

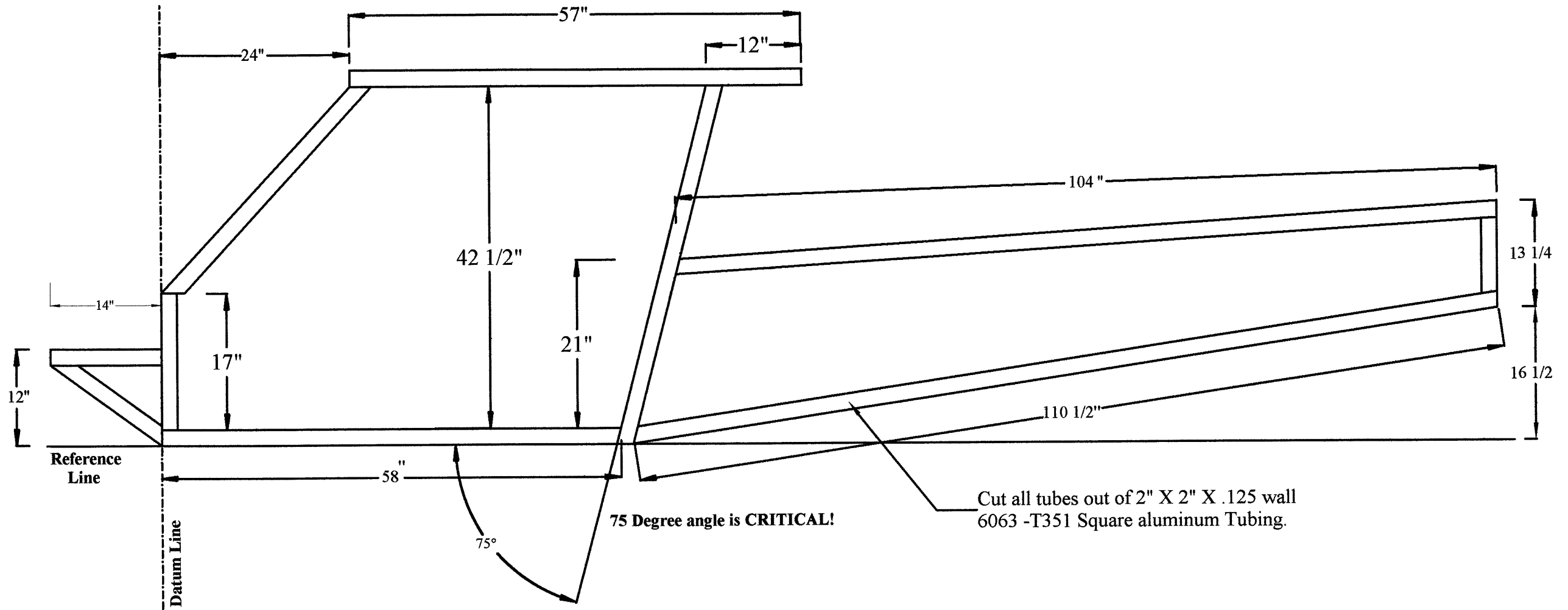
SPECIFICATIONS

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

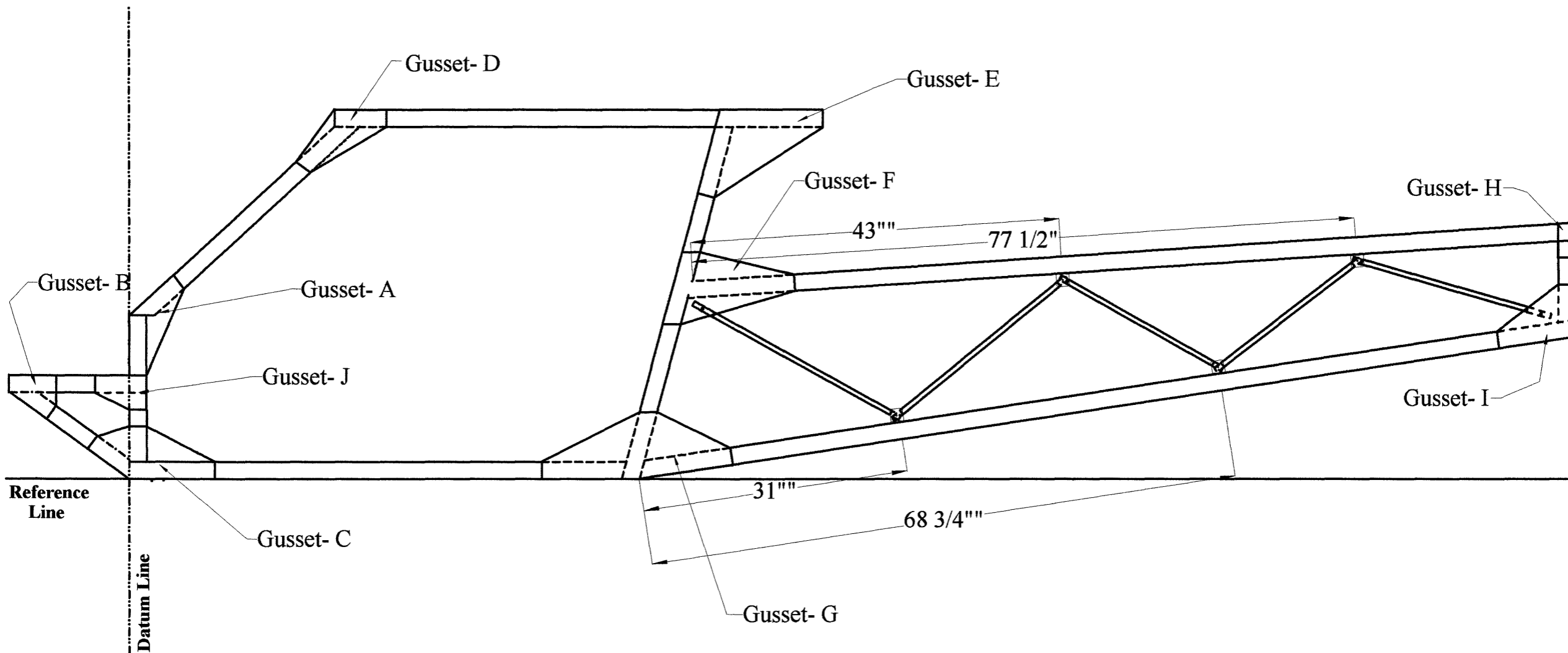
Stall 26 mph
Cruise 55 mph
Max power 63 mph
V/ne 70 mph

Build time... approx. 250 hrs

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



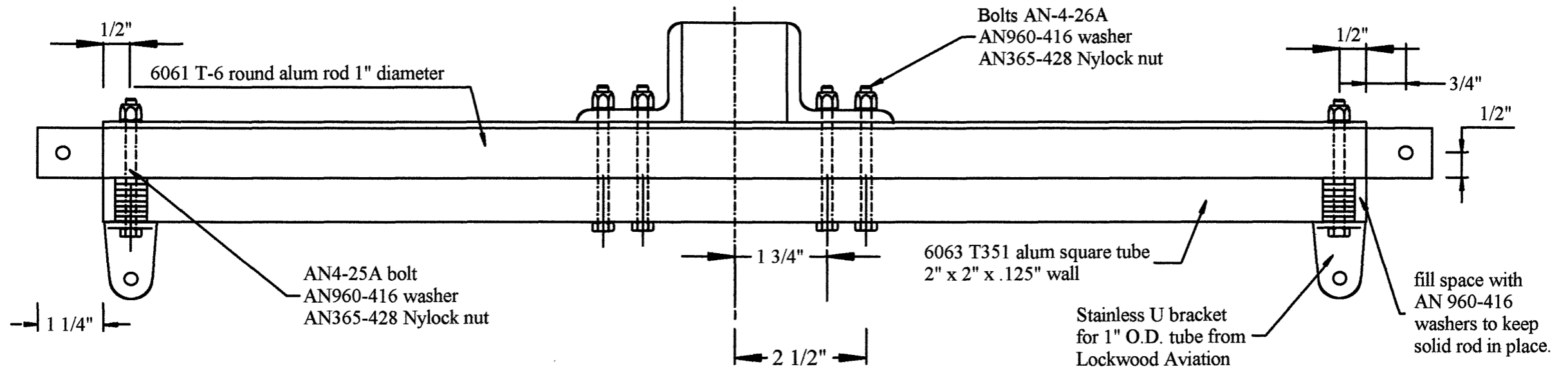
AFFORDAPLANE	
Description	
Fuselage Tube Layout	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	2
Copyright 2001 by Dave Edwards Marketing Group	



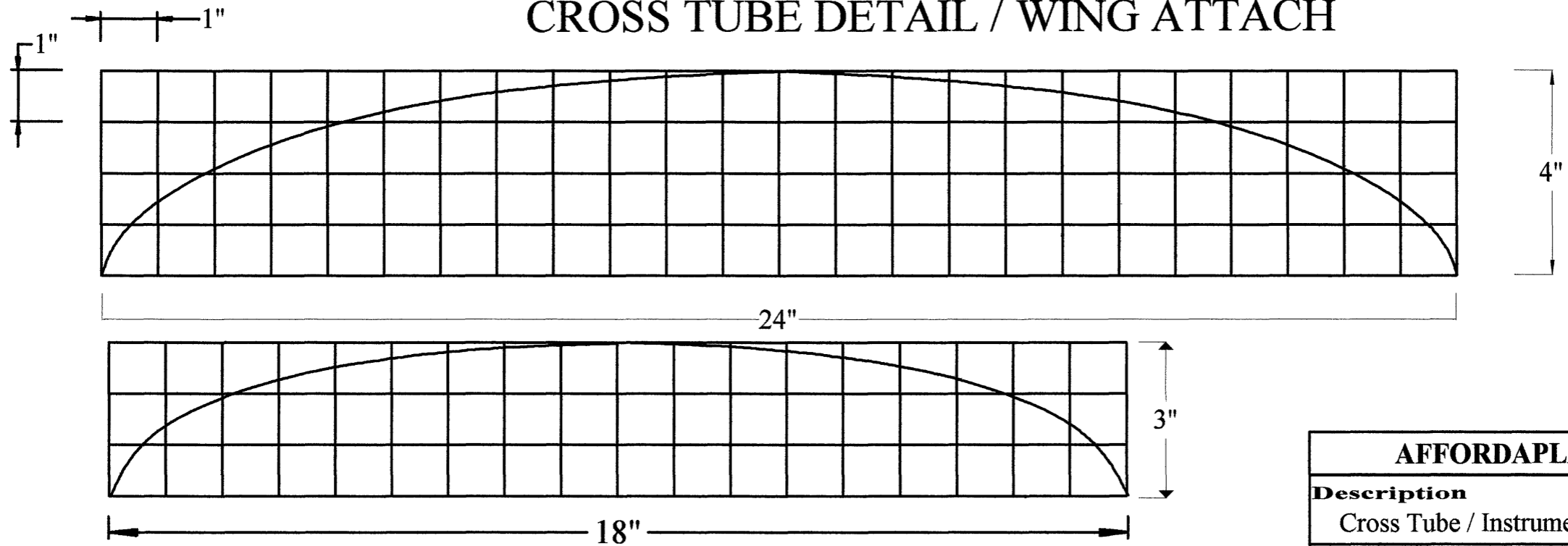
NOTE: Assemble fuselage with
 AN3-25 bolt
 AN960-10 washer
 AN364-1032 nylock nut
 Then drill through existing holes
 for larger bolts as per plans.

