

From: "Tandy Walker" <rdb435021@icloud.com>

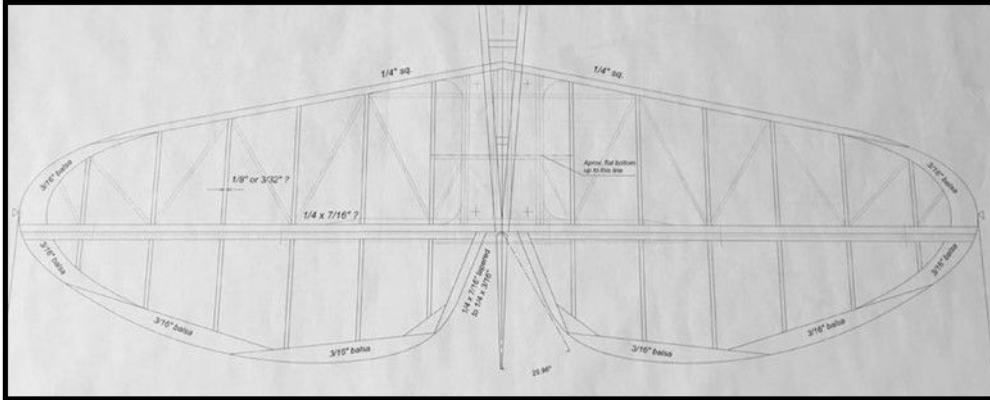
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Date: 3/14/2018 3:04:03 PM

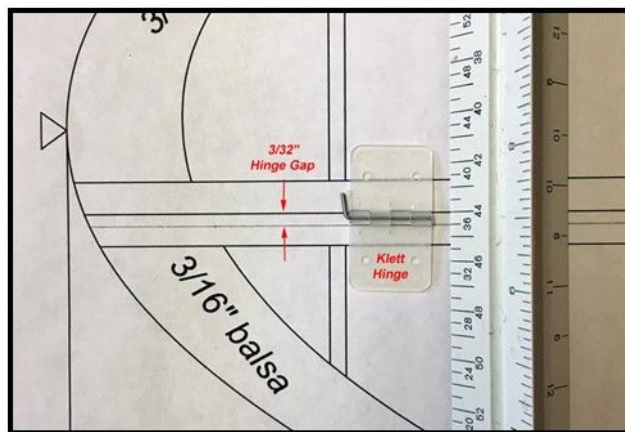
Subject: 84 Lancer 850 - Horizontal Tail Construction (Part 2)

Report No. 84  
 New Cyclone Lancer 850  
 March 14, 2018

After Sue and I returned from our fitness center workout this morning, I spent a couple of hours incorporated the design modifications on horizontal tail drawing shown below that were discussed in yesterday's Report No. 83.

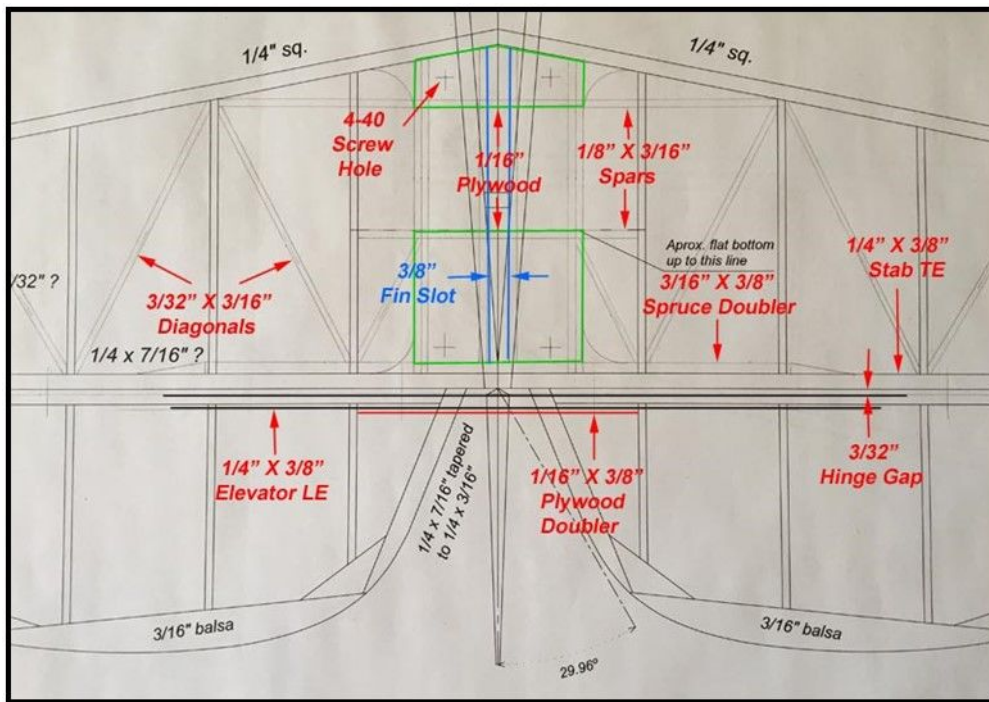


Since I plan to use six Klett 2-piece hinges to hinge the elevator to the stab, a 3/32" hinge gap is required. This moves the elevator leading edge back 3/32" as shown below.

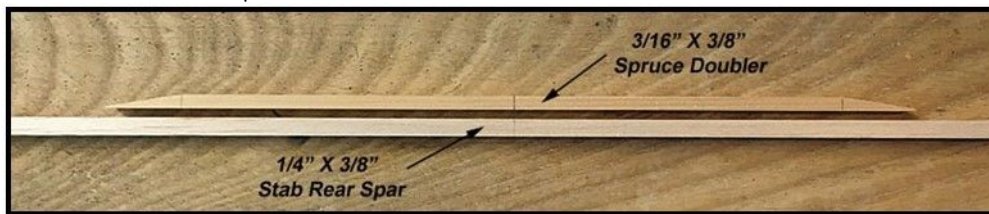


The horizontal tail drawing above is too small to read so I took this close up of the center section to point out the eight modifications to you:

- 3/16" X 3/8" spruce doubler on the stab's 1/4" X 3/8" rear spar
- 3/32" X 3/16" diagonals in the stab structure
- Two 1/8" X 3/16" intermediate spars
- Two sections of 1/16" plywood planking on the bottom of the center section
- Four holes for 4-40 attachment screws
- 3/8" slot for fin
- Elevator halves are connected with a continuous 1/4" X 3/8" leading edge
- The central portion of the elevator's 1/4" X 3/8" balsa leading edge is reinforced on the back side with a 1/16" X 3/8" plywood doubler



A strip of 3/16" X 3/8" spruce was cut to length and tapered on each end to make the center section's doubler shown below for the stab's 1/4" X 3/8" rear spar.



The spruce doubler was clamped to the stab's rear spar on the edge of the work table with five Quick-Grip clamps and glued with Titebond Extend aliphatic glue as shown below. Notice the aluminum angle straight edge to keep the stab's rear spar straight.....Tandy

