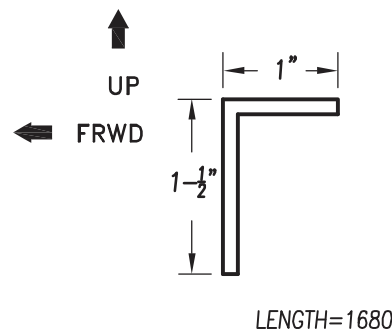
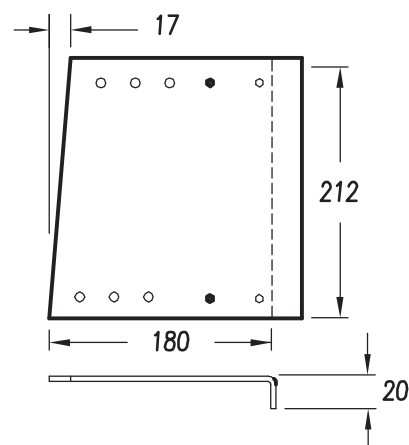
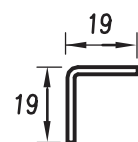




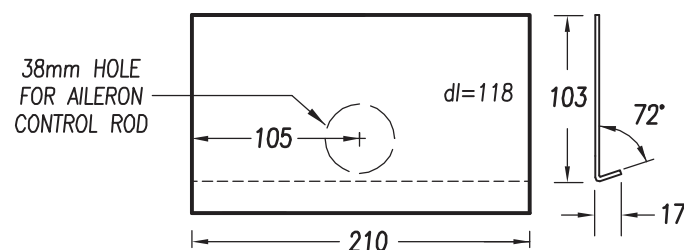
1 **EXTRUSION ANGLE**
EXT. 6061-T6 1"x1-1/2"x1/8"
(2 REQ'D)



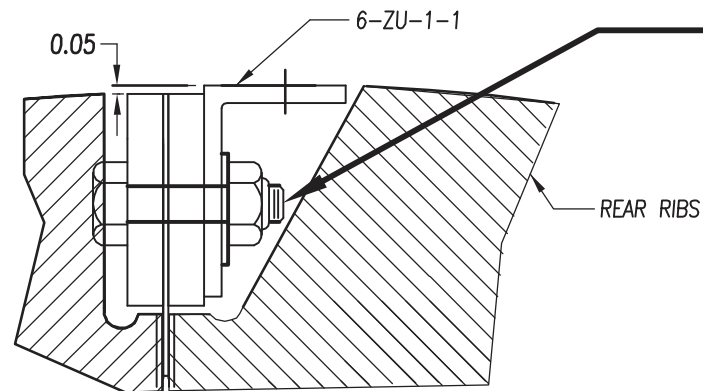
2 **WING ROOT DOUBLER**
t=.063" 6061-T6



3 **TOP REAR SPAR ANGLE**
t=.040" 6061-T6 (4 REQ'D)



4 **AILERON ROD HOLE DOUBLER**
t=.032" 6061-T6 (2 REQ'D)

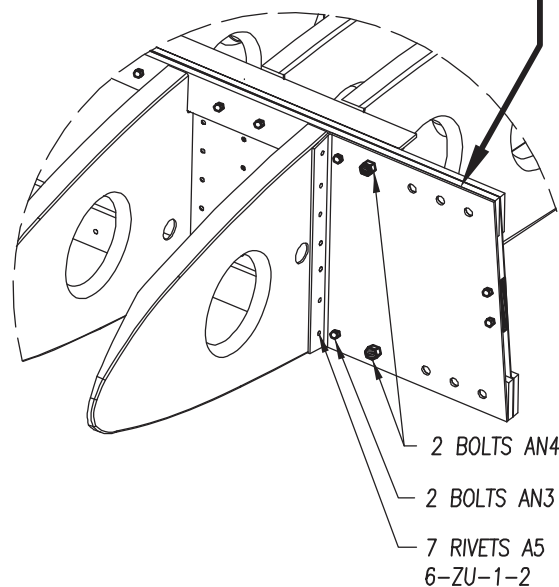


6-ZU-1-1

DRILL OUT SOLID RIVETS.
CUT SPAR ANGLE 6W3-6 AT 1680MM FROM INBOARD END.
TRIM BACK TOP FLANGE ON REAR RIBS.
INSTALL EXTRUSION WITH AN3 OR AN4 BOLTS

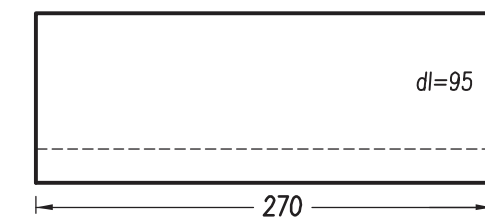
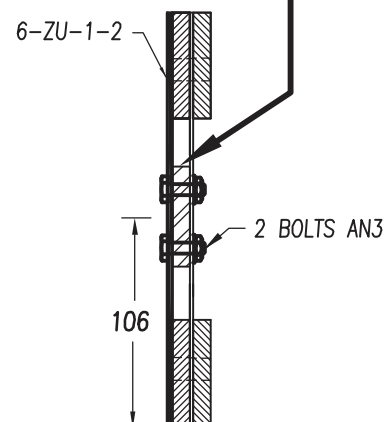
6-ZU-1-2

WING ROOT DOUBLER INSTALLED ON FRONT
SIDE OF SPAR ROOT.
ADD RIVET LINE THRU NOSE RIB.
2 BOLTS AN3 AND
2 BOLTS AN4 THRU SPAR CAPS.