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

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



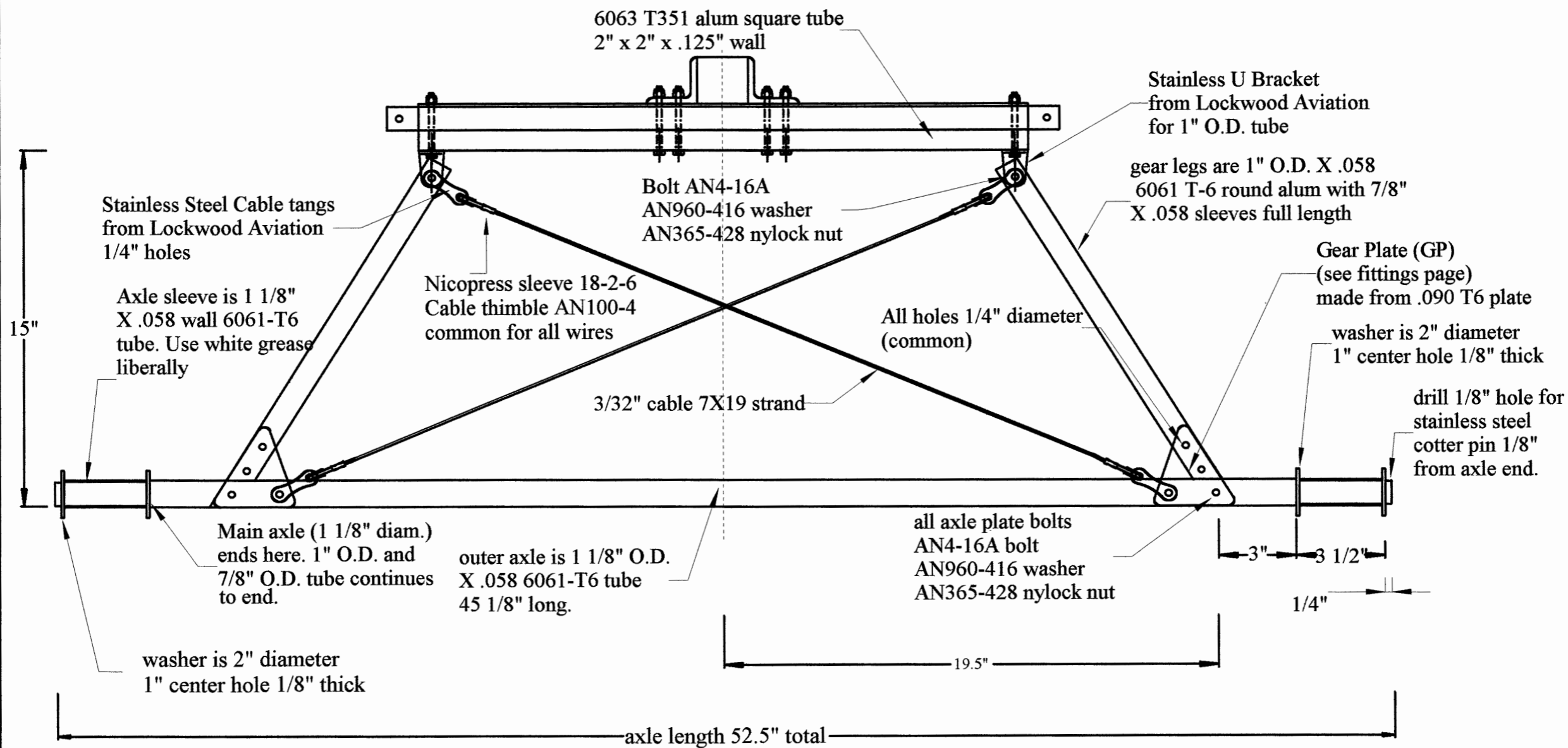
CROSS TUBE DETAIL / WING ATTACH



Panel made from
.032 alum sheet

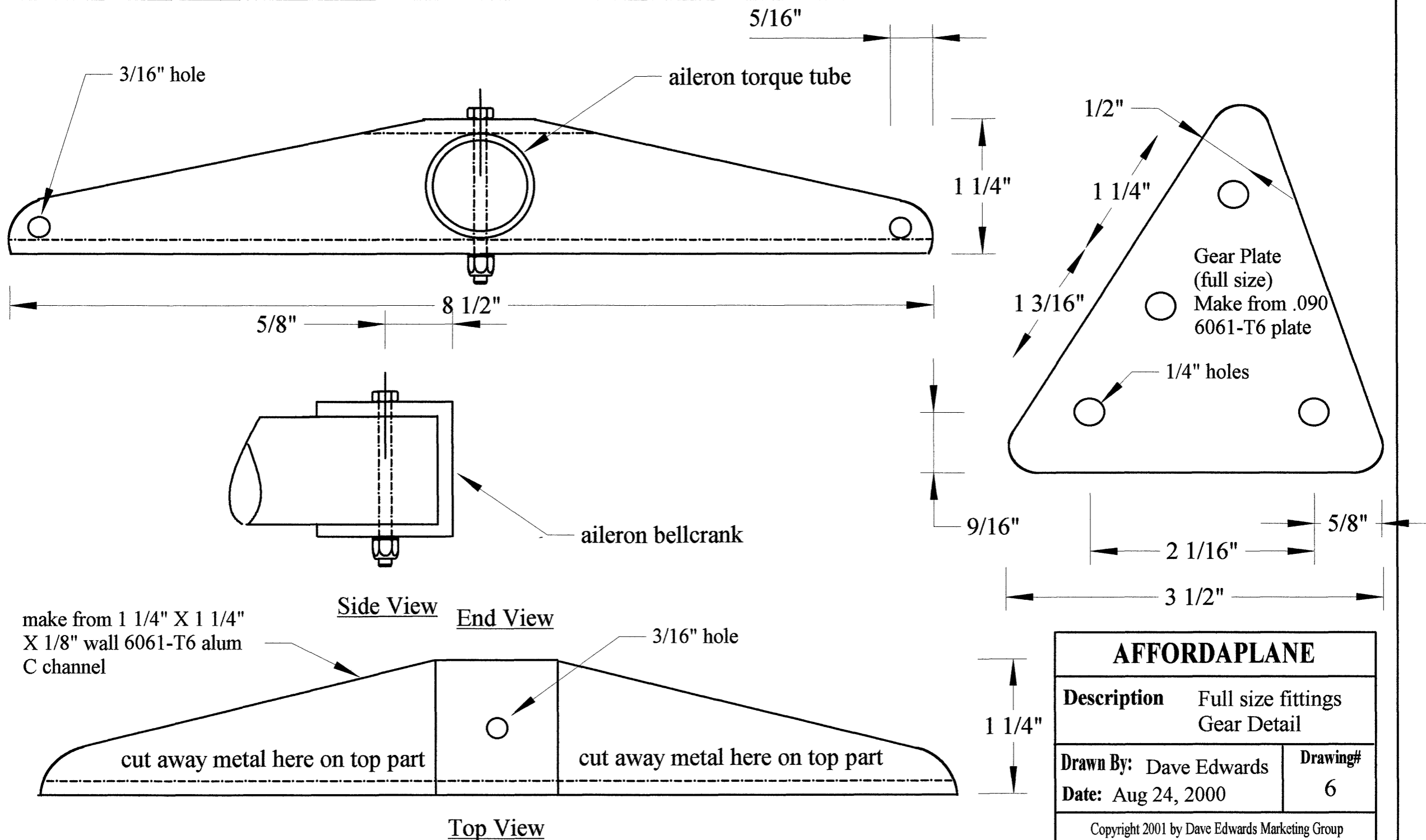
Instrument panel /
Forward top cowling curve

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



NOTE: See Page 12 for axle attach details

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



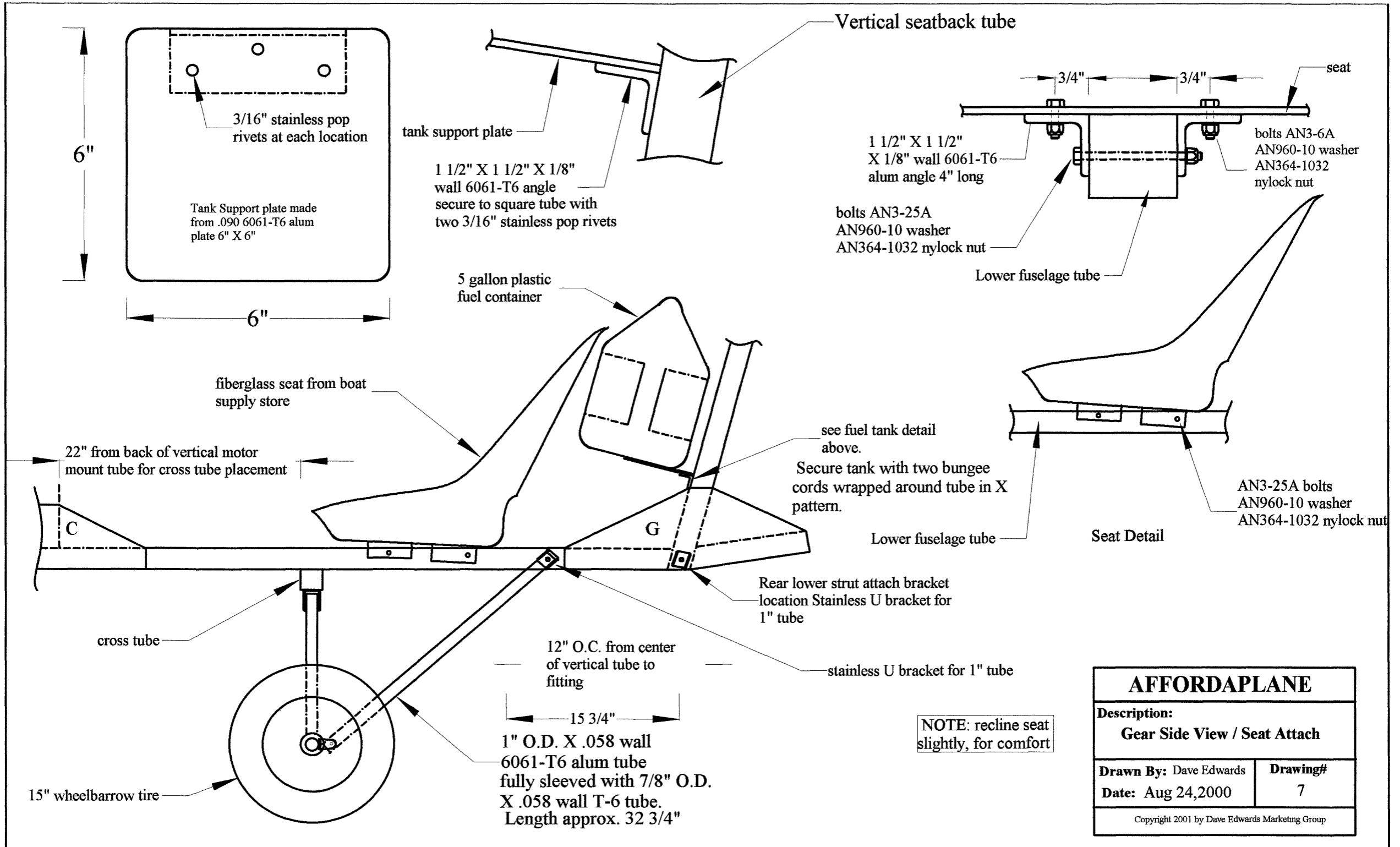
AFFORDAPLANE

Description	Full size fittings Gear Detail
--------------------	-----------------------------------

Drawn By: Dave Edwards	Drawing#
-------------------------------	-----------------

Date: Aug 24, 2000	6
---------------------------	---

Copyright 2001 by Dave Edwards Marketing Group



AFFORDAPLANE

Description:

