 7. A different approach to better nose streamlining. A Schweizer 1-26 moulded canopy fitted to otherwise standard nose. New fiberglass nose fairing replaces original. Removable section ahead of windshield was wood covered with fabric on original, is now covered with fiberglass cloth. Rear canopy modified and reinforced to delete extra tube bracing shown in Figures 3 through 6.



Figure 8. An attempt to improve streamlining and visibility with increased windshield slope and use of one-piece canopy over both cockpits. This arrangement was structurally weak and was soon abandoned.

Figure 9. The same L-K of Figure 8 with further canopy modification. Extreme lowering of front portion of canopy imposed severe handicap on the pilot.

