

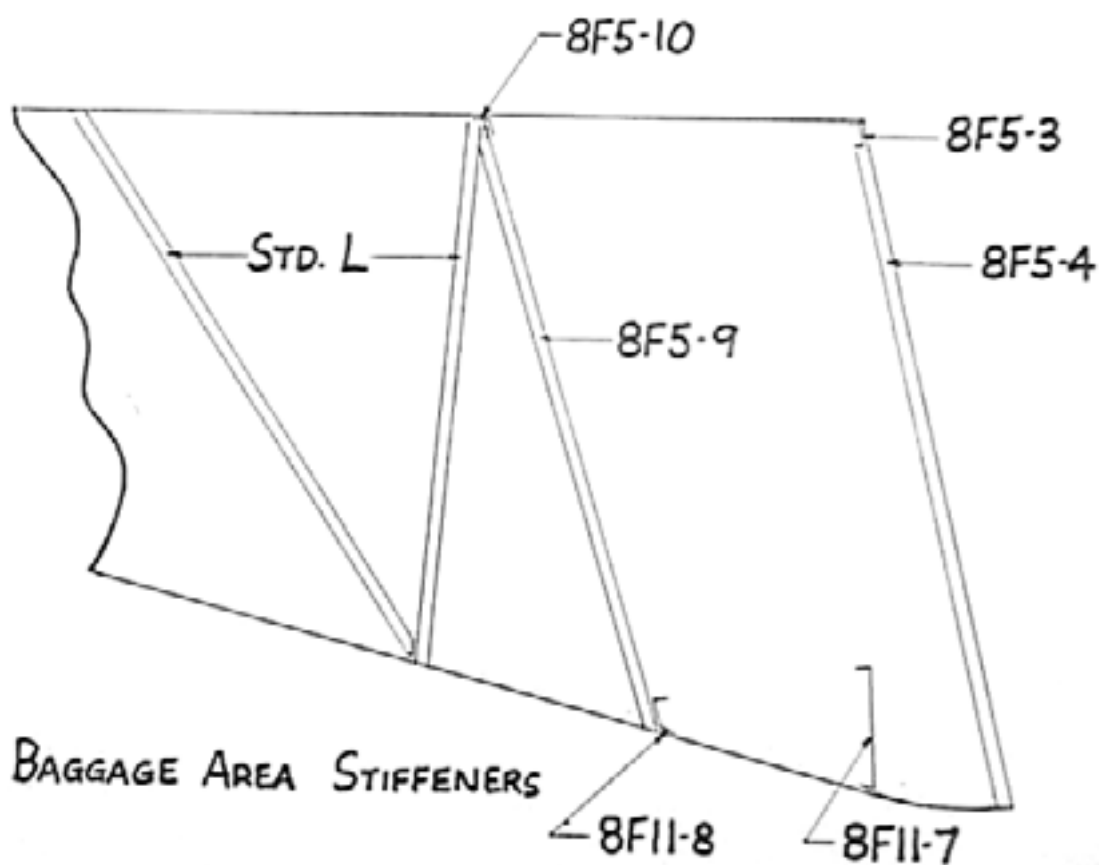
# STOL CH 801

## REAR FUSELAGE ASSEMBLY

### SECTION 6

#### Baggage and Rear Seat Channels; Forward Channels and Wing Attachments

Ref Dwg 8FR-4



Before installing parts, mark the aircraft center line in the middle of the part.  
It is the position on the fuselage by lining up the center line.



## REAR SEAT REAR CHANNEL 8F11-8

The top flange is bent 90° and the bottom flange is opened to match the angle of the bottom skin.

Joggle the ends of the bottom flange to overlap on top of the Longerons.

NOTE: The Rear Seat Upright Channel 8F5-9 is already clecoed to the side skins.

COMMENT: The two 'L' angles in front of the Z should not interfere with the Channel. Remove the 'L' angles to install the Channel, trim to size and reinstall.



Clamp the Rear Channel 8F11-8 on the front side of the Upright Channel 8F5-9.

The rivet line in the bottom skin is already pre-drilled. Pull the fuselage over the edge of the workbench to back drill into the bottom flange of the Channel.