Gear Side View / Seat Attach

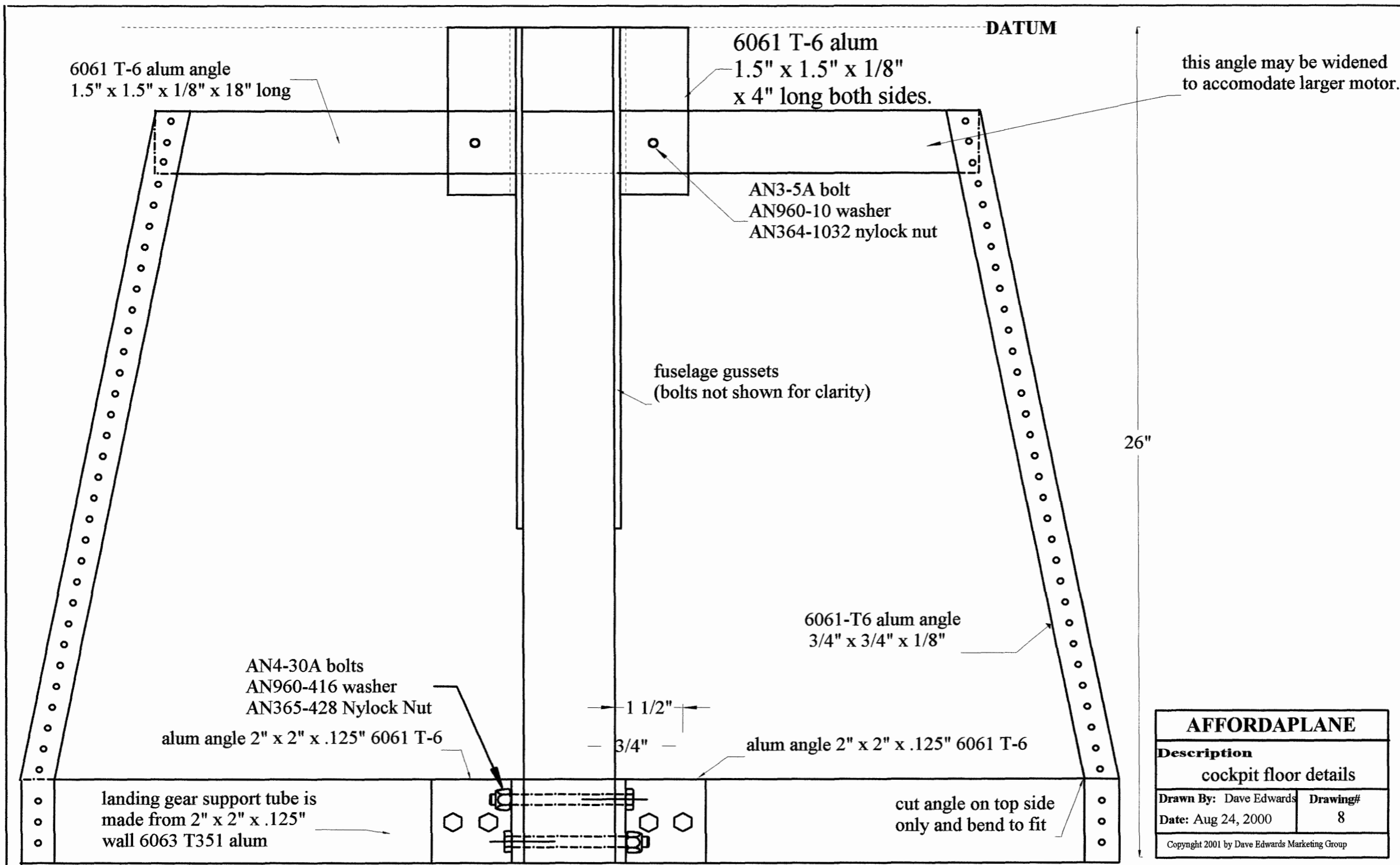
Drawn By: Dave Edwards

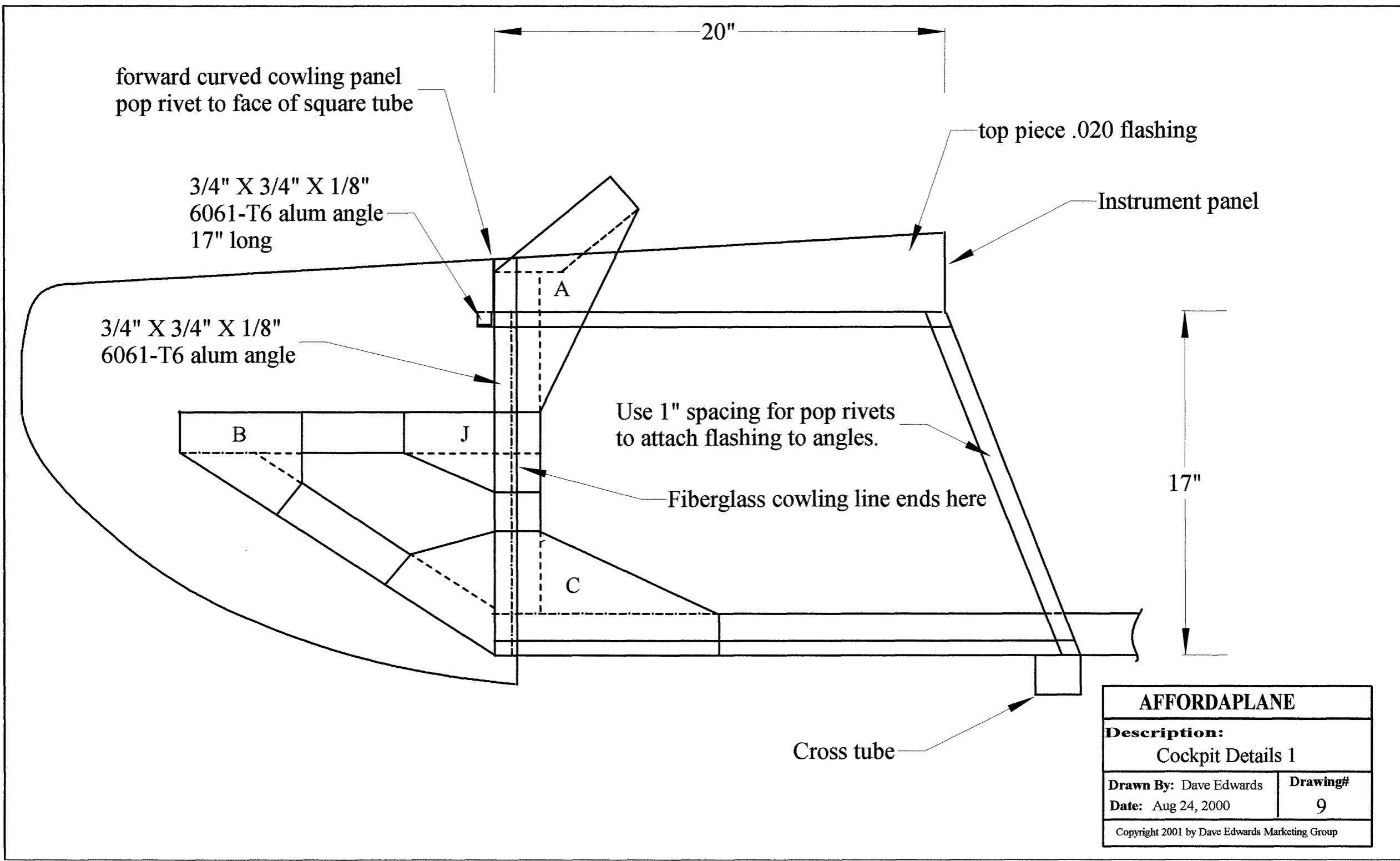
Drawing#

Date: Aug 24,2000

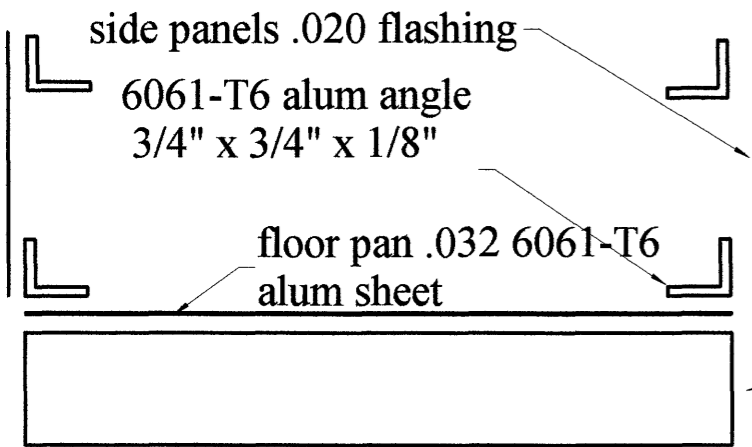
7

Copyright 2001 by Dave Edwards Marketing Group



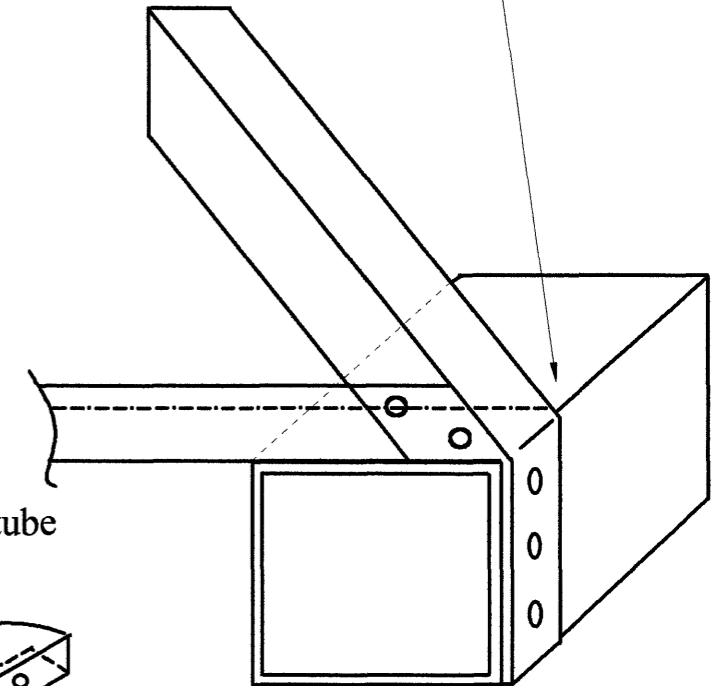


AFFORDAPLANE	
Description: Cockpit Details 1	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	9
Copyright 2001 by Dave Edwards Marketing Group	



