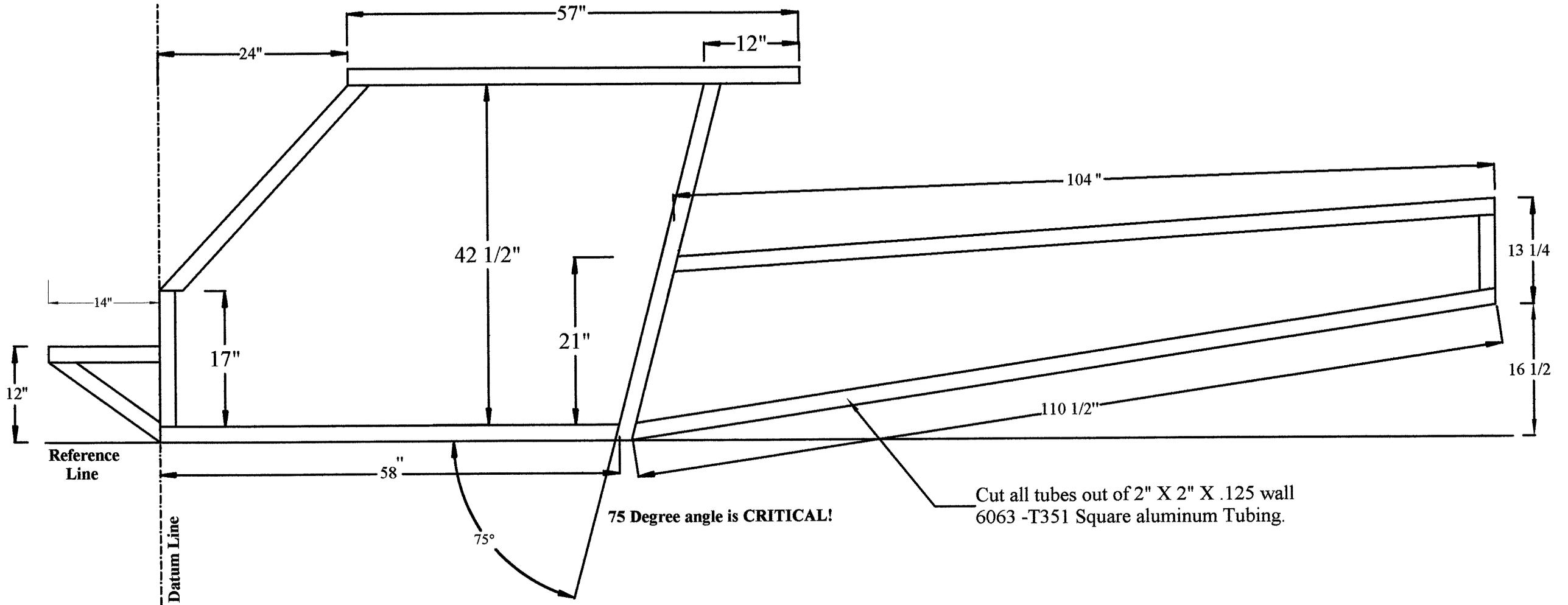


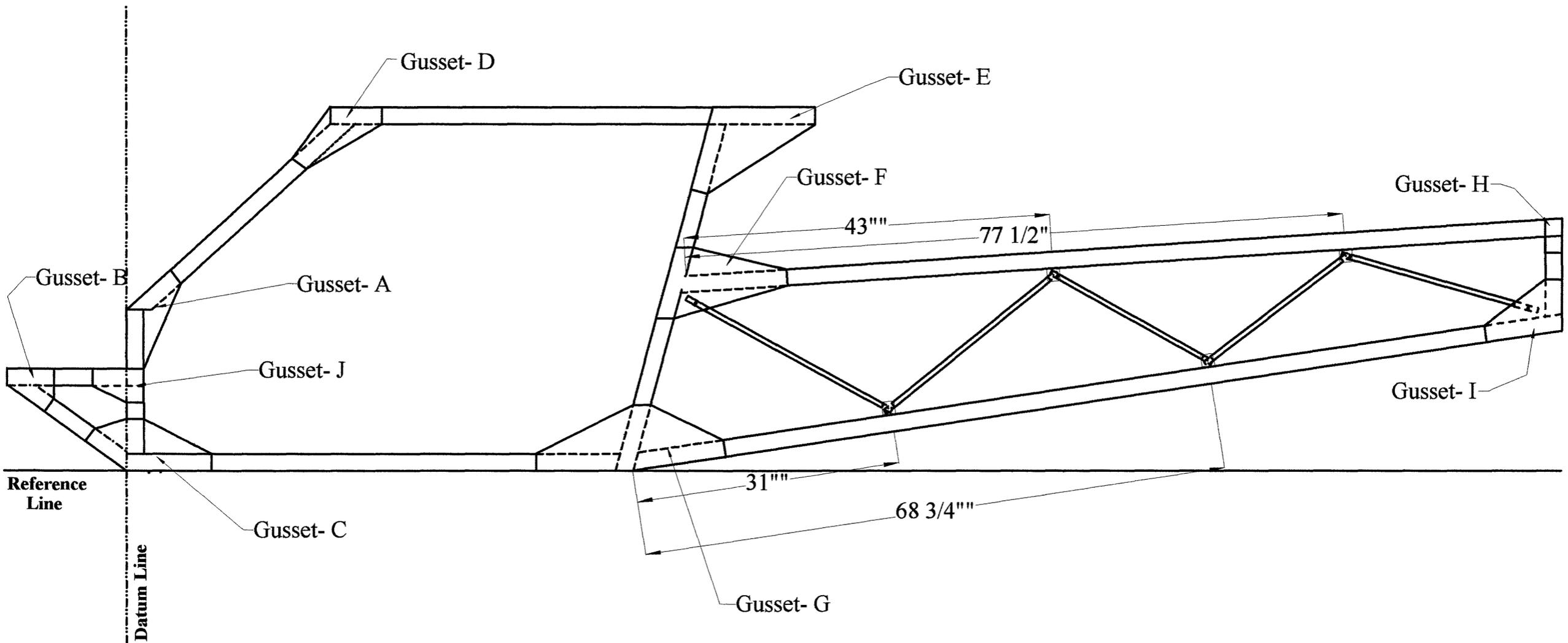
**SPECIFICATIONS**

**Empty Weight 254 lbs**  
**Gross Weight 540 lbs**  
**Wingspan 27.5 ft**  
**Wing Area 117 sq ft**  
**Length 17 ft 3 in**  
**Height 5 ft**  
**Fuel Cap. 5 gal**  
**Engine 35 to 40 hp**  
  
**Stall 26 mph**  
**Cruise 55 mph**  
**Max power 63 mph**  
**V/ne 70 mph**  
  
**Build time... approx. 250 hrs**

<b>Affordaplane</b>	
<b>Description: 3 View</b>	
<b>Drawn By: Dave Edwards</b>	<b>Drawing#</b>
<b>Date: Aug 24, 2000</b>	<b>1</b>
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



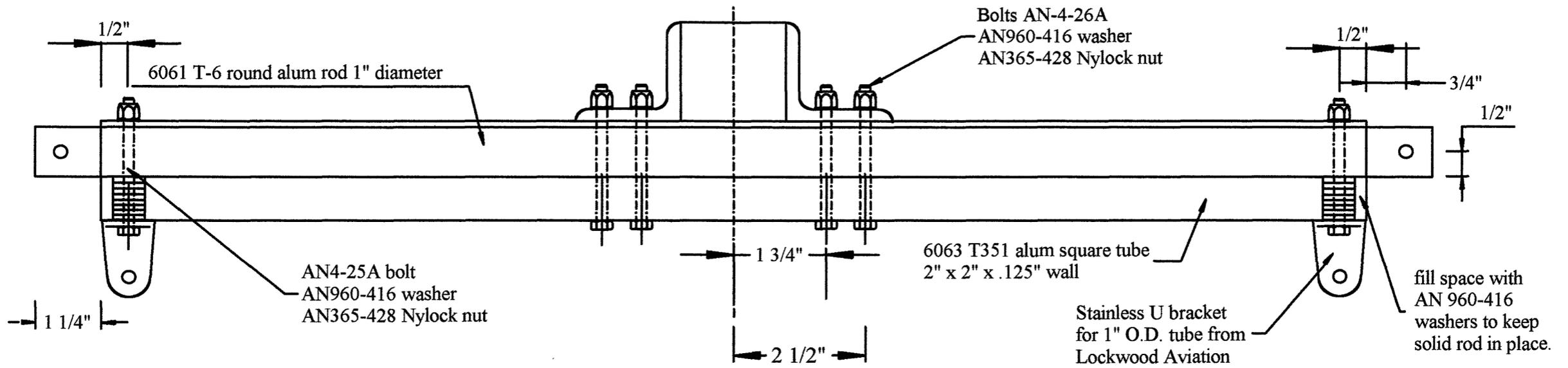
<b>AFFORDAPLANE</b>	
Description Fuselage Tube Layout	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	2
Copyright 2001 by Dave Edwards Marketing Group	



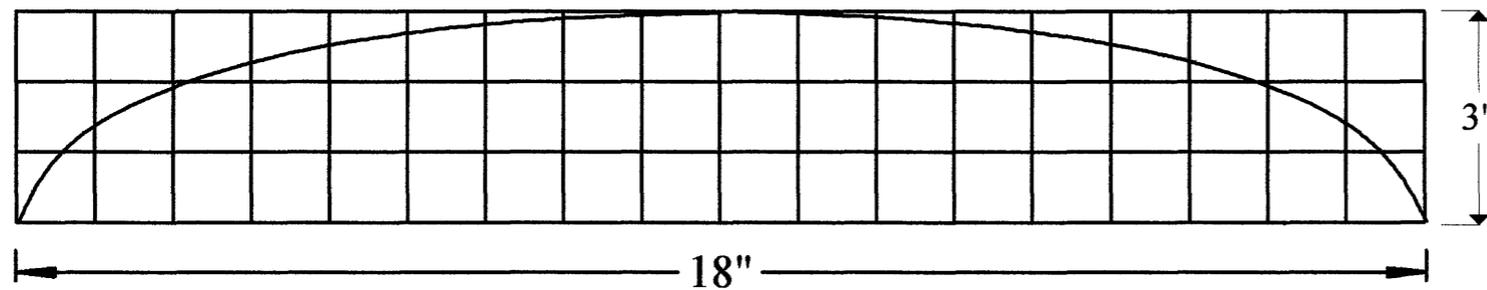
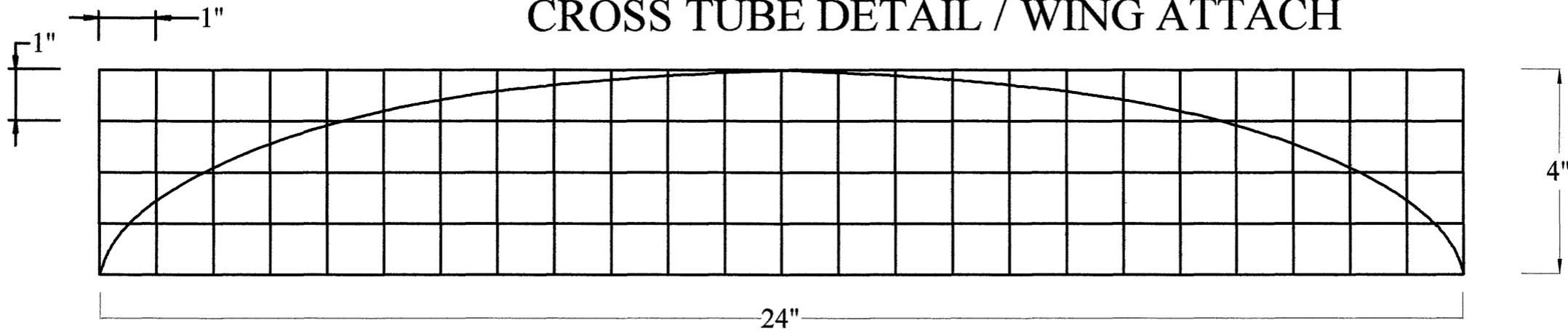
NOTE: Assemble fuselage with  
 AN3-25 bolt  
 AN960-10 washer  
 AN364-1032 nylock nut  
 Then drill through existing holes  
 for larger bolts as per plans.

NOTE: All diagonal tubing is  
 1" X .035 wall 6061-T6 alum  
 Tube.

<b>AFFORDAPLANE</b>	
Description: Gusset Locations / diagonal placement	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	3
Copyright 2000 by Dave Edwards Marketing Group	



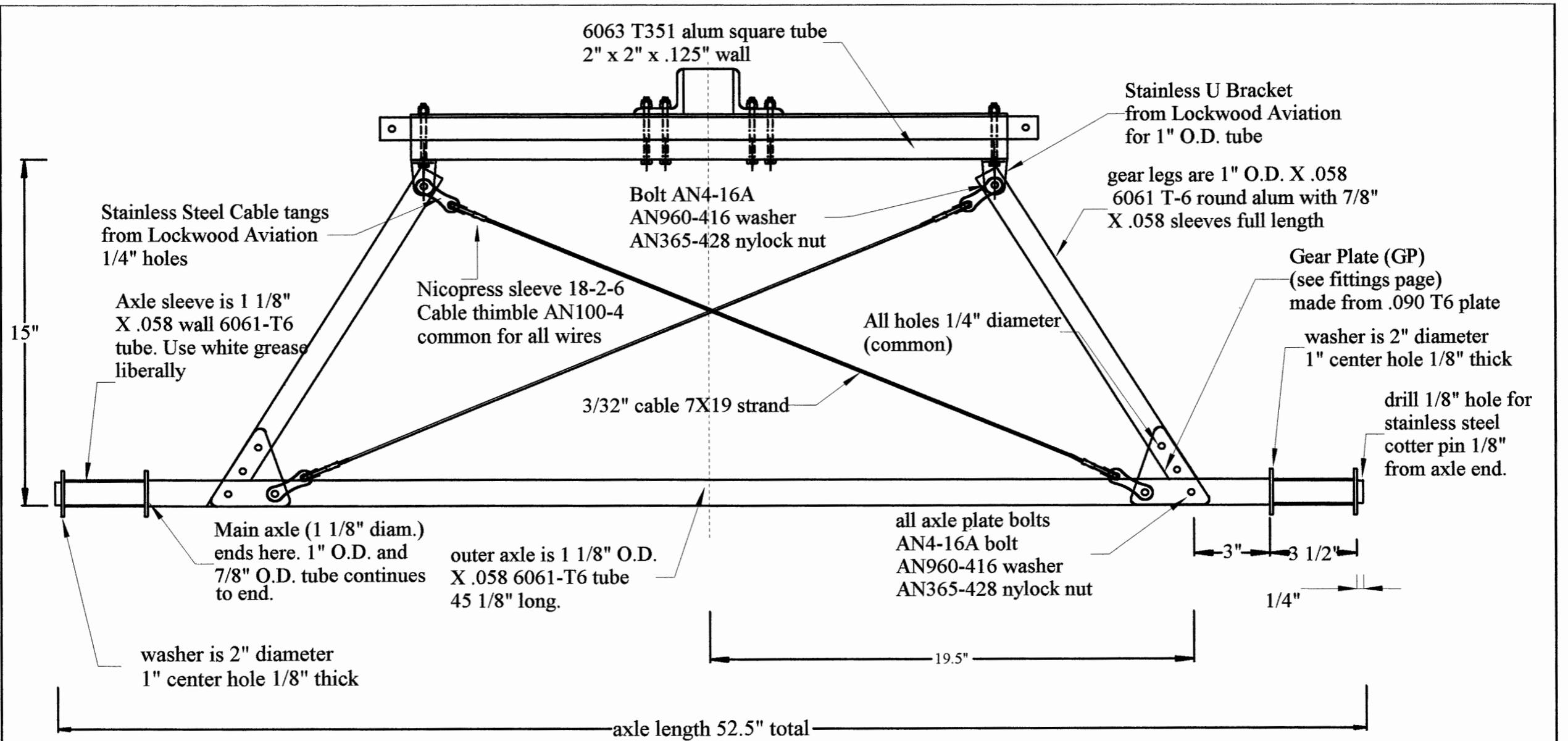
## CROSS TUBE DETAIL / WING ATTACH



Panel made from  
.032 alum sheet

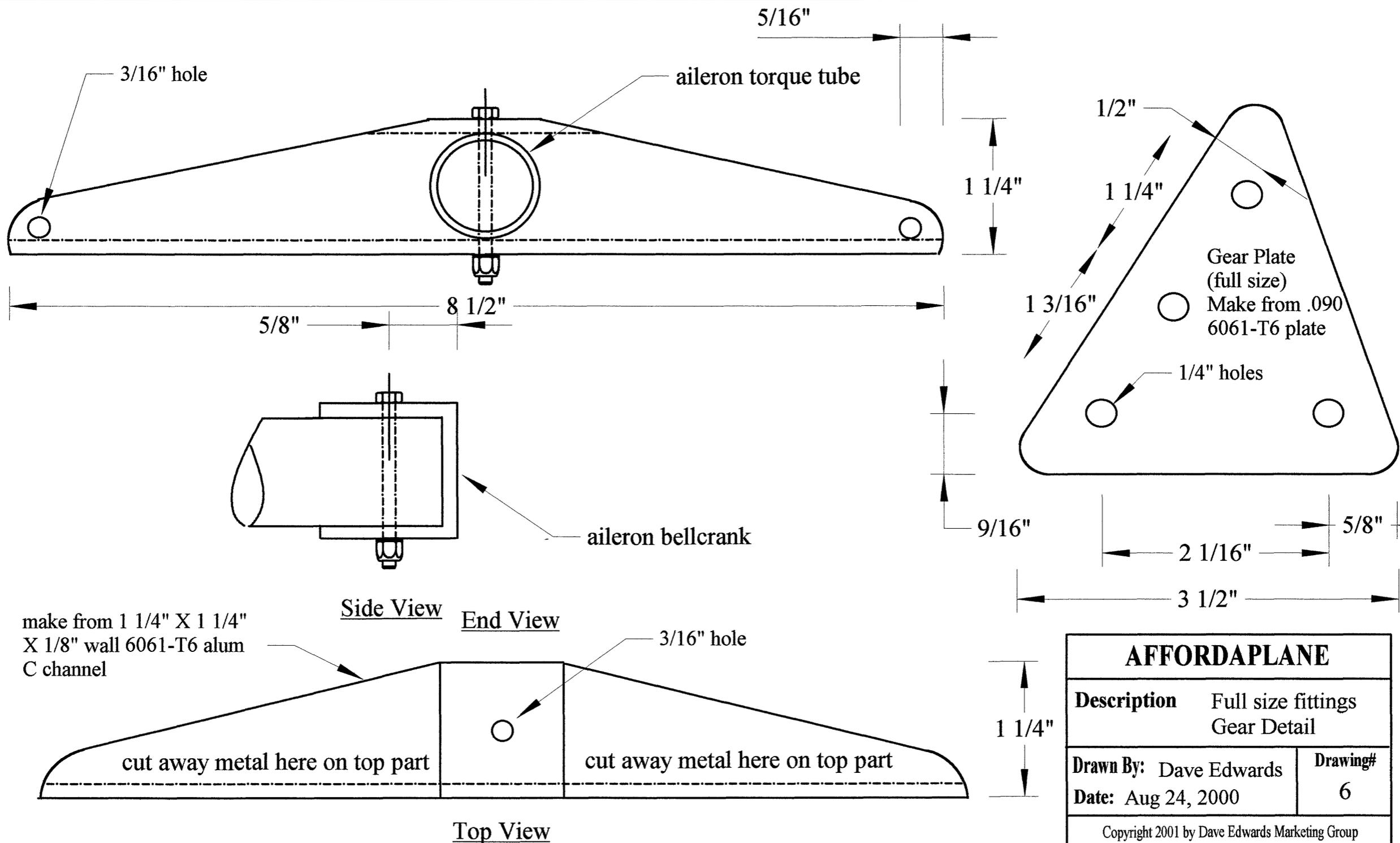
Instrument panel /  
Forward top cowling curve

AFFORDAPLANE	
<b>Description</b> Cross Tube / Instrument Panel	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	4
Copyright 2001 by Dave Edwards Marketing Group	

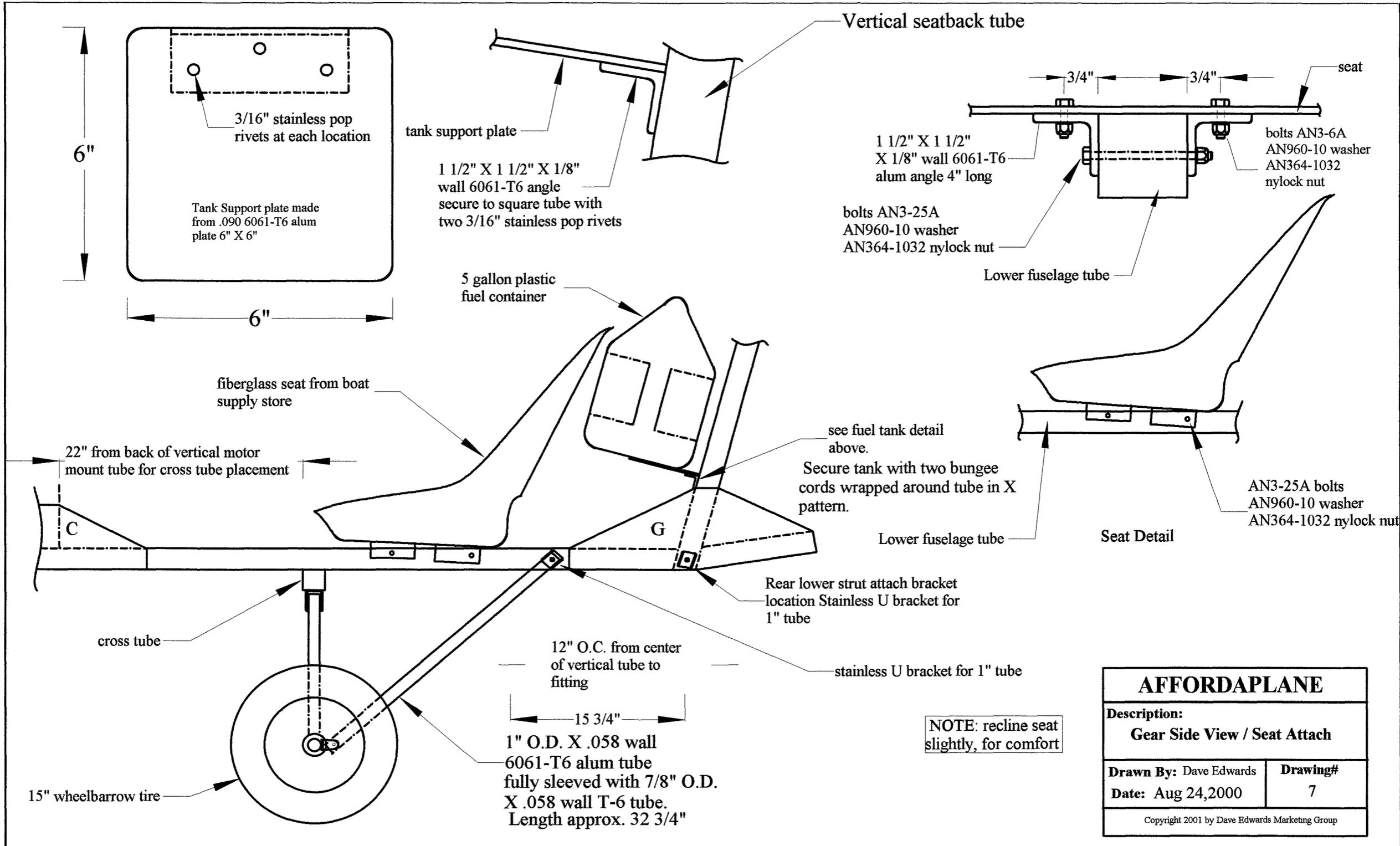


NOTE: See Page 12 for axle attach details

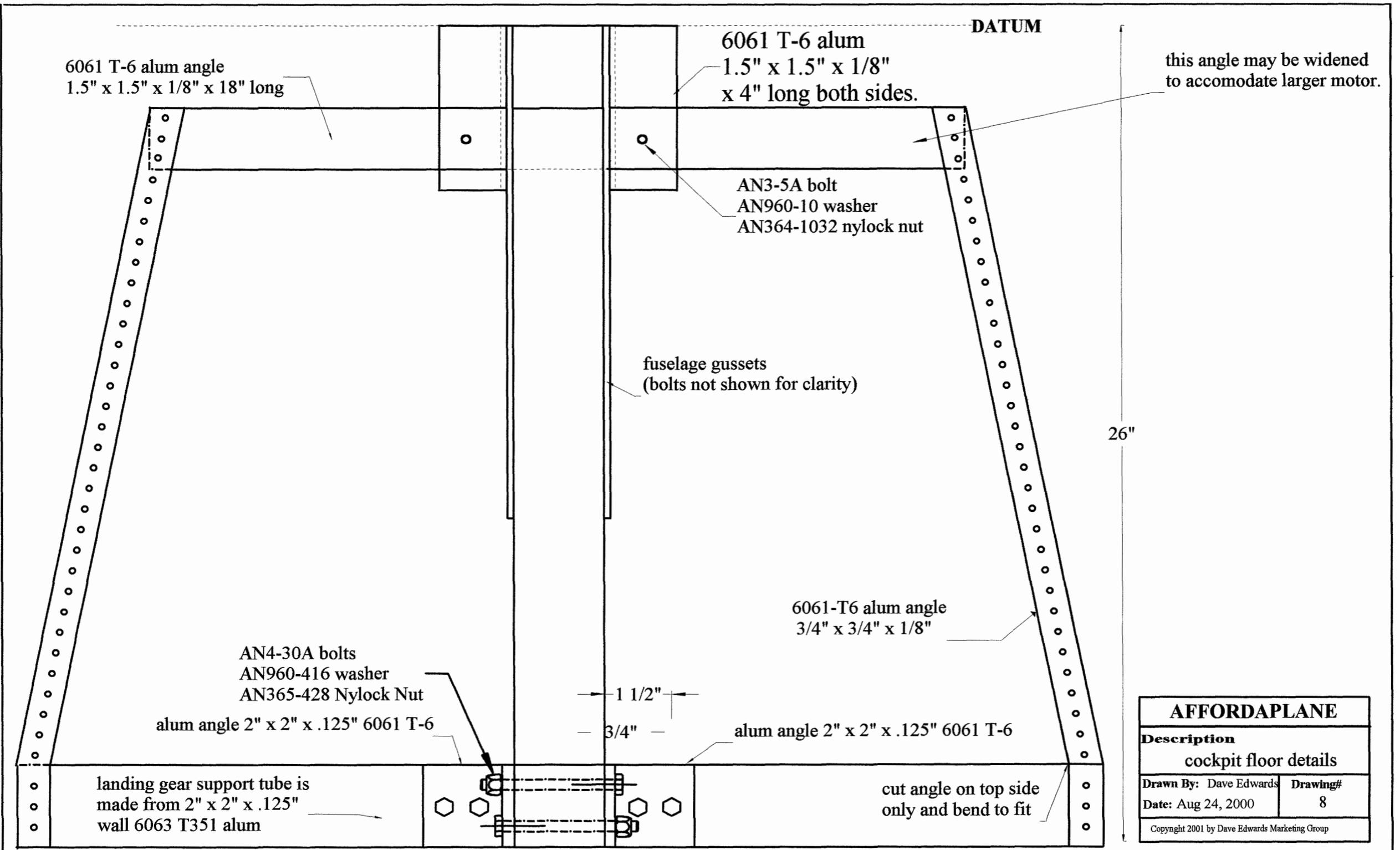
<b>AFFORDAPLANE</b>	
<b>Description:</b> Landing Gear	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	5
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