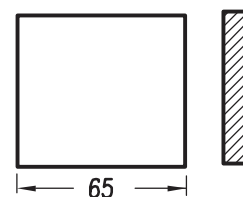


6-ZU-1-6

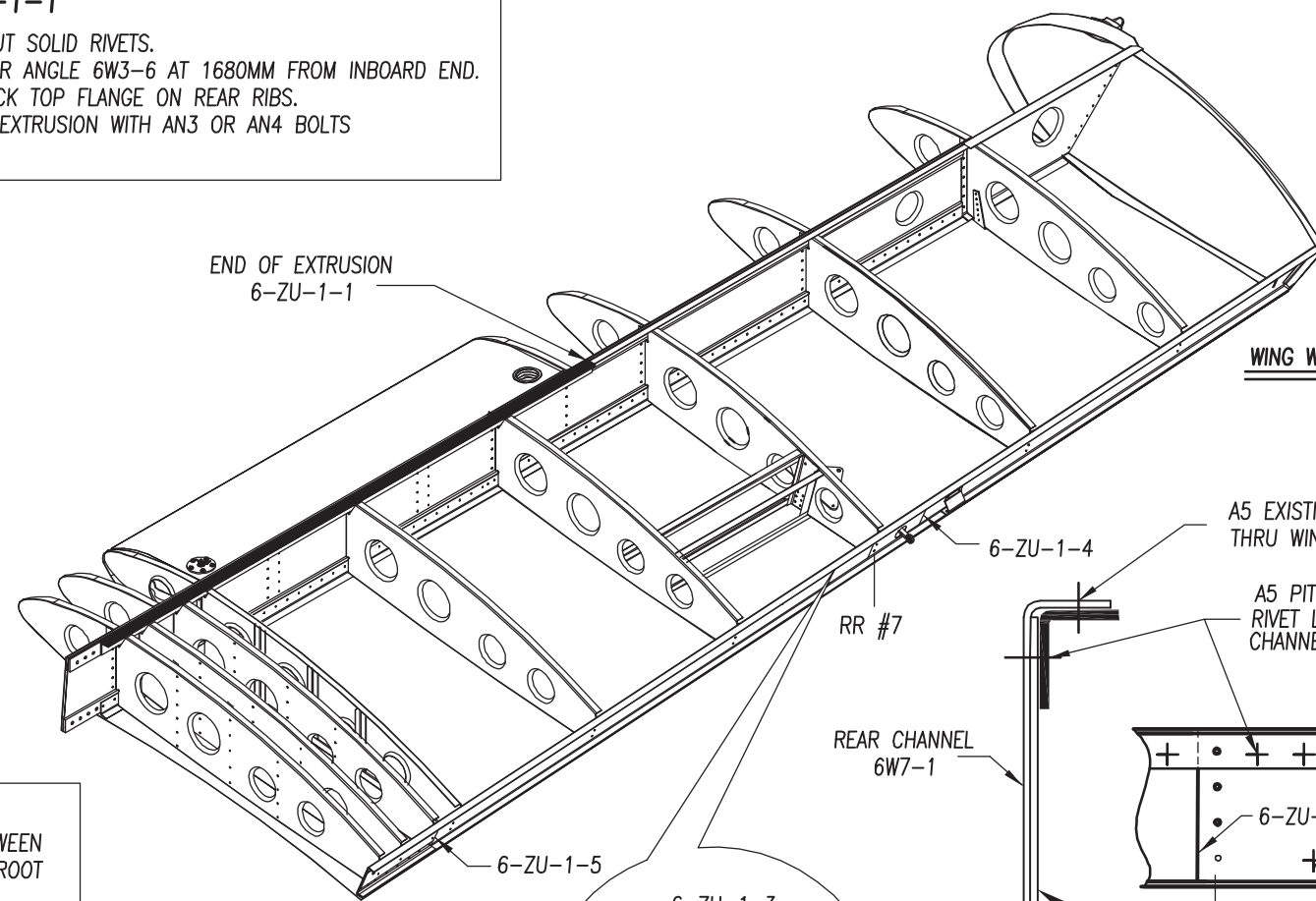
CAP SPACER FITS BETWEEN
SPAR WEB AND WING ROOT
DOUBLER
2 BOLTS AN3



5 **REAR CHANNEL DOUBLER**
t=.040" 6061-T6 (2 REQ'D)



