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Construction of the LS(1) 0417 Mod Quickie canard

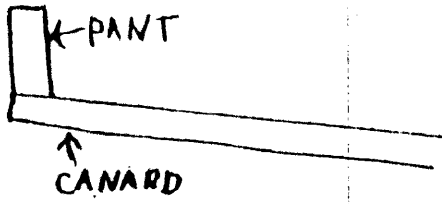
Review the Q2/Q200 plans included, pages 1-7. Disregard the last page (8) dealing with the pitch control system as the Quickie pitch control system is identical to the original except for the bearing blocks. Even the original bearing blocks can be used by adding additional material.

The construction techniques of the Quickie canard are almost identical to the Q2/Q200 version.

Hotwiring:

Lay out your foam blocks similar to your original patterns except note that they are slightly longer. This is so that the wheel pant can be attached under the canard tip rather than on to the end:

ORIGINAL BL 10 to BL 38  
NEW BL 10 to BL 92

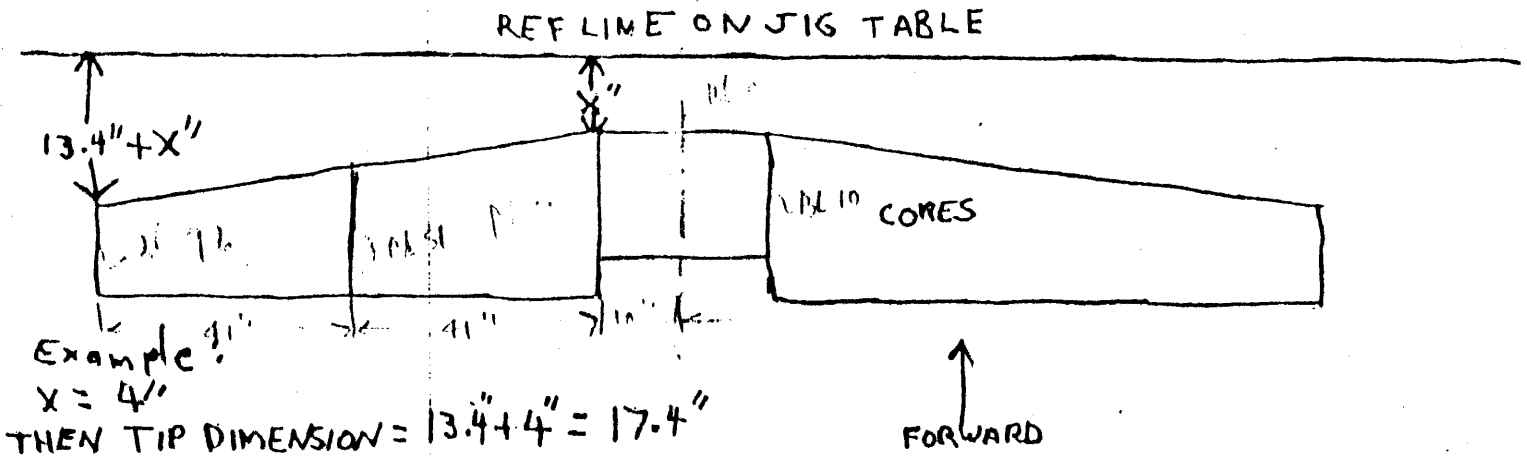


Core Templates:  
BL 10 - 41"  
BL 51 - 41"  
BL 92

You will need to add counting numbers to the templates. Use your original Quickie canard templates as a guide.

Jigging the foam cores:

The sweep and anhedral of the new canard are identical to the original. When you set up your jig on your table, the leading edge of the foam cores should measure 13.4" from BL 10 to BL 92:

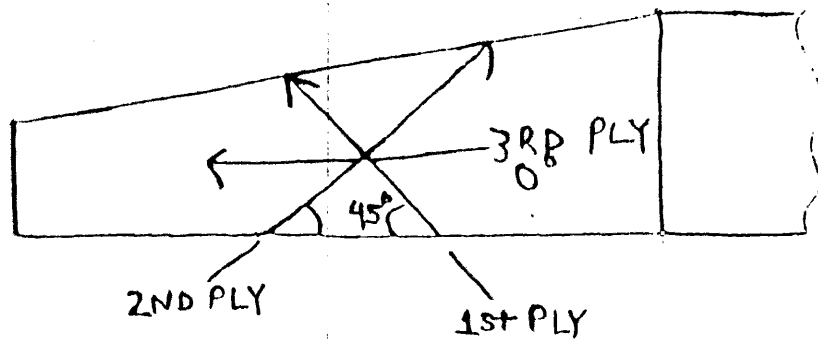


You can jig the templates and spars temporarily with bondo to set this dimension.

Follow the procedure in the Q2/Q200 instructions for bonding the spars together. Use the 3 ply on the bottom and 18 ply on the top, stagger each ply in length with the longest terminating at the fuselage sides, make all plies about 3.0" wide.

#### Laminating skin plies:

Three plies of uni are used top and bottom:



Add one additional ply on the top surface in the fuselage area extending about 8" past the fuselage sides.

#### Elevators:

Construction of the elevators is the same as your original plans show. Please note that the ~~lift edge of the elevator~~ has a discrete thickness instead of a sharp edge as on the original. This is a very important feature of the LS(1) 0417 mod airfoil so don't change it.

#### Sparrow Strainers:

These devices put an aerodynamic download on the elevators and are very important. Do not fly without them, make them using the same airfoil shown in the Q2/Q200 instructions. Instead of 11.5" long make them 8" long. Some experimentation may be necessary to determine optimum mounting angle. Contact QAC for details.

#### Wheel pants:

These are constructed similar to your originals. Review your Quickie construction plans for details. Note in the new plans that the axles have been moved forward about 2 inches.

Make new LG1's as shown in the new plans. Use your old drawings for LG2 and LG3 as they have not been changed. LG1 moves LG2 and LG3 forward from the original location which results in the axles moving forward the proper amount. Be sure and redo your weight and balance after installation of the new canard and drop new reaction points as shown in The "Initial Flight Test Guide".

#### Mounting the canard:

Mount following the Q2/Q200 instructions. Be sure and add a fairing on the bottom using pour in place foam or cut scrap foam to fit and cover with 1 BID, this area is not structural.

Control System:

Fabricate or modify CS14 as shown in these drawings. Your old CS15, CS16, and CS19's can be used but some modifications will need to be made. Install these parts and the elevators using the jiggling templates provided.

NOTE OLD CS14 MAY BE USED BY TRIMMING + ADDING A NEW SECTION EXTENDING TO THE SPAR. GLASS WITH 3 BID, BOTH SIDES.