AFFORDAPLANE	
Description	Full size fittings Gear Detail
Drawn By: Dave Edwards	Drawing# 6
Date: Aug 24, 2000	
Copyright 2001 by Dave Edwards Marketing Group	



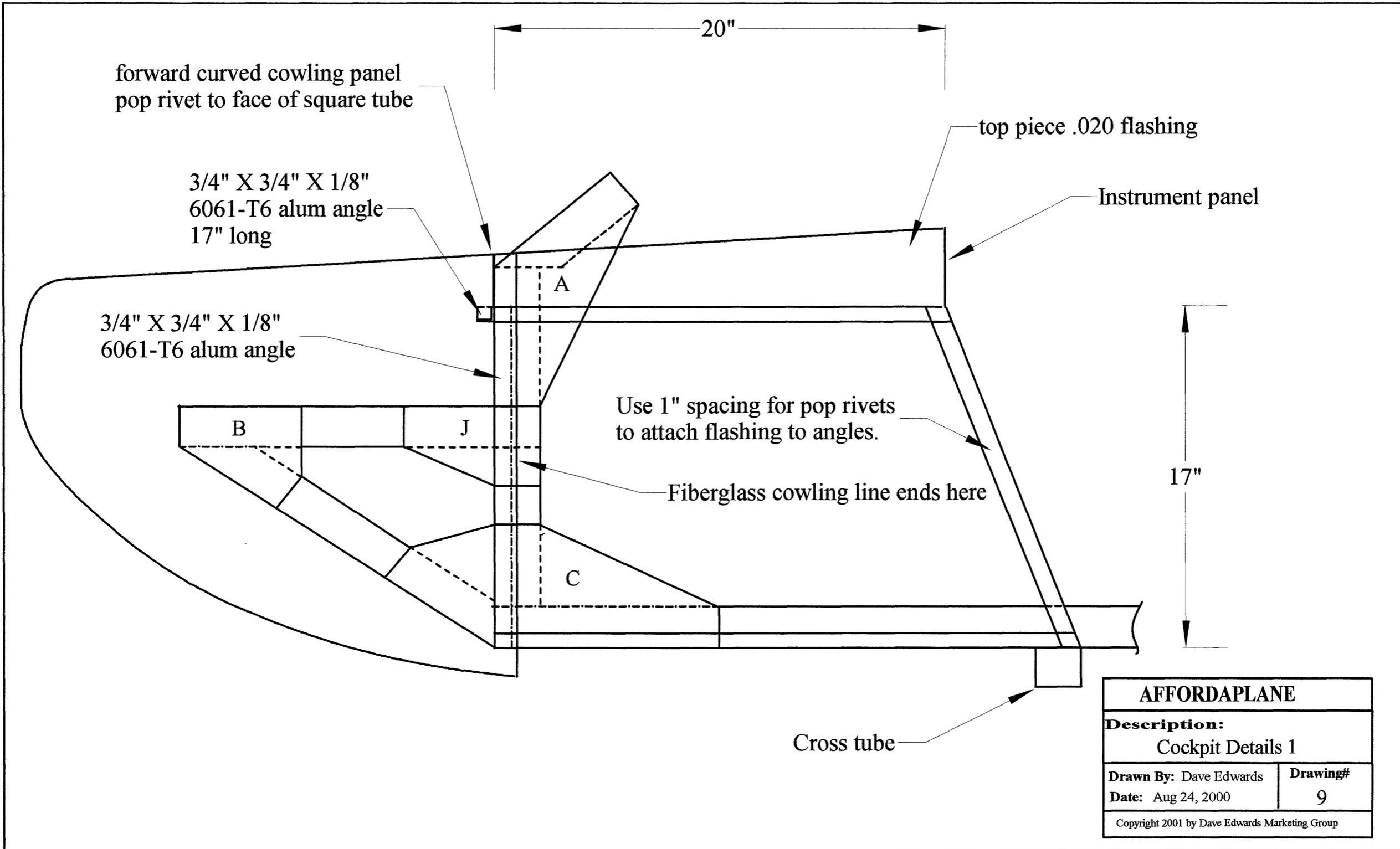
<b>AFFORDAPLANE</b>	
<b>Description:</b> Gear Side View / Seat Attach	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	7
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



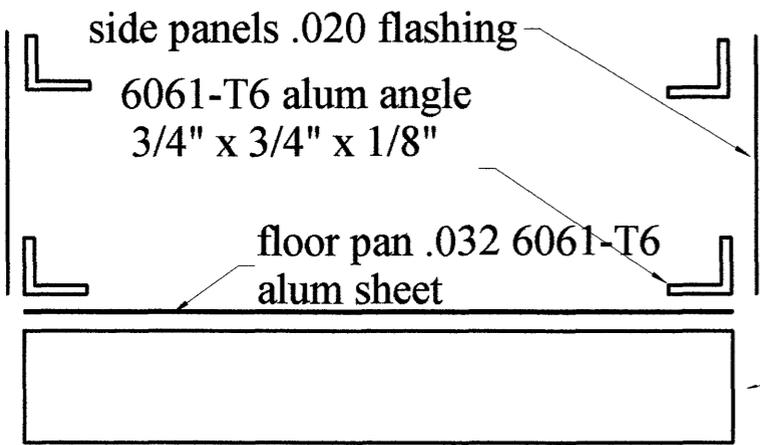
**AFFORDAPLANE**

**Description**  
cockpit floor details

**Drawn By:** Dave Edwards    **Drawing#**  
Date: Aug 24, 2000                      8



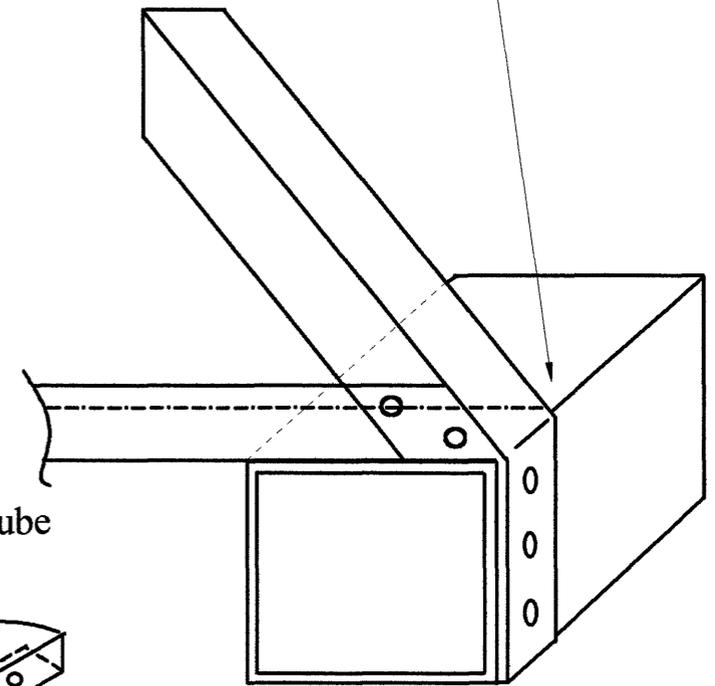
<b>AFFORDAPLANE</b>	
<b>Description:</b> Cockpit Details 1	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	9
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



Cross Tube

Exploded View Cockpit Details

bend here and cut to fit cross tube. Secure with three 1/8" x 3/8" pop rivets.



forward cowling piece  
.032 alum pop riveted to vertical motor tube

vertical motor mount tube

3/4" X 3/4" X 1/8"  
6061-T6 alum angle

X brace made from 1/2" X .058 alum tube. Pop rivet to angles with 1/8" pop r

Make two gussets one top one bottom.

gussets made from .032 alum sheet Use 4 1/8" pop rivets 4" X 4"

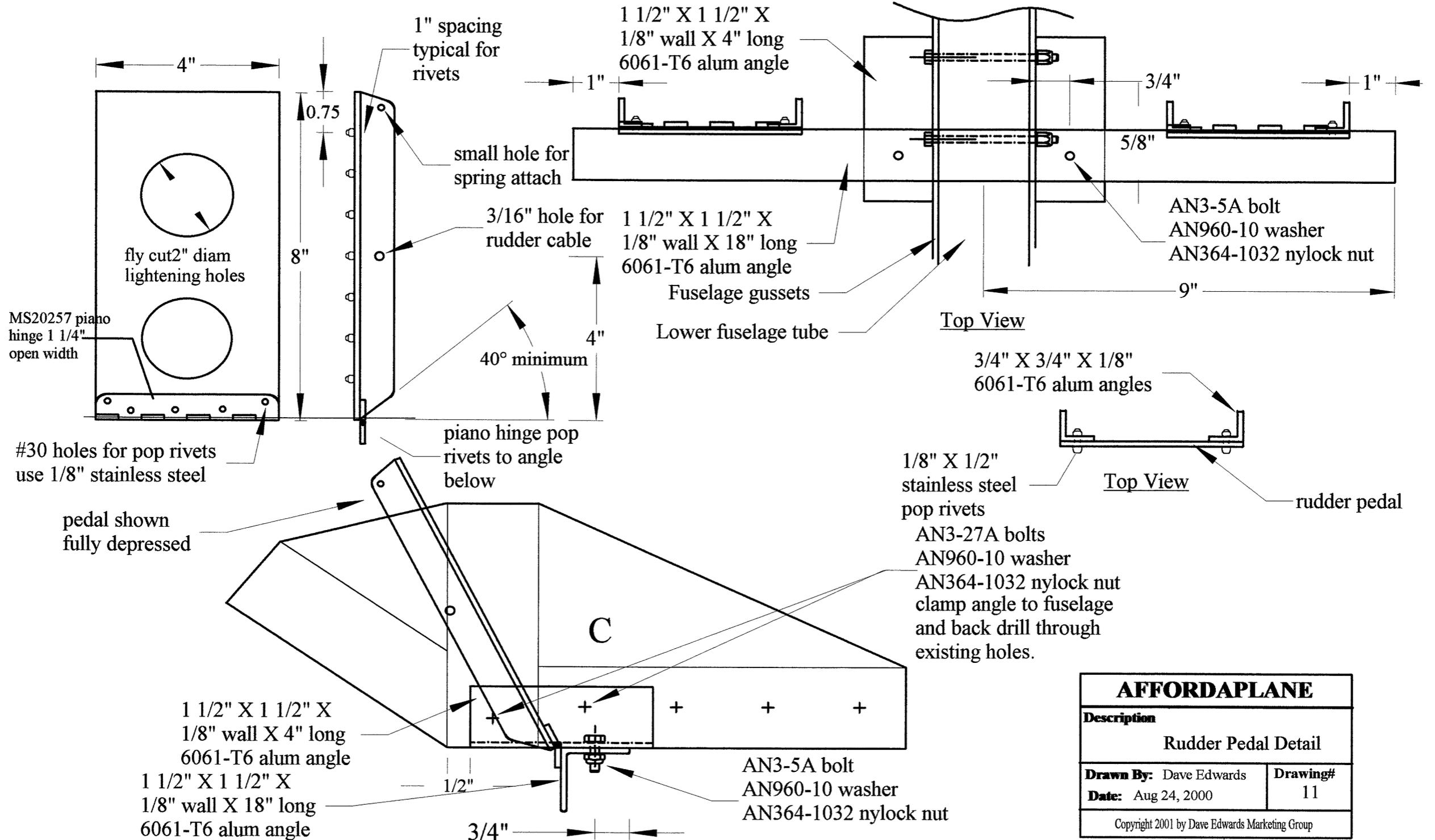
3/4" X 3/4" X 1/8"  
6061-T6 alum angle

Instrument panel  
Secure to angle with 4 1/8" pop rivets

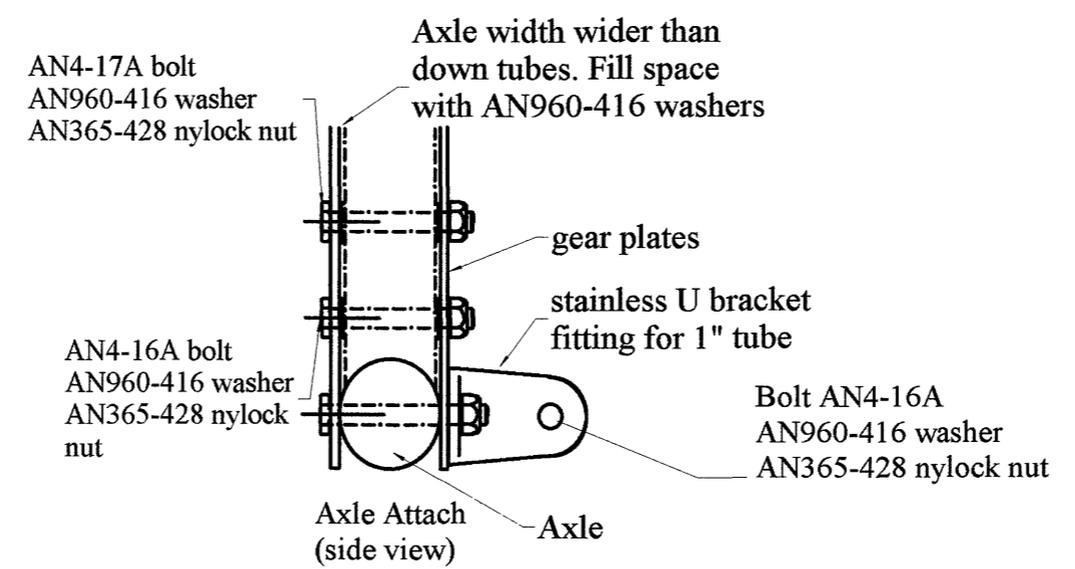
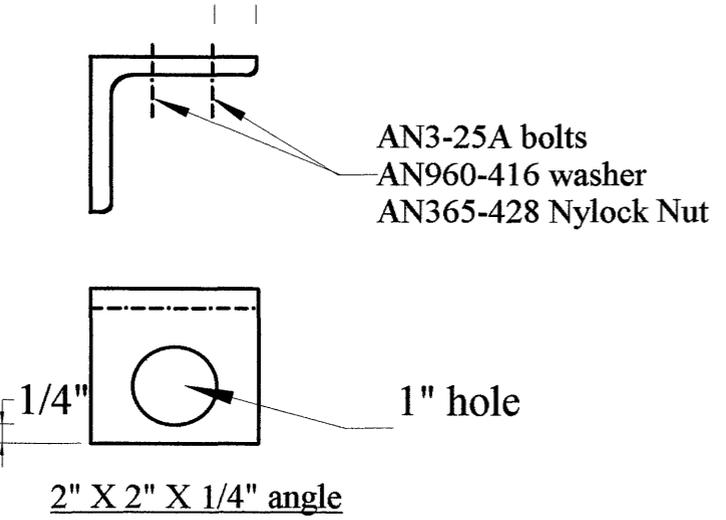
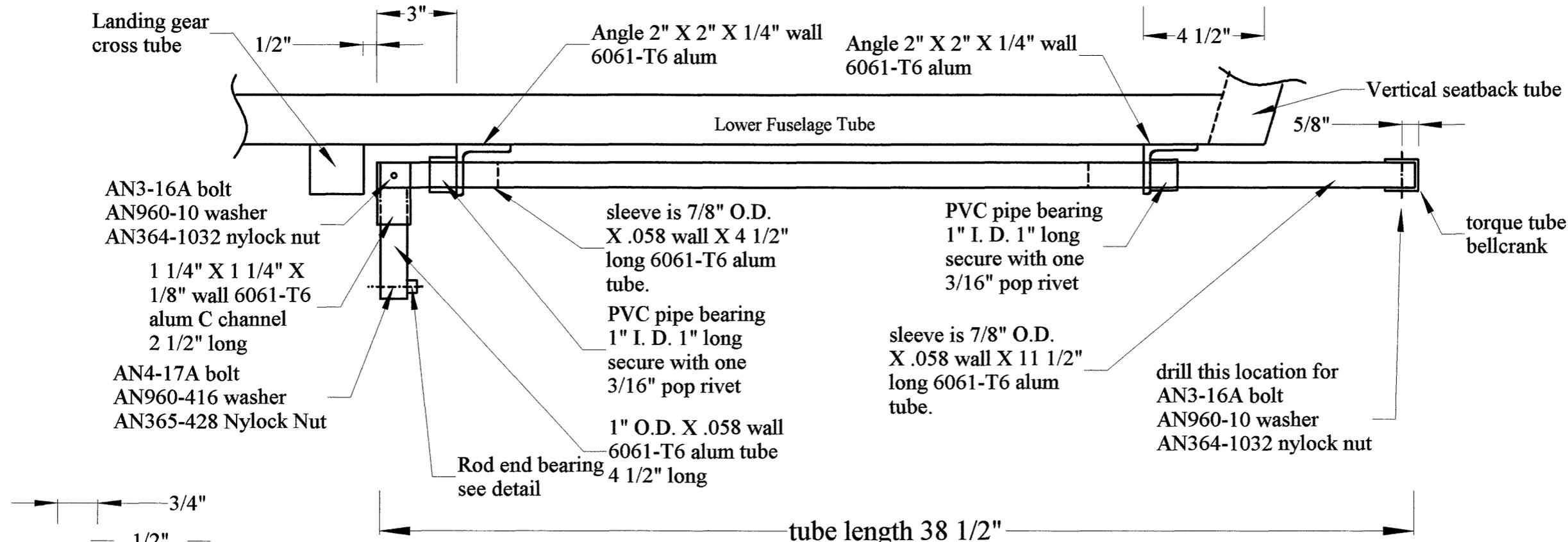
pop rivet faces of angles

Top View Cockpit

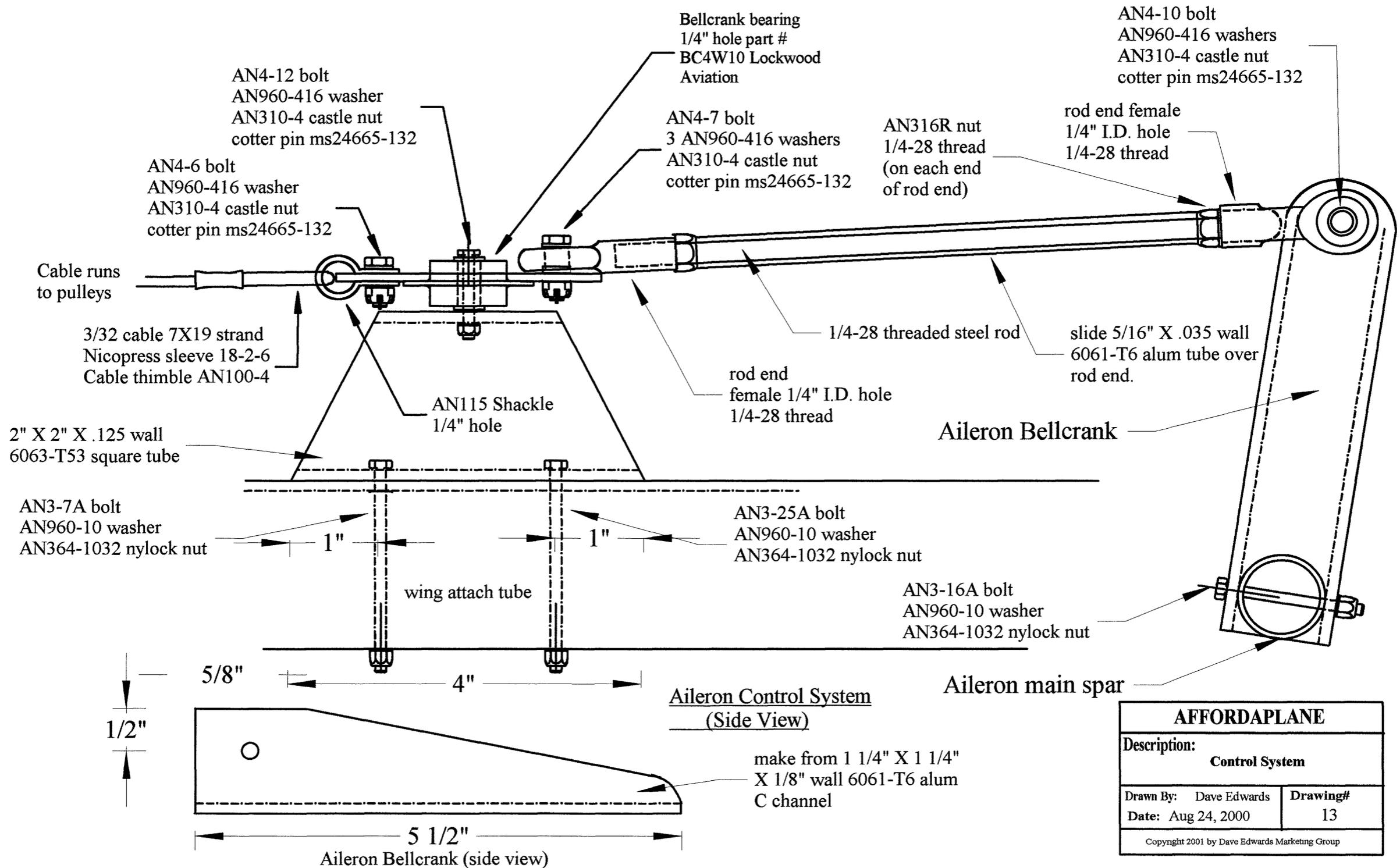
<b>AFFORDAPLANE</b>	
<b>Description:</b> Cockpit Details	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	10
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



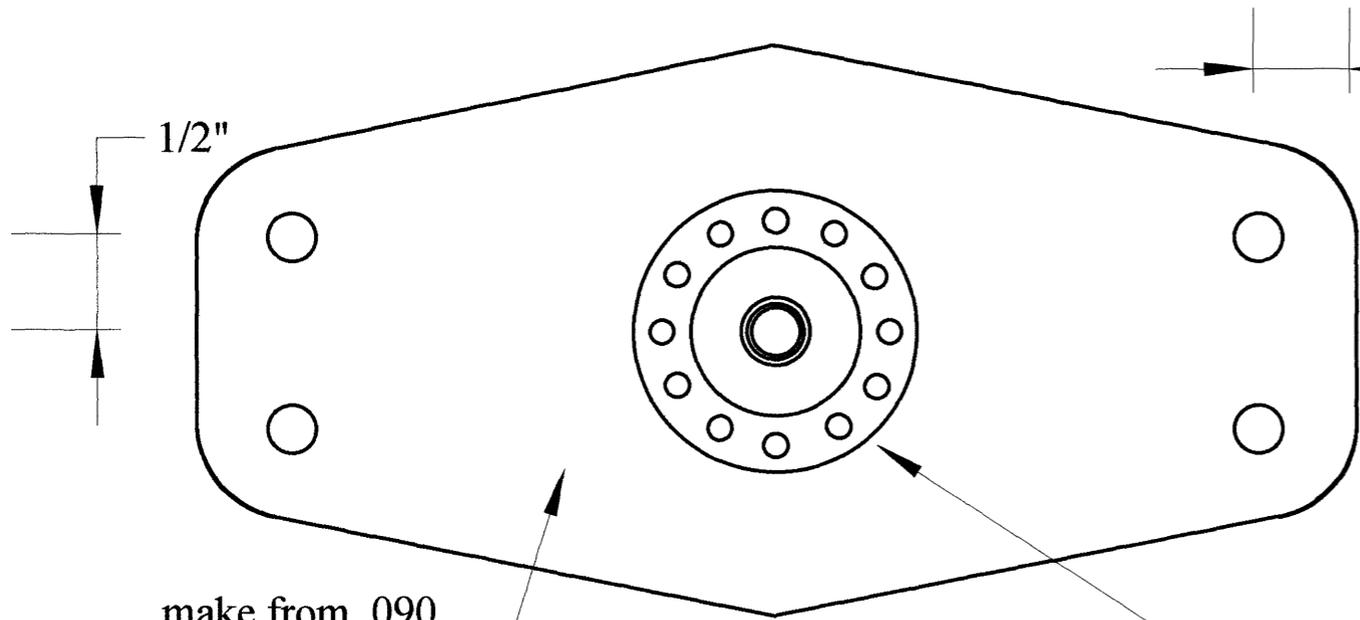
<b>AFFORDAPLANE</b>	
<b>Description</b>	
Rudder Pedal Detail	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	11
Copyright 2001 by Dave Edwards Marketing Group	



<b>AFFORDAPLANE</b>	
Description: <b>Control System</b>	
Drawn By: <u>Dave Edwards</u>	Drawing# 12
Date: Aug 24, 2000	
Copyright 2001 by Dave Edwards Marketing Group	