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

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

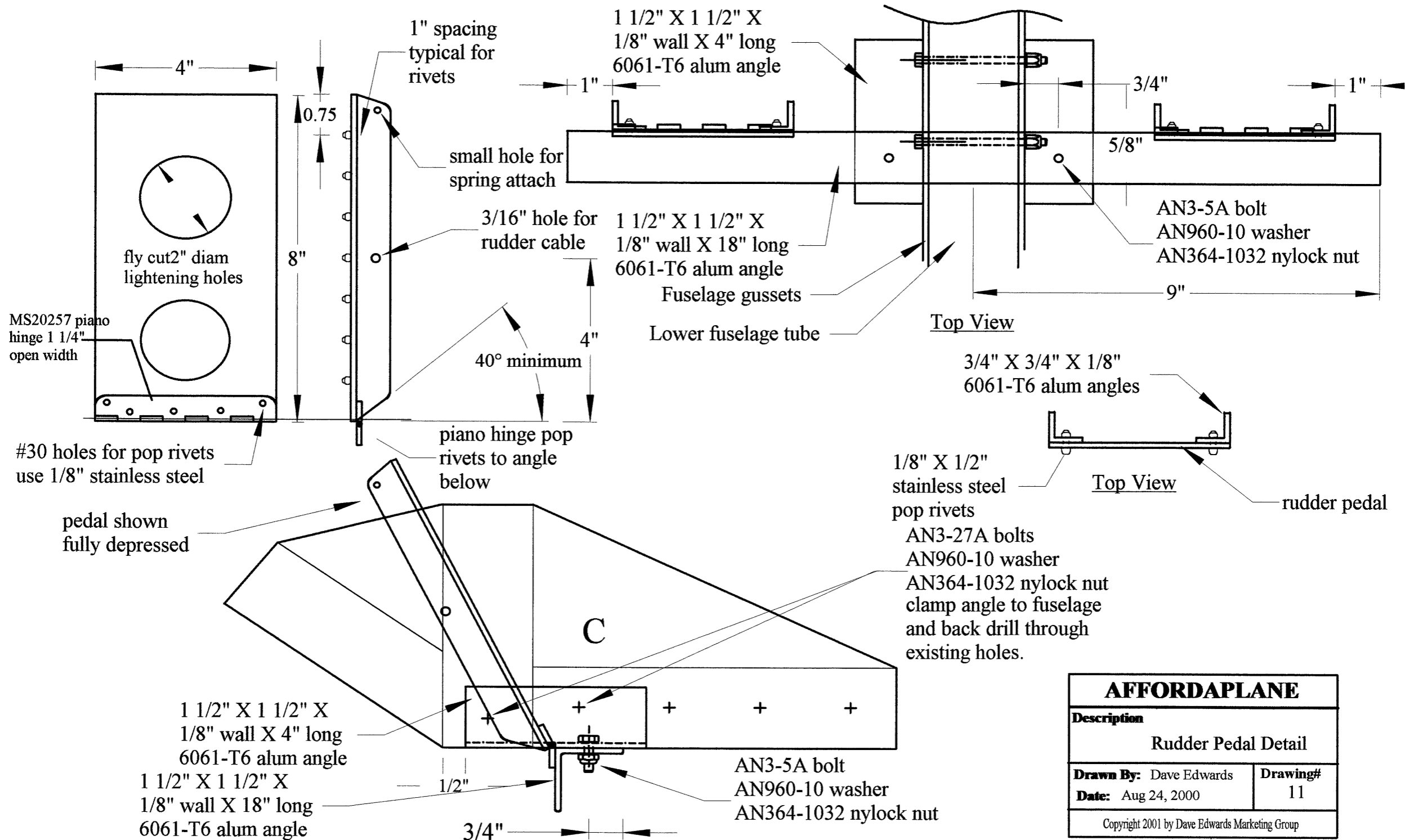
Top View Cockpit

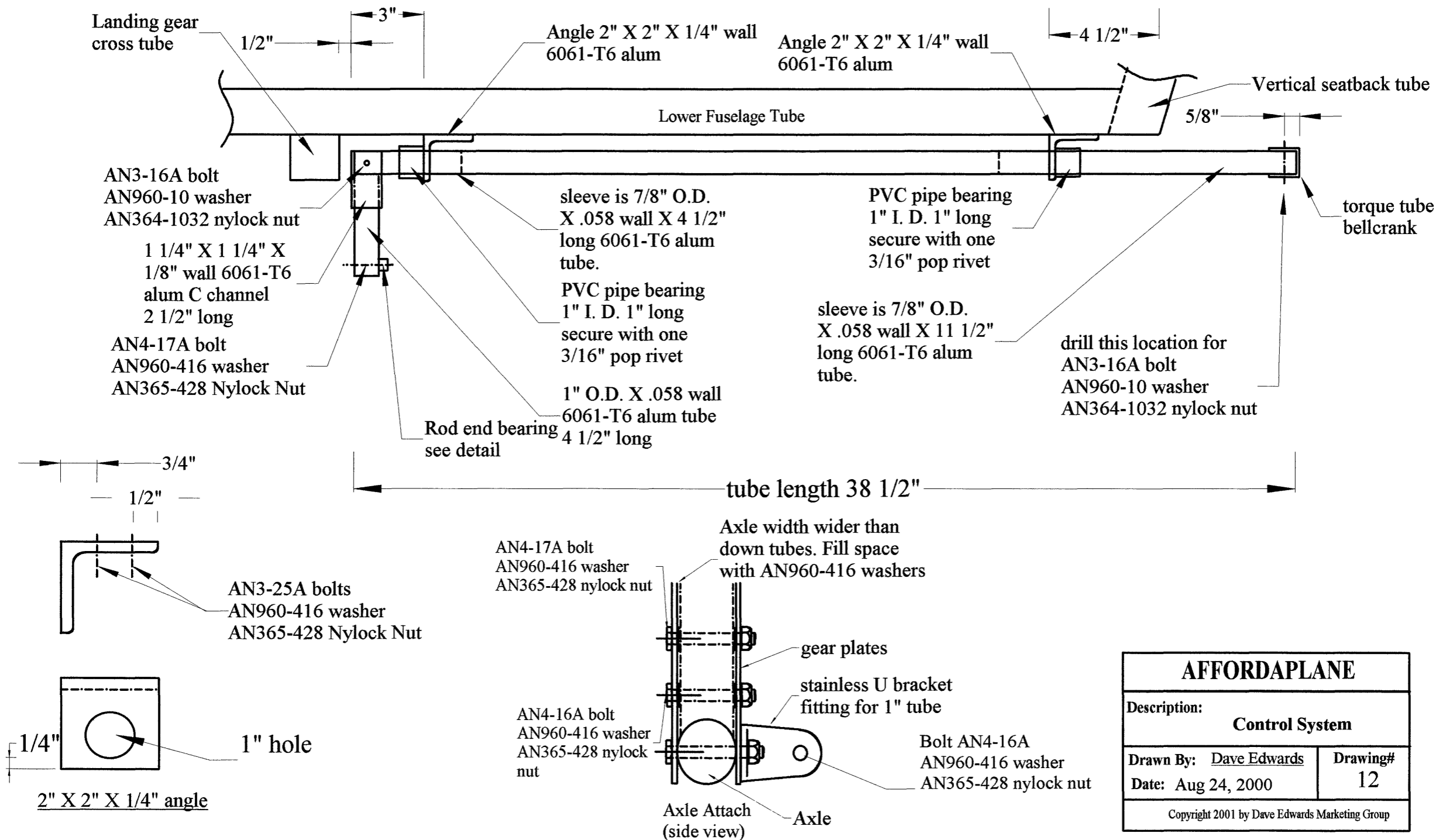
vertical motor mount tube

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

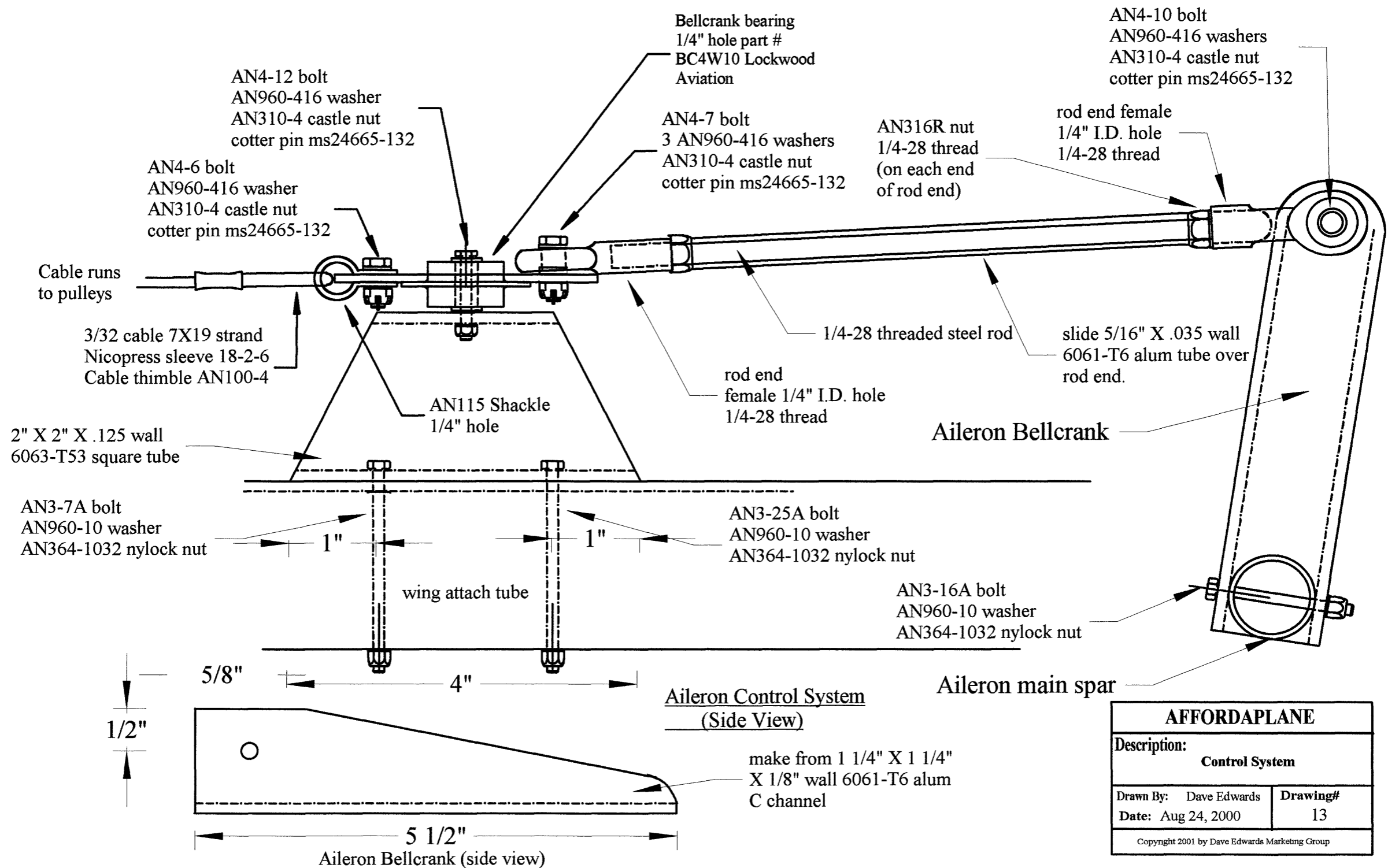
pop rivet faces of angles

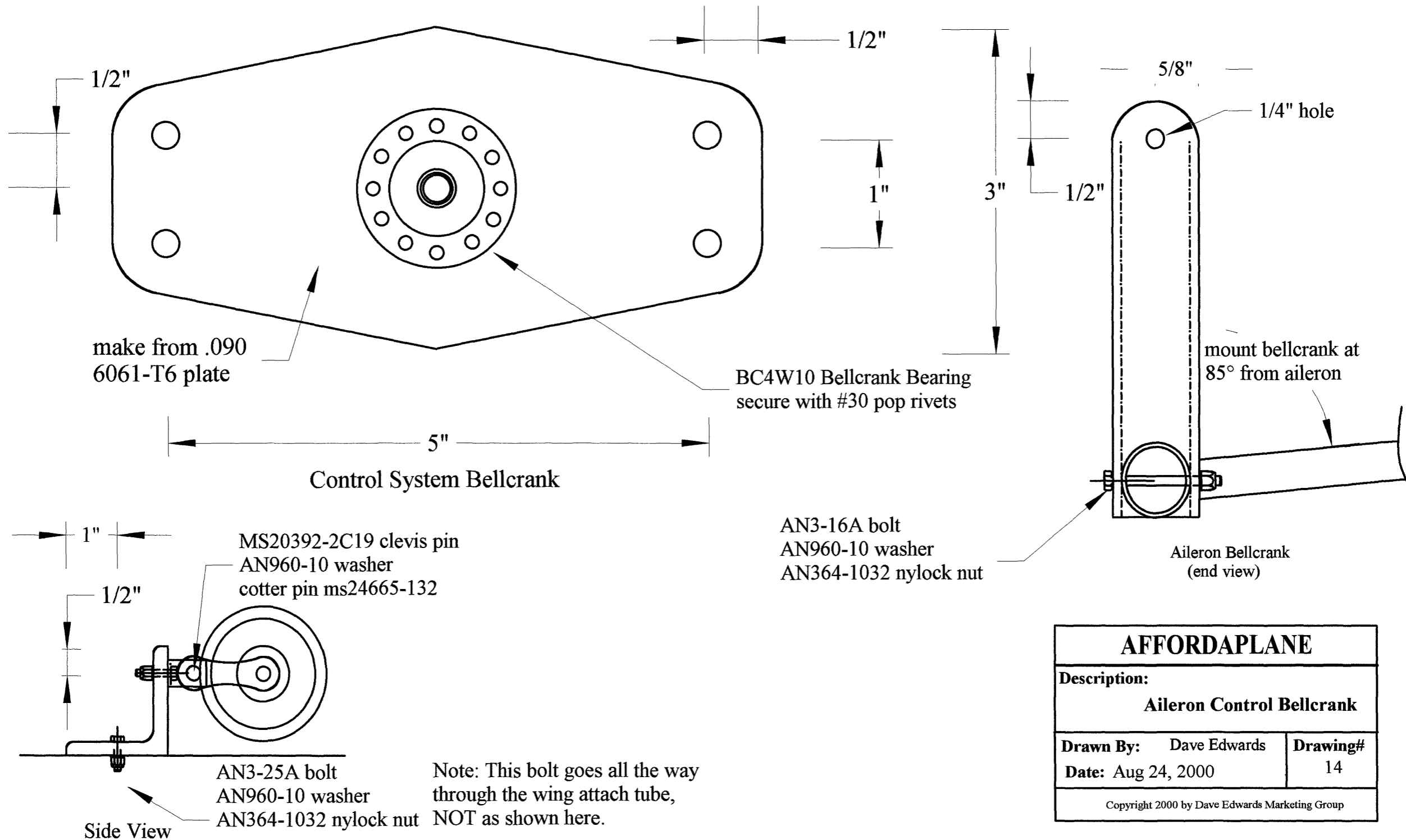
AFFORDAPLANE	
Description: Cockpit Details	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	10
Copyright 2001 by Dave Edwards Marketing Group	





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





AFFORDAPLANE		
Description: Aileron Control Bellcrank		
Drawn By:	Dave Edwards	Drawing#
Date:	Aug 24, 2000	14
Copyright 2000 by Dave Edwards Marketing Group		

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 washers
AN310-4 castle nut
cotter pin ms24665-132

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

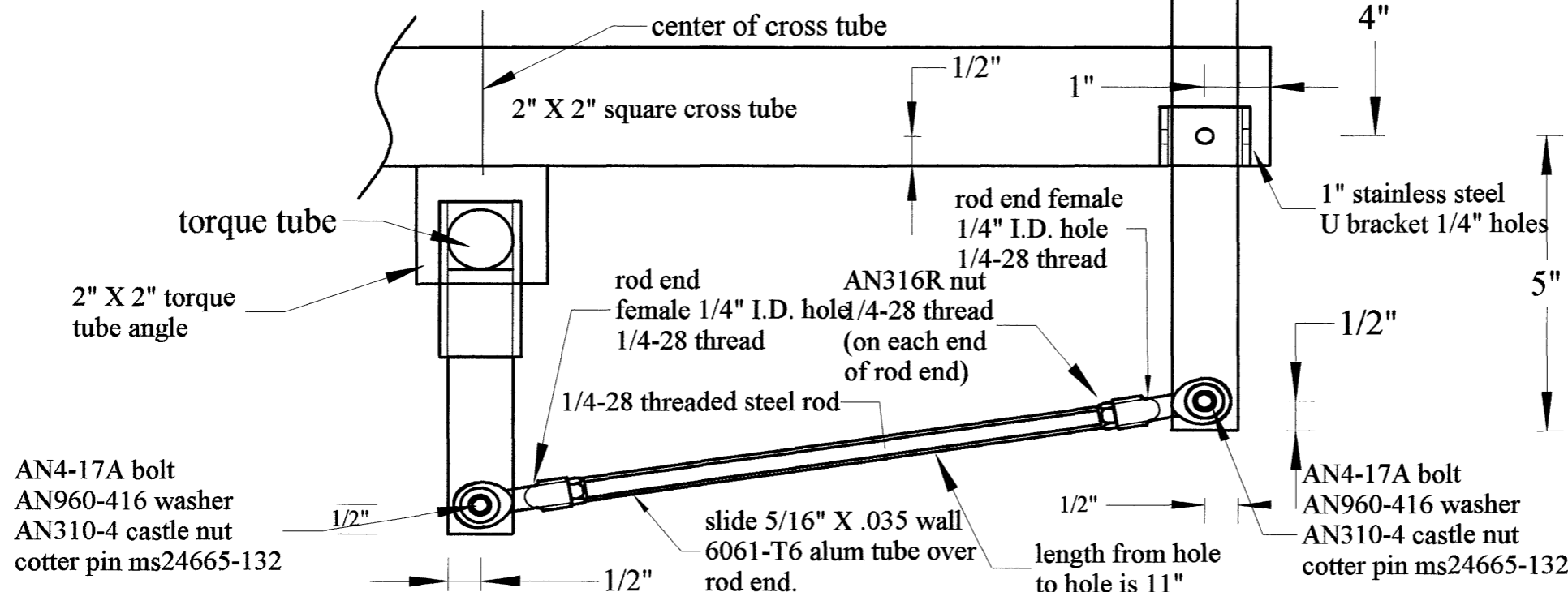
AN4-16 bolt
AN960-416 washers
AN310-4 castle nut
cotter pin ms24665-132

cross tube
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



AFFORDAPLANE

Description:

Control Stick Details

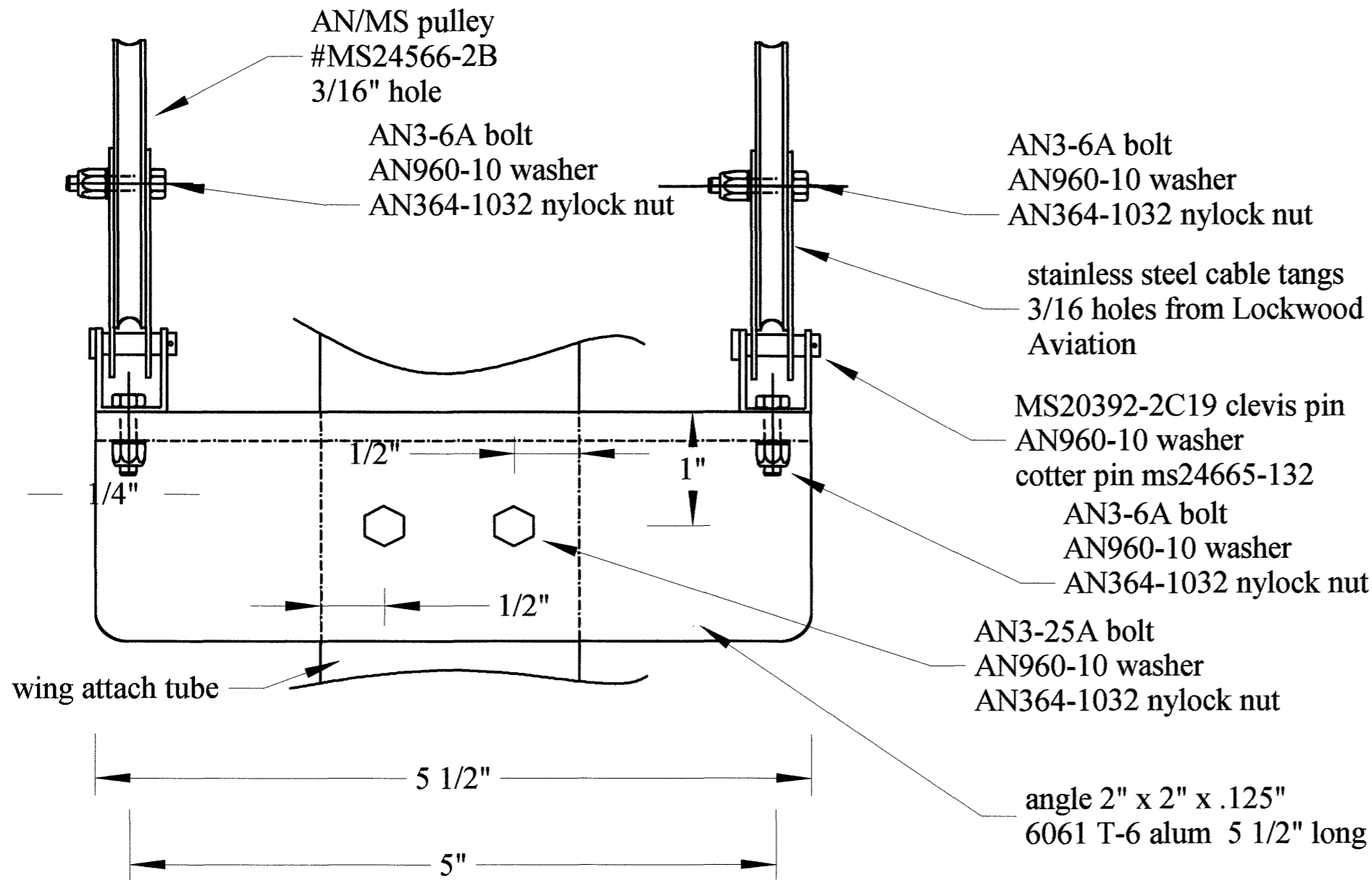
Drawn By: Dave Edwards

Drawing#

Date: Aug 24, 2000

15

Copyright 2001 by Dave Edwards Marketing Group



top view

AFFORDAPLANE

Description:

