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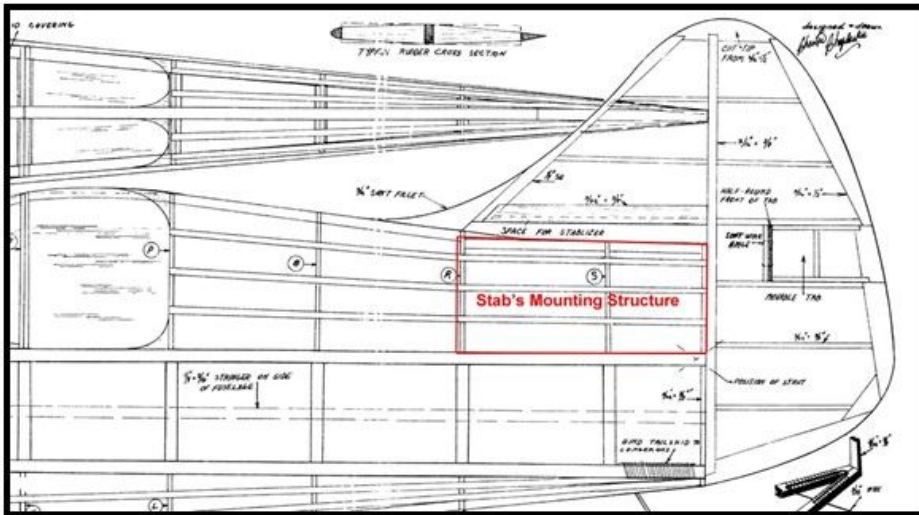
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Date: 3/23/2018 10:48:58 PM

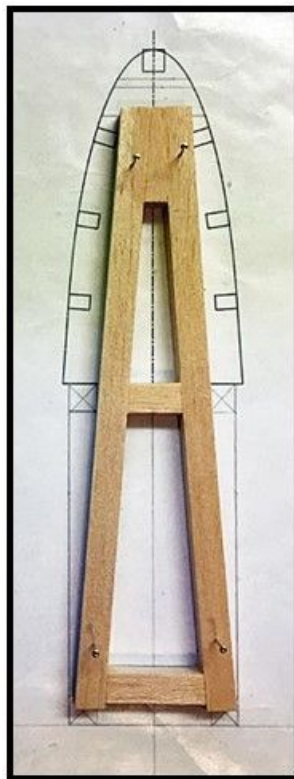
Subject: 93 Lancer 850 - Design of the Fuselage's Stab Mounting Structure (Part 2)

Report No. 93
New Cyclone Lancer 850
 March 23, 2018

The term "stab's mounting structure" relates to the area between the top longerons and up to the bottom of the stab as shown below.



In yesterday's Report No. 92, the picture below showed the 1/4" sq. front A-Frame for the mounting structure.



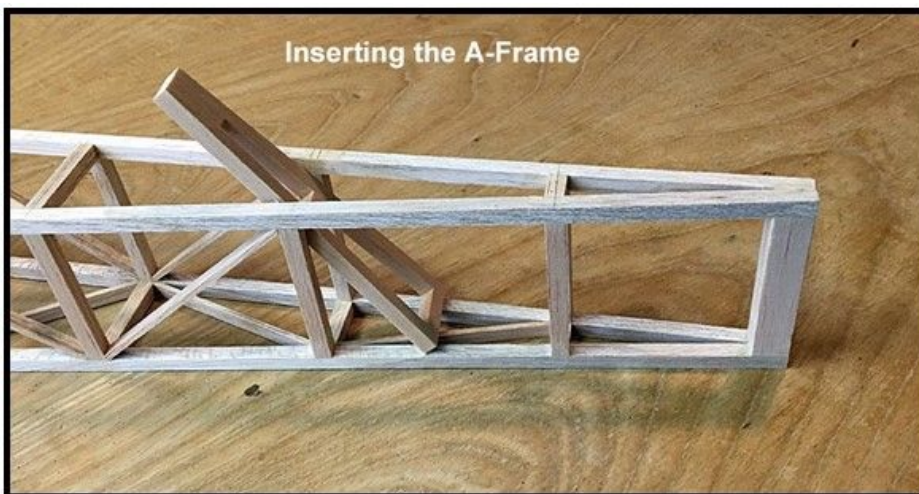
The A-Frame was too long to be inserted into the fuselage's structure so the one cross member and two diagonals shown below had to cut out of the structure.



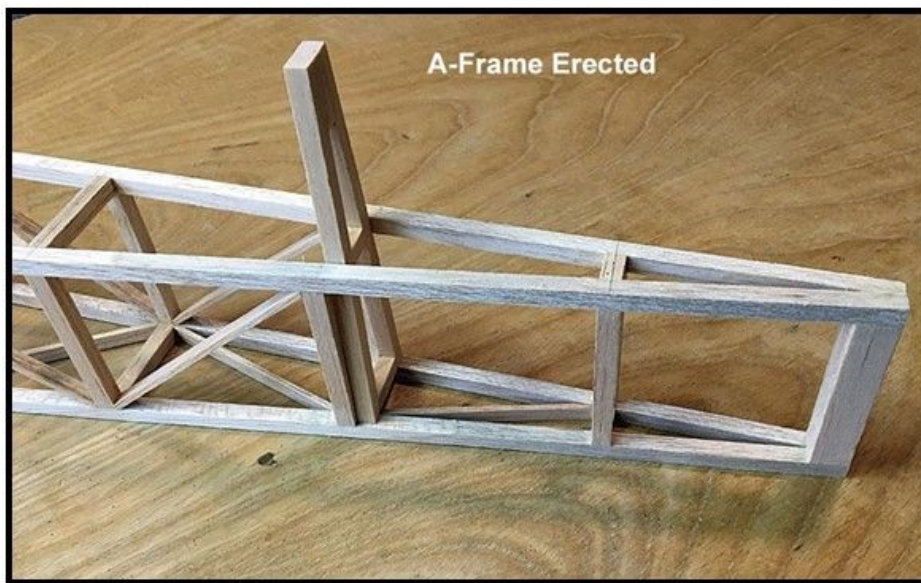
This shows the fuselage structure after the three members were removed.