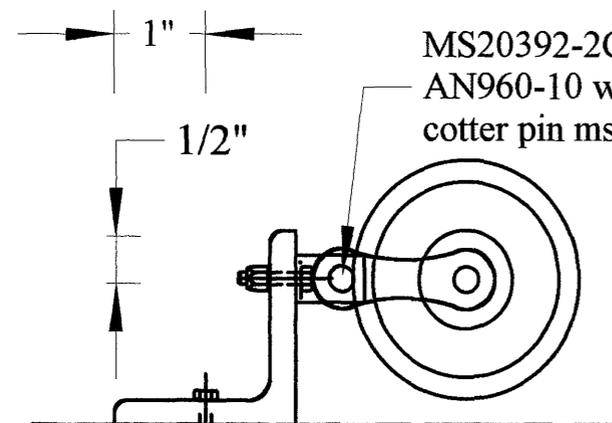
<b>AFFORDAPLANE</b>	
Description: <b>Control System</b>	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	13
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



make from .090  
6061-T6 plate

BC4W10 Bellcrank Bearing  
secure with #30 pop rivets

Control System Bellcrank

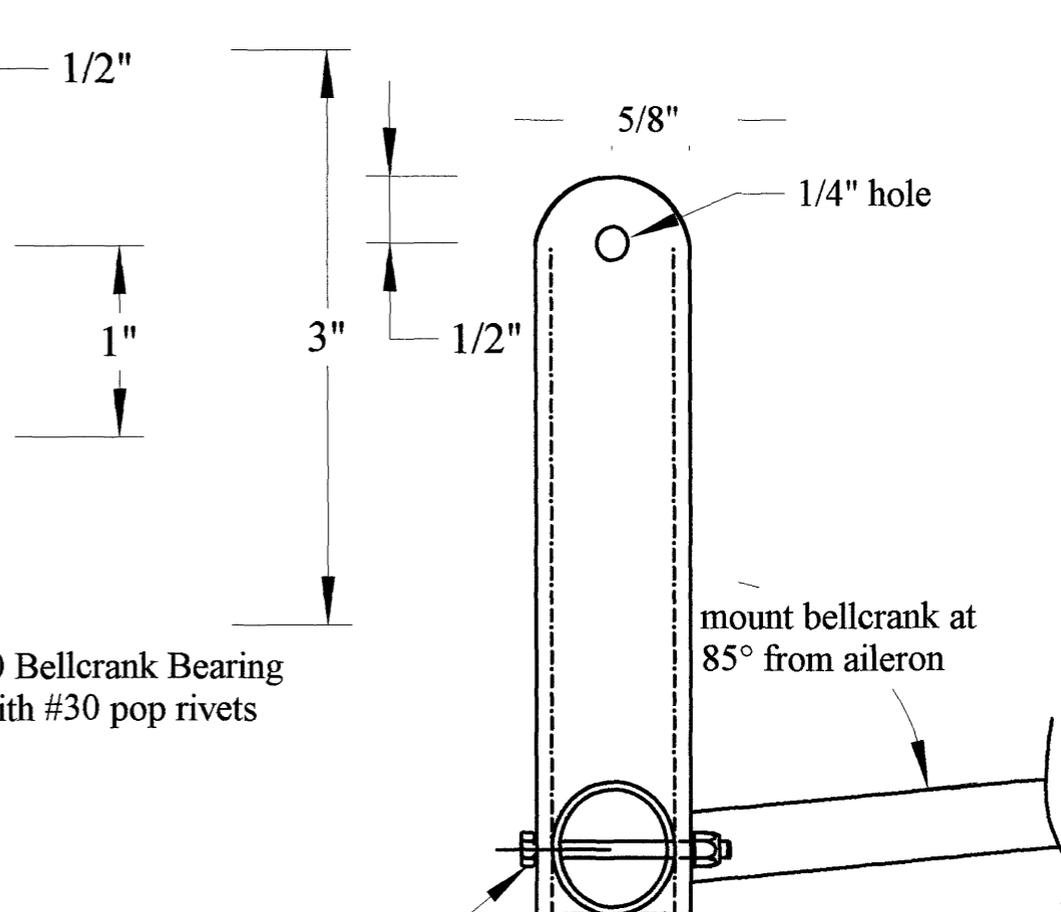


MS20392-2C19 clevis pin  
AN960-10 washer  
cotter pin ms24665-132

AN3-25A bolt  
AN960-10 washer  
AN364-1032 nylock nut

Side View

Note: This bolt goes all the way  
through the wing attach tube,  
NOT as shown here.



mount bellcrank at  
85° from aileron

AN3-16A bolt  
AN960-10 washer  
AN364-1032 nylock nut

Aileron Bellcrank  
(end view)

## AFFORDAPLANE

Description:

**Aileron Control Bellcrank**

Drawn By: Dave Edwards

Drawing#

Date: Aug 24, 2000

14

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drill 1/4" hole in stainless U bracket for AN4-16 bolt  
AN960-416 washer  
AN310-4 castle nut  
cotter pin:  
ms24665-132

AN4-5 bolt  
AN960-416 washer  
AN310-4 castle nut  
cotter pin ms24665-132

AN4-16 bolt  
AN960-416 washer  
AN310-4 castle nut  
cotter pin ms24665-132

AN4-16 bolt  
AN960-416 washers  
AN310-4 castle nut  
cotter pin ms24665-132

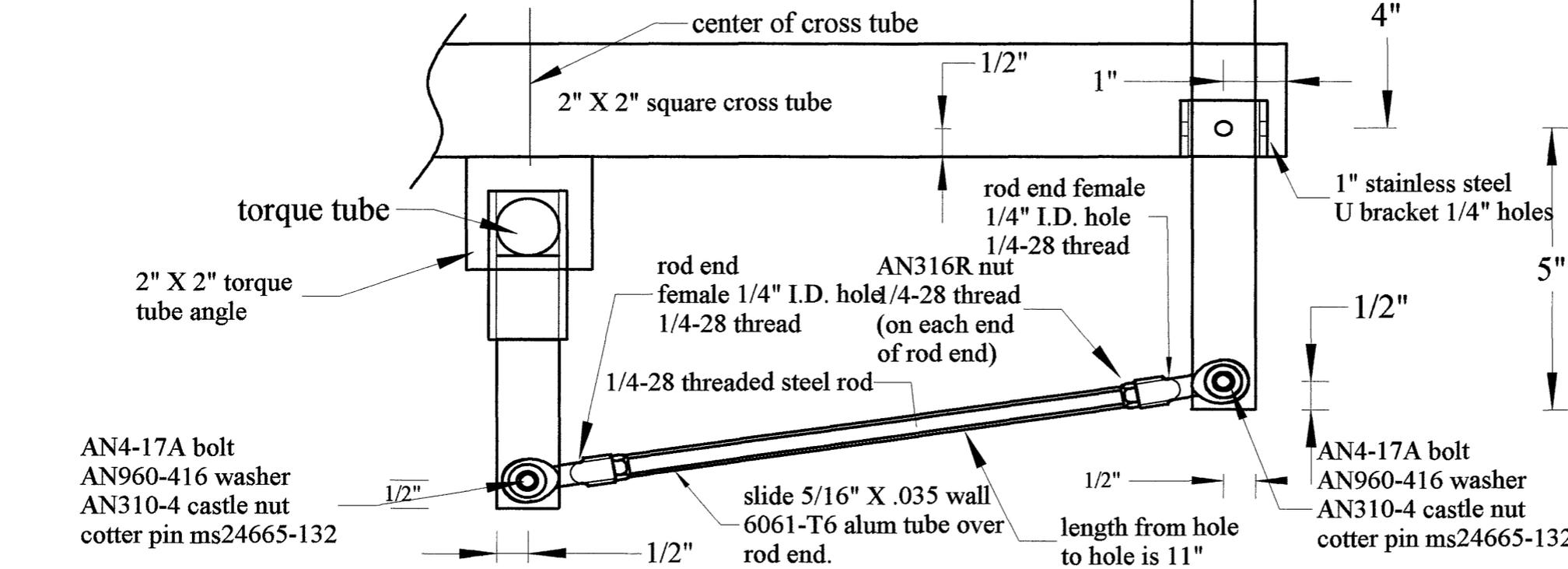
AN4-16 bolt  
AN960-416 washers  
AN310-4 castle nut  
cotter pin ms24665-132

1" stainless steel U bracket 1/4" holes  
AN4-26 bolt  
AN960-416 washer  
AN310-4 castle nut  
cotter pin ms24665-132

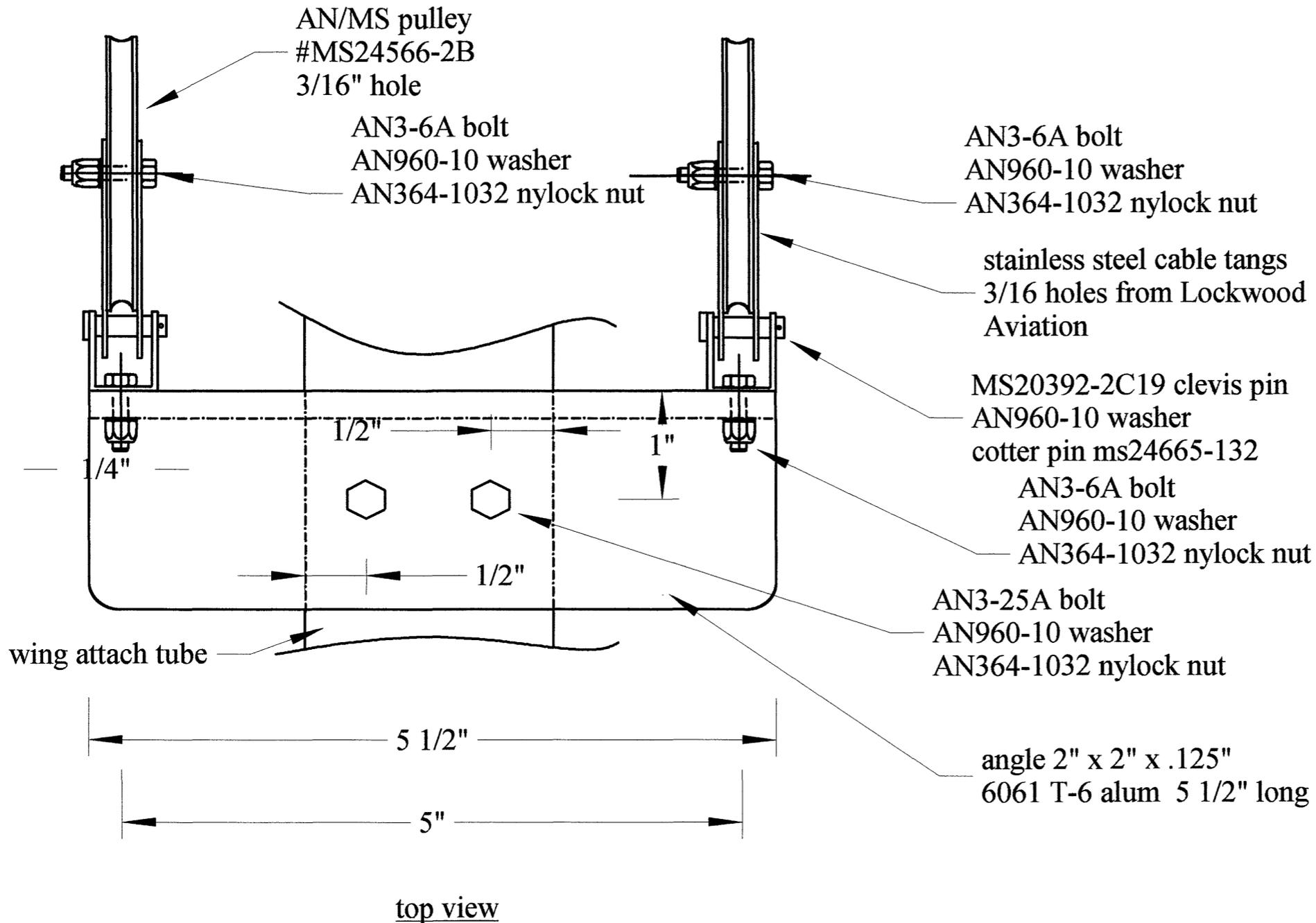
bicycle grip

stick is 1" O.D. X .058 wall  
6061-T6 alum tube fully sleeved  
with 7/8" O.D. X .058 wall  
6061-T6 alum tube  
19 1/2" overall length

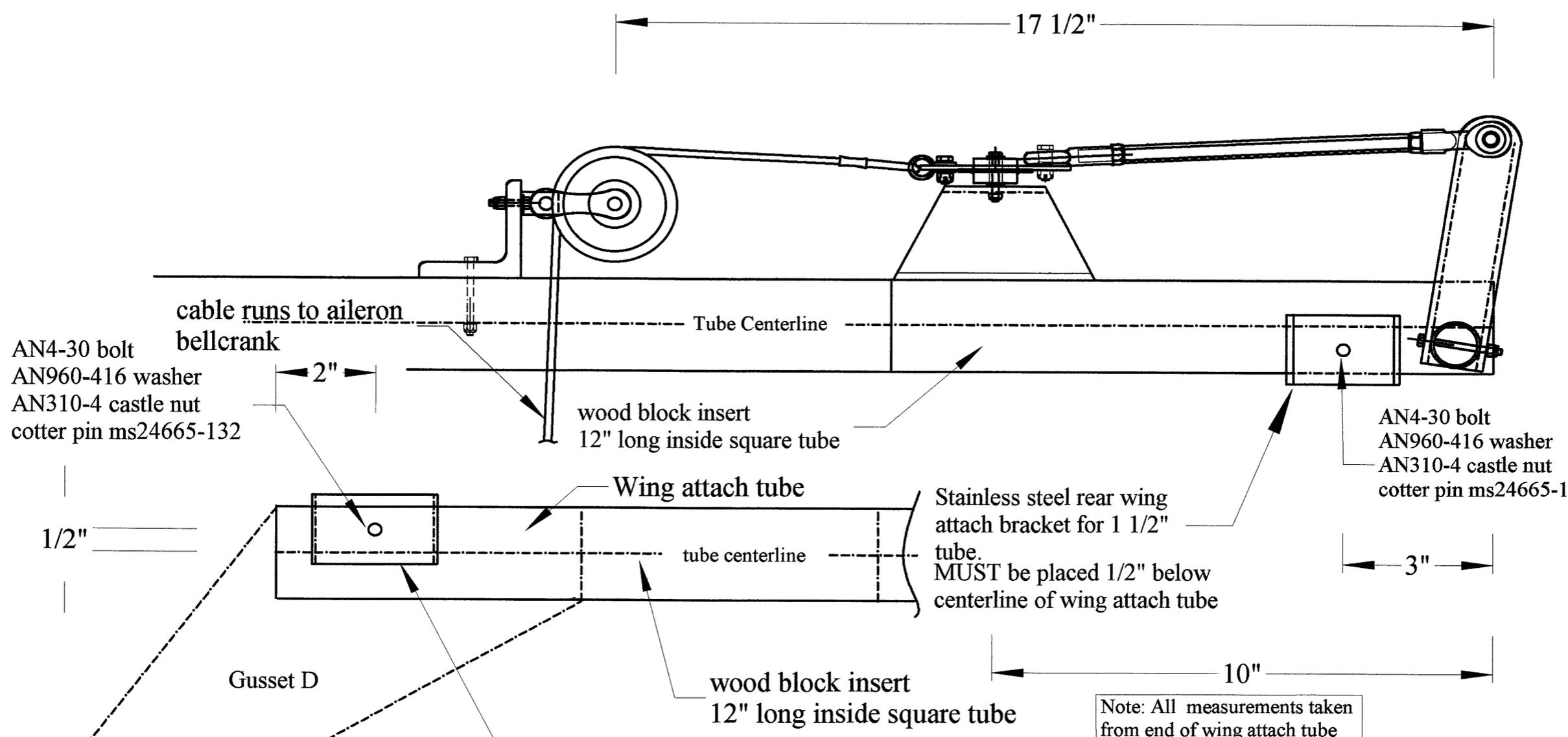
Elevator Tube Attach Detail



<b>AFFORDAPLANE</b>	
Description: <b>Control Stick Details</b>	
Drawn By: <u>Dave Edwards</u>	Drawing# 15
Date: Aug 24, 2000	
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



<b>AFFORDAPLANE</b>	
Description: <b>Control Pulleys</b>	
Drawn By: Dave Edwards	Drawing# 16
Date: Aug 24, 2000	
Copyright 2001 by Dave Edwards Marketing Group	



AN4-30 bolt  
 AN960-416 washer  
 AN310-4 castle nut  
 cotter pin ms24665-132

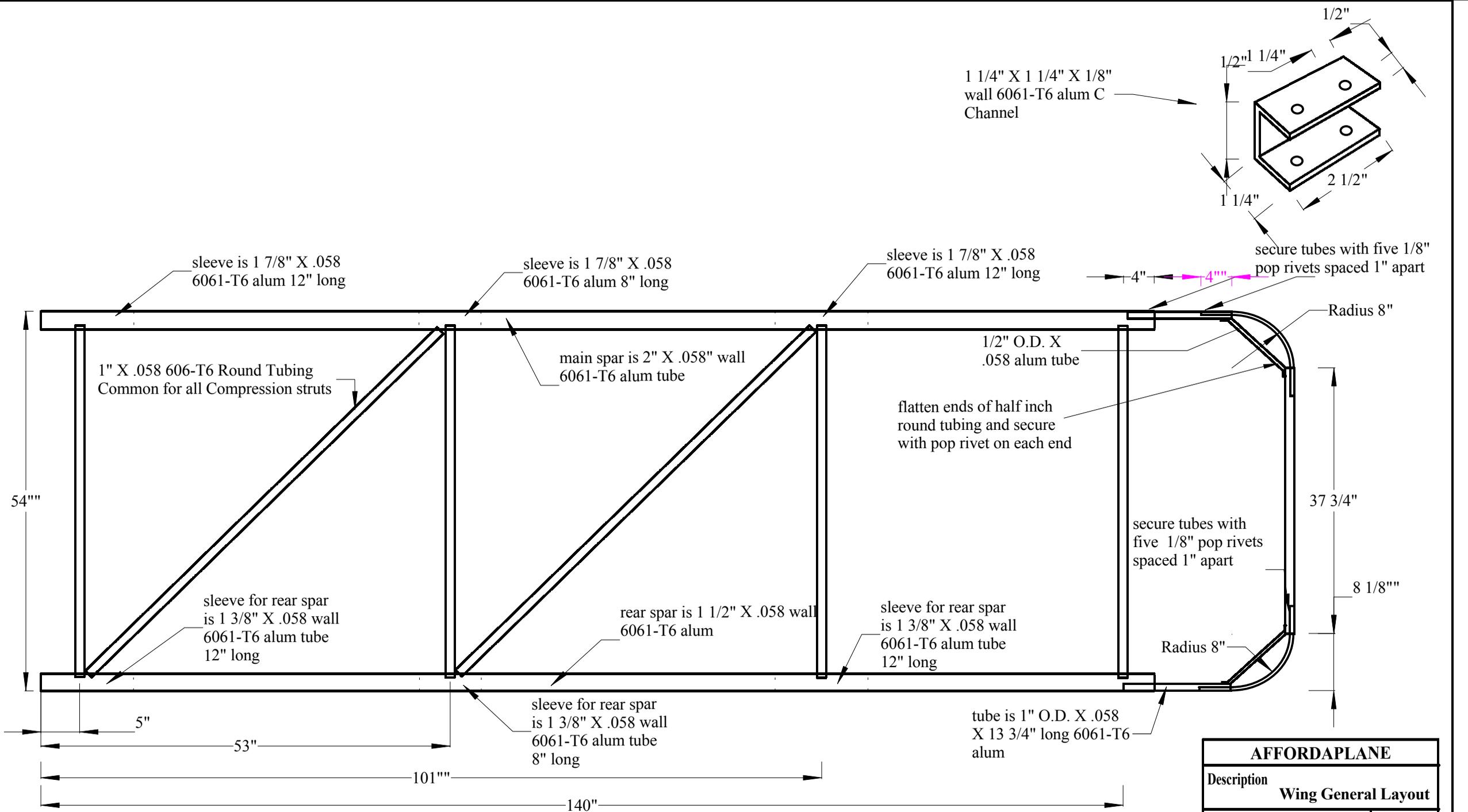
AN4-30 bolt  
 AN960-416 washer  
 AN310-4 castle nut  
 cotter pin ms24665-132

NOTE: Front wing attach bolts are AN4-30 bolts  
 AN960-416 washer  
 AN310-4 castle nut  
 cotter pin ms24665-132

Rear wing attach bolts  
 AN 4-25 bolts  
 AN960-416 washer  
 AN310-4 castle nut  
 cotter pin ms24665-132

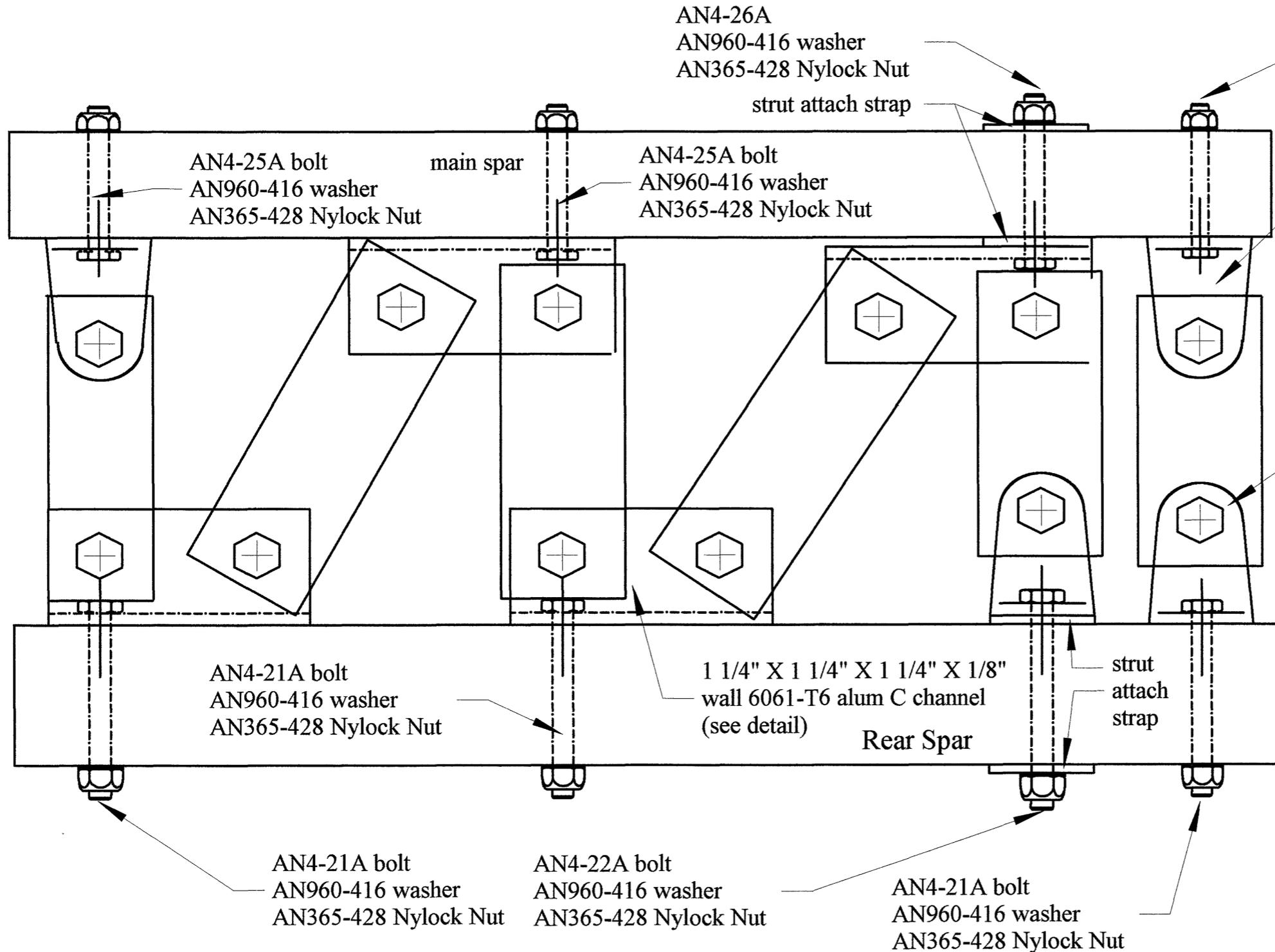
Note: All measurements taken from end of wing attach tube

<b>AFFORDAPLANE</b>	
<b>Description:</b> Wing Attach / Control placement	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	17
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



Top View  
Right Wing Shown

<b>AFFORDAPLANE</b>	
Description <b>Wing General Layout</b>	
Drawn By: <u>Dave Edwards</u>	Drawing#
Date: Aug 24, 2000	18
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



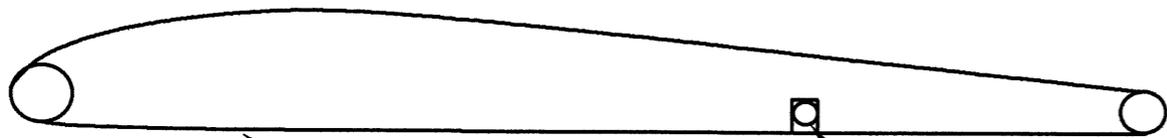
AN4-25A bolt  
AN960-416 washer  
AN365-428 Nylock Nut

Stainless Steel U bracket  
for 1" O.D. tube 1/4" hole

1/2"

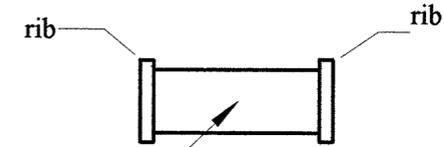
All C Channel and stainless  
U bracket bolts are  
AN4-16A bolt  
AN960-416 washer  
AN365-428 Nylock Nut

<b>AFFORDAPLANE</b>	
<b>Description:</b> Wing Detail	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	<b>19</b>
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	