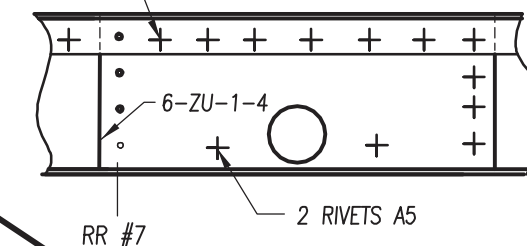
6 **CAP SPACER**
BAR 1-1/2"x1/4" 6061-T6



WING WITH LONG RANGE FUEL TANK

A5 EXISTING HOLE
THRU WING SKINS

A5 PITCH 40
RIVET LINE IN REAR
CHANNEL AND ANGLE 6-ZU-1-3



6-ZU-1-4

ADD DOUBLER PLATE CENTERED
ON HOLE FOR AILERON ROD.

6-ZU-1-3

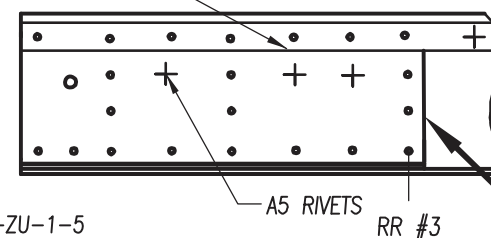
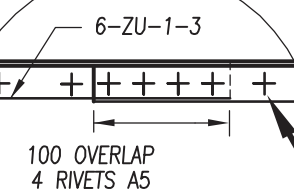
TOP FLANGE OF REAR CHANNEL IS
DOUBLED ALONG FULL LENGTH WITH
SPAR ANGLE 6-ZU-1-3
OVERLAP EACH PIECE 100MM

6-ZU-1-5

REPLACE HINGE DOUBLER 6W7-3
WITH REAR DOUBLER 6-ZU-1-5

UP
FRWD

REAR CHANNEL
6W7-1



A5 PITCH 40
THRU EXISTING HOLES

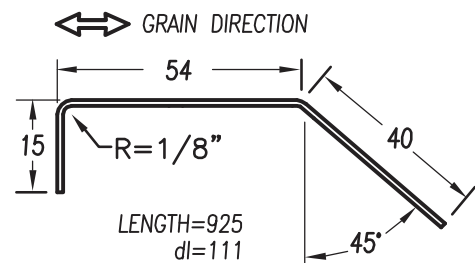
ZODIAC
CH 601 XL / 650

ZENAIR UPGRADE
WING SPAR & REAR CHANNEL

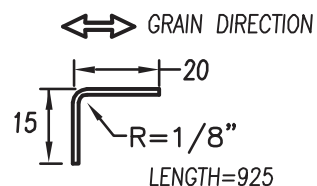
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6-ZU-1

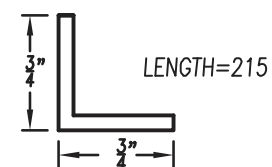
DATE: 8 NOV 2009



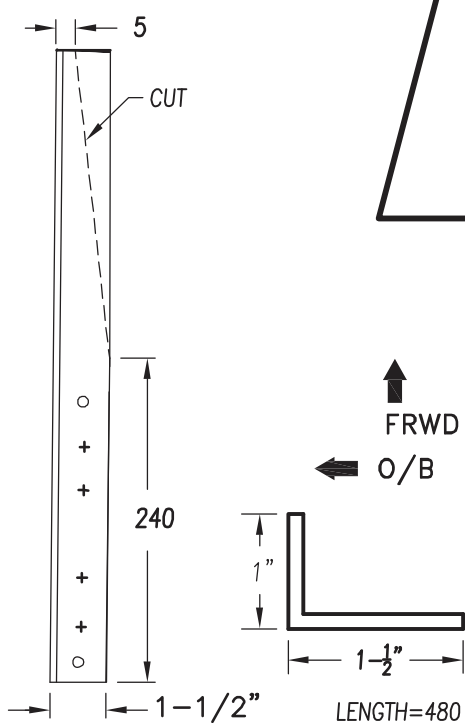
1 **CENTER SPAR TOP DOUBLER**
t=.063" 6061-T6 (1 REQ'D)