Control Pulleys

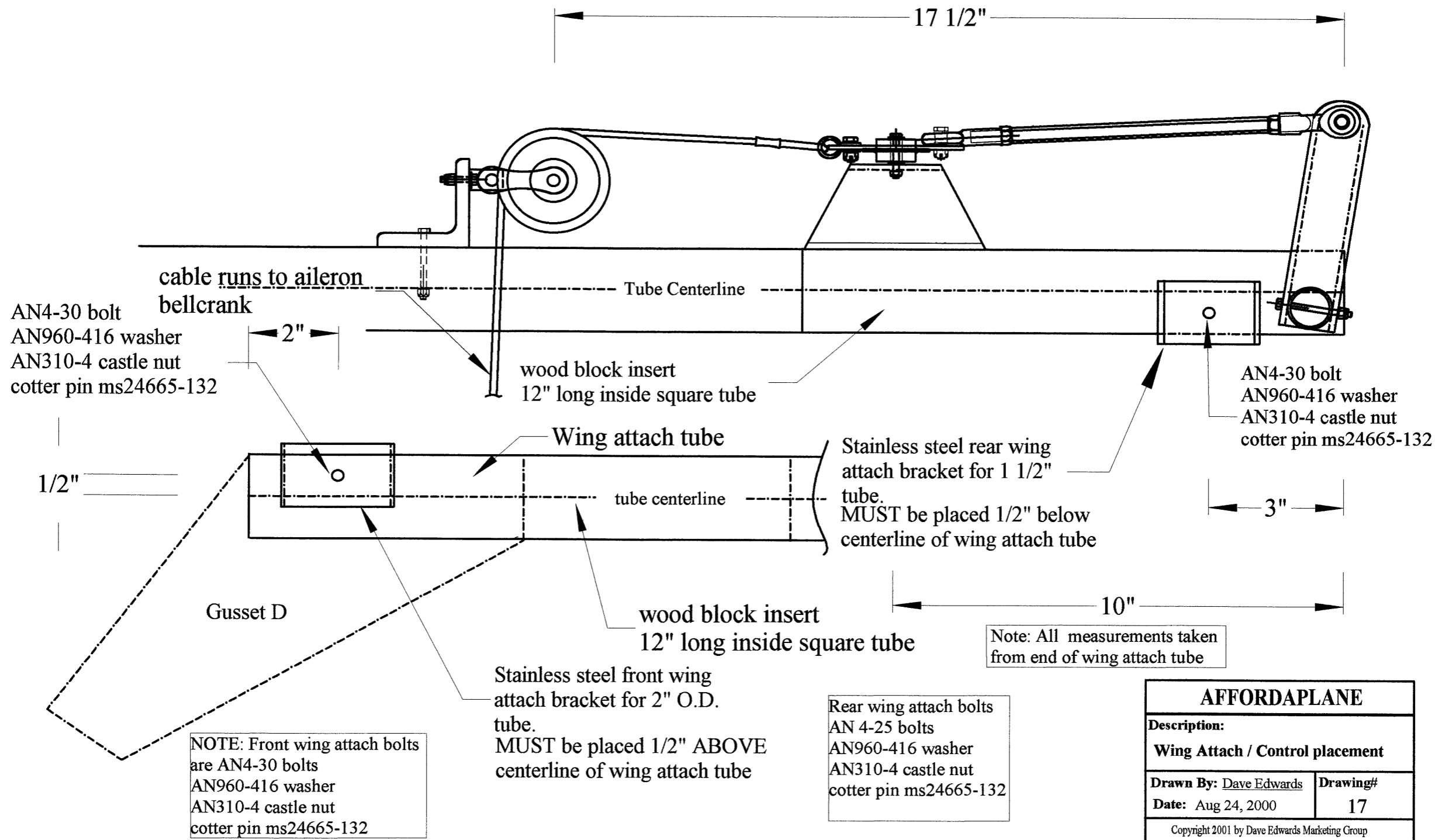
Drawn By: Dave Edwards

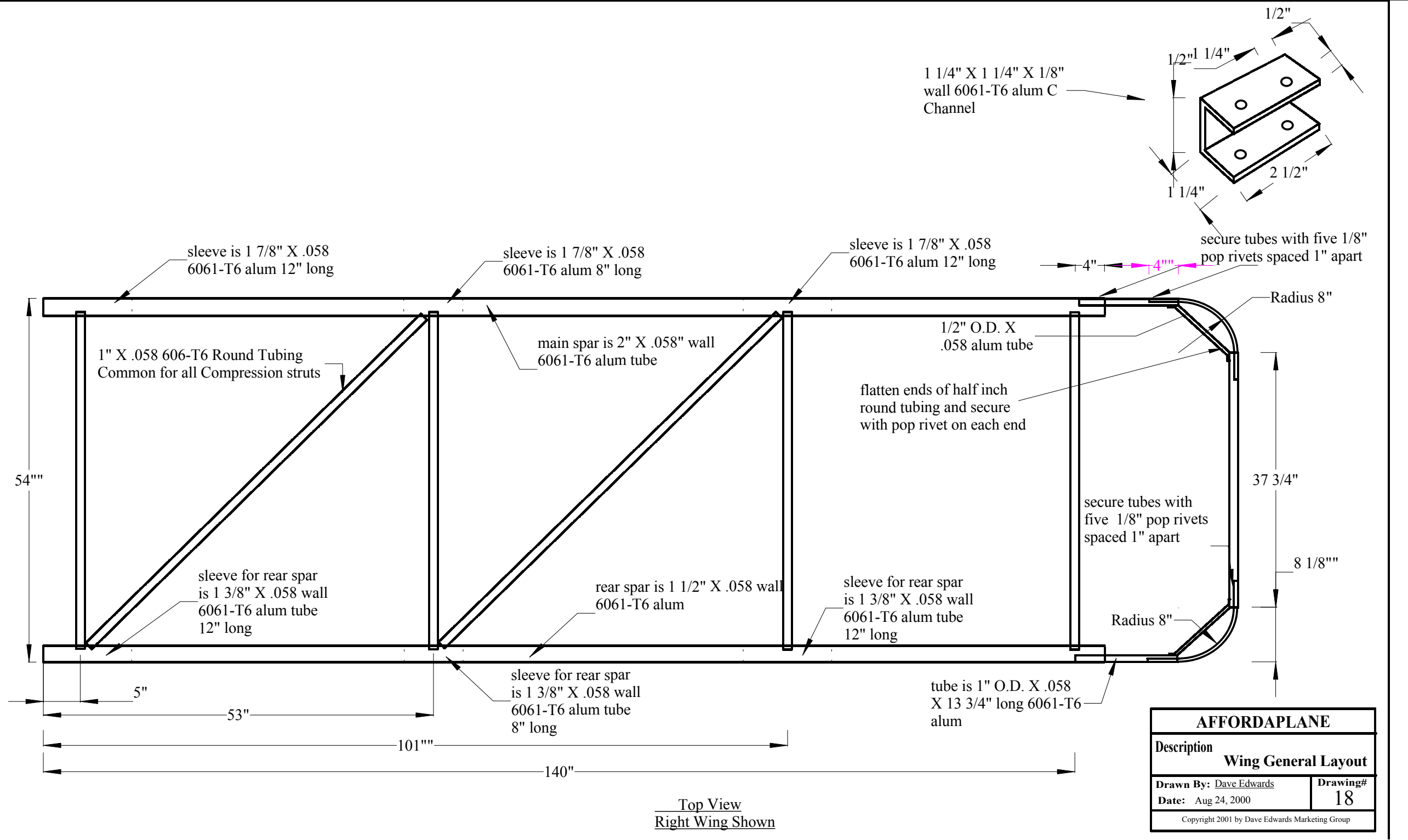
Drawing#

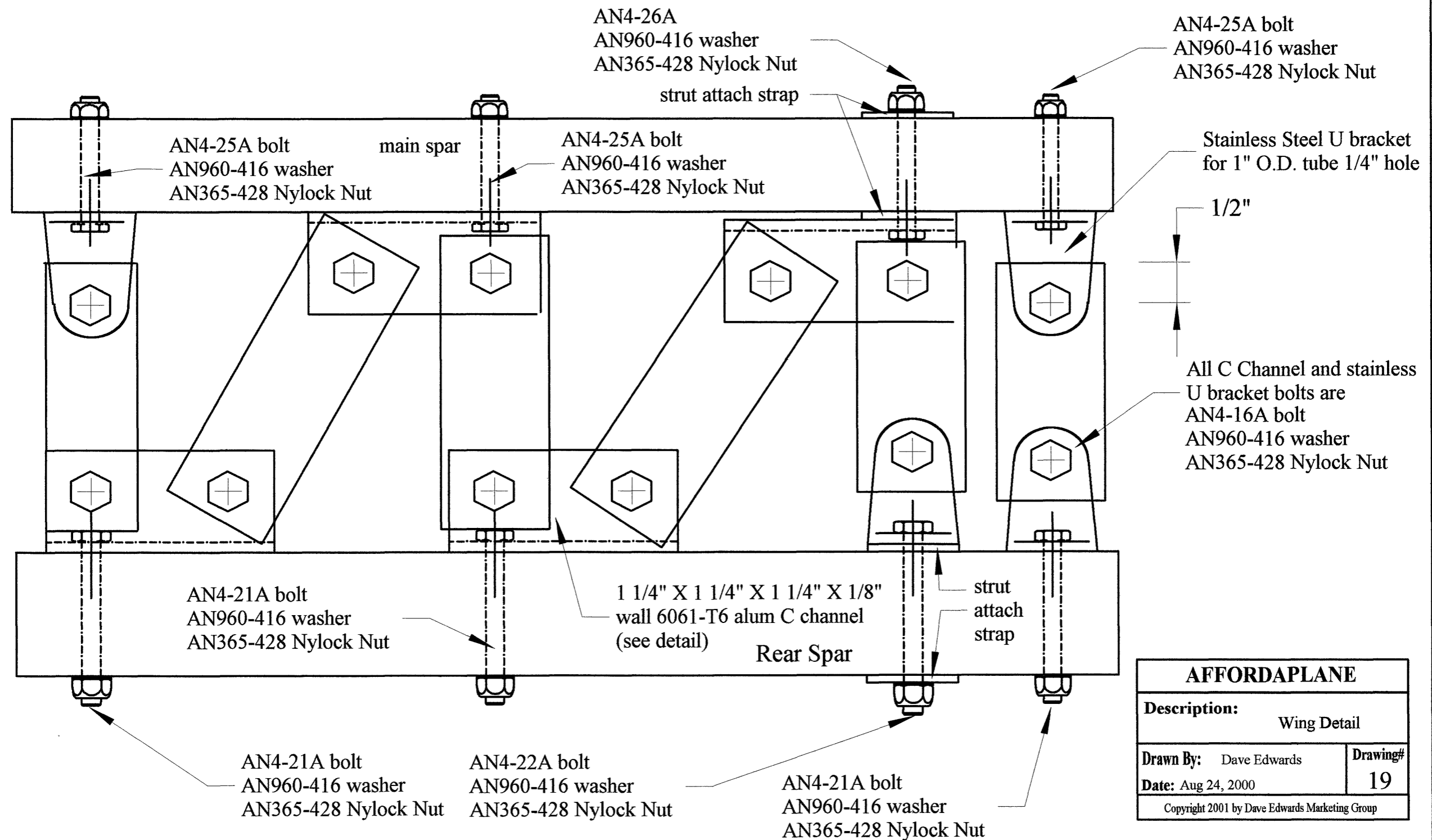
Date: Aug 24, 2000

16

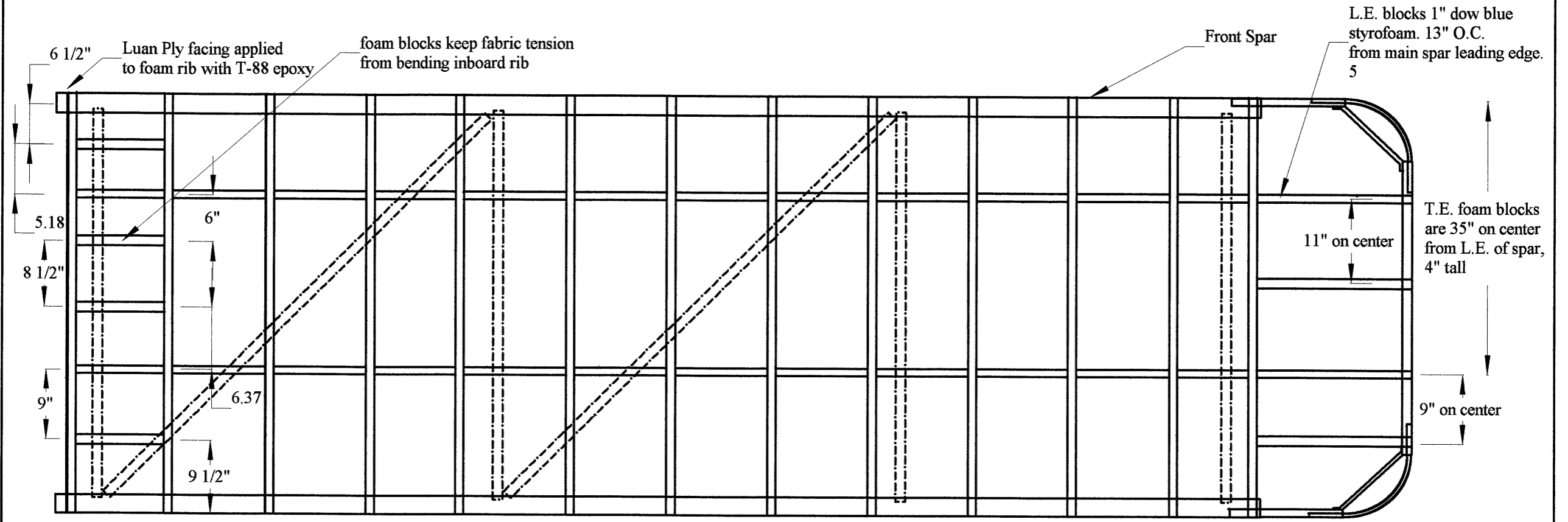
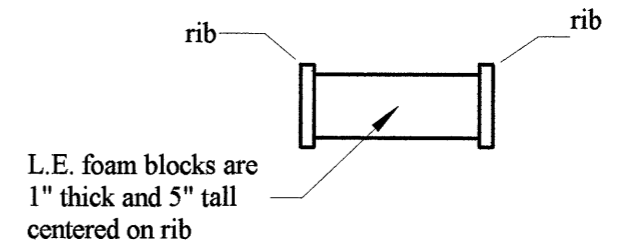
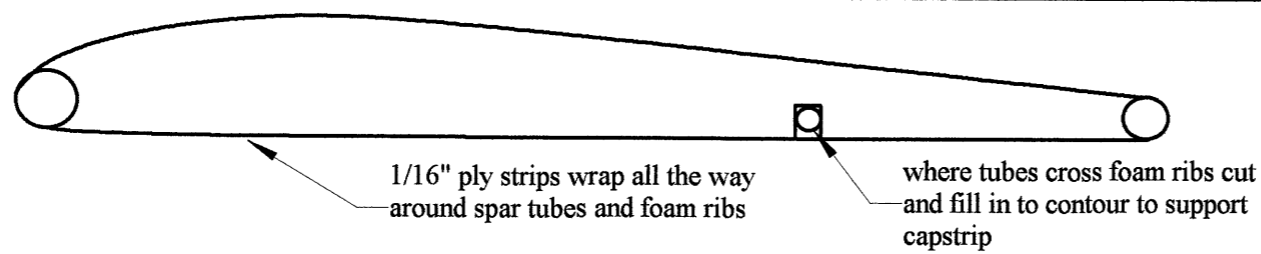
Copyright 2001 by Dave Edwards Marketing Group



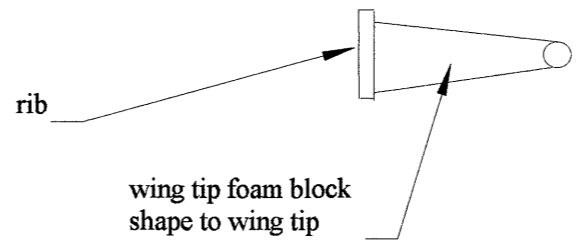
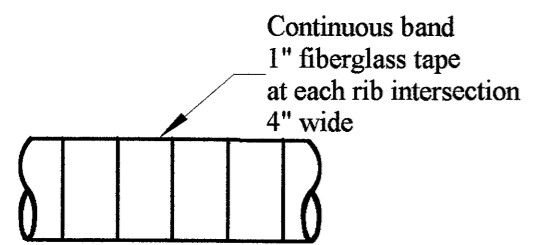




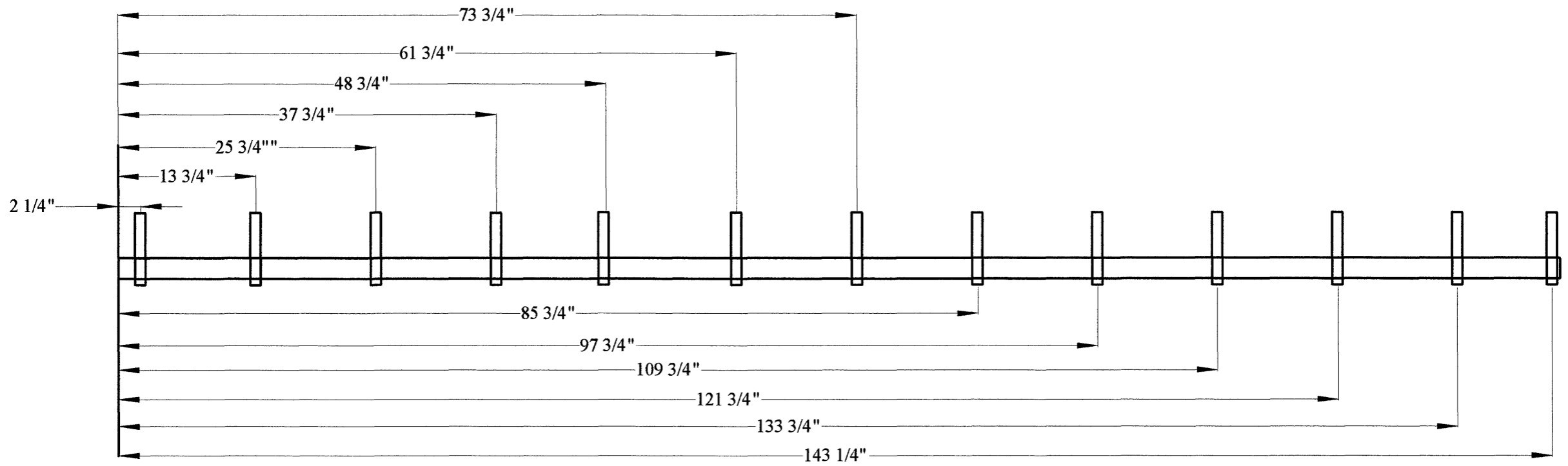
AFFORDAPLANE		
Description:		Wing Detail
Drawn By:	Dave Edwards	Drawing#
Date:	Aug 24, 2000	19
Copyright 2001 by Dave Edwards Marketing Group		



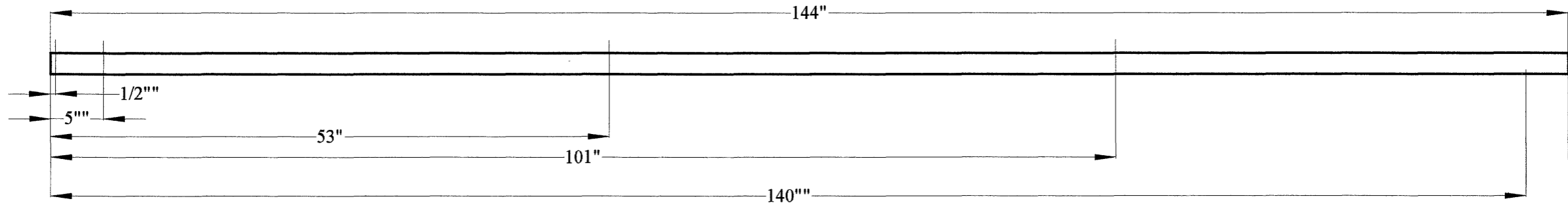
Top View
Right Wing Shown



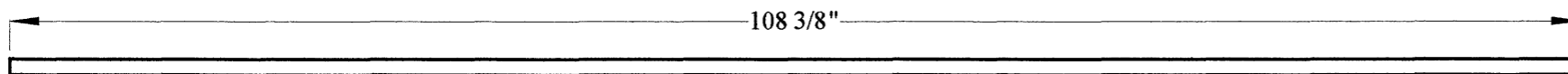
AFFORDAPLANE		
Description: Foam rib and block placement		
Drawn By: Dave Edwards		Drawing# 20