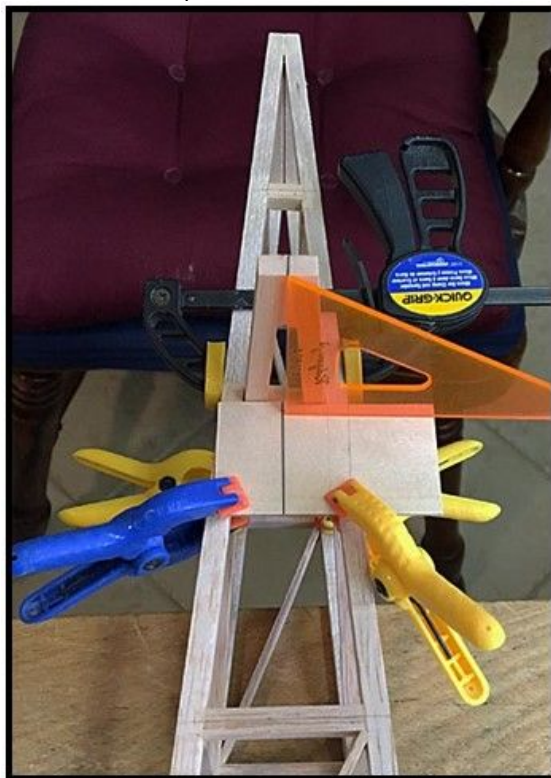
Even then the A-Frame had to be inserted on its side and then rotated into the inclined position shown below.



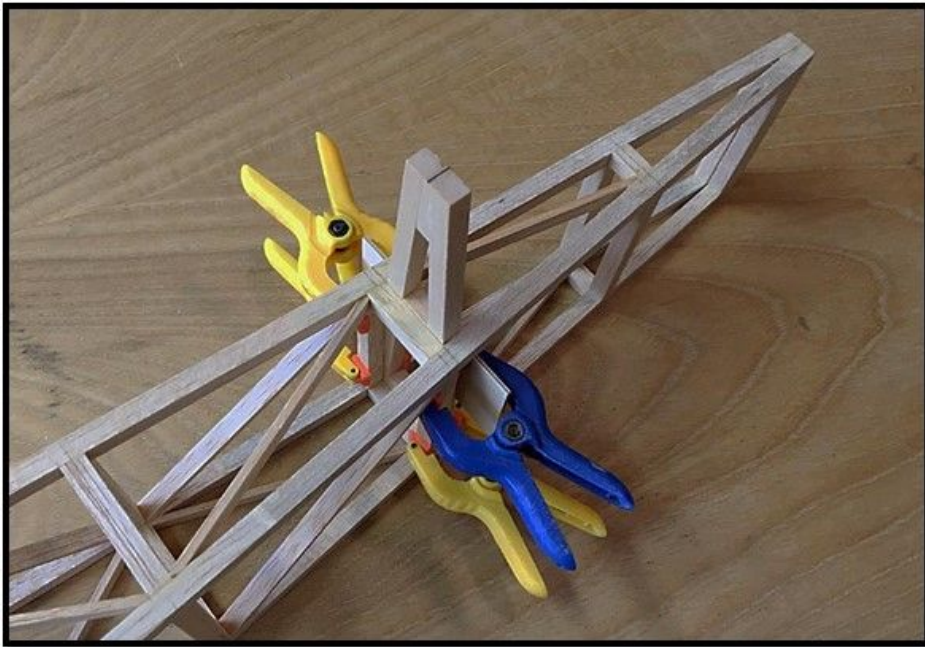
The A-Frame was simultaneously rotated back and pushed forward until it was finally erected up against the two fuselage up rights as shown below.



A new 1/4" sq. cross member was glued in between the two top longerons in front of the A-Frame and clamped with a Quick-Grip clamp you see in the picture below. Then an alignment check was made to place the center the top of the A-Frame on the fuselage center line. This was done using a small orange triangle placed on a piece of 1/16" plywood clamped to the fuselage's two top longerons as shown below. With slight adjustment, the alignment was accomplished.



The A-Frame was moved back enough to apply a liberal amount of aliphatic glue to all of the fuselage structural surfaces that the A-Frame would be in contact with. Then the A-Frame was pushed into place and clamped as shown below. After removing all of the excess glue, the A-Frame alignment was quickly rechecked and adjusted slightly. This is where the additional working time of the Titebond Extend wood glue became important. Notice that the cross member was replaced as well as the two diagonals.



An additional 1/4" sq. cross member was also glued to the bottom of the A-Frame between the two bottom longerons. The A-Frame will be left to dry overnight.....Tandy