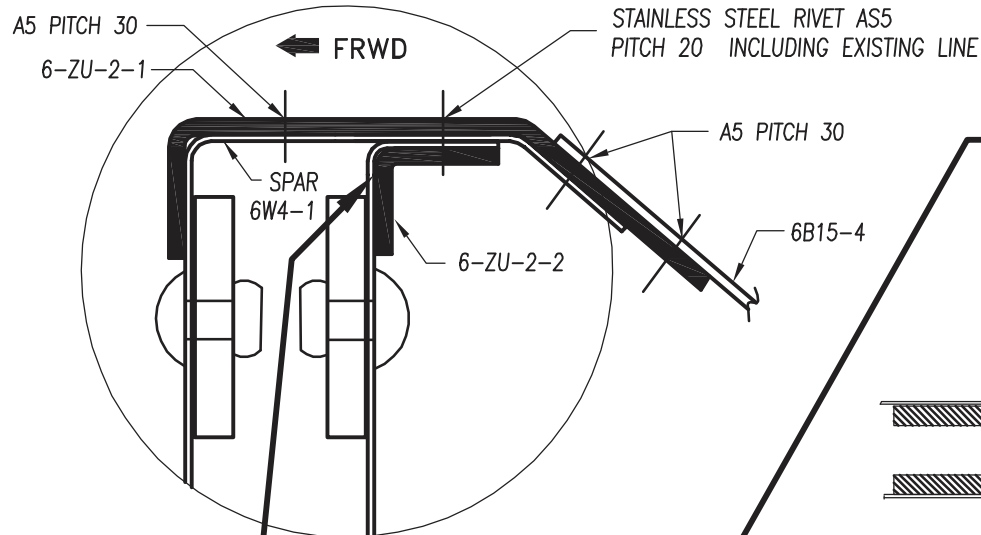
2 **SEAT FRONT ANGLE**
t=.063" 6061-T6 (1 REQ'D)



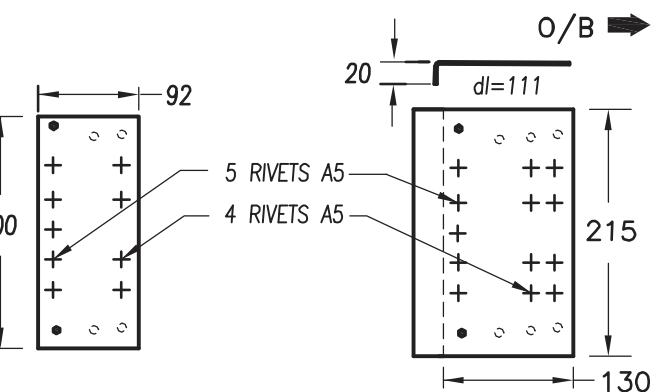
3 **SPAR UPRIGHTS**
EXT. 6061-T6 (4 REQ'D)
3/4"x3/4"x.093"



4 **FRONT WING UPRIGHTS**
EXT. 6061-T6 1"x1-1/2"x1/8"
(1L + 1R REQ'D)

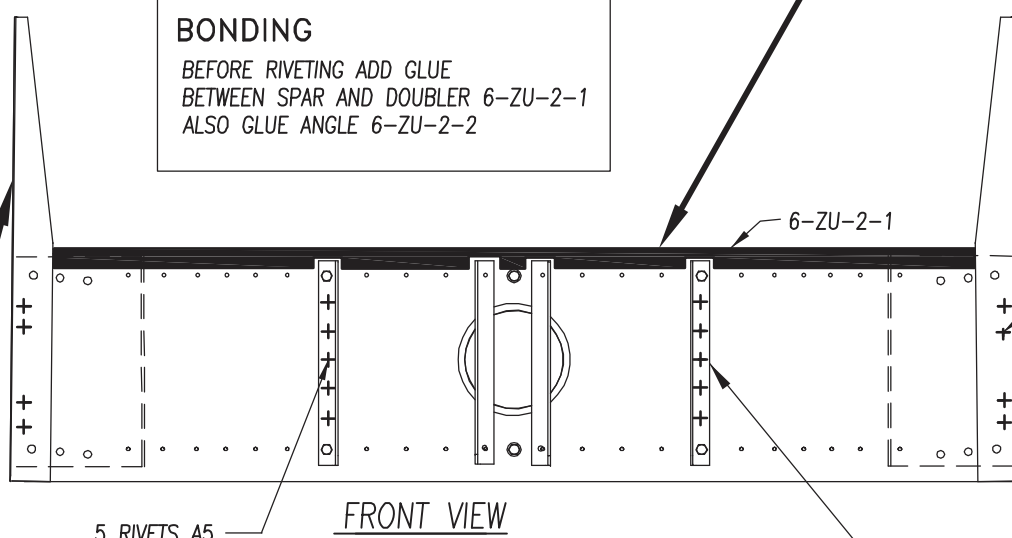


5 **UPRIGHT SHIM**
t=.063" 6061-T6 (2 REQ'D)



6 **WEB DOUBLER**
t=.063" 6061-T6 (2 REQ'D)

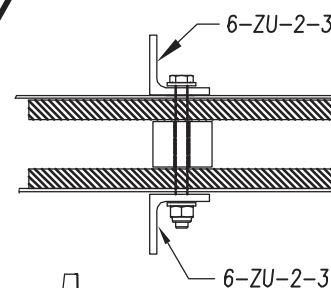
BONDING
BEFORE RIVETING ADD GLUE
BETWEEN SPAR AND DOUBLER 6-ZU-2-1
ALSO GLUE ANGLE 6-ZU-2-2