Date: Aug 24, 2000		
Copyright 2001 by Dave Edwards Marketing Group		



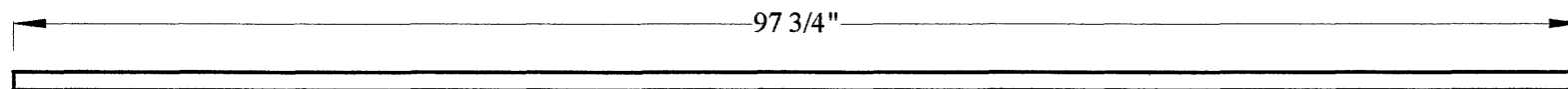
Foam Rib Locations



Main spar and rear
spar bolt hole locations



Rear Strut



Front Strut

AFFORDAPLANE

Description: Foam Rib Placement /
Spar Hole Locations

Drawn By: Dave Edwards

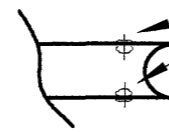
Date: Aug 24, 2000

Drawing#

21

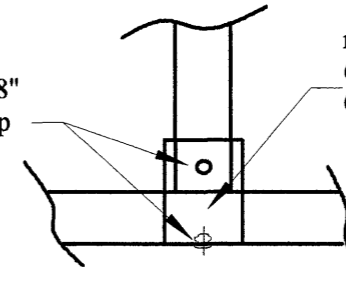
Copyright 2001 by Dave Edwards Marketing Group

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



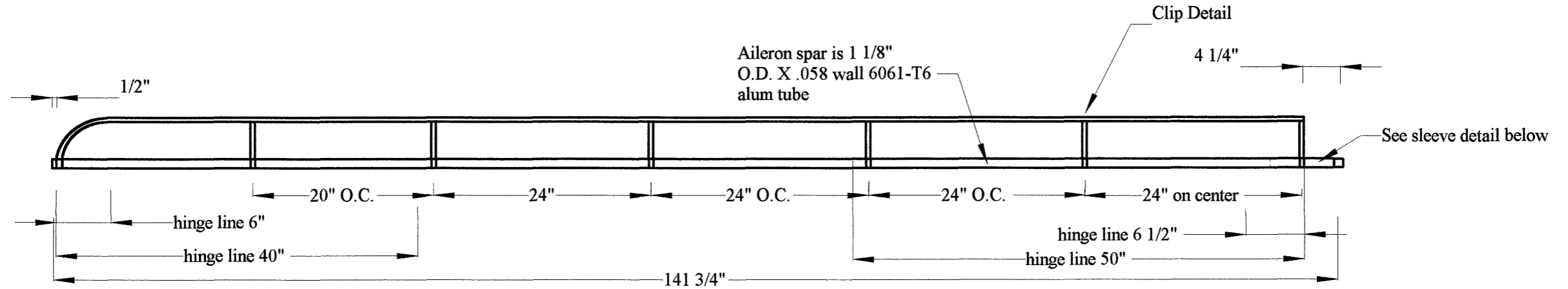
Side View

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



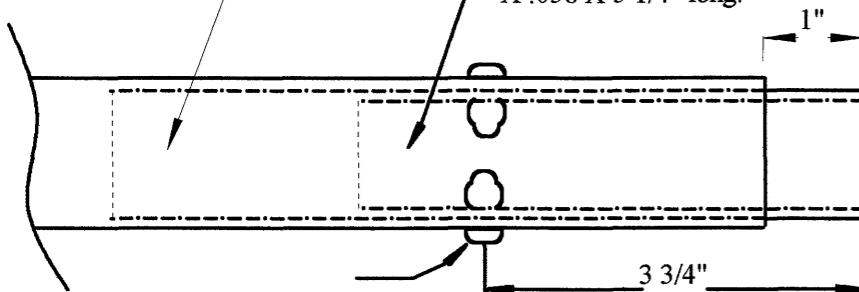
Top view

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



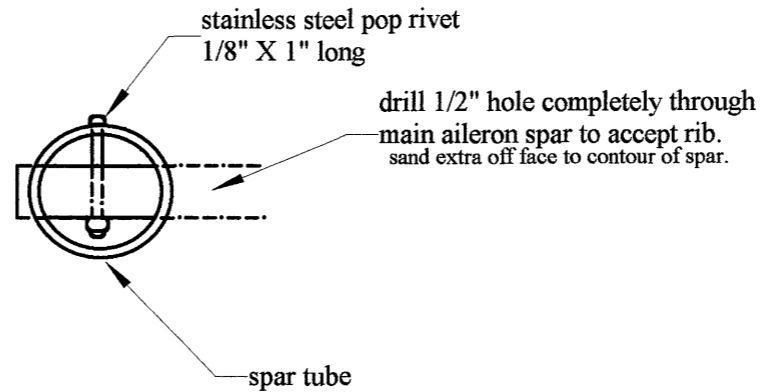
Sleeve is 1" O.D. X .058 wall
X 8" long.