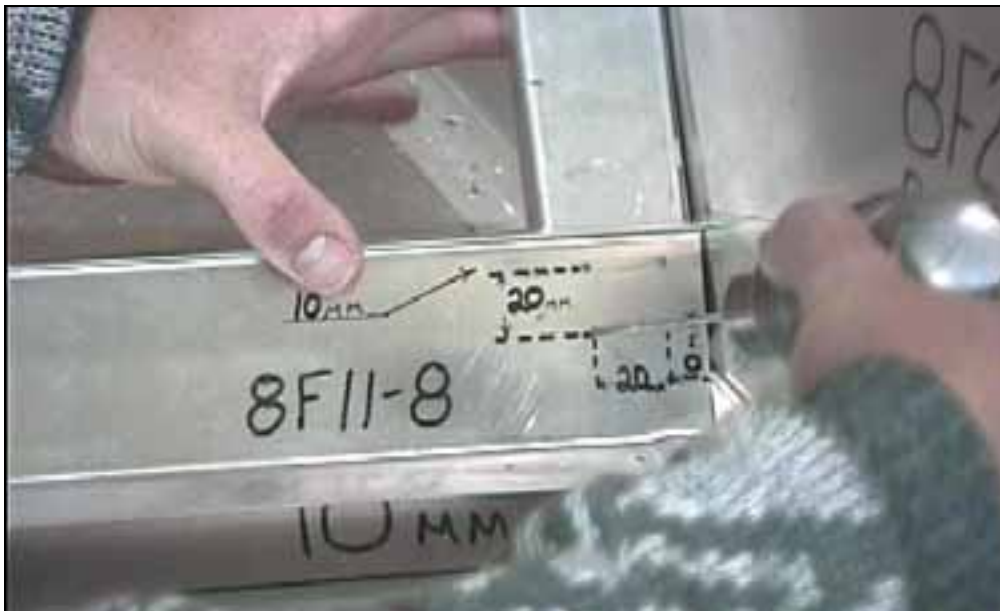
**A4 PITCH 30**

CHECK: Before drilling the Channel together, check that the aircraft center line on the top skin is over the center line in the bottom skin.



Aircraft Center line

Plumb bob to align aircraft center lines: hold the plumb bob on the aircraft center of the top skin; adjust the sides to bring the plumb bob over the center line on the bottom skin.



4 RIVETS A4

4 rivets in the over-lap of the two channels: edge distance=10mm (20mm between rivets).



Trim to length as required to fit between the side skins on front side (top) of the Uprights Channels 8F5-9.

NOTE: An overlap of 14 to 16mm between 8F5-10 and 8F5-9 is acceptable.



NOTE: Baggage Back Panel 8F11-13 will be attached through the same rivet line in the top skin.



#### **TOP REAR BAGGAGE STIFFENER 8F5-10**

The ends of the top flange are joggled to fit underneath the Top Rear Longeron 8F3-1B.

Positioned with the bend towards the front.

The top skin is already pre-drilled. Back drill into 8F5-9 with #40 pilot holes.

#### **A4 PITCH 40**

Clamp the Stiffener to the front side of the Upright Channel 8F5-9.

CHECK: Before drilling the overlap with the channel, check that the aircraft center line on the top skin is in line with the center line on the bottom skin.

#### **2 RIVETS A4**

First Cleco to 8F5-9 then back drill through the top skin.



Installation of:  
**Side Channel**  
**8F5-4**  
**Rear Wing Attachment**  
**Bracket**  
**8F5-1**  
**Top Channel**  
**8F5-3**

**COMMENT:**  
 8E1-1, Rear Support Fuel Line Trim, and 8F5-11, Door Post Trim, will be drilled through the same rivet line along the front edge of the fuselage side skins.

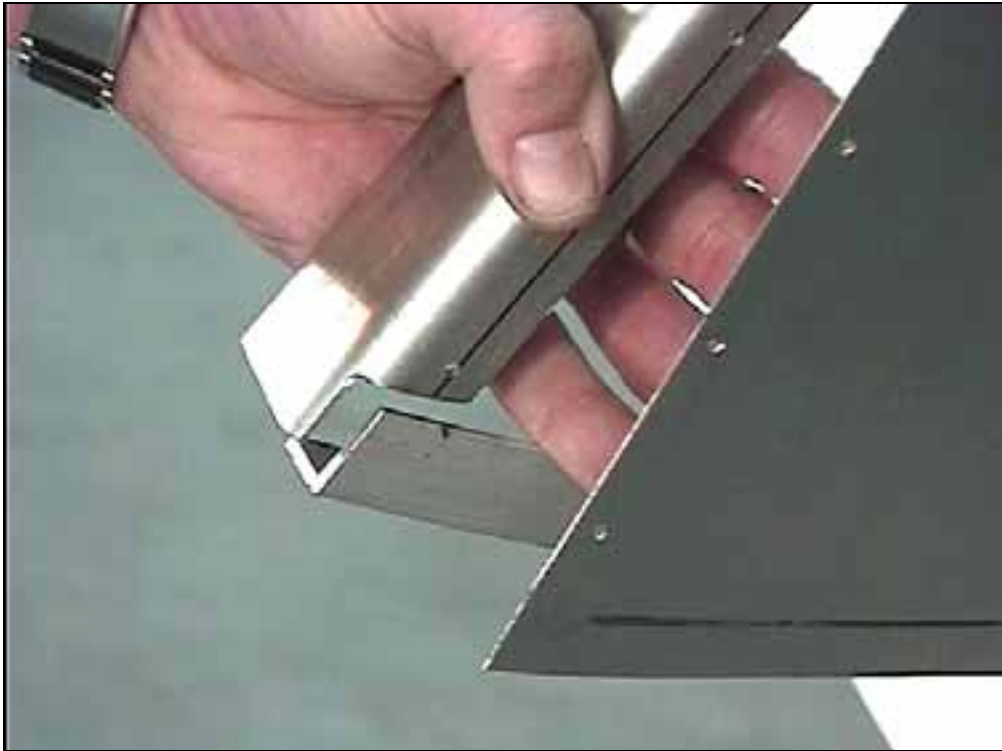


**SIDE CHANNEL**  
**8F5-4**

Orientation: the web (flat area between the bends) is parallel with the front edge of the top skin.