6-ZU-2-4
REPLACE FRONT WING UPRIGHT 66-B-13-1 WITH HEAVIER
EXTRUSION 6UL2-4
USE A TRANSFER CENTER PUNCH TO LOCATE SPAR BOLT
HOLES. DRILL THRU EXISTING HOLES IN SIDE SKIN

6-ZU-2-1

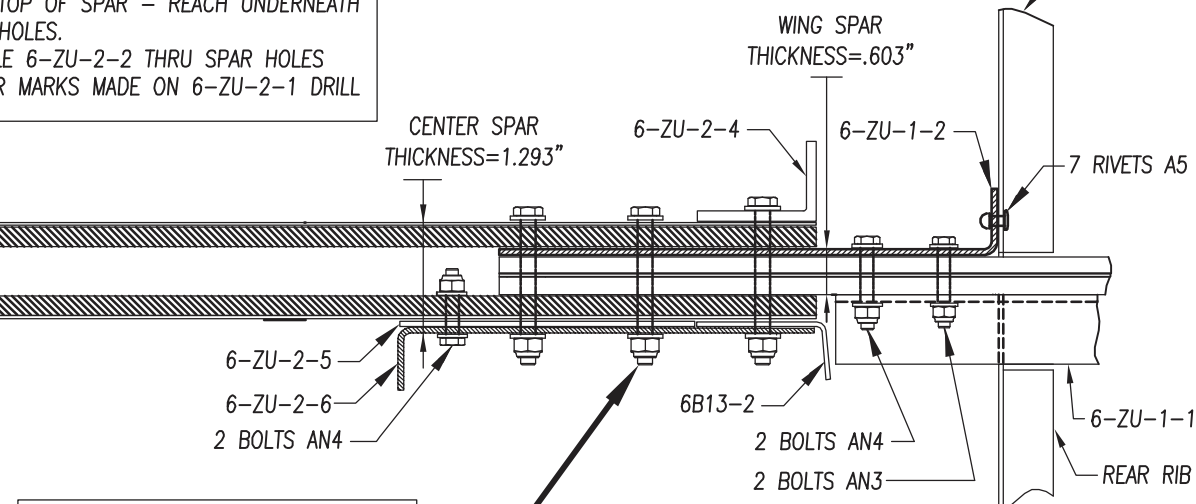
REMOVE CENTER CONSOLE TO DRILL OUT EXISTING RIVETS
ON TOP OF SPAR AND ALONG FRONT OF SEAT.
CUT NOTCHES IN FRONT FLANGE OF 6-ZU-2-1 TO MAKE
ROOM FOR ENDS OF 3/4" EXTRUSIONS.
POSITION DOUBLER ON TOP OF SPAR - REACH UNDERNEATH
TO TRANSFER EXISTING HOLES.
DRILL SEAT FRONT ANGLE 6-ZU-2-2 THRU SPAR HOLES
CLAMP 6-ZU-2-2 OVER MARKS MADE ON 6-ZU-2-1 DRILL