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)



NOTE: Build one right and one left aileron.

AFFORDAPLANE

Description: **Aileron**

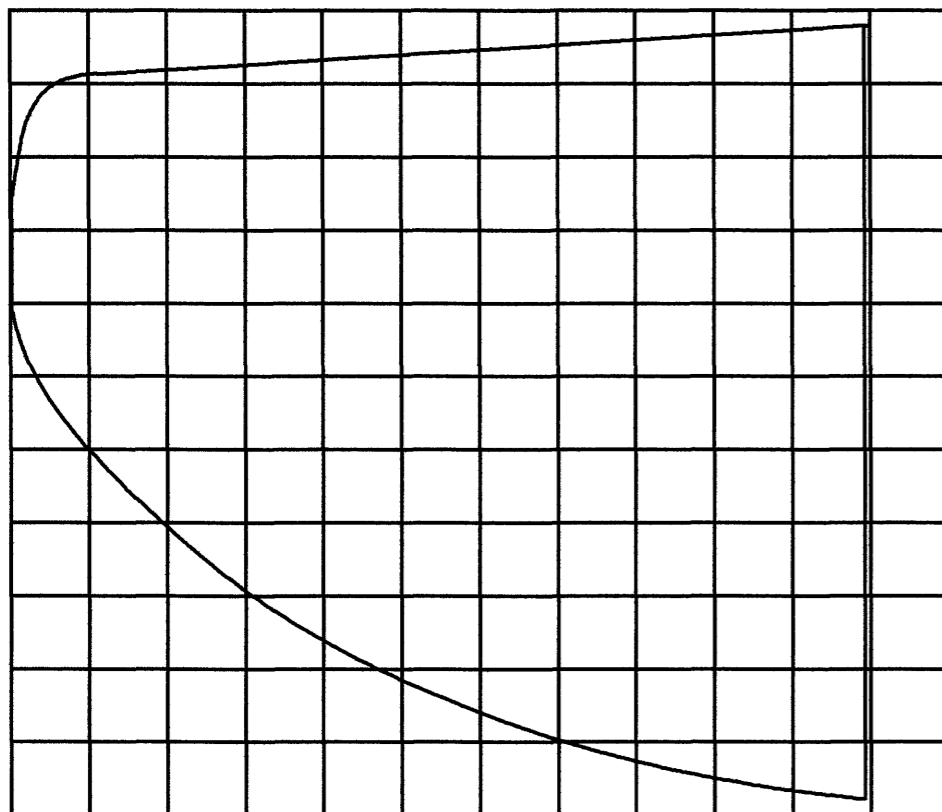
Drawn By: Dave Edwards

Date: Aug 24, 2000

Drawing#

22

Copyright 2001 by Dave Edwards Marketing Group

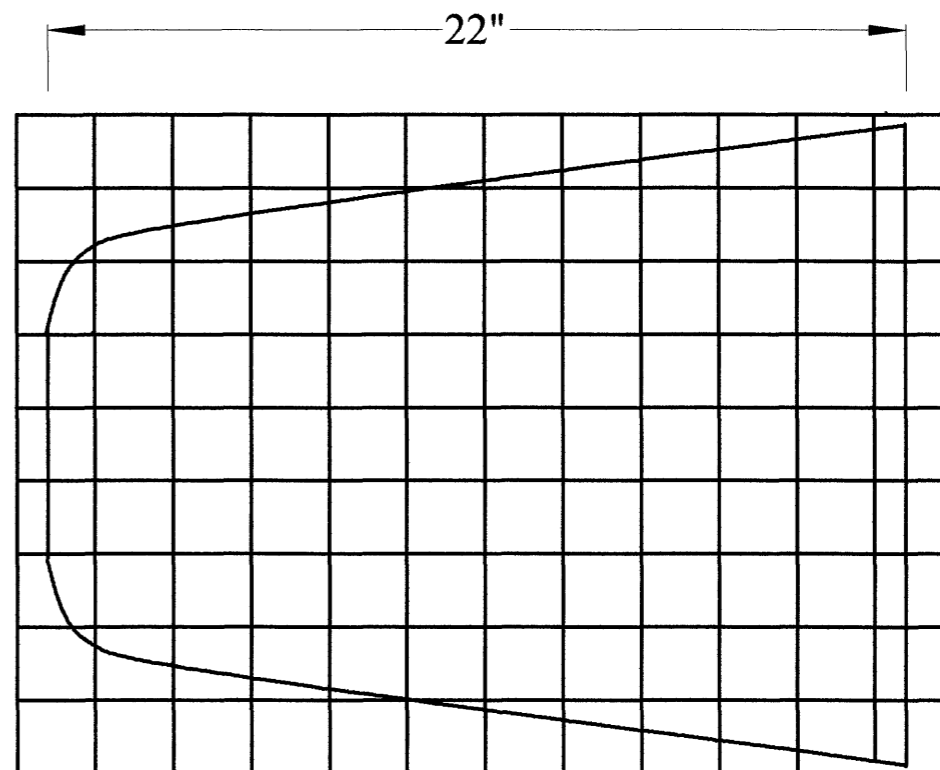


22"

Side View

21 1/4"

1"
1"



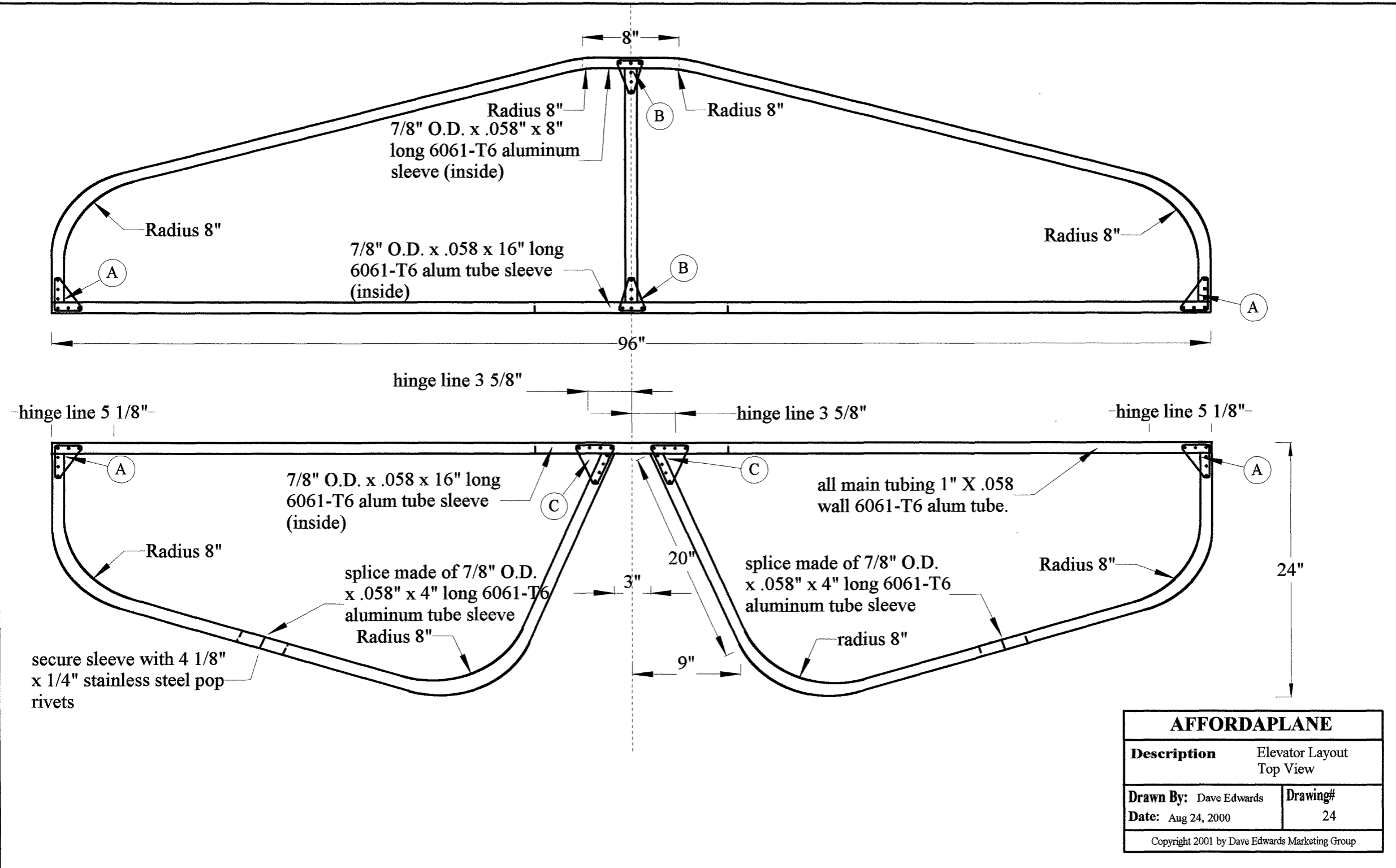
22"

18"

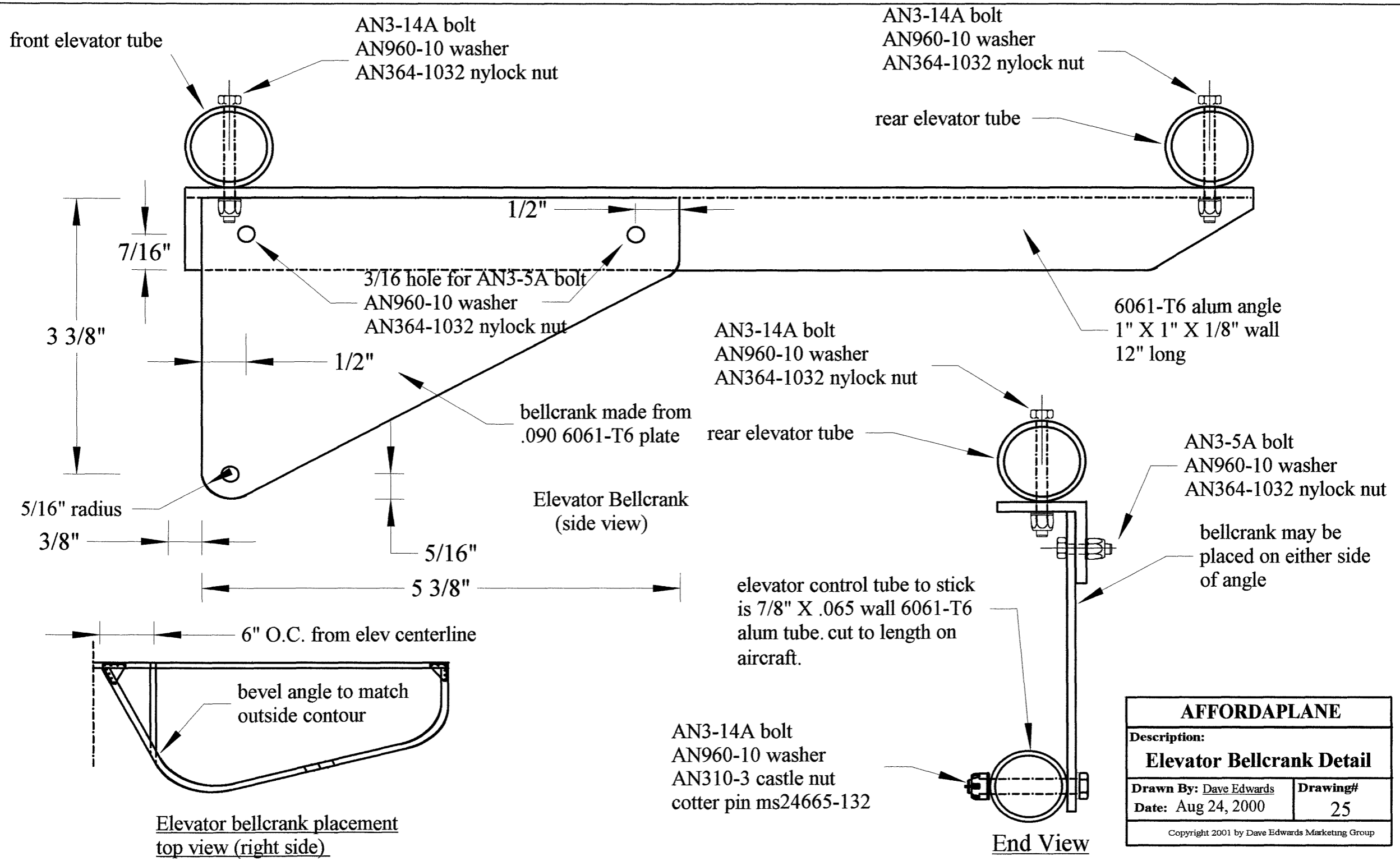
Top View

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

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

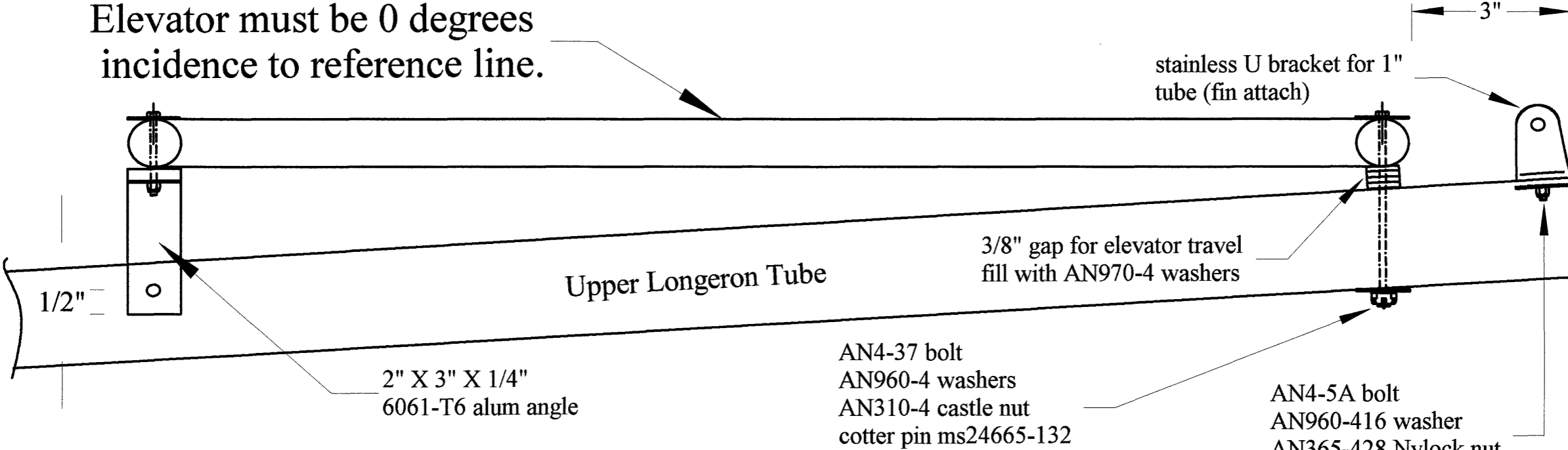


AFFORDAPLANE	
Description	Elevator Layout Top View
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	24
Copyright 2001 by Dave Edwards Marketing Group	



