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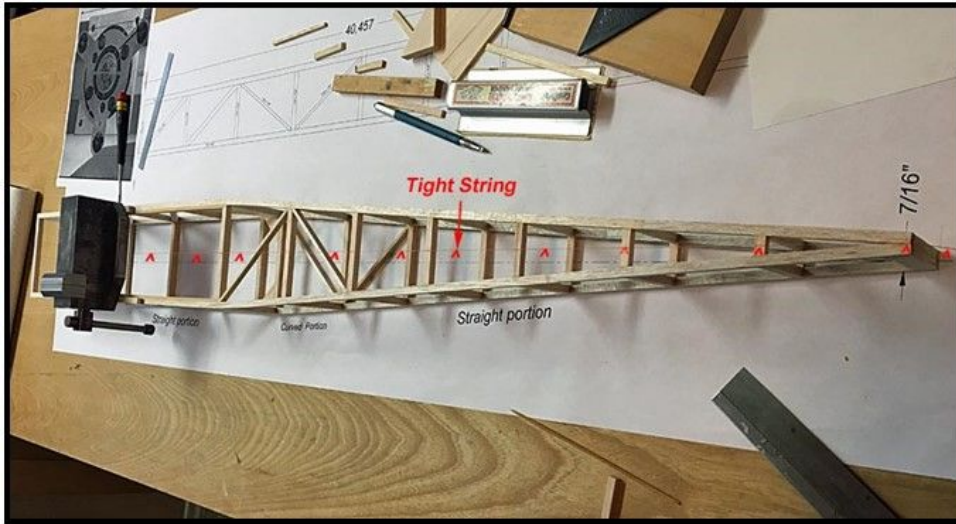
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Date: 3/1/2018 11:22:37 AM

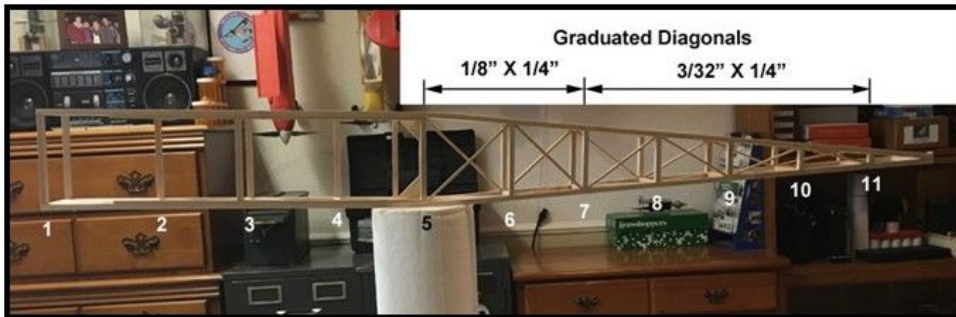
Subject: 76 Lancer 850 - Joining the Two Sides (Part 5)

Report No. 76
 New Cyclone Lancer 850
 March 1, 2018

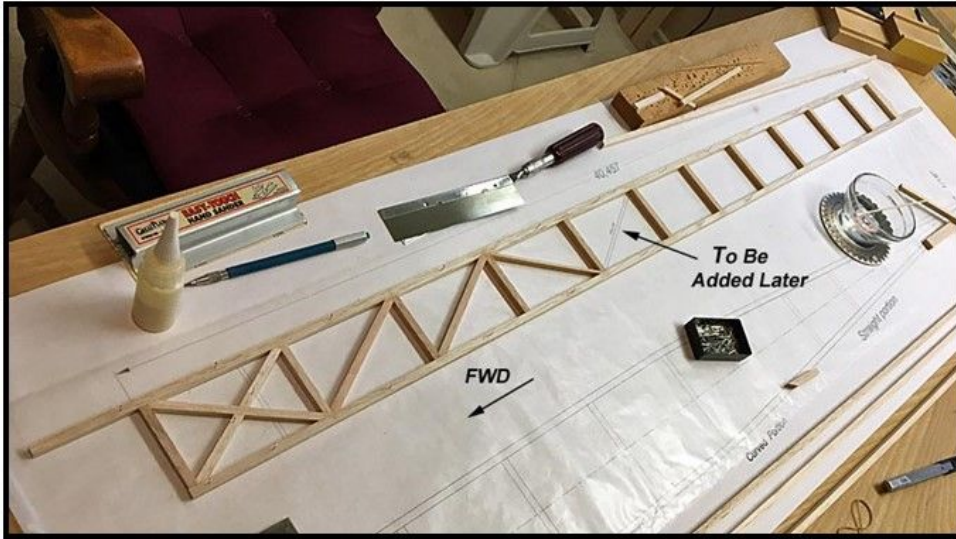
Yesterday after verifying the accuracy of the fuselage's 1/4" sq. frame work shown below, I became aware of the lack of torsional rigidity (resistance to twisting) in the long slender portion of the aft fuselage.



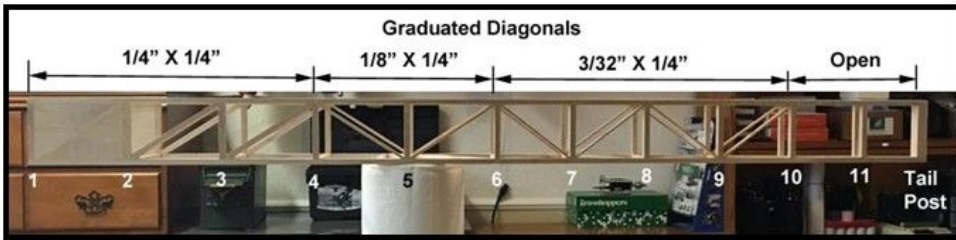
The two sets of 1/8" X 1/4" diagonals between Sta. 5 and Sta. 7 used to lock the curve portion of the top and bottom longerons in place were already there. So 3/32" X 1/4" diagonals were added to the top and bottom longerons from Sta. 7 back to Sta. 11 as shown below. Notice the direction of the diagonals on the top are reversed on bottom. This significantly stiffened up the long slender portion of the aft fuselage at the cost of very little additional weight.



In Report No. 69, the first side of the fuselage's primary structure was framed up as shown below. The 1/8" X 1/4" diagonal was omitted in the frame's 5th structural bay. This was to be added after the two sides have been joined and all of the structure's cross pieces glued in.



The 1/8" X 1/4" diagonal was added in the frame's 5th structural bay. In addition, 3/32" X 1/4" diagonals were also added to both sides from Sta. 6 back to Sta. 10 as shown below. The last two side bays will be left open until the pushrods are installed.



The construction of this fuselage primary 1/4" sq. structural frame shown below has not only turned out accurate, but is torsionally "bullet proof"!



The frame was weighed in on the Acculab scale at 95 grams (3.35 oz) as shown below.....Tandy