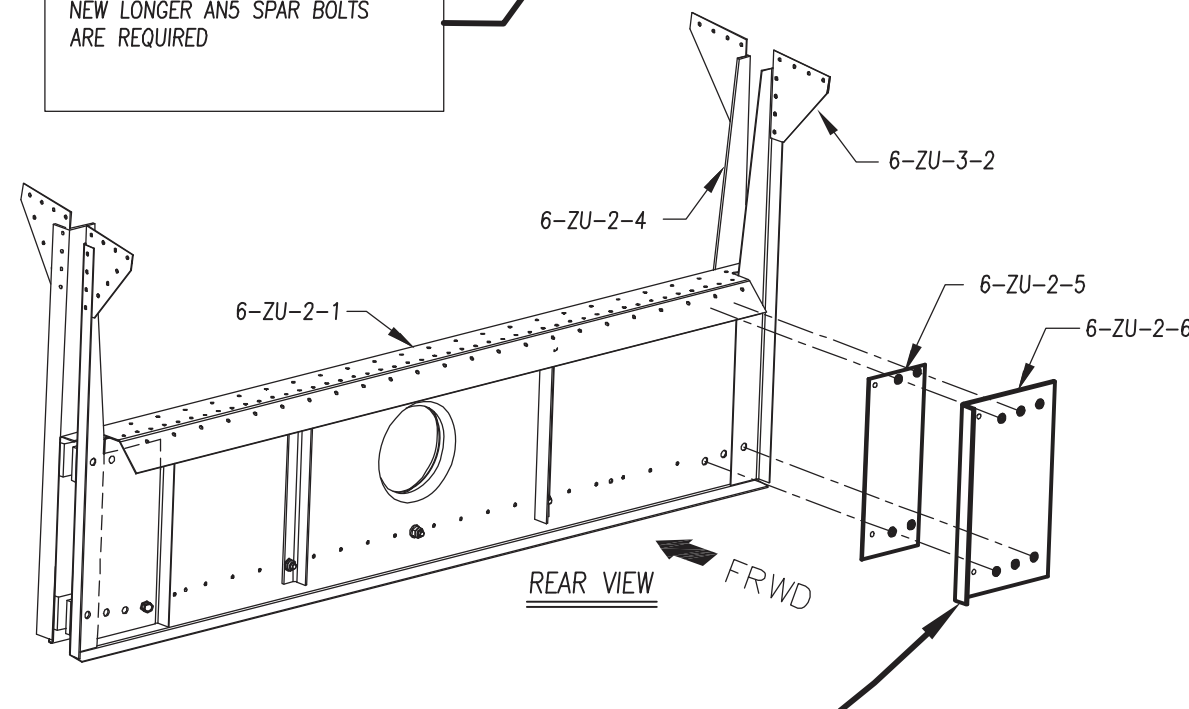
6-ZU-2-3

ADD VERTICAL UPRIGHTS 6-UL-2-3 ON FRONT AND REAR
SIDE OF SPAR LOCATED AT EXISTING BOLT LOCATION.
REPLACE BOLTS WITH LONGER AN4

FRWD (TOP VIEW)



CENTER SPAR + WING
NEW LONGER AN5 SPAR BOLTS
ARE REQUIRED



6-ZU-2-6

ADD SHIM 6-ZU-2-5 ON BACK SIDE OF SPAR - TOP IS AGAINST BOTTOM
EDGE OF SEAT ANGLE 6-ZU-2-2, OUTBOARD EDGE IS AGAINST EXISTING WING
UPRIGHT. DOUBLER OVERLAPS ON TOP OF SHIM

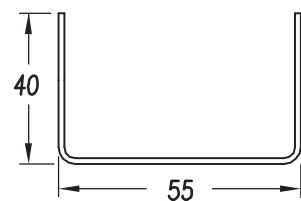
ZODIAC
CH 601 XL / 650

ZENAIR UPGRADE
CENTER SPAR SECTION

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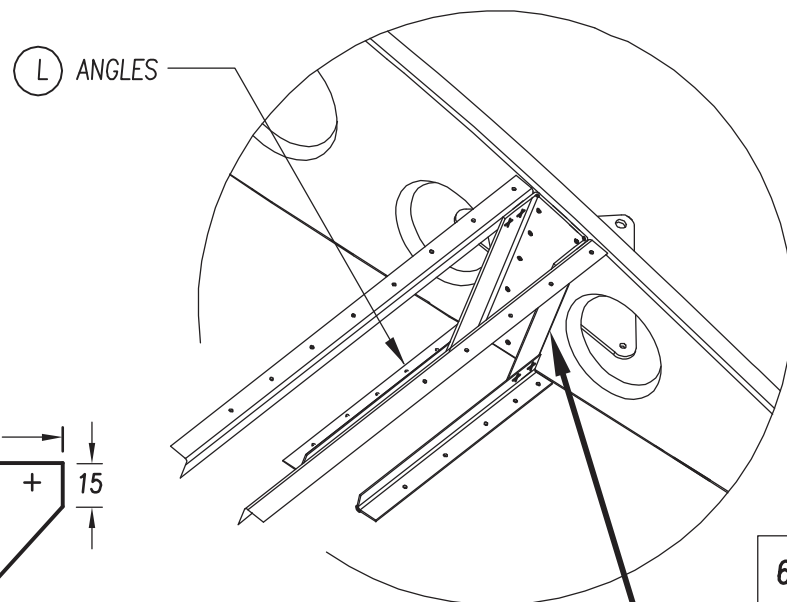
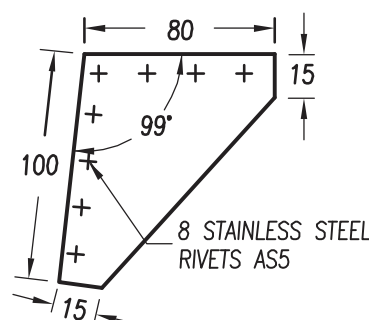
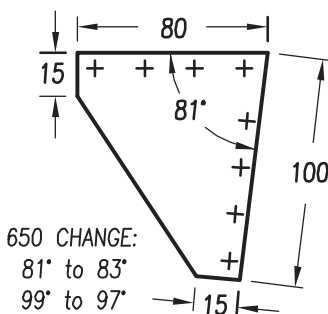
6-ZU-2