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

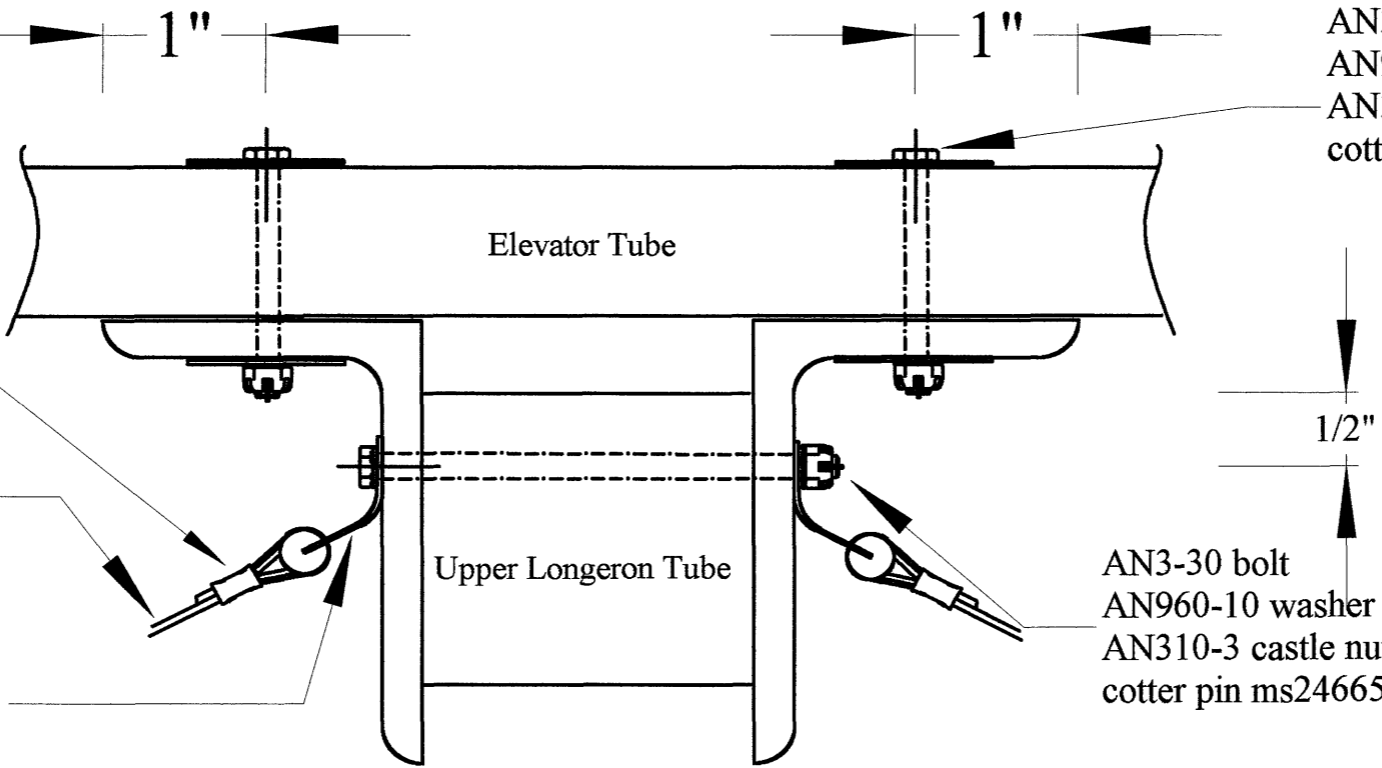
Elevator must be 0 degrees incidence to reference line.



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

Cable runs to forward wing attach
strut (upper fitting). see detail.

Stainless Steel Cable Tang



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

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

4 1/2"

30 1/4"

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

2 1/4"

1/2"

hinge line 3"

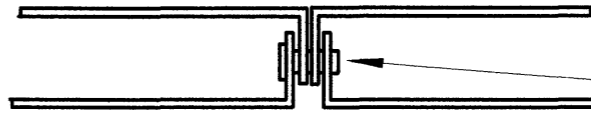
hinge line 2"

hinge line 17"

34 3/4"



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



MS20393-2C11 clevis pin
cotter pin ms24665-132

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

40"

Radius 6"

4"

F2

4"

6 1/2"

11"

= 1/4"

AFFORDAPLANE

Description:

Fin

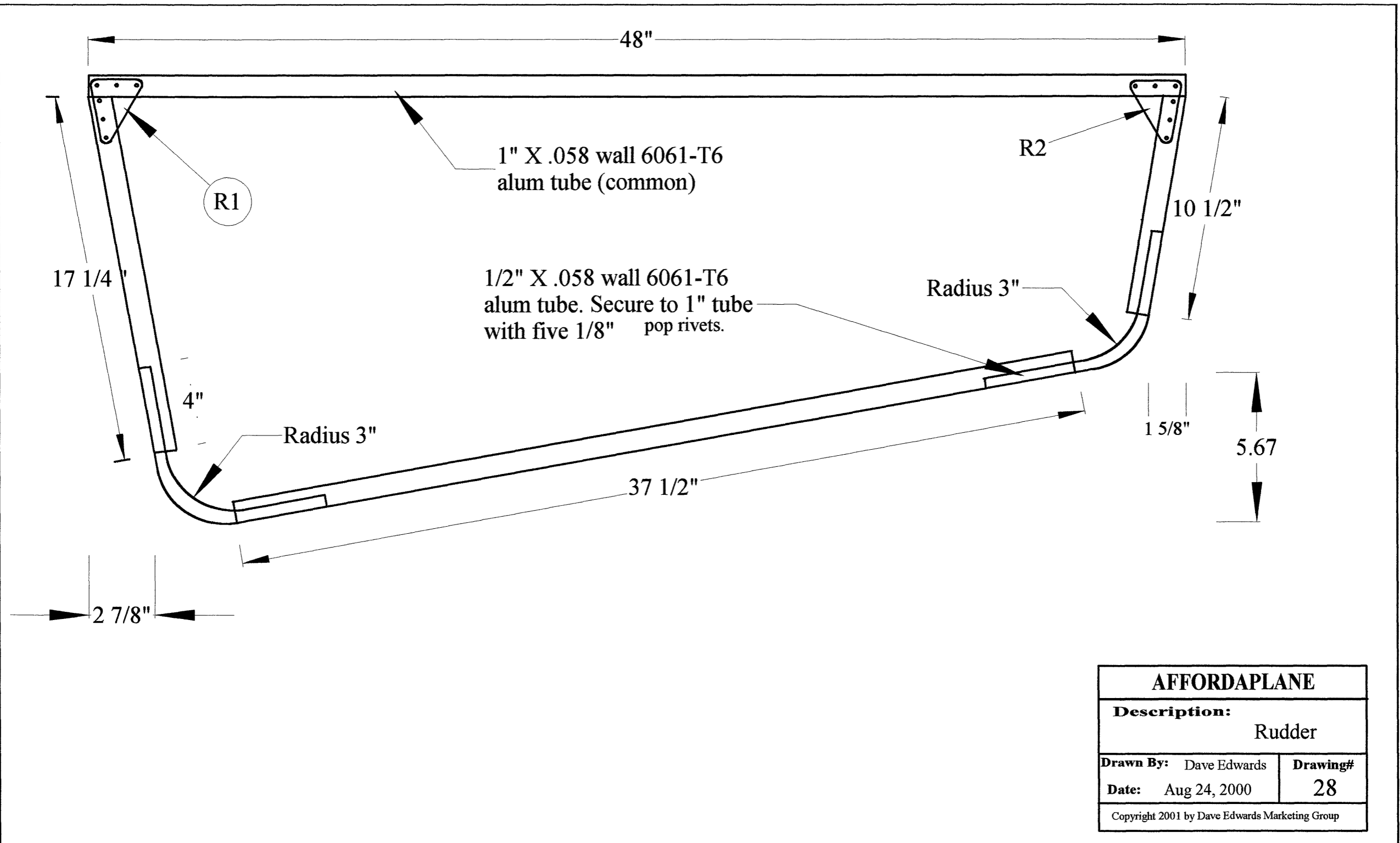
Drawn By: Dave Edwards

Drawing#

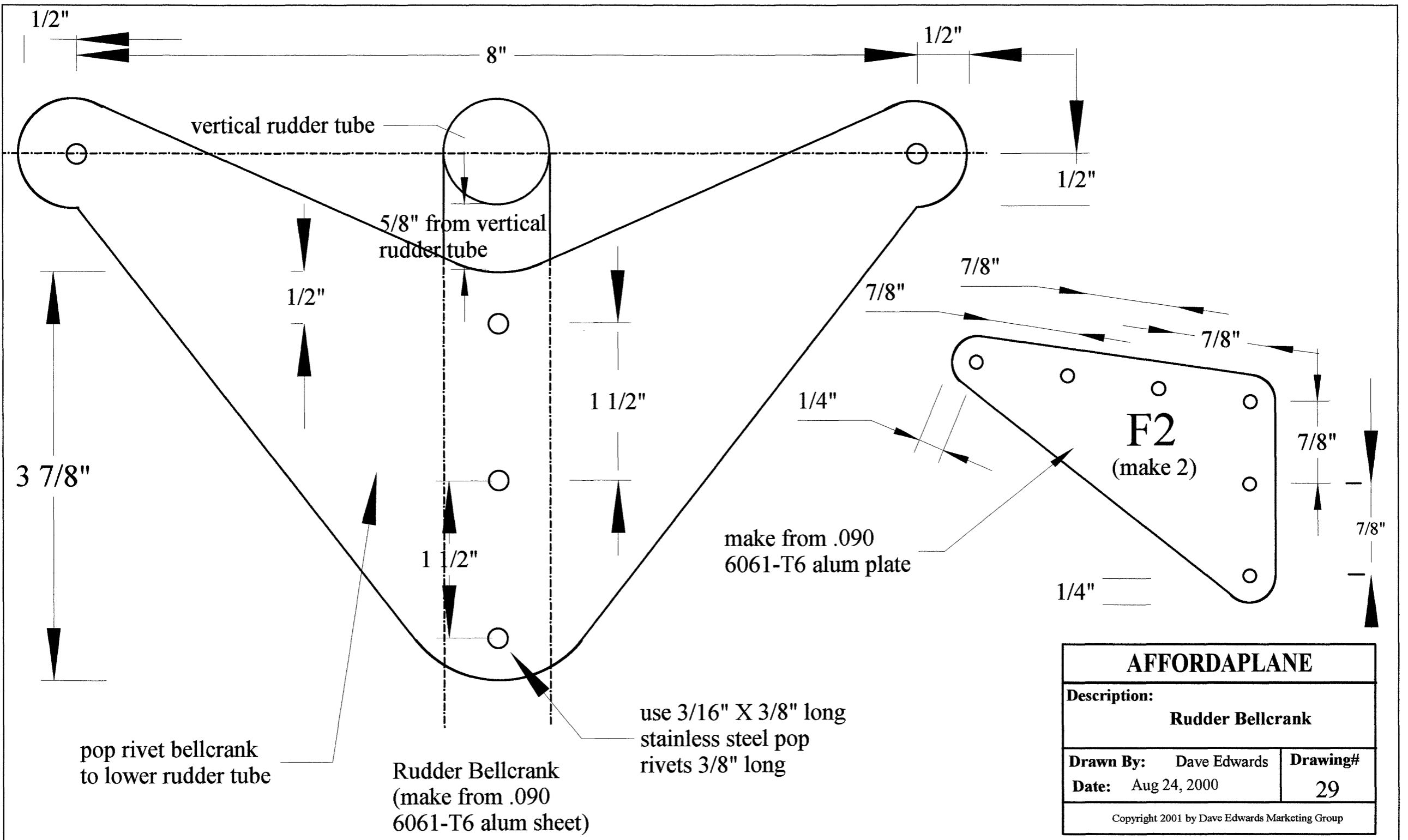
Date: Aug 24, 2000