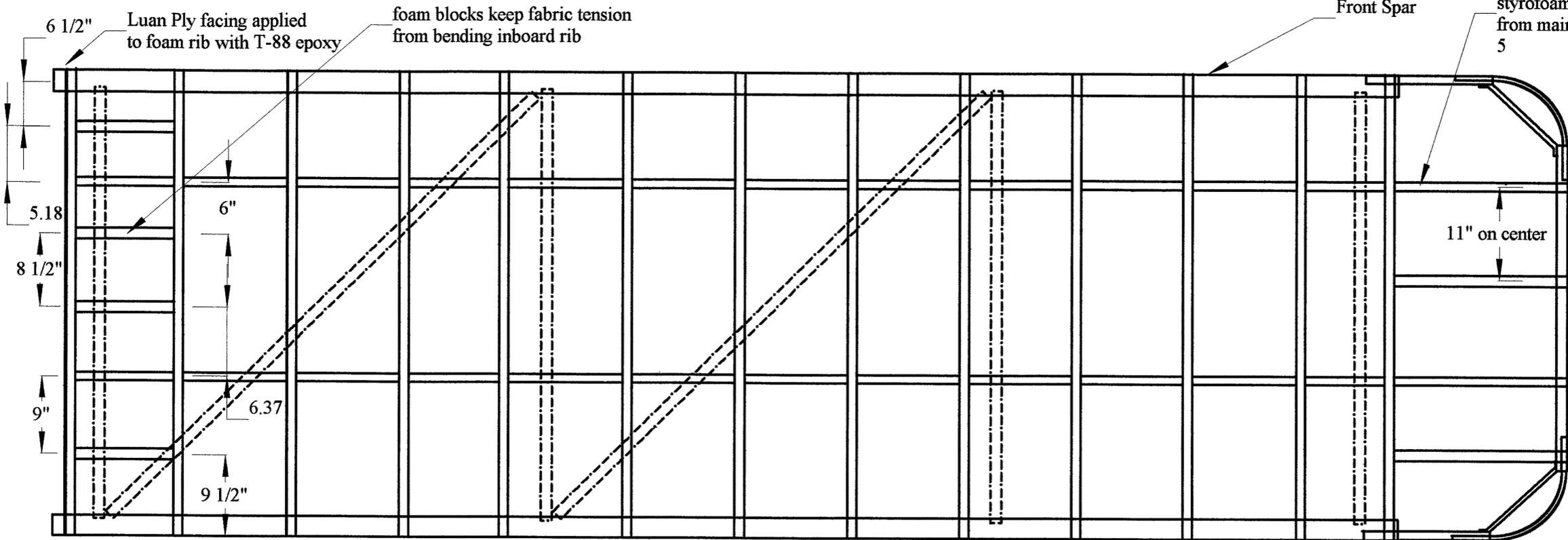


1/16" ply strips wrap all the way around spar tubes and foam ribs

where tubes cross foam ribs cut and fill in to contour to support capstrip



L.E. foam blocks are 1" thick and 5" tall centered on rib

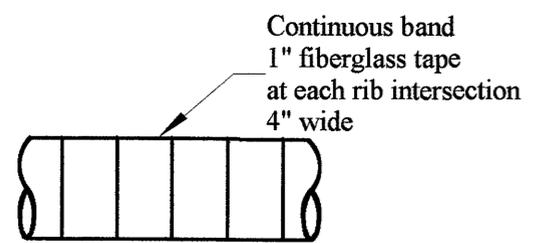


L.E. blocks 1" dow blue styrofoam. 13" O.C. from main spar leading edge. 5

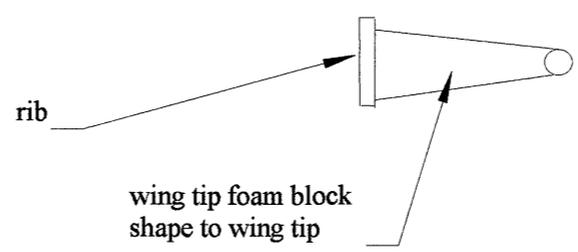
T.E. foam blocks are 35" on center from L.E. of spar, 4" tall

9" on center

Top View  
Right Wing Shown

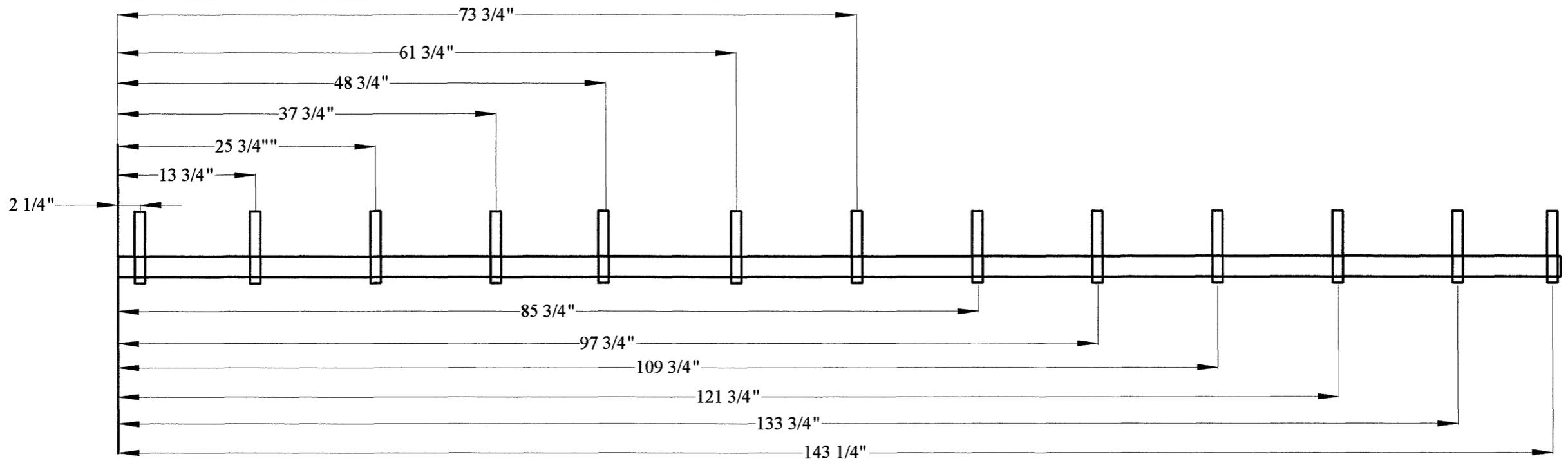


Continuous band 1" fiberglass tape at each rib intersection 4" wide

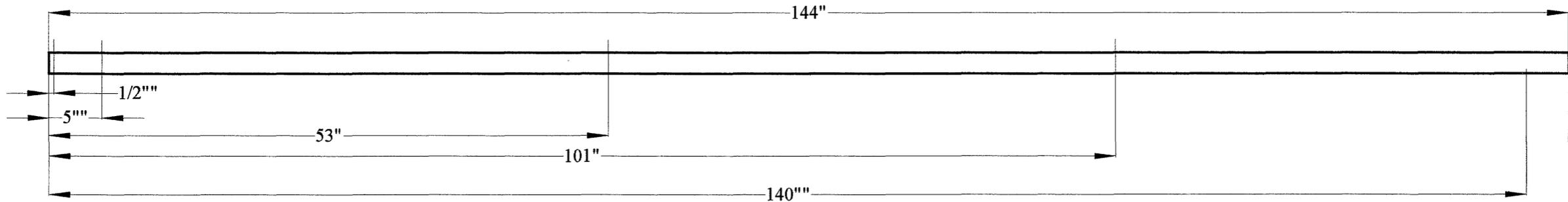


wing tip foam block shape to wing tip

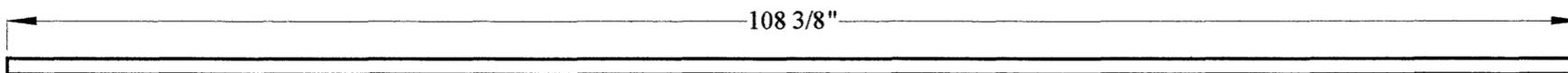
AFFORDAPLANE		
Description:	Foam rib and block placement	
Drawn By:	Dave Edwards	Drawing#
Date:	Aug 24, 2000	20
Copyright 2001 by Dave Edwards Marketing Group		



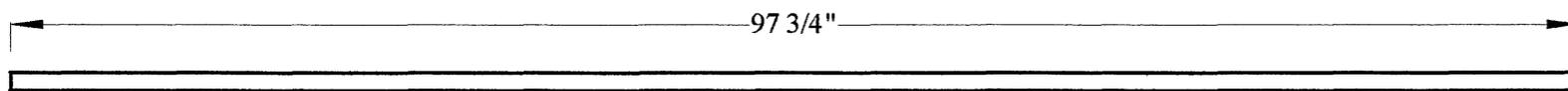
Foam Rib Locations



Main spar and rear  
spar bolt hole locations



Rear Strut



Front Strut

## AFFORDAPLANE

**Description:** Foam Rib Placement / Spar Hole Locations

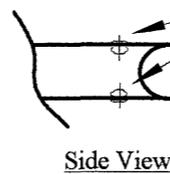
**Drawn By:** Dave Edwards

**Drawing#**

**Date:** Aug 24, 2000

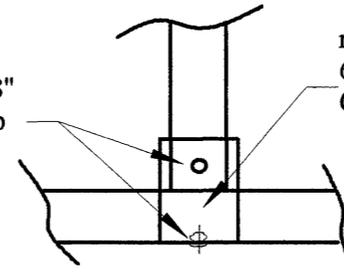
21

rib clip made from .020 alum sheet 1/2" wide 2" long.



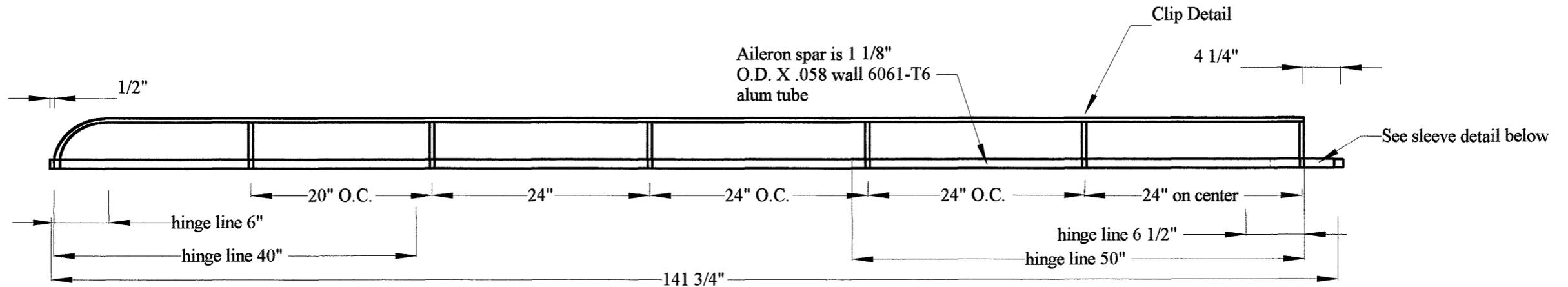
Side View

secure with 1/8" X 1/8" long stainless steel pop rivets.



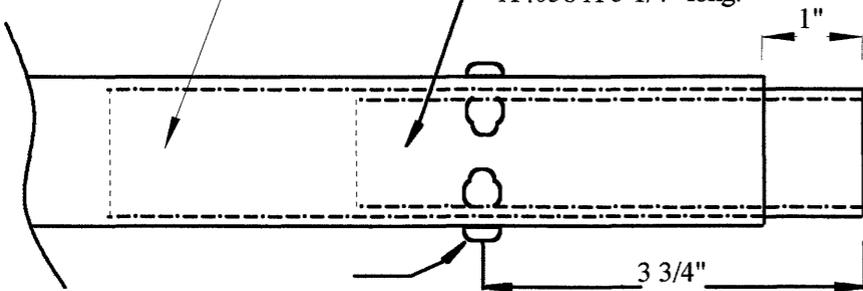
Top view

rib clip is made from .020 6061-T6 alum sheet. Clip is 1/2" wide X 2 1/2" long.



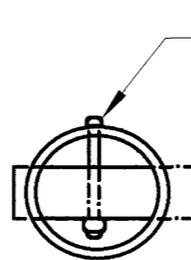
Sleeve is 1" O.D. X .058 wall X 8" long.

This sleeve is 7/8" O.D. X .058 X 5 1/4" long.



secure sleeves with two 3/16" X 1/4" stainless pop rivets

Sleeve Insert Detail (not to scale)



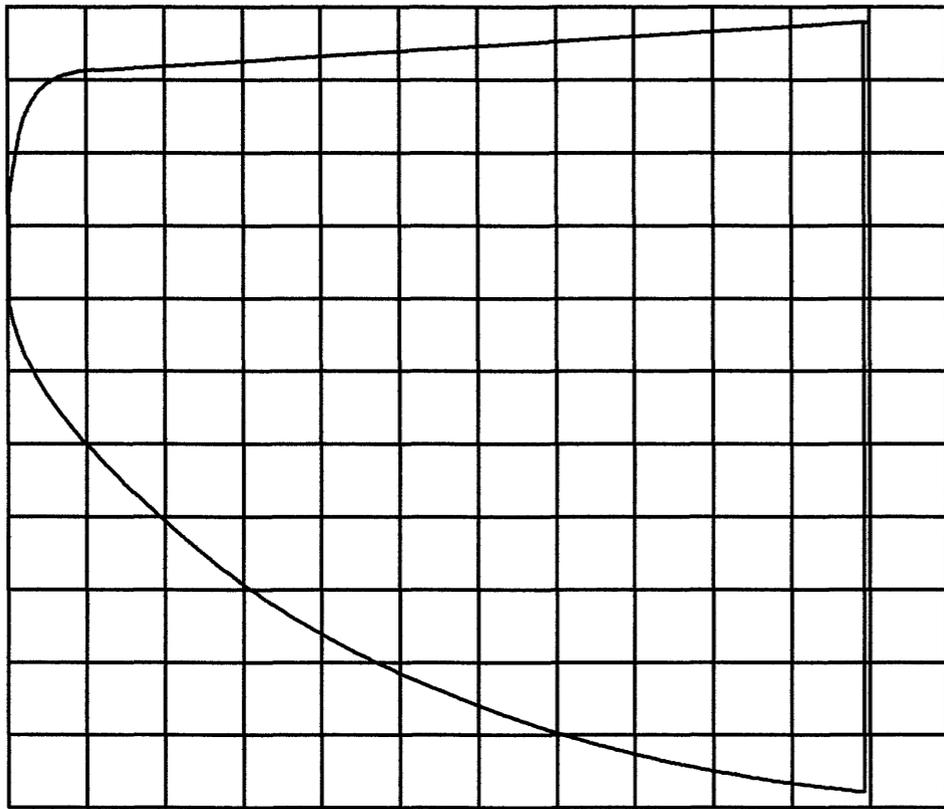
stainless steel pop rivet 1/8" X 1" long

drill 1/2" hole completely through main aileron spar to accept rib. sand extra off face to contour of spar.

spar tube

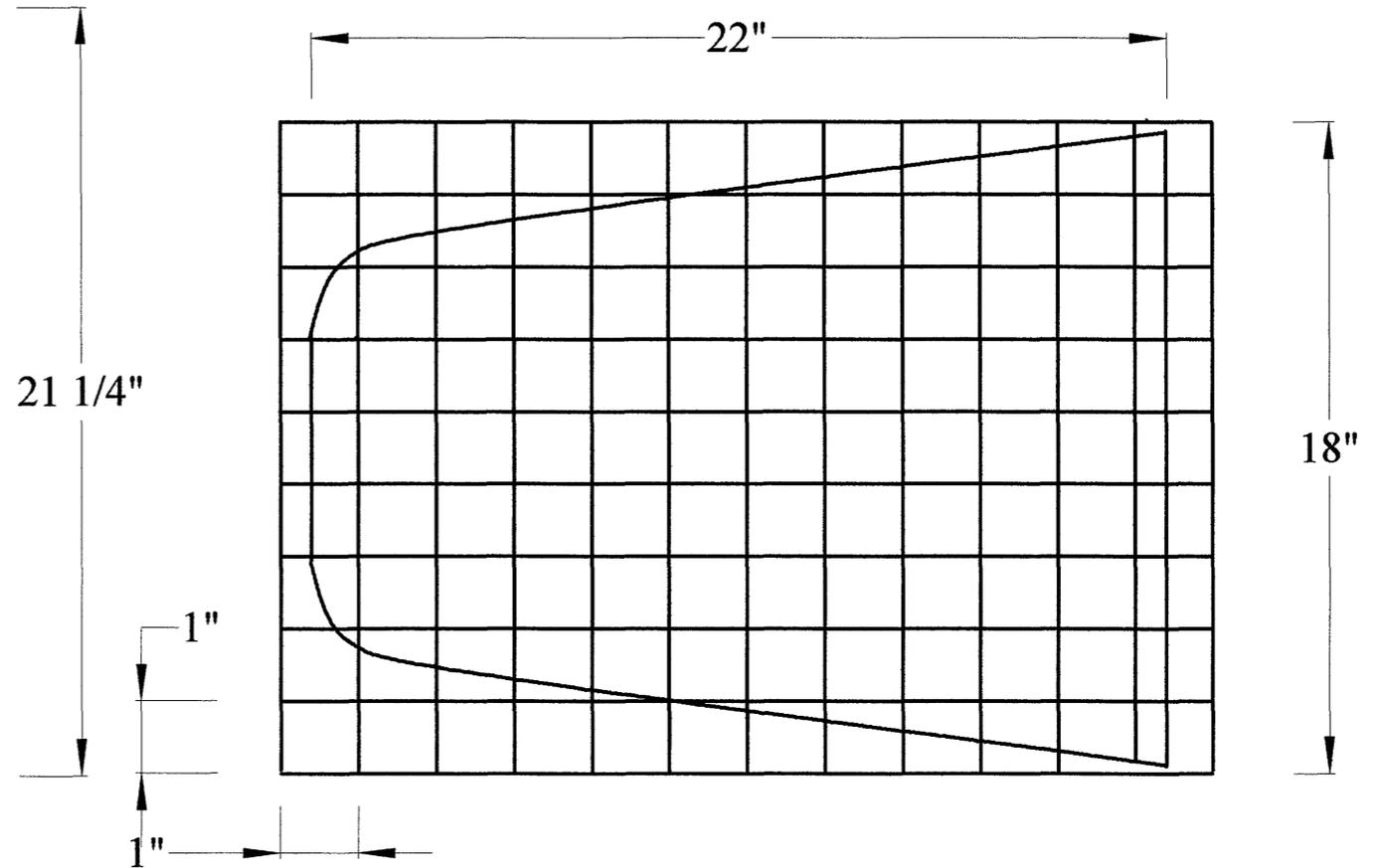
NOTE: Build one right and one left aileron.

<b>AFFORDAPLANE</b>	
Description: <b>Aileron</b>	
Drawn By: <u>Dave Edwards</u>	Drawing#
Date: Aug 24, 2000	<b>22</b>
Copyright 2001 by Dave Edwards Marketing Group	



22"

Side View

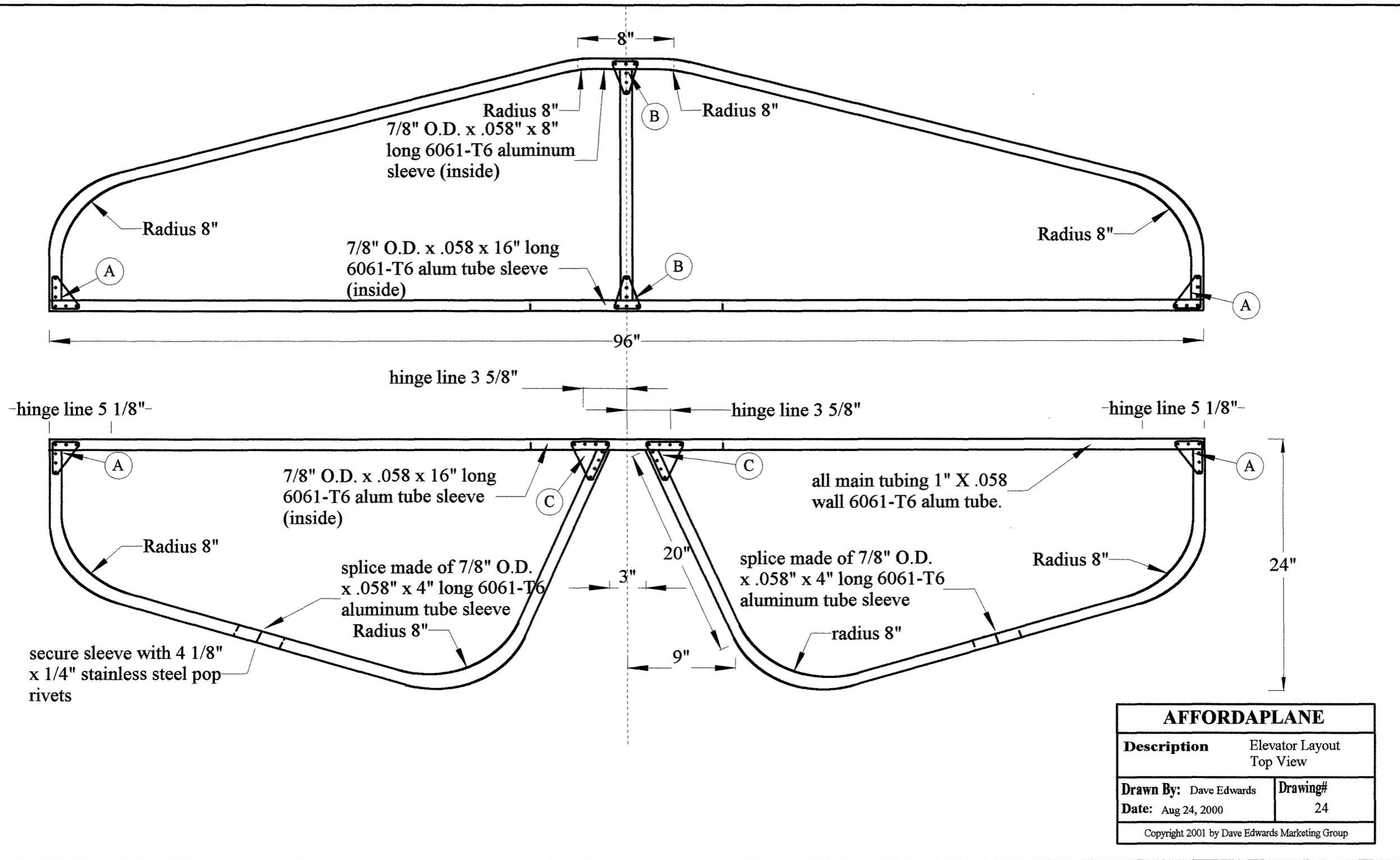


21 1/4"

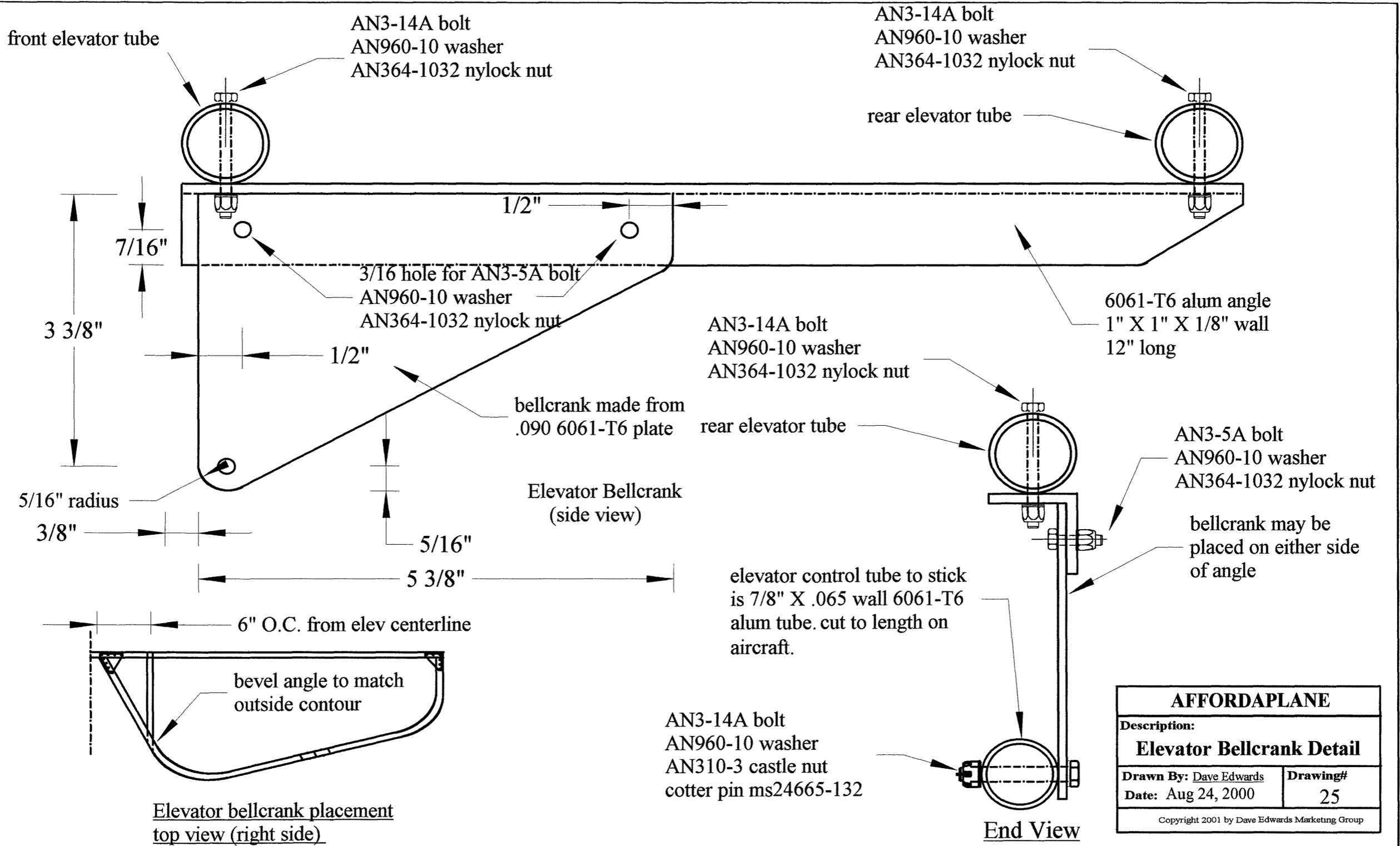
Top View

NOTE: Use three layers of medium weight boat cloth. Secure to cockpit angles with #30 pk screws spaced 1" apart.