DATE: 8 NOV 2009



L=180
dl=90

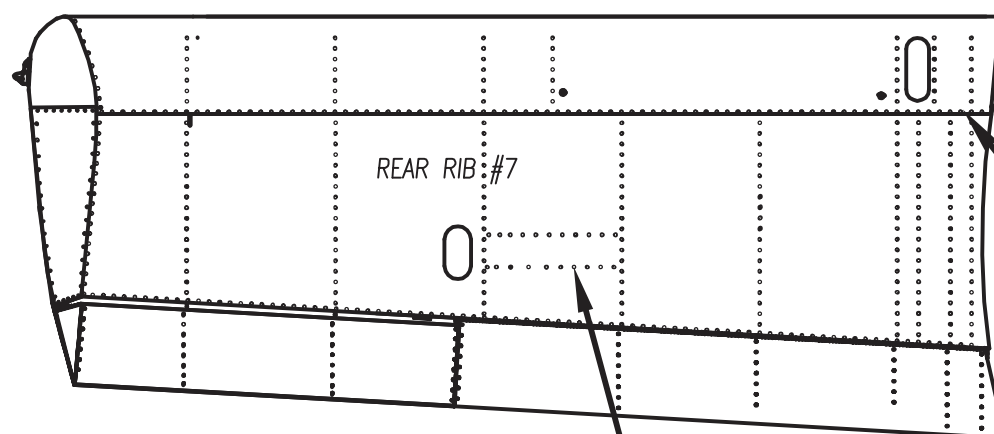
1 **BELLCRANK SUPPORT CHANNEL**
t=.040" 6061-T6 (2 REQ'D)



6-ZU-3-1

6-ZU-3-1 REPLACES BELLCRANK SUPPORT CHANNEL 6W6-10.
BOLT BUSHING 6W10-3 TO BELLCRANKS
AILERON BELLCRANK SUPPORT 6W6-11 AND REINSTALL PER
DRAWING 6-W-6 USING EXISTING HOLES

A5 RIVETS BELLCRANK SUPPORT, AND BELLCRANK CHANNEL TO RIB



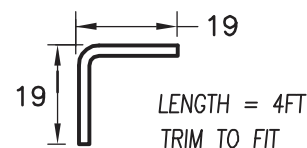
SPAR RIVET LNE
DOUBLE UP RIVET LINE THRU SPAR
EXTRUSION [TOP] AND SPAR ANGLE
[BOTTOM] UP TO RR # 5

A5 PITCH 20

L ANGLE

ADD L ANGLES ON BOTH SIDES OF RR #7. ANGLES ARE
RIVETD WITH 2 RIVETS A5 TO FLANGES OF BELLCRANK
CHANNEL 6-ZU-3-1
RIVETED TO TOP AND BOTTOM SKIN WITH A4 PICH 40

2 **REAR UPRIGHT GUSSET**
t=.063" 6061-T6 (2 REQ'D)



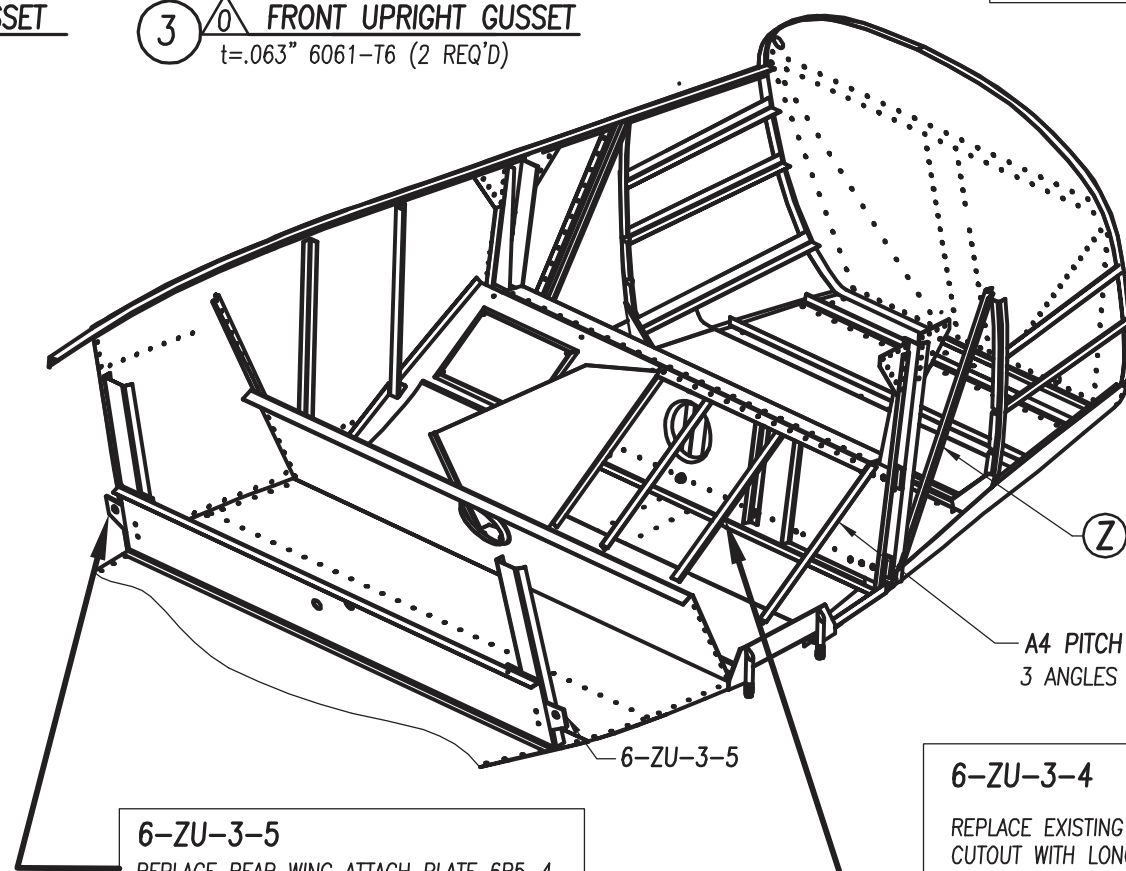
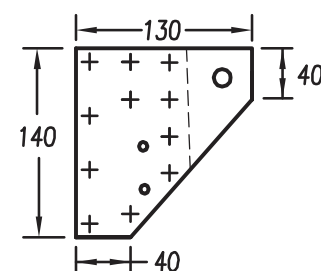
3 **FRONT UPRIGHT GUSSET**
t=.063" 6061-T6 (2 REQ'D)

