

12 AEROTAN BIPLANE - Complete Top Wing Drawing

1 message

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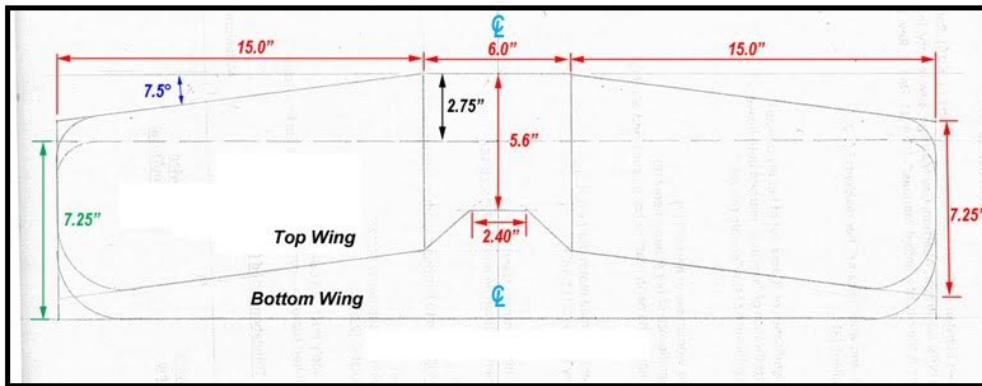
16 November 2022 at 07:25

Report No. 12

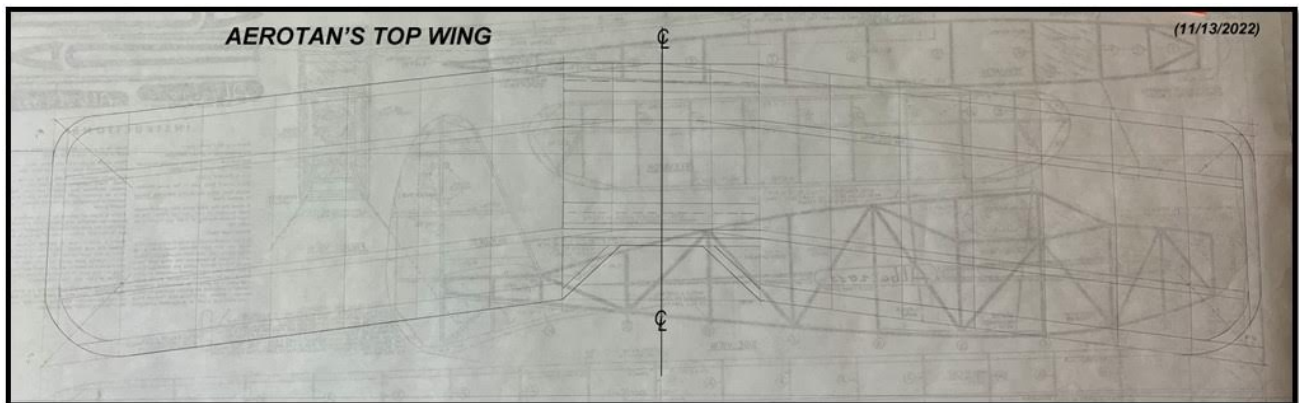
AEROTAN BIPLANE

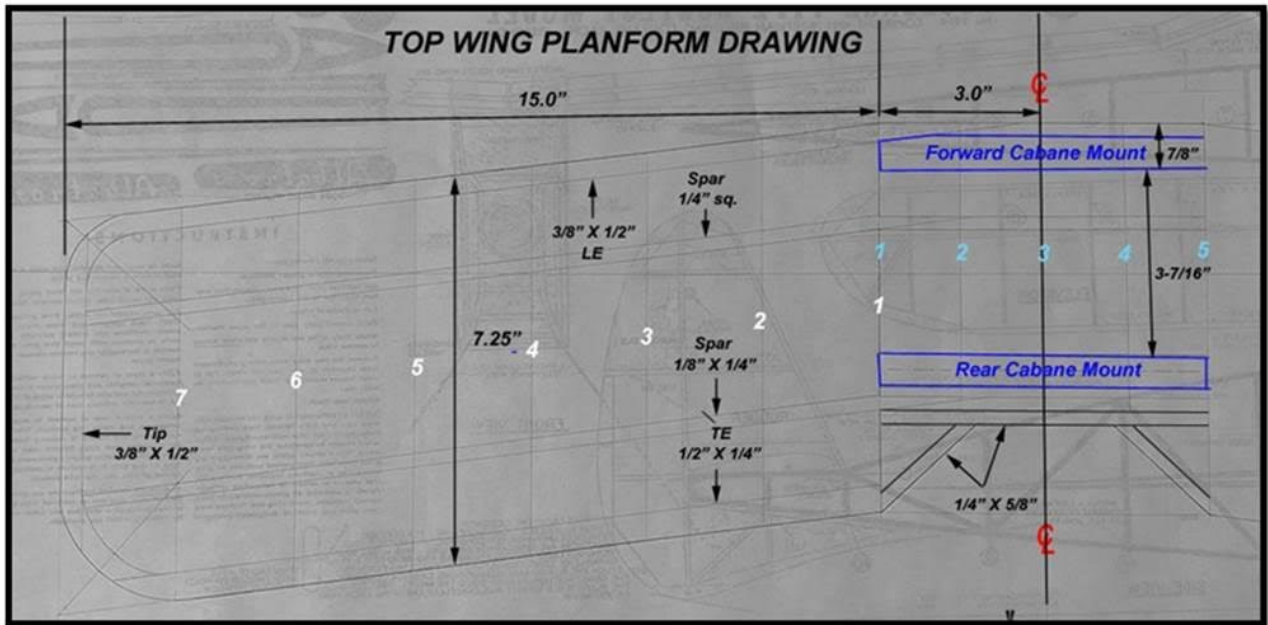
November 15, 2022

The planform outlines shown below for both the top and bottom wings.



This drawing of the complete top wing drawing is somewhat faint and drawn on the back of another plan. However, it can be used to build from.....Tandy





Details for the structural design of top wing shown on the top wing's drawing below are as follows:

- Wing span: 36.00"
- Wing panel span: 15.00"
- Wing center section span: 6"
- Wing chord: 7.25"
- Front wing tips area loss: ~ 0.490 sq.in.
- Rear wing tips area loss: ~ 2.250 sq.in.
- Center cut out area loss: 7.013 sq.in.
- Total area loss: ~ 9.753 sq.in.
- Top wing area:  $(36.00 \times 7.25) - 9.753 = 251.247$  sq.in.
- Aspect Ratio:  $36.00^2 / 251.247 = 5.158$
- The spacing for the wing panel's seven (7) ribs is  $15/7 = 2.143$ "
- The spacing for the wing's center section five (5) ribs is  $6/4 = 1.5$ "
- The rear face of the forward cabane mount is 7/8" aft of the LE.
- The Spacing between forward and rear cabane mount is 3-7/6"