<b>AFFORDAPLANE</b>	
<b>Description:</b> Cowling Top View / Side View	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	23
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



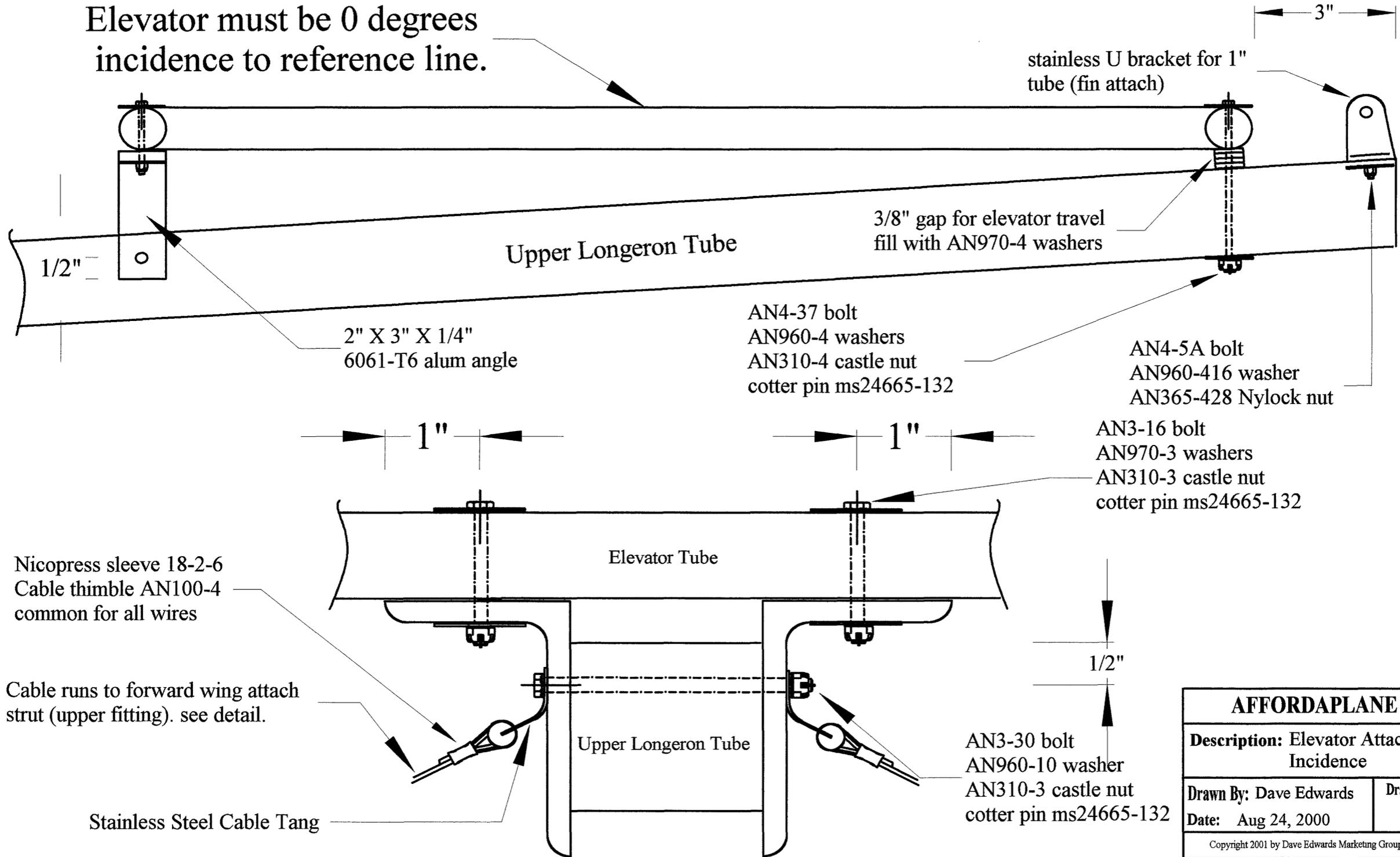
<b>AFFORDAPLANE</b>	
<b>Description</b>	Elevator Layout Top View
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	24
Copyright 2001 by Dave Edwards Marketing Group	



Elevator bellcrank placement top view (right side)

<b>AFFORDAPLANE</b>	
Description:	
<b>Elevator Bellcrank Detail</b>	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	25
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	

Elevator must be 0 degrees incidence to reference line.



<b>AFFORDAPLANE</b>	
<b>Description:</b> Elevator Attach / Incidence	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	26
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	

Bolt AN4-16A  
AN960-416 washer  
AN365-428 nylock nut

1/2"  
stainless fitting bolts  
to upper longeron  
with AN4-25 bolt  
AN960-416 washer  
AN365-428 Nylock nut

F1

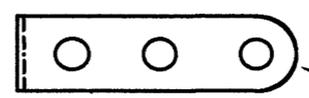
1" X .058 wall 6061-T6  
alum tube (common)

1/2" X .058 wall 6061-T6  
alum tube. Secure to 1" tube  
with five 1/8" pop rivets.

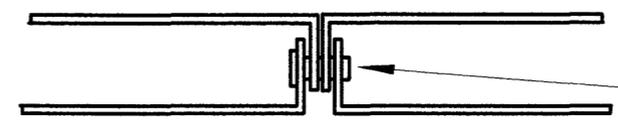
A

F2

All hinges made this way.  
secure to tubing with 3/16"  
stainless steel pop rivets.  
Top View.



stainless steel hinges  
from Lockwood Aviation  
bent, 3/16" hole



MS20393-2C11 clevis pin  
cotter pin ms24665-132

30 1/4"

4 1/2"

40"

Radius 6"

4"

11"

2 1/4"

1/2"

4"

6 1/2"

1/4"

hinge line 3"

hinge line 2"

hinge line 17"

34 3/4"

**AFFORDAPLANE**

**Description:**

Fin

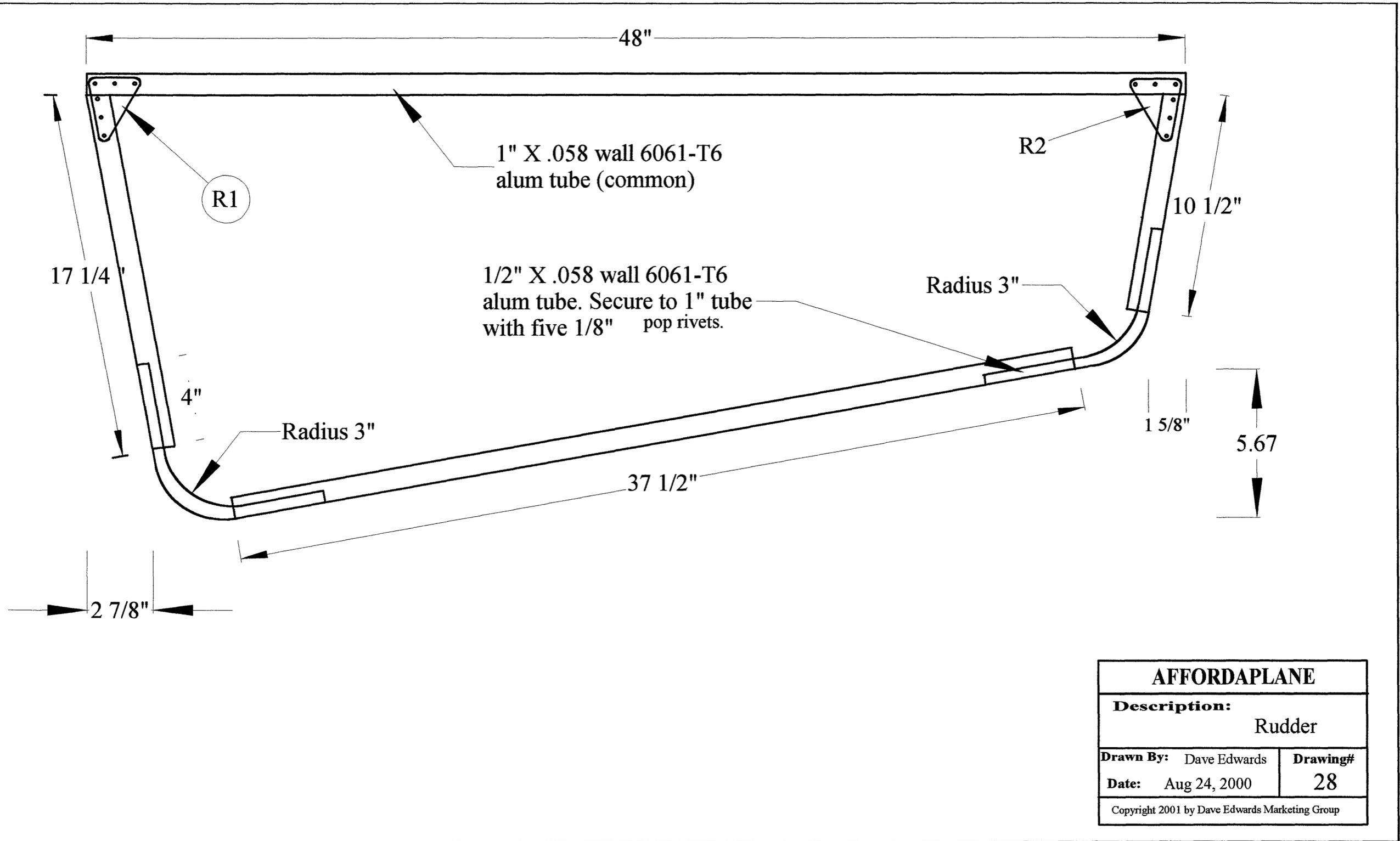
Drawn By: Dave Edwards

Drawing#

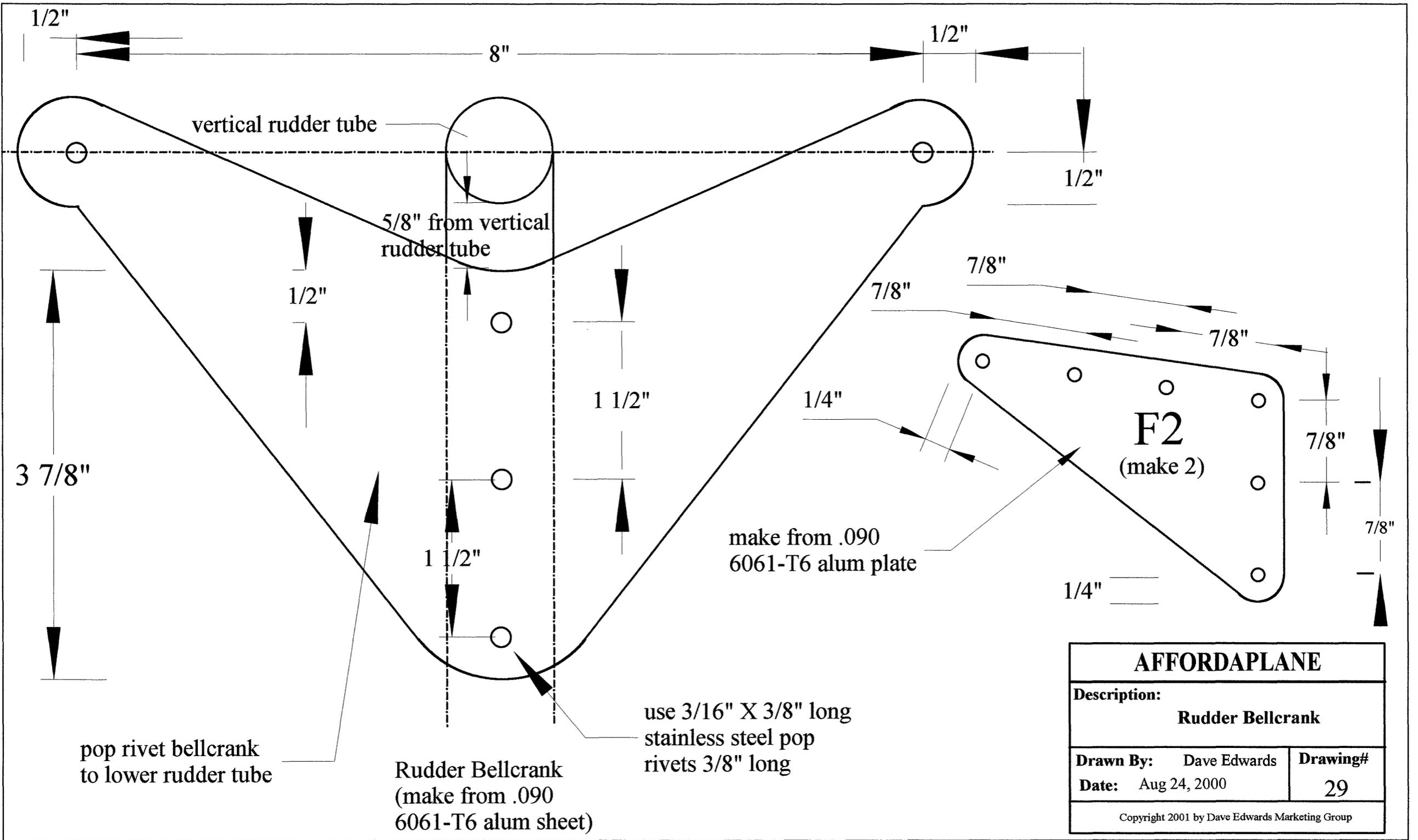
Date: Aug 24, 2000

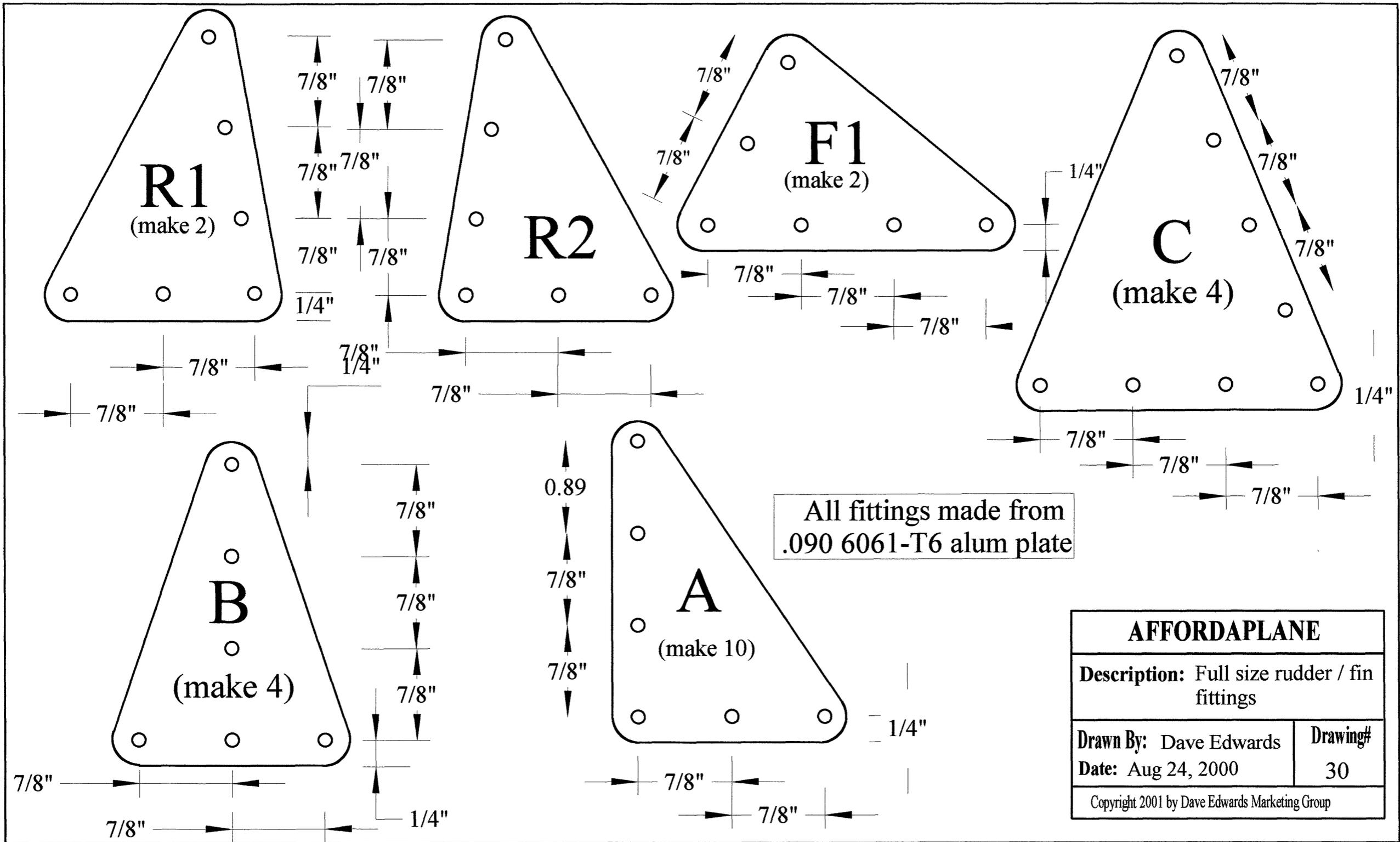
27

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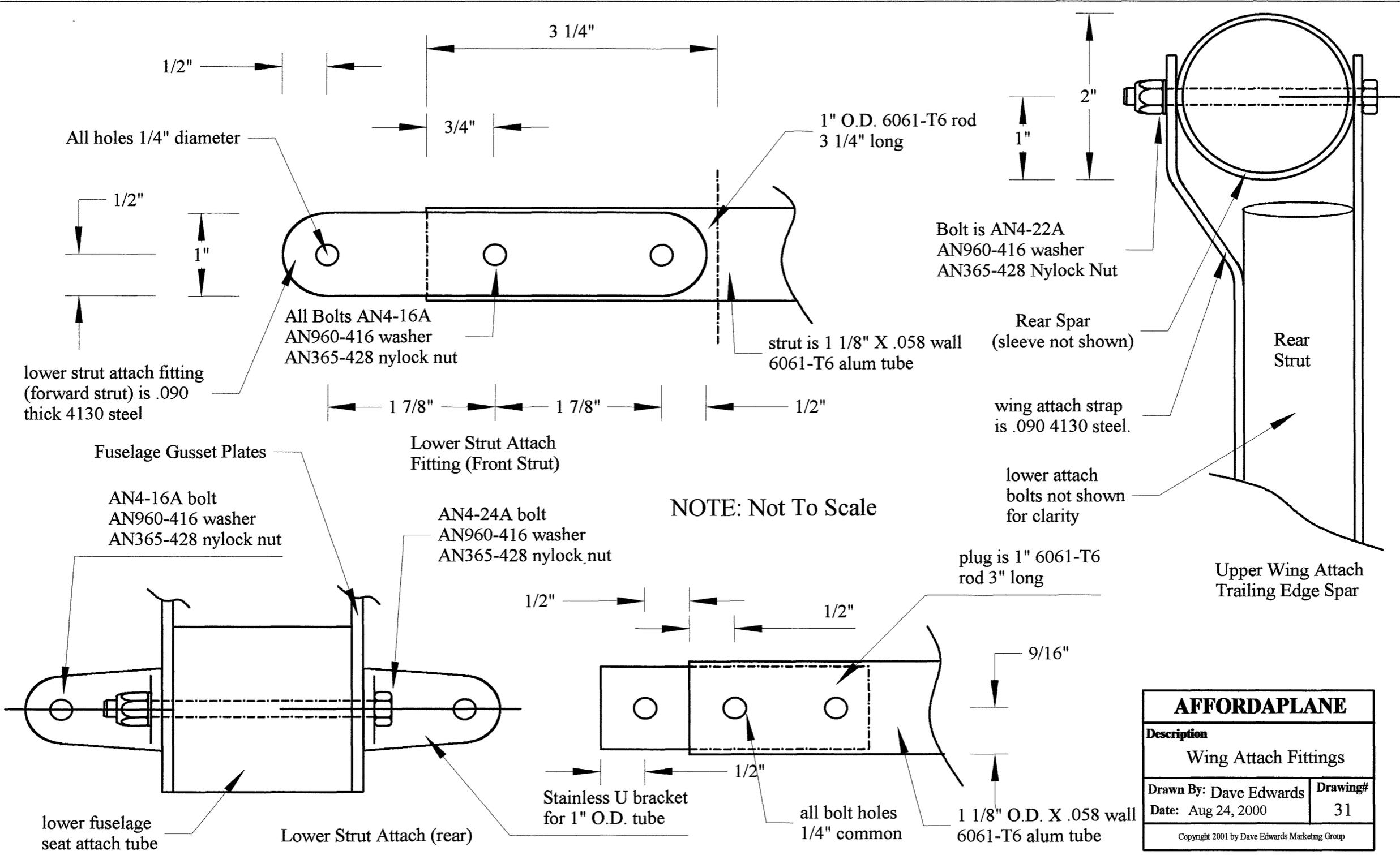


<b>AFFORDAPLANE</b>	
<b>Description:</b> Rudder	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	<b>28</b>
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	

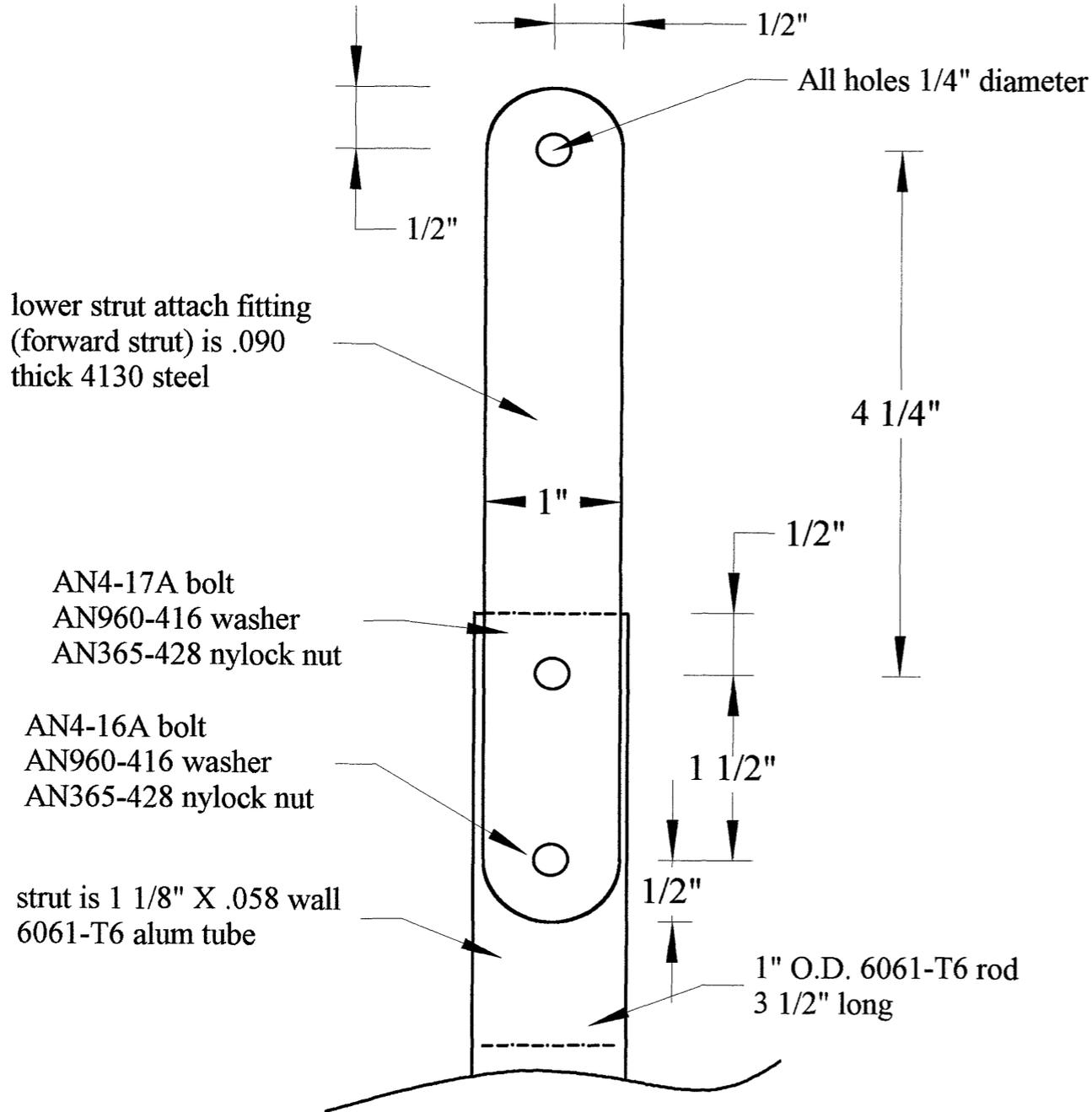




<b>AFFORDAPLANE</b>	
<b>Description:</b> Full size rudder / fin fittings	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	30
Copyright 2001 by Dave Edwards Marketing Group	

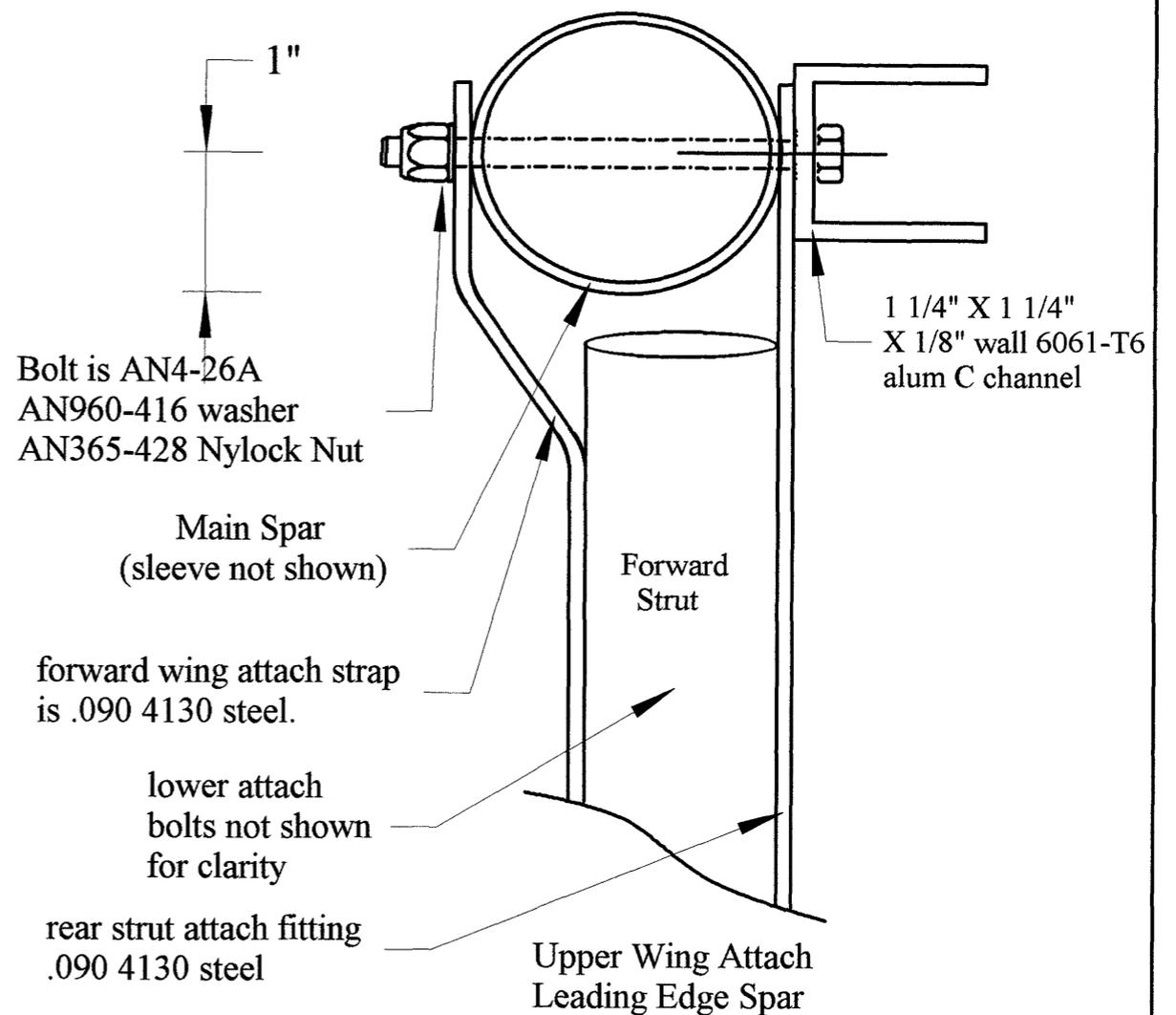


<b>AFFORDAPLANE</b>	
Description Wing Attach Fittings	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	31
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