The 83 degree flange is placed next to the side skins (outboard).





The lower end of 8F5-4 is notched to make room for the bottom Longerons 8F3-1A.

**IMPORTANT:** File a "corner relief hole" to radius the inside corner of the notch.

The length of the Side Channel is from the bottom skin to the top skin.



Cut the top I/B corner on a 45 degree angle.

Trim O/B flange to make room for the Top Rear Longerons 8F3-1A (similar to the notch for the bottom Longerons).

Drill & Cleco when the rivet line is visible through the pre-drilled pilot holes in the front edge of the side skin. #40 pilot holes.

**A5 PITCH 40**

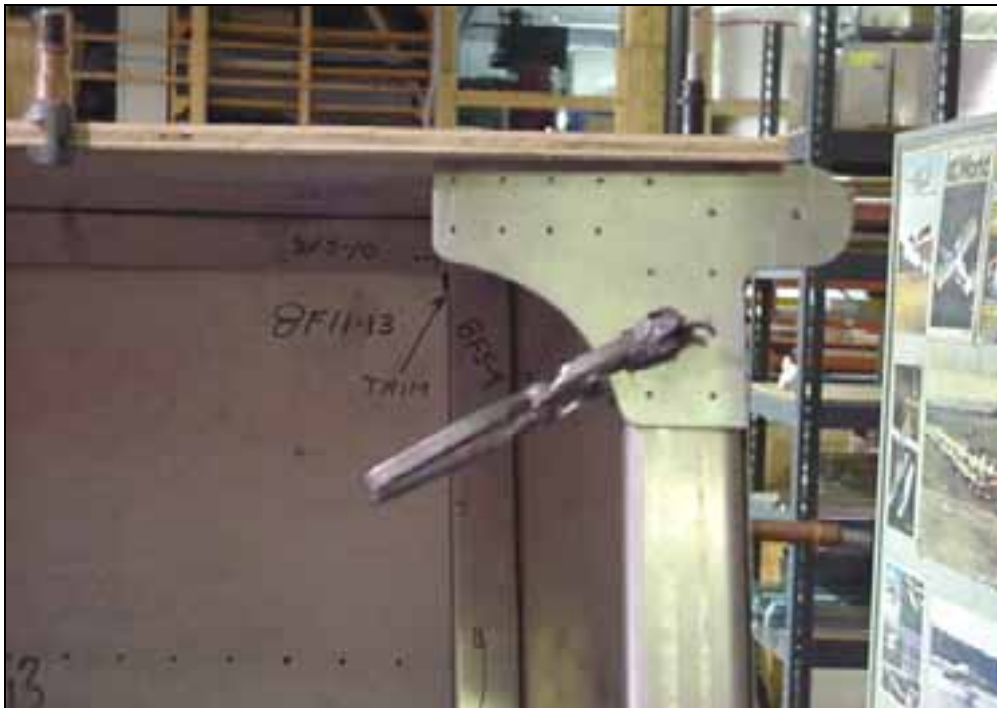
Layout the rivet line 10mm from the aft edge of the O/B flange. Install the left and right Side Channels along the front edge of the fuselage side skin.



**REAR WING  
ATTACHMENT  
BRACKET  
8F5-1**

**16 RIVETS A5**

9 holes in the top channel, 7 holes in the side channel



Alignment:  
Set 586mm from aircraft  
center line to rear wing  
attachment bolt.

Clamp 8F5-1 with the top edge flush to the underside of the top Longeron  
gusset 8F3-3.

Check: 21mm from bolt hole to fuselage side skin.



## TOP CHANNEL 8F5-3

Note:  $t = .063''$

Orientation: The open angle is the top flange.

Check: When the top flange overlaps underneath the top skin, the web is parallel to the front edge of the fuselage side skin.



Cut the ends at 46 degrees.

Length = width of top skin; trim the ends to fit the side channels.

Cut a notch (both ends) in the top flange to make room for the Longerons (file a corner relief hole).





Trial fit with 8F5-1 removed.

NOTE: 8F5-4 is wider than 8F5-3. The inside flanges do not meet corner to corner.

The side and top flange of the Channels is notched to make room for the left and right Longerons.



Clamp the Top Channel on the backside of 8F5-1.

Cleco the top channel to The pre-drilled holes in 8F5-1.

Back drill the top skin to the top flange.

**A4 PITCH 40**  
**6 RIVETS A5**  
 (In Gusset 8F3-3)

Re-check: That the Fuselage is not twisted: use a plumb bob to check alignment of the aircraft center line on the top and bottom skins.



Side channels, brackets and top channel.



Viewed from the back: left 8F5-1.