6-ZU-3-3

ADD GUSSETS 6-ZU-3-2 AND 6-ZU-3-4 BETWEEN WING
UPRIGHTS AND LONGERONS: FRONT AND REAR

DRILL OUT RIVETS IN FUSELAGE SIDE SKIN AND INSTALL
GUSSET WITH STAINLESS STEEL RIVETS AS5

4 **SEAT ANGLES**
t=.040" 6061-T6 (3 REQ'D)

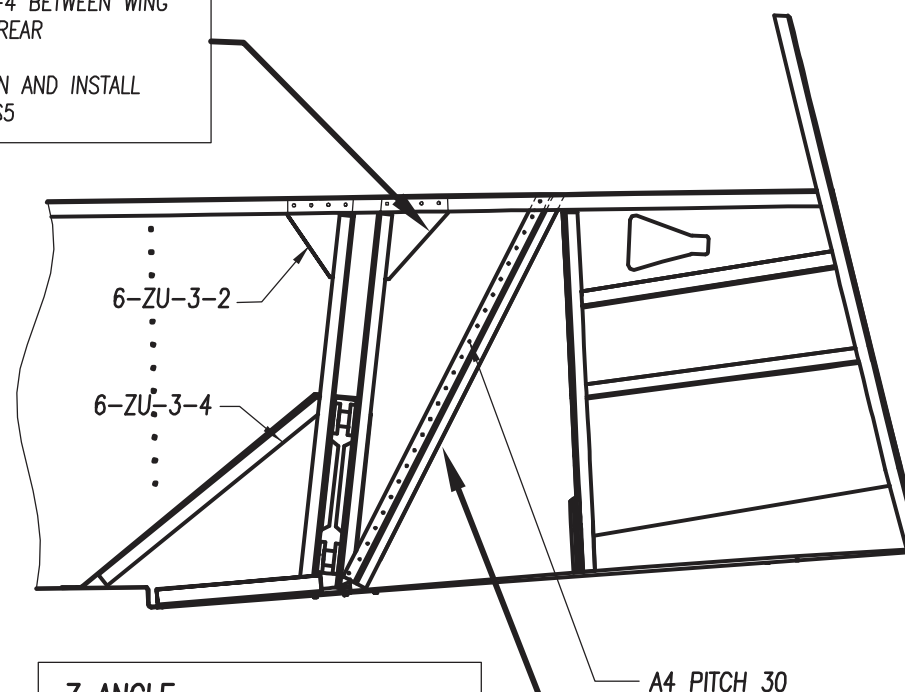


A4 PITCH 30
3 ANGLES UNDER SEAT PANEL

6-ZU-3-4

REPLACE EXISTING L ON SIDES OF ACCESS
CUTOUT WITH LONGER ANGLES 6-UL-3-4
ADD ANGLE 6-UL-3-4 IN CORNER OF SEAT
6B15-4 AND ARM REST SIDES 6B18-1

REINSTALL NUTPLATE OR RIV-NU FOR SPAR
ACCESS COVER 6B18-5



Z ANGLE

ADD DIAGONAL STANDARD Z ANGLE
TO FUSELAGE SIDE SKIN

6-ZU-3-5

REPLACE REAR WING ATTACH PLATE 6B5-4
WITH THICKER MATERIAL 6-ZU-3-5

5 **ATTACH PLATE**
t=.125" 6061-T6 (1 L + 1R REQ'D)

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ZENAIR UPGRADE
BELLCRANK CHANNEL - SEAT ANGLES

6-ZU-3