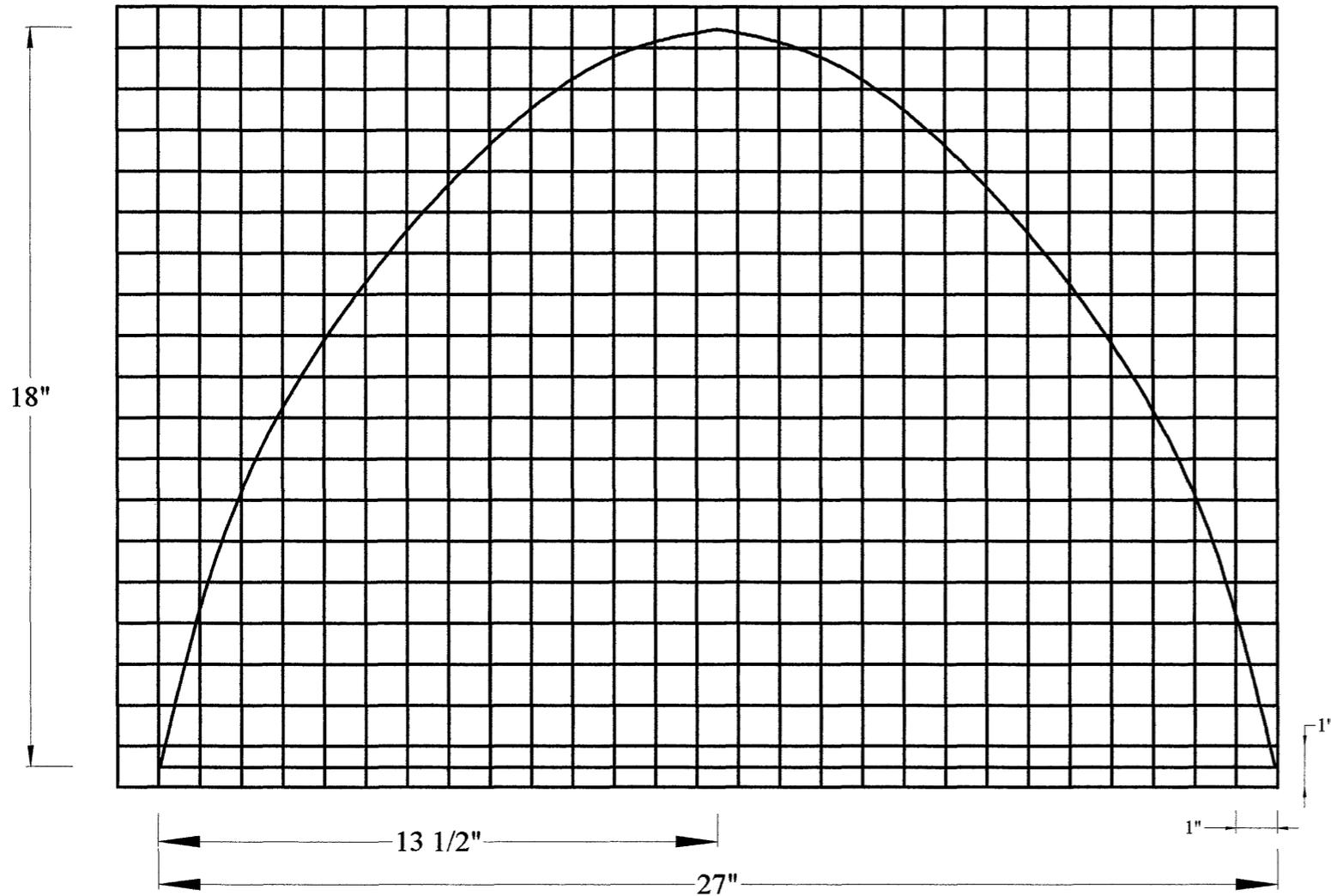
Upper Strut Attach  
(rear strut)

NOTE: Not to scale

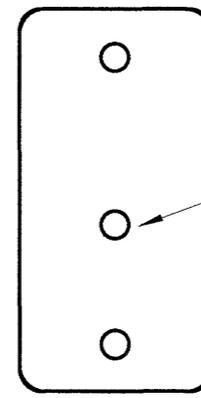
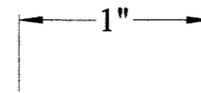


NOTE: Make front strap longer to allow for bend. Back drill through rear strap and strut to get hole locations for forward strap. Once drilled remove and clean up strap to allow 1/2" edge grain margin for lower bolt.

AFFORDAPLANE	
Description Wing Attach Fittings	
Drawn By: Dave Edwards	Drawing# 32
Date: Aug 24, 2000	
Copyright 2001 by Dave Edwards Marketing Group	



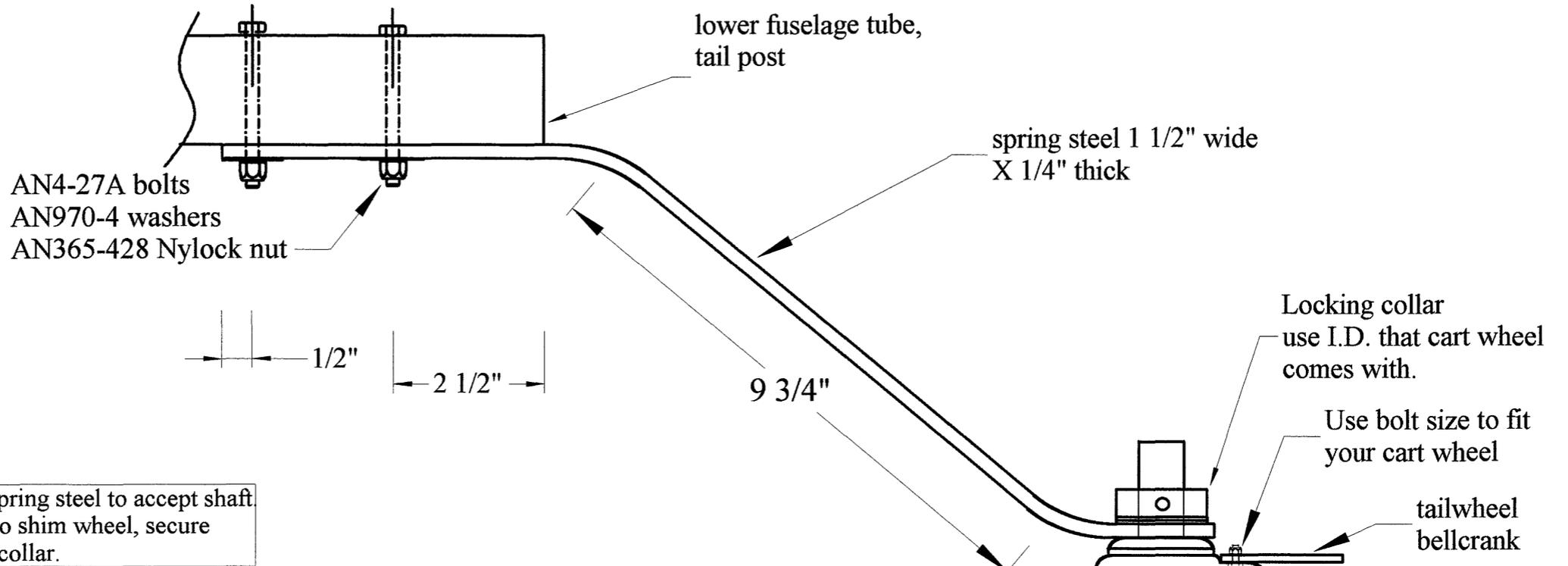
Windscreen made from 1/8" acrylic sheet  
(high impact acrylic)



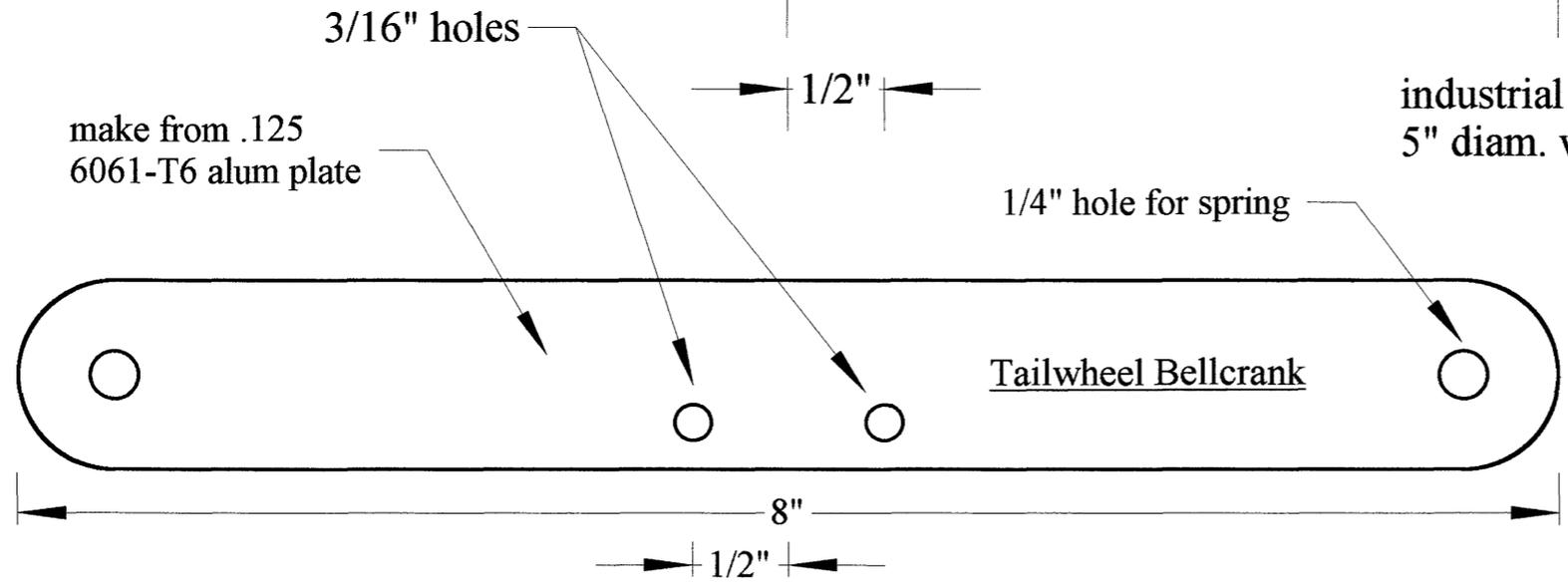
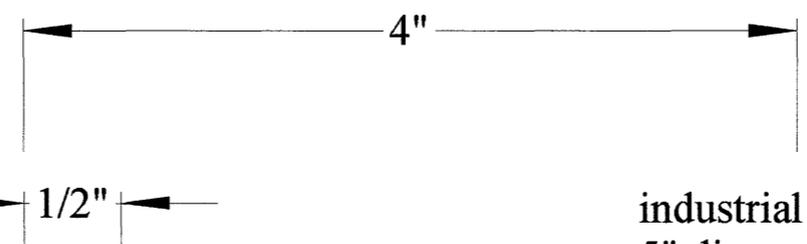
all holes 1/8"  
pop rivet windscreen to clips  
with 1/8" pop rivets

windscreen clips (make 3)  
out of 1/8" medium hard  
alum sheet

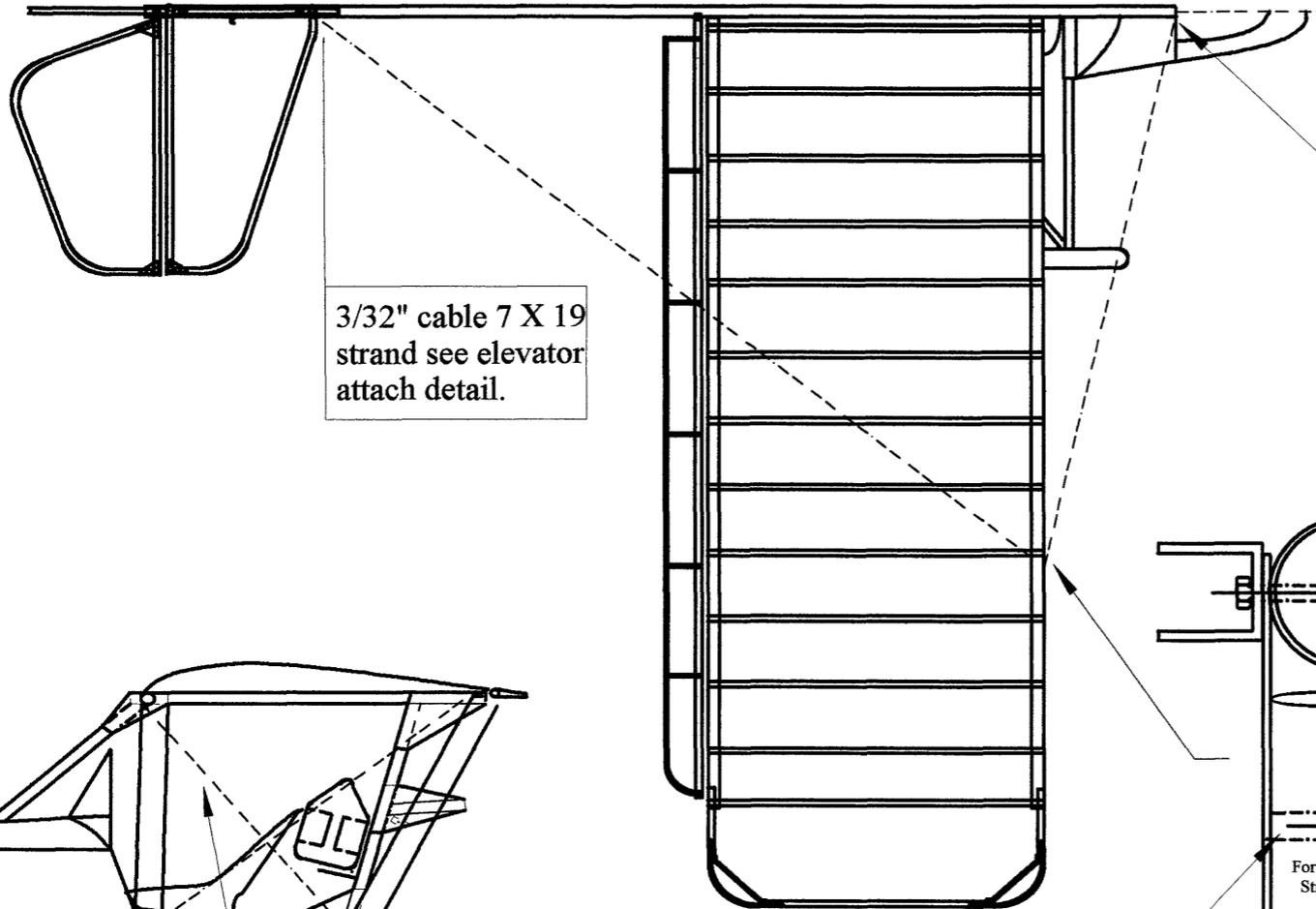
<b>AFFORDAPLANE</b>	
<b>Description:</b> Windscreen	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	<b>33</b>
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



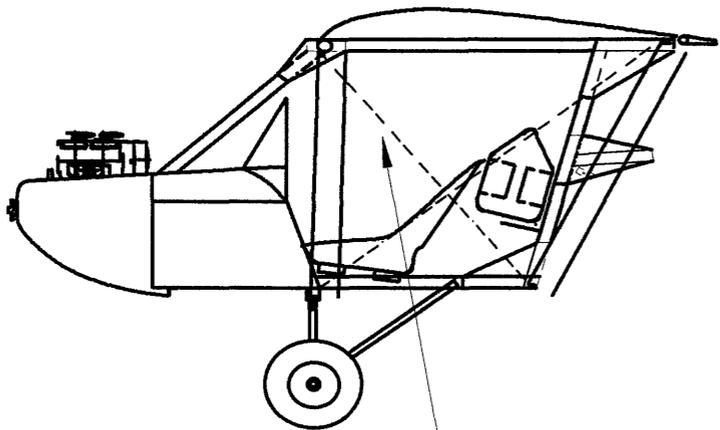
NOTE: drill spring steel to accept shaft.  
Use washers to shim wheel, secure with locking collar.



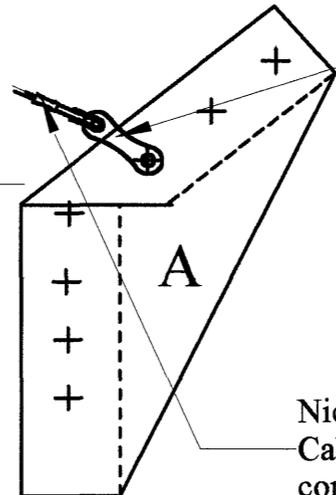
<b>AFFORDAPLANE</b>	
Description: <b>Tailwheel Detail</b>	
Drawn By: <u>Dave Edwards</u>	Drawing#
Date: Aug 24, 2000	34
Copyright 2001 by Dave Edwards Marketing Group	



3/32" cable 7 X 19 strand see elevator attach detail.

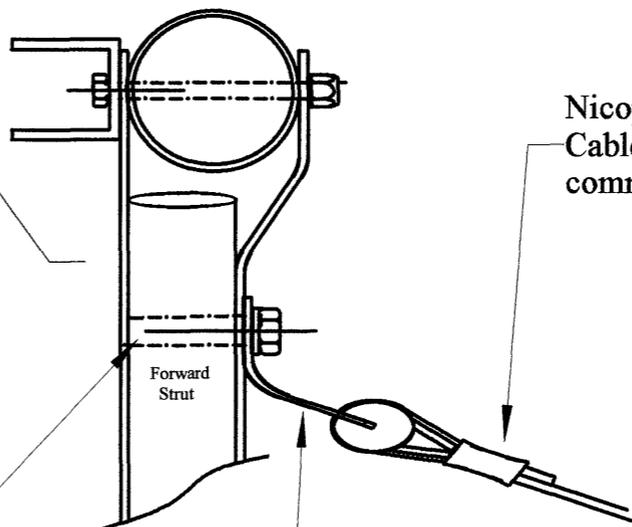


Cross bay wires 3/32" 7 X 19 strand Use same assembly as detail on right side of page. Tangs attach to most upper bolts and most lower bolts.



Stainless Steel Cable tangs from Lockwood Aviation 3/16" holes

Nicopress sleeve 18-2-6 Cable thimble AN100-4 common for all wires



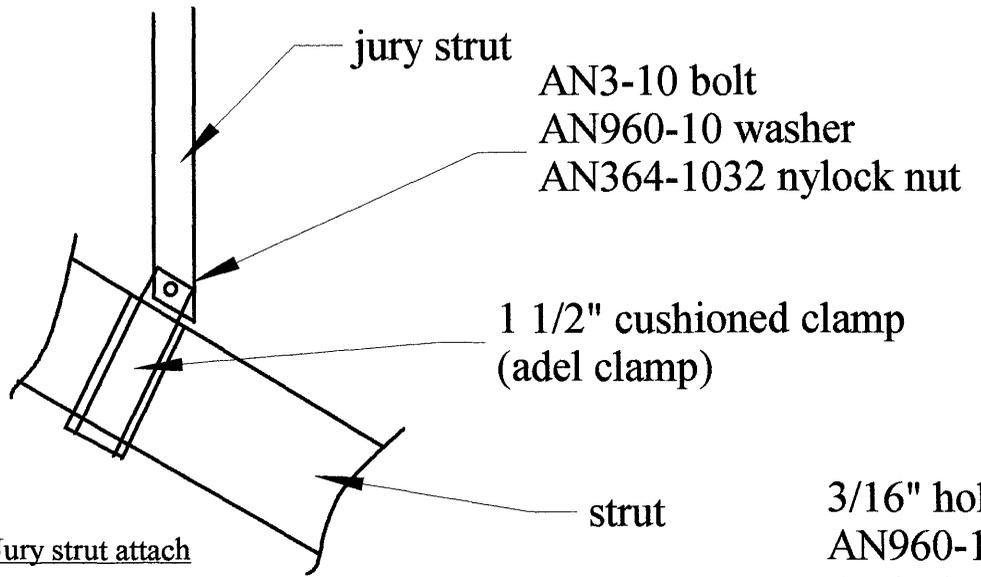
Nicopress sleeve 18-2-6 Cable thimble AN100-4 common for all wires

upper bolt

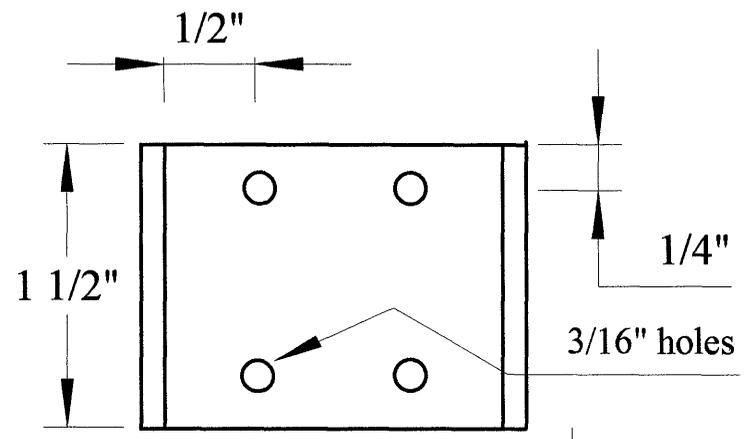
Upper Wing Attach Leading Edge Spar

Stainless Steel Cable Tang

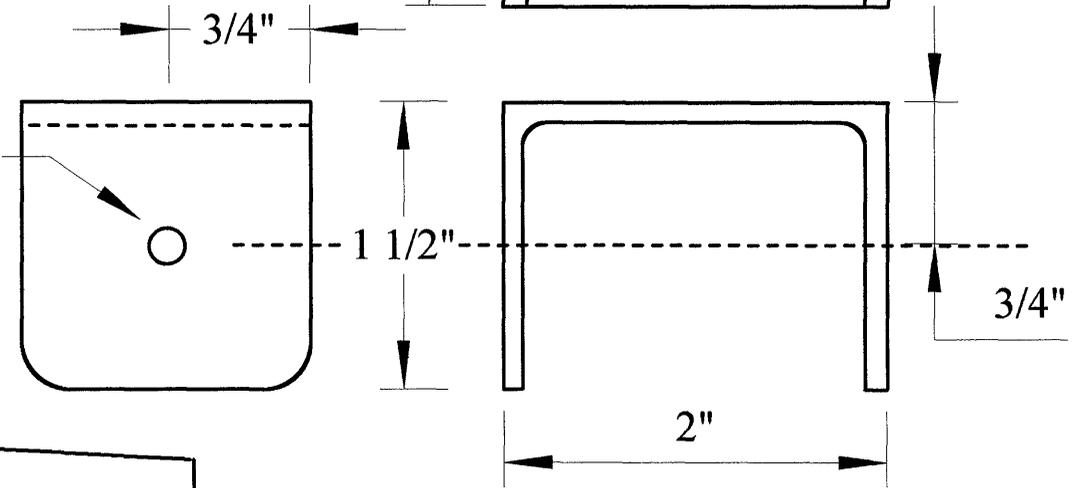
<b>Affordaplane</b>	
Description: <b>Rigging</b>	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	35
Copyright 2001 by Dave Edwards Marketing Group	



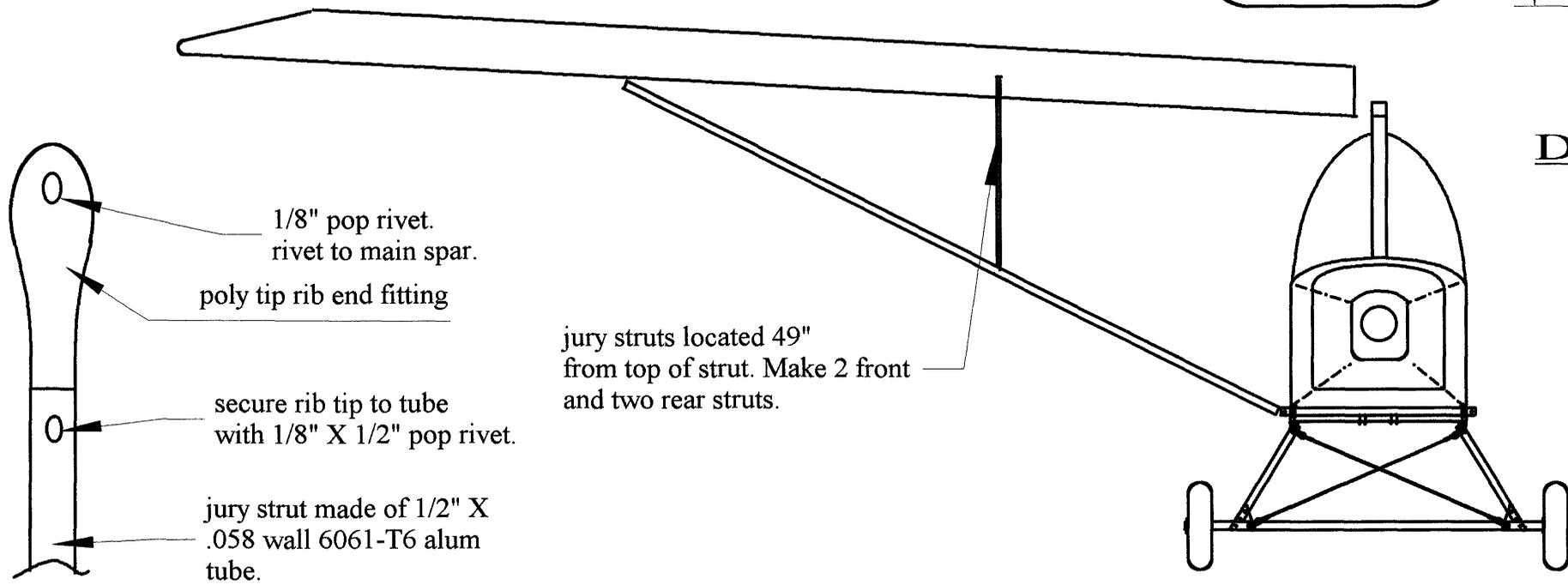
Saw out of 2" .125 Wall  
6063- T351 Square Tubing



