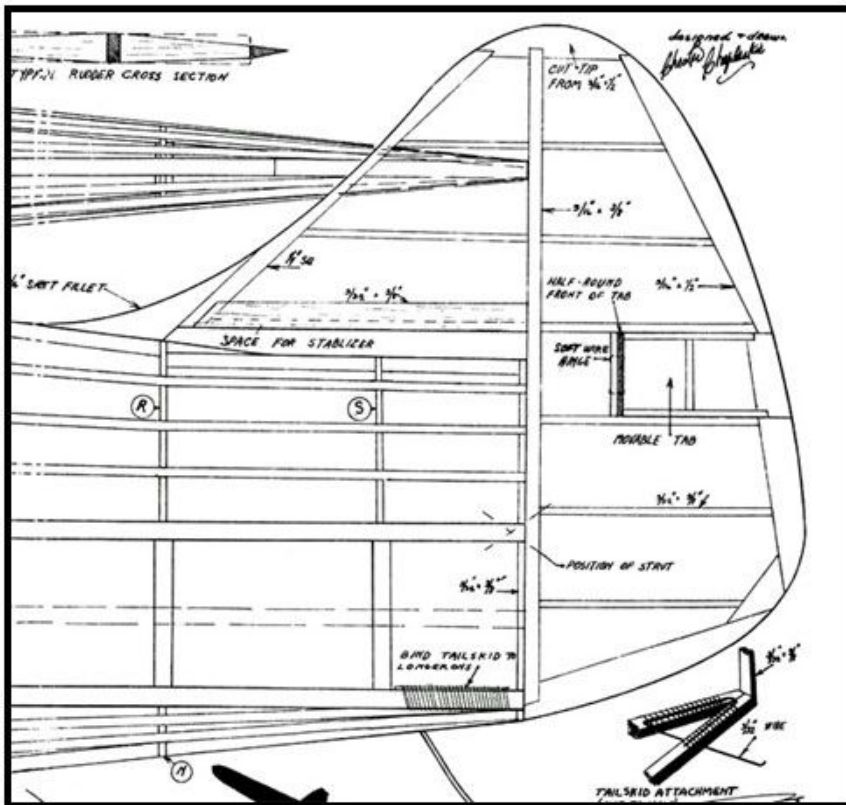


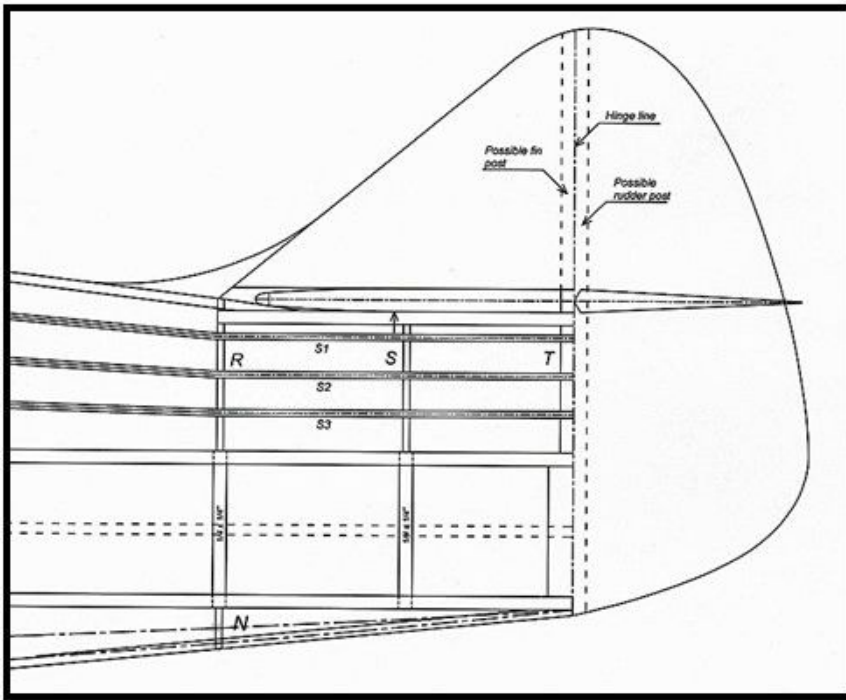
From: "Tandy Walker" <rdb435021@icloud.com>
 To: "Tandy Walker" <rdb435021@icloud.com>
 Date: 4/3/2018 10:29:56 PM
 Subject: 104 Lancer 850 - Vertical Tail Construction (Part 1)

Report No. 104
 New Cyclone Lancer 850
 April 3, 2018

The vertical tail on the Lancer 72 plan is shown below. Since the 1939 model was designed a free flight, the structure for the vertical tail has to be separated into a fin and a rudder and modified to permit the connected elevator bar to pass through the leading edge of the rudder's structure. However, the modification will not change the vertical tail's shape in any way and will adhere to the original design as closely as possible.



Alfredo Herbon generated the original outer contour drawing of the scaled up Lancer 850 vertical tail shown below on his ACAD program for me to develop the structure for the fin and rudder.



This is the drawing for the vertical tail's fin and rudder structure that I am going to build. Since the rudder's leading edge has to be cut out circular to allow the connected elevator bar to pass through the rudder's structure, a large doubler was put in that is 3/4" wide in the middle and tapers to 1/2" on either end. The rudder's 1/2" control horn mount will be 1/8" plywood laminated with 1/4" hard balsa to form a 3/8" X 1/2" pad. The 1/8" plywood will be on the surface of the right side of the rudder for the control horn to screw into. The rudder will be hinged with two hinges on the fin and two hinges on the fuselage with two separate hinge pins.....Tandy

