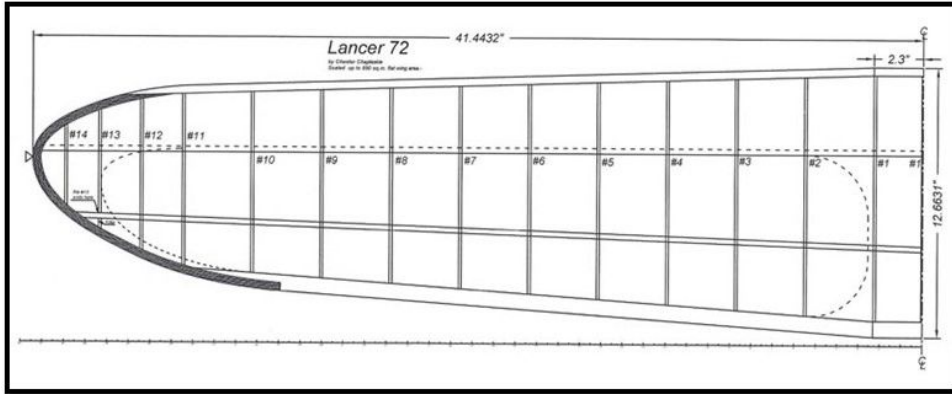


From: "Tandy Walker" <rdb435021@icloud.com>  
 To: "Tandy Walker" <rdb435021@icloud.com>  
 Date: 12/16/2017 7:52:56 AM  
 Subject: 17 Lancer 850 - Final iteration on the Wing Structure

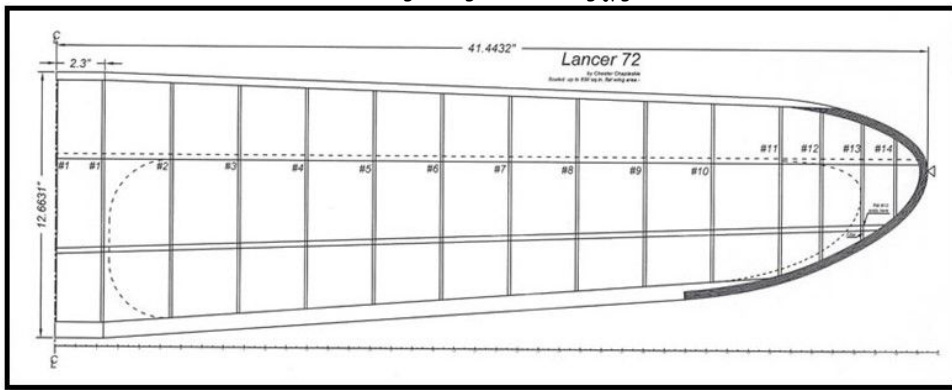
*New Cyclone Lancer 850  
 December 16, 2017*

The development of the Lancer 850 wing plan required a number of structural design iterations including increasing the number of wing ribs from ten 3/32" ribs to fourteen 1/8" ribs and one 1/4" rib, a leading edge D-Box, additional rear spar, a solid trailing edge, and a several changes to the wing's center section. The results of this coordinated between Alfredo Herbon and myself are summarized in this report.....Tandy

Drawing of Left wing Half.jpg

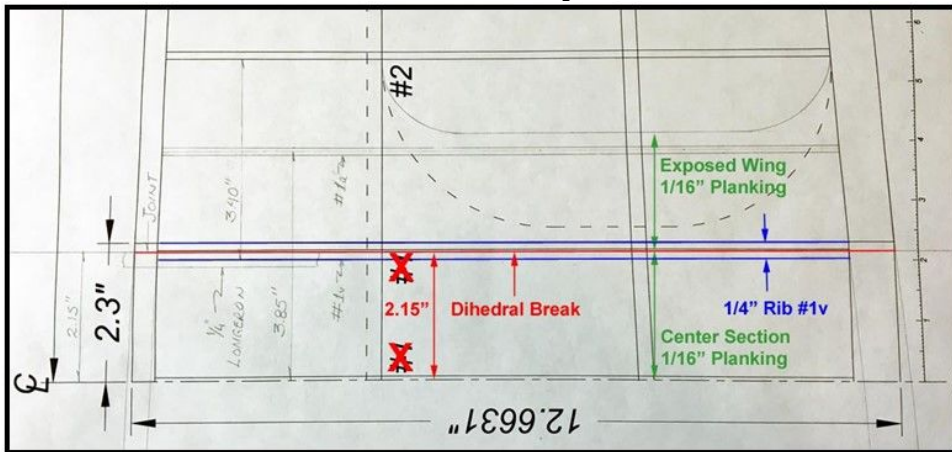


Drawing of Right Half Wing.jpg

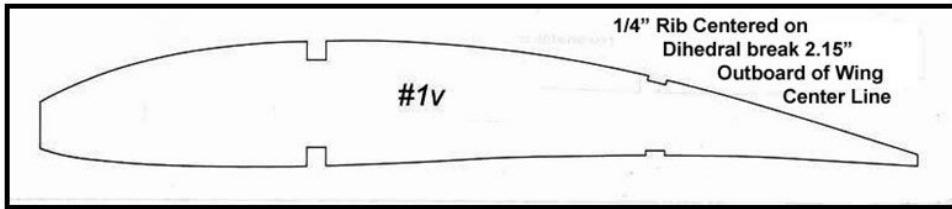


An extra thick (1/4") Rib #1v was centered on the dihedral break over the outside edge of the fuselage's top longeron as shown below. This will provide an 1/8" ledge to bond the edge of the center section 1/16" planking to as well as an 1/8" ledge to bond the edge of the exposed wing's 1/16" planking to. Notice also that an additional Rib #1a was added which was located 3.85" outboard of the wing's center line. This rib supports the exposed wing planking.

Center Section Changes



The new #1v and #1a rib patterns shown below were developed on Alfredo's ACDC program.  
 Ribs #1v



Rib #1a



The remaining ribs #2 through #14 are shown below for completeness.

Ribs #2-14