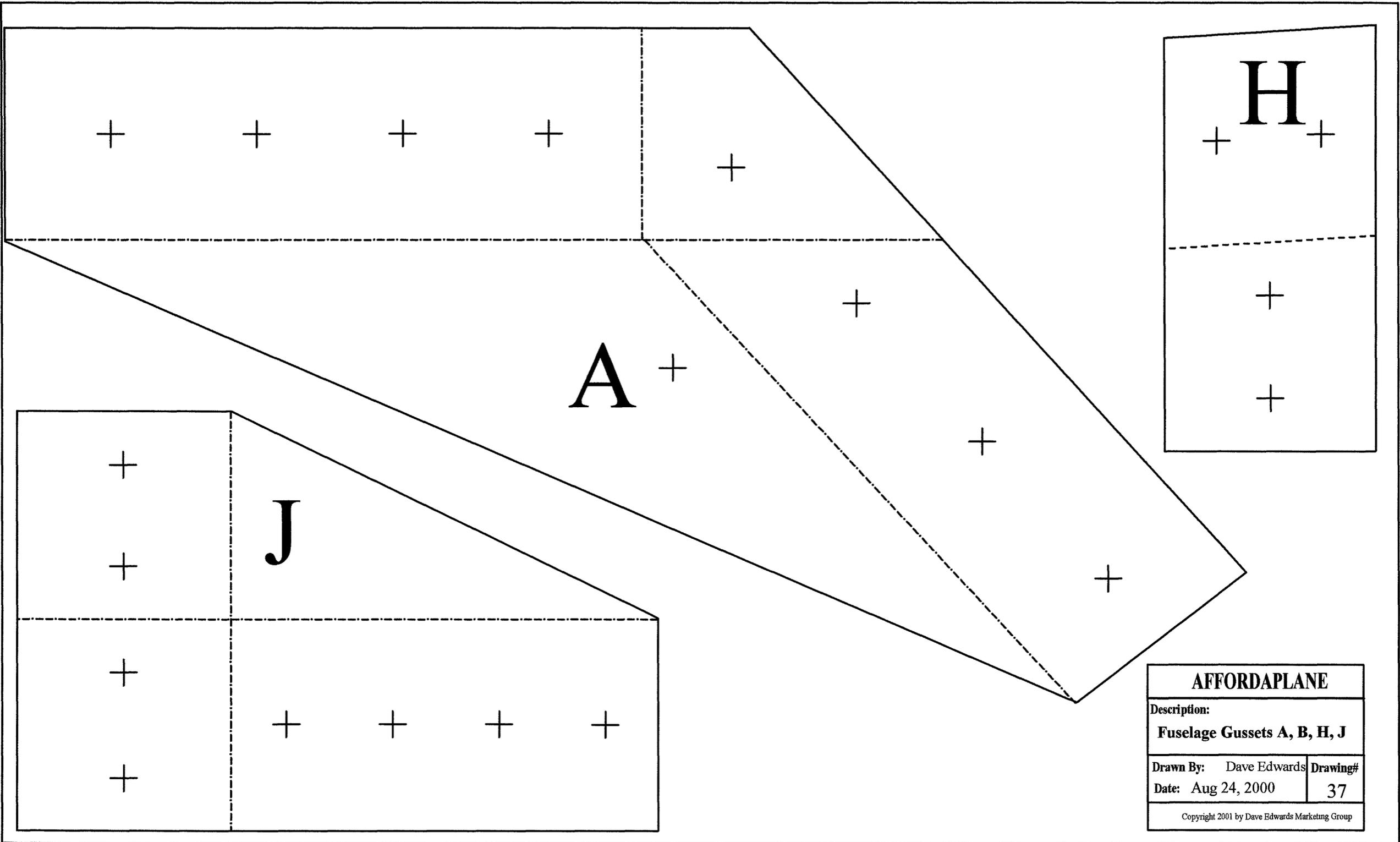
3/16" hole for AN3-20A bolt  
AN960-10 washer  
AN364-1032 nylock nut



**Diagonal Support Bracket**  
**4 Required**



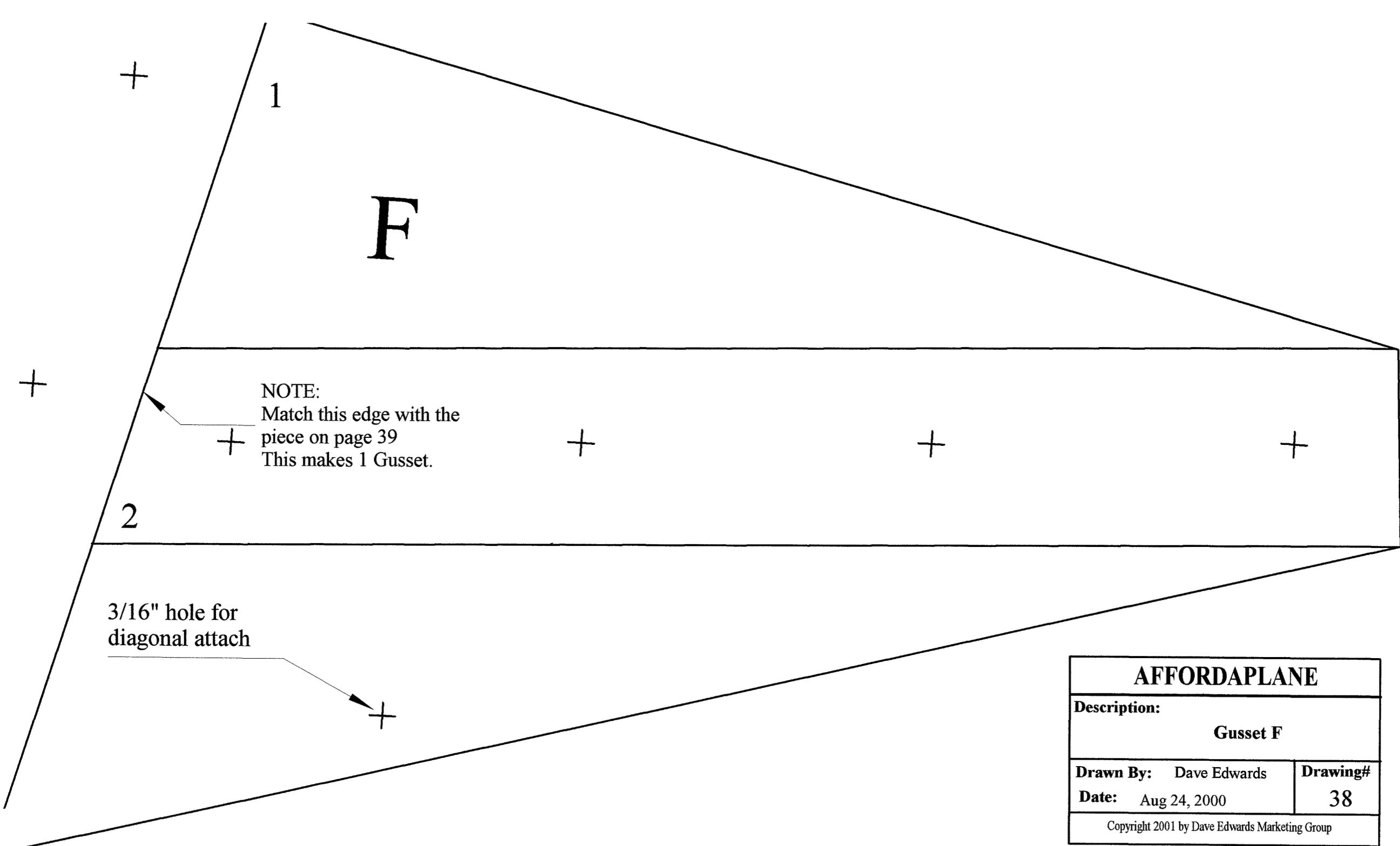
<b>AFFORDAPLANE</b>	
<b>Description:</b> Diagonal brackets / jury struts	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	36
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



**AFFORDAPLANE**

**Description:**  
**Fuselage Gussets A, B, H, J**

<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	37



+

1

**F**

+

+

NOTE:  
Match this edge with the  
piece on page 39  
This makes 1 Gusset.

+

+

+

2

3/16" hole for  
diagonal attach

+

**AFFORDAPLANE**

**Description:**

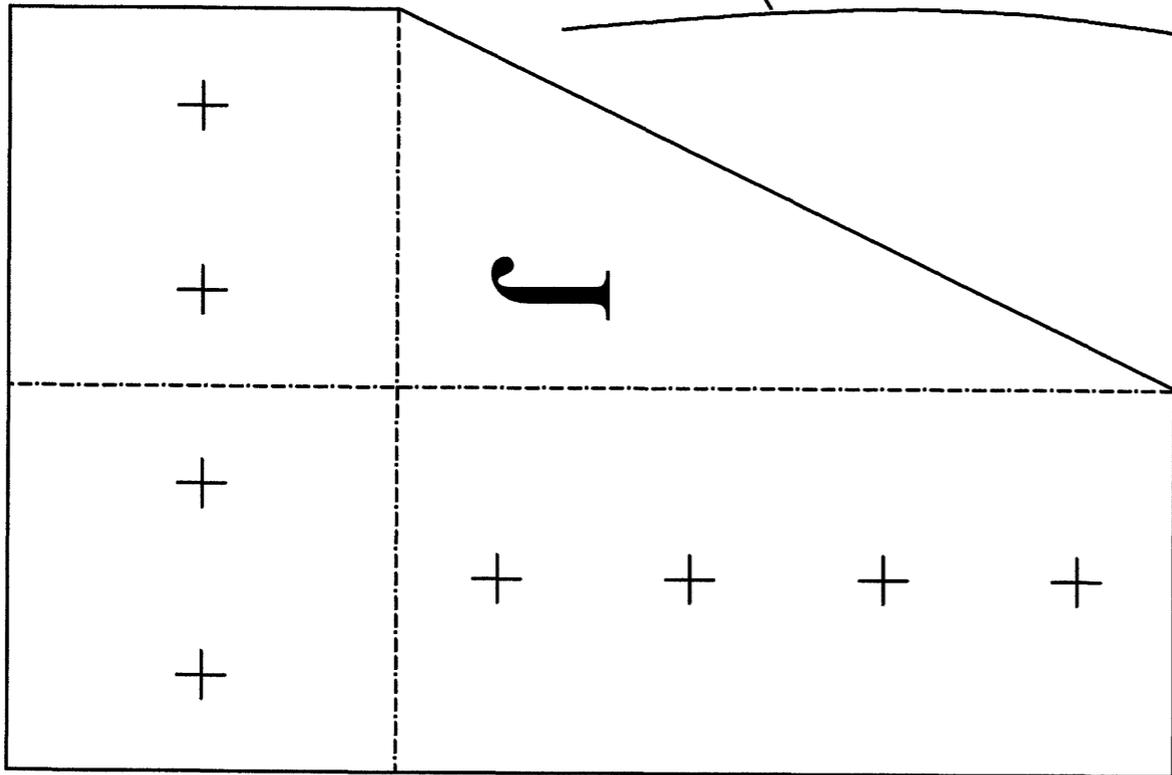
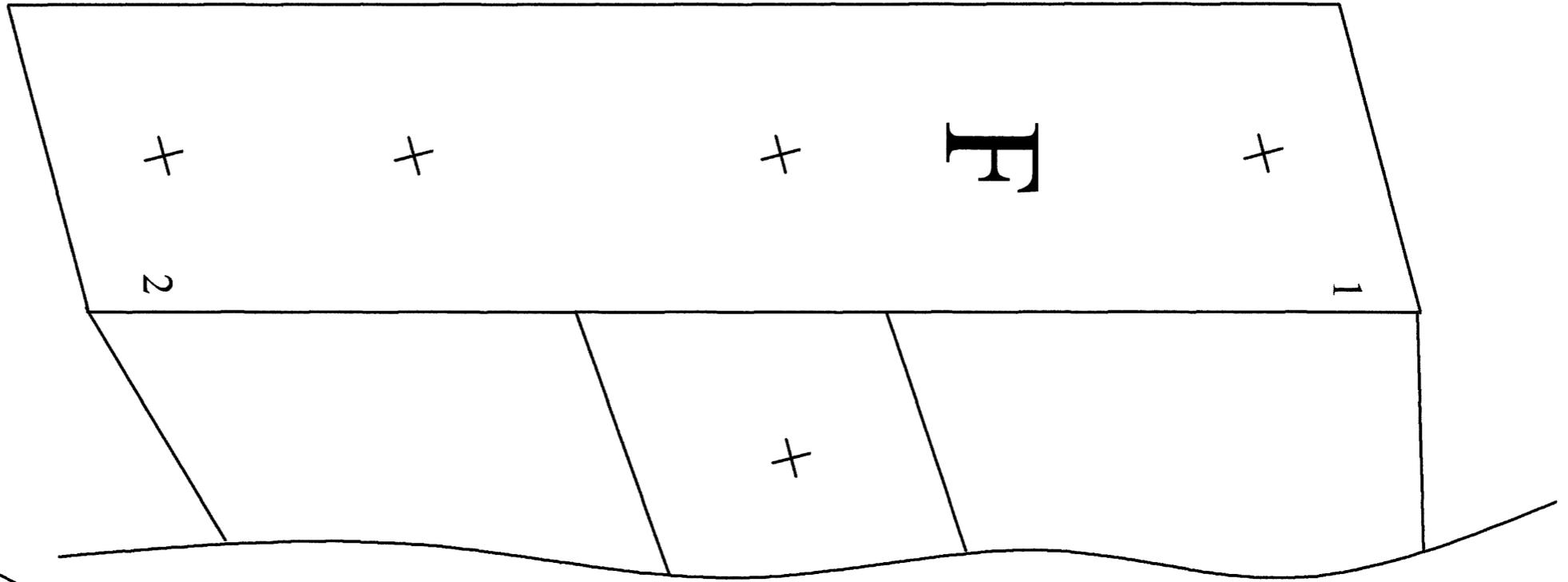
**Gusset F**

**Drawn By:** Dave Edwards

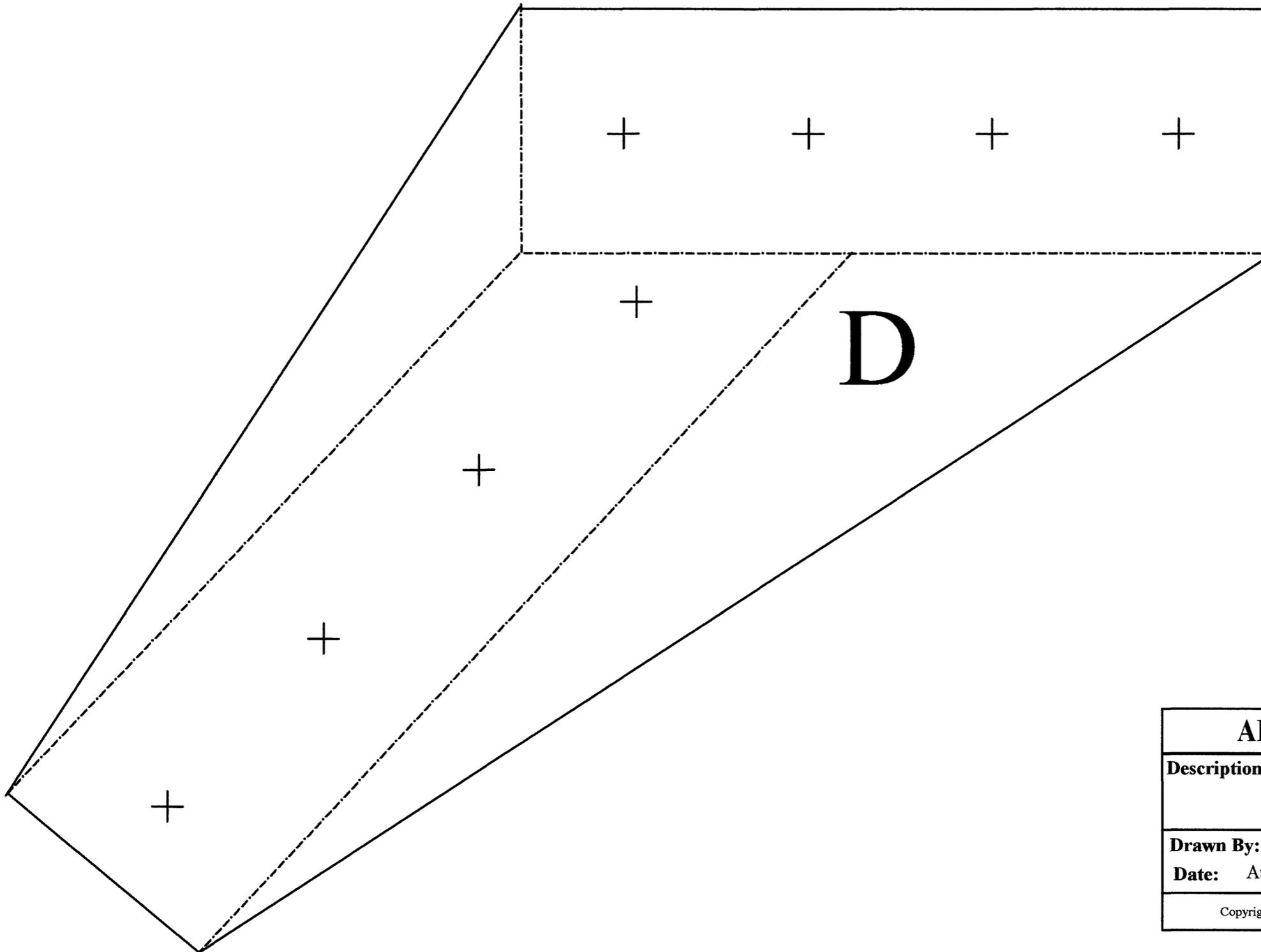
**Drawing#**

**Date:** Aug 24, 2000

**38**



<b>AFFORDAPLANE</b>	
<b>Description:</b> Gusset F, J	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	39
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**AFFORDAPLANE**

**Description:**

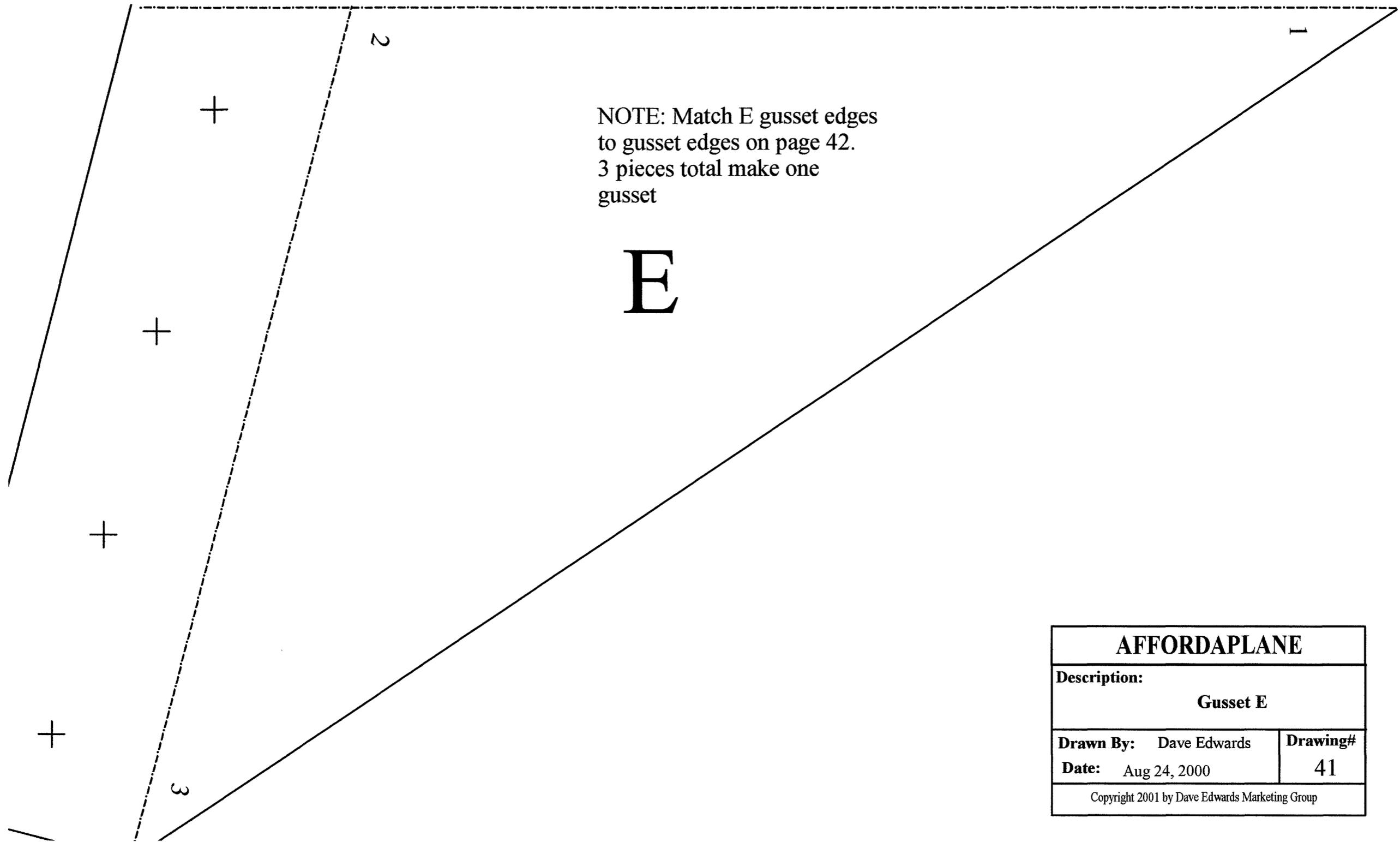
**Gusset D**

**Drawn By:** Dave Edwards

**Drawing#**

**Date:** Aug 24, 2000

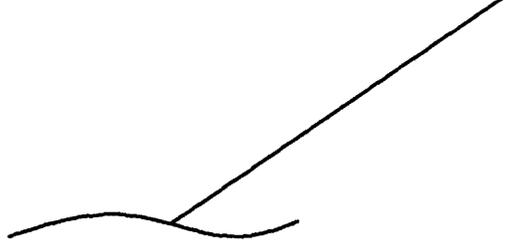
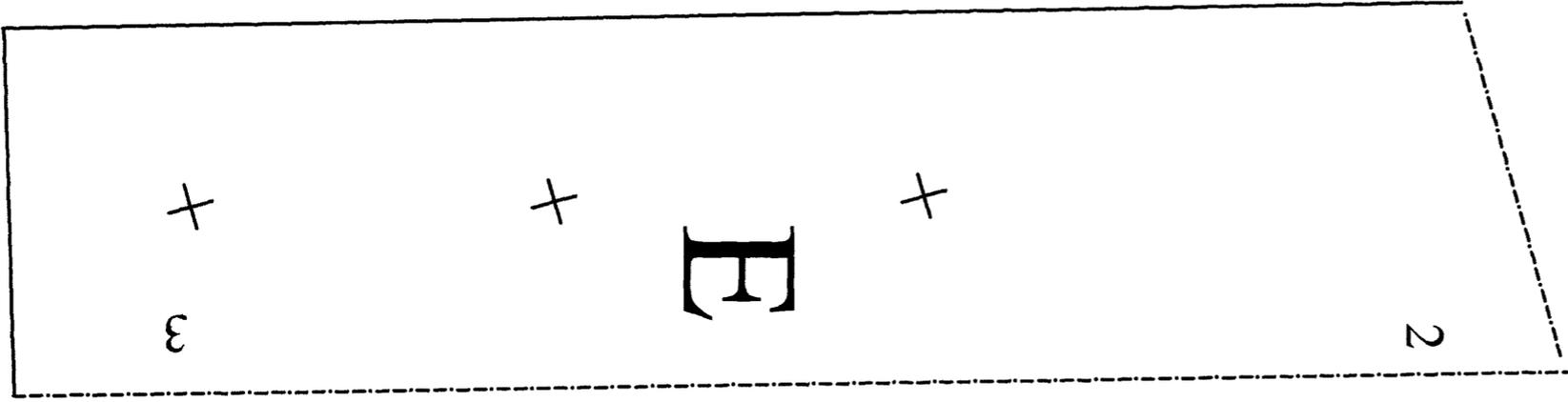
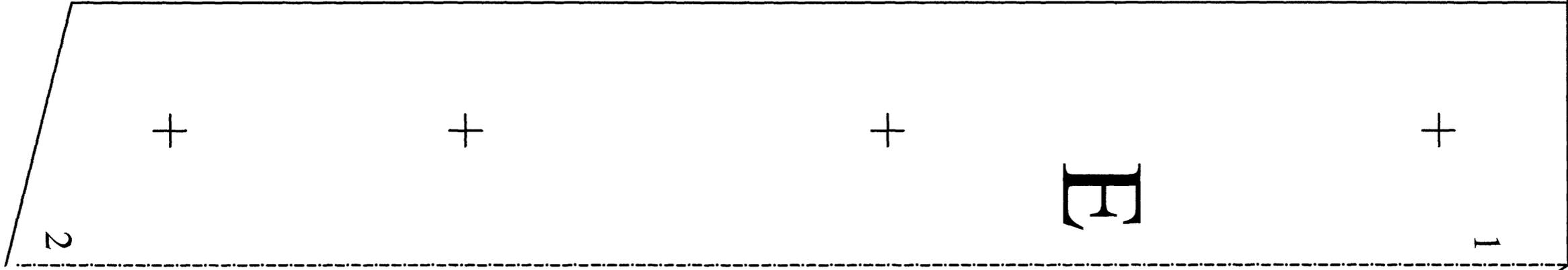
**40**



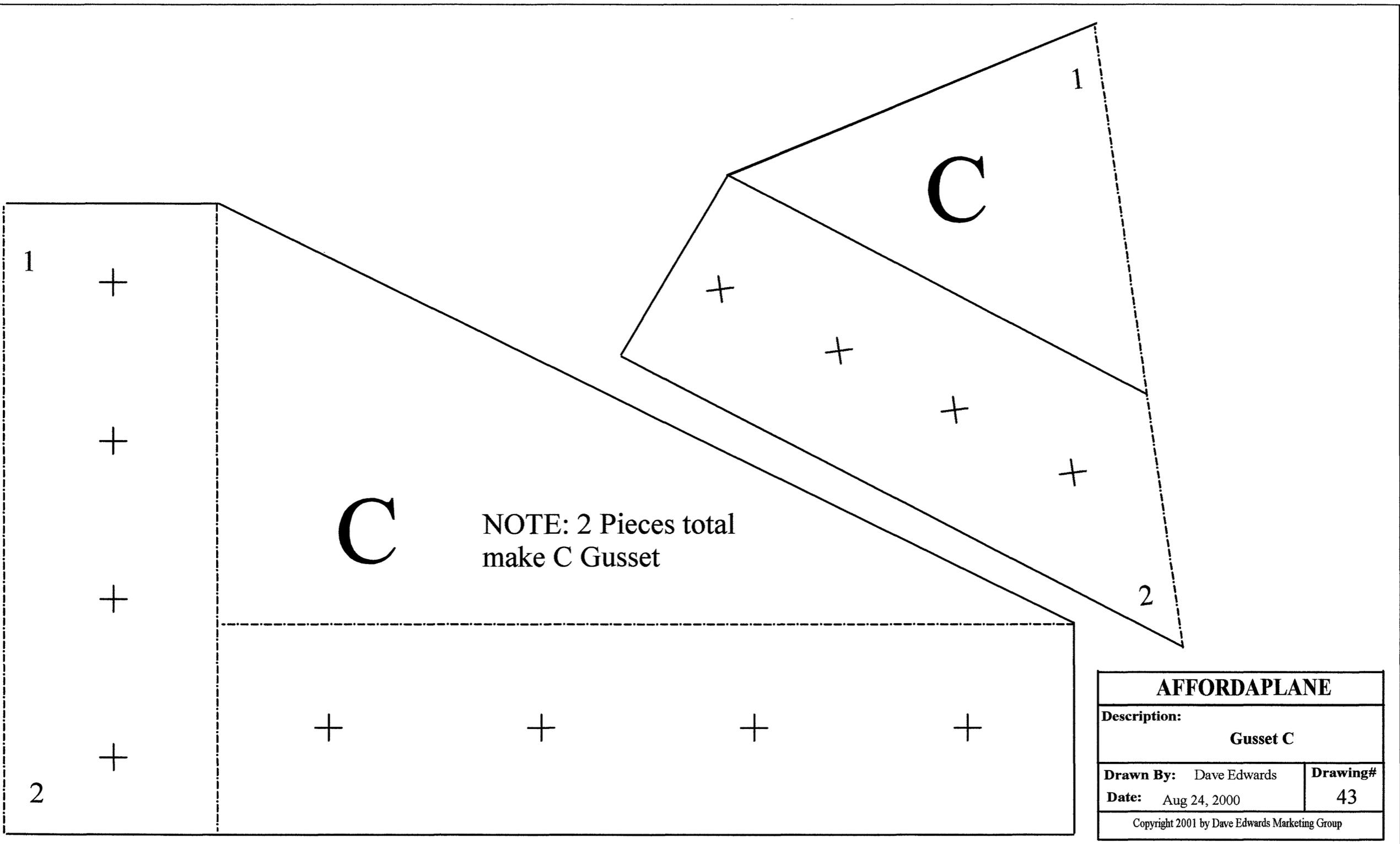
NOTE: Match E gusset edges  
to gusset edges on page 42.  
3 pieces total make one  
gusset

**E**

<b>AFFORDAPLANE</b>	
<b>Description:</b>	
<b>Gusset E</b>	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	<b>41</b>
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<b>AFFORDAPLANE</b>	
<b>Description:</b>	
<b>Gusset E</b>	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b>
<b>Date:</b> Aug 24, 2000	42
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



# AFFORDAPLANE

**Description:**

**Gusset G**

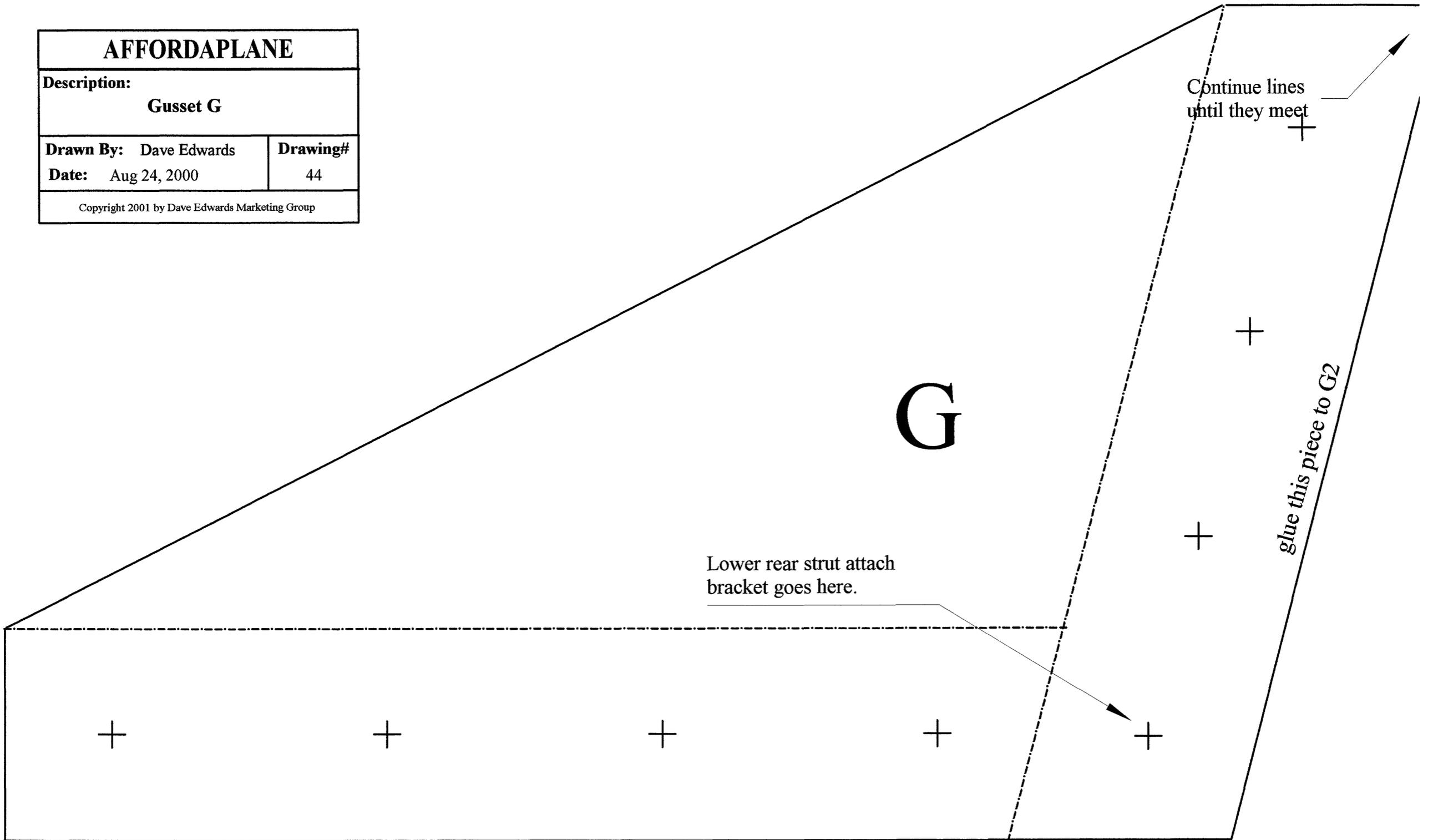
**Drawn By:** Dave Edwards

**Drawing#**

**Date:** Aug 24, 2000

44

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*glue this edge to G*

G2

+

+

+

+

**AFFORDAPLANE**

**Description:**

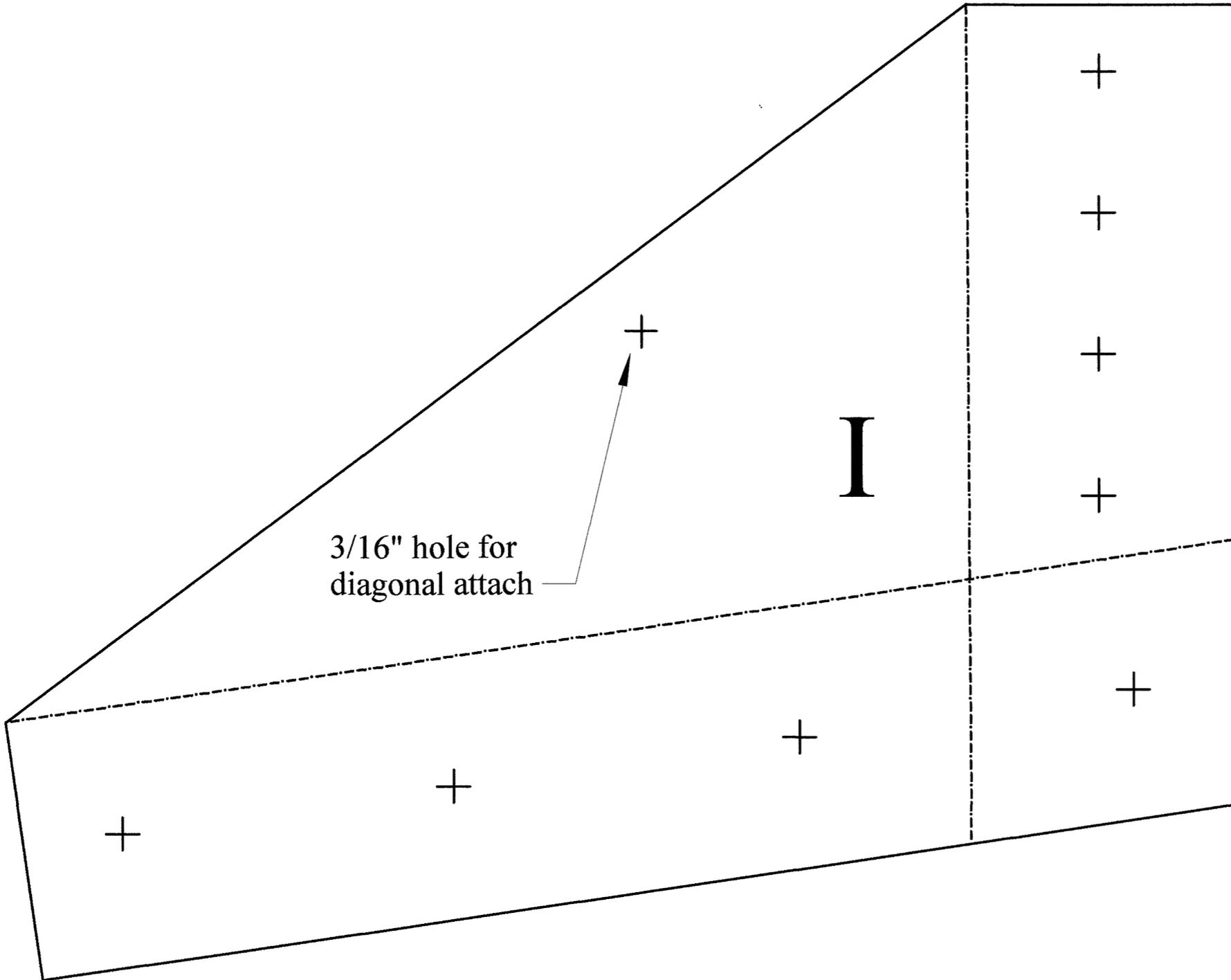
**Gusset G2**

**Drawn By:** Dave Edwards

**Drawing#**

**Date:** Aug 24, 2000

45



**AFFORDAPLANE**

**Description:**

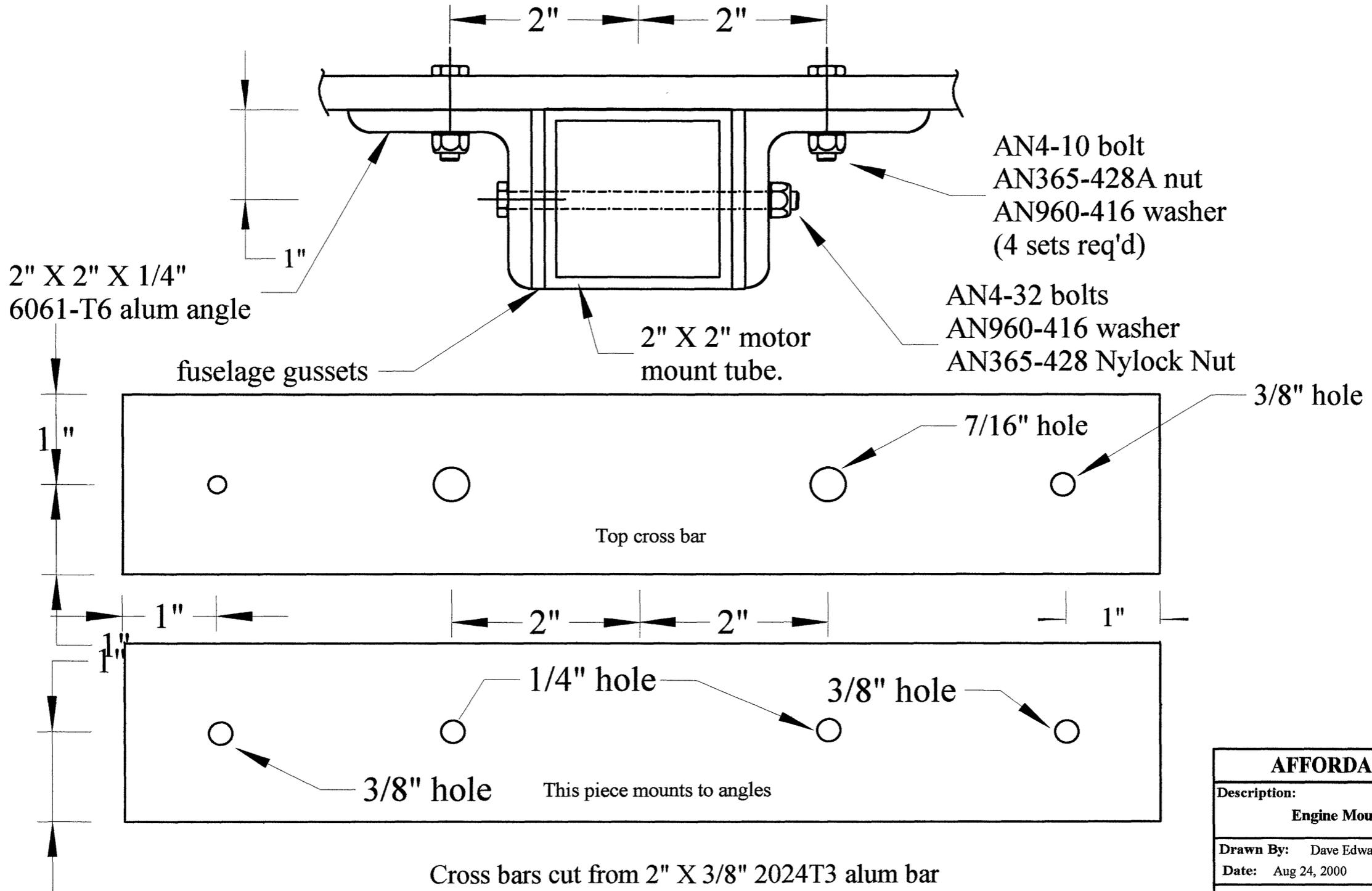
**Gusset I**

**Drawn By:** Dave Edwards

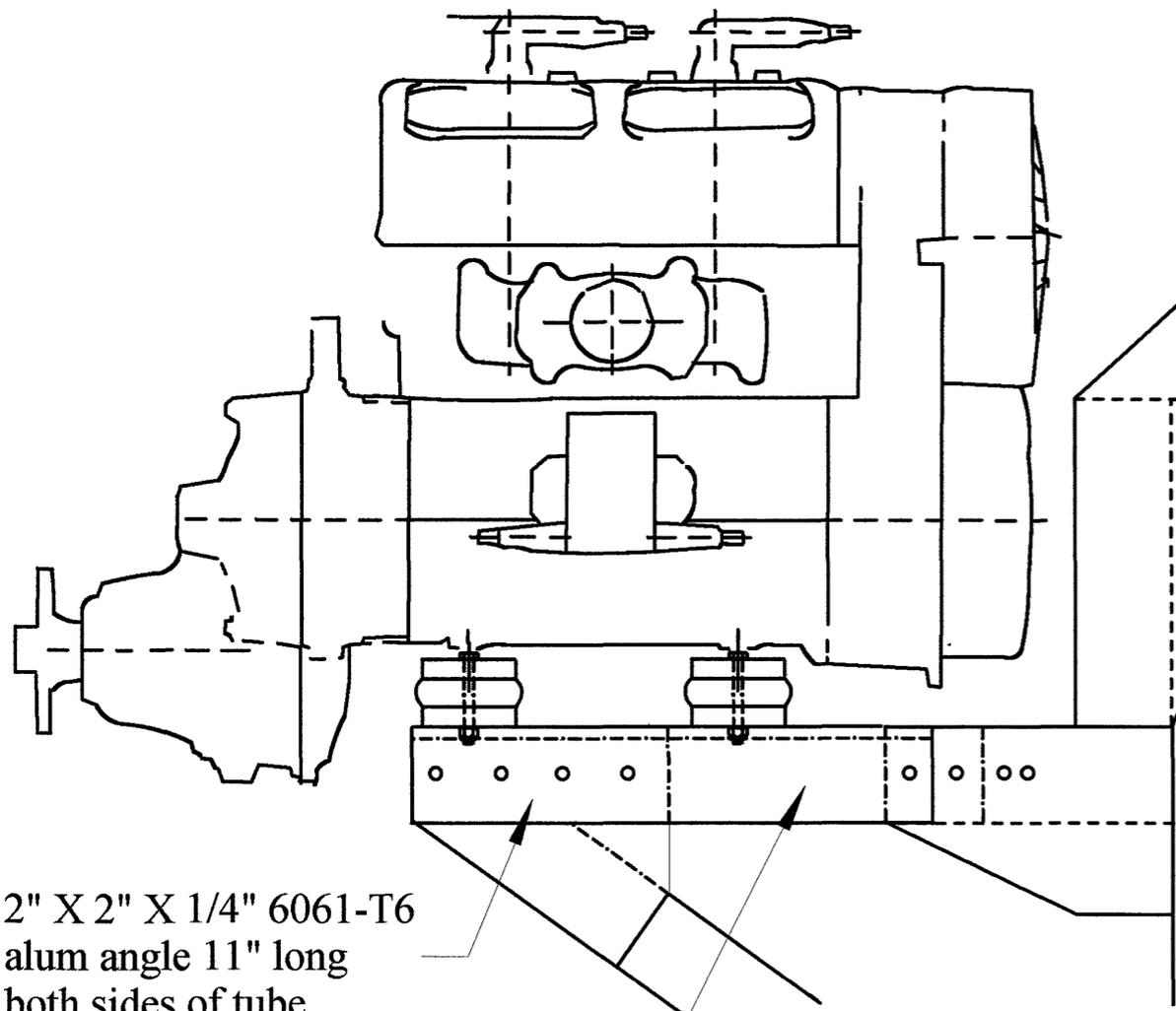
**Drawing#**

**Date:** Aug 24, 2000

**46**



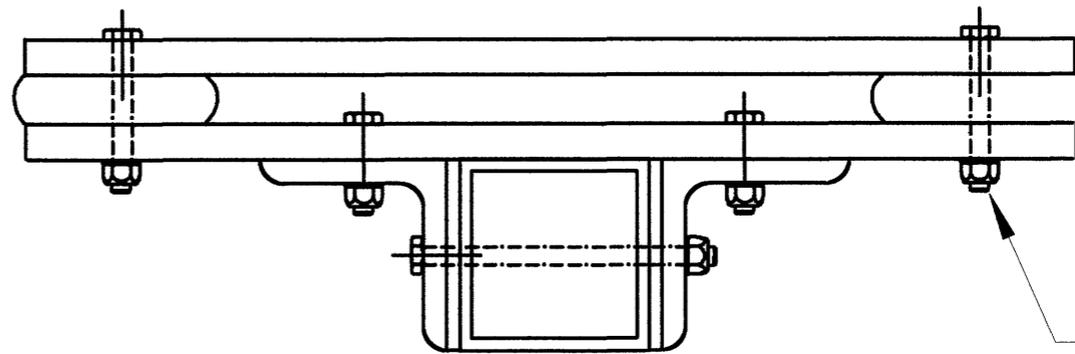
<b>AFFORDAPLANE</b>	
Description:	
<b>Engine Mount Details</b>	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	47
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	



2" X 2" X 1/4" 6061-T6  
alum angle 11" long  
both sides of tube.

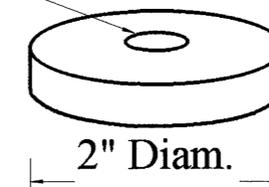
wood support inside tube  
12" long

Rotax 447 mount shown



AN4-10 bolt  
AN365-428A nut  
AN960-416 washers  
(4 sets req'd)

3/8" hole



1/2"

2" Diam.

Rubber Bushing

NOTE: Clamp angles in place  
and back drill through existing holes  
for correct placement.

## Affordaplane

**Description:**

Motor Mount Details

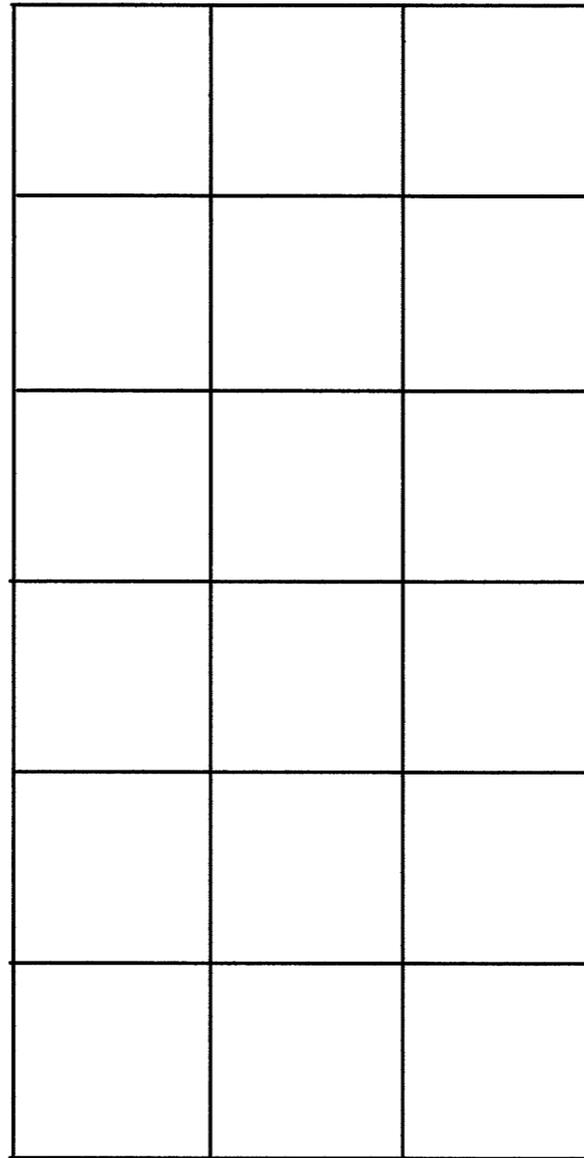
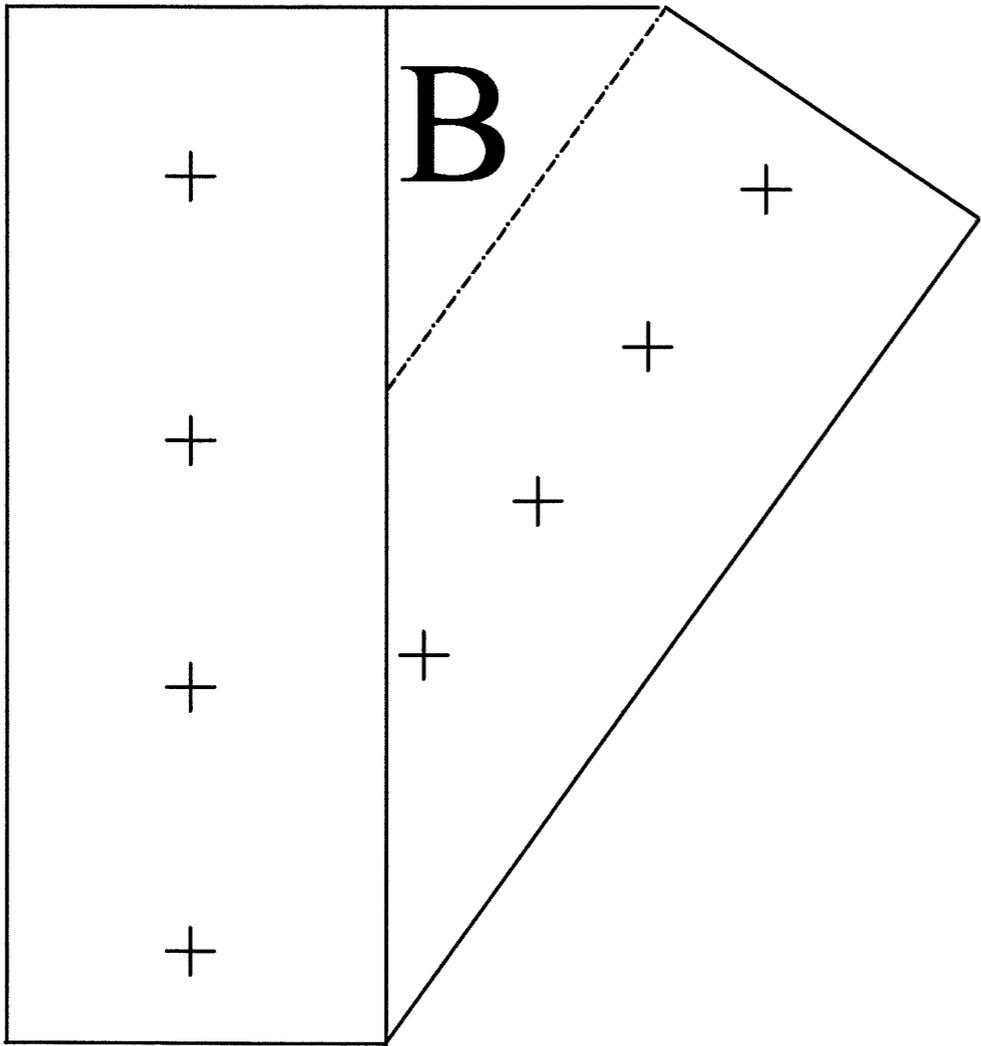
Drawn By: Dave Edwards

Drawing#

Date: Aug 24, 2000

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↑  
1"  
↓

← 1" →

Use this page to see if your printer is printing the right size.

<b>AFFORDAPLANE</b>	
<b>Description:</b> CALIBRATION PAGE Gusset G	
<b>Drawn By:</b> Dave Edwards	<b>Drawing#</b> 1 A
<b>Date:</b> Aug 24, 2000	
<small>Copyright 2001 by Dave Edwards Marketing Group</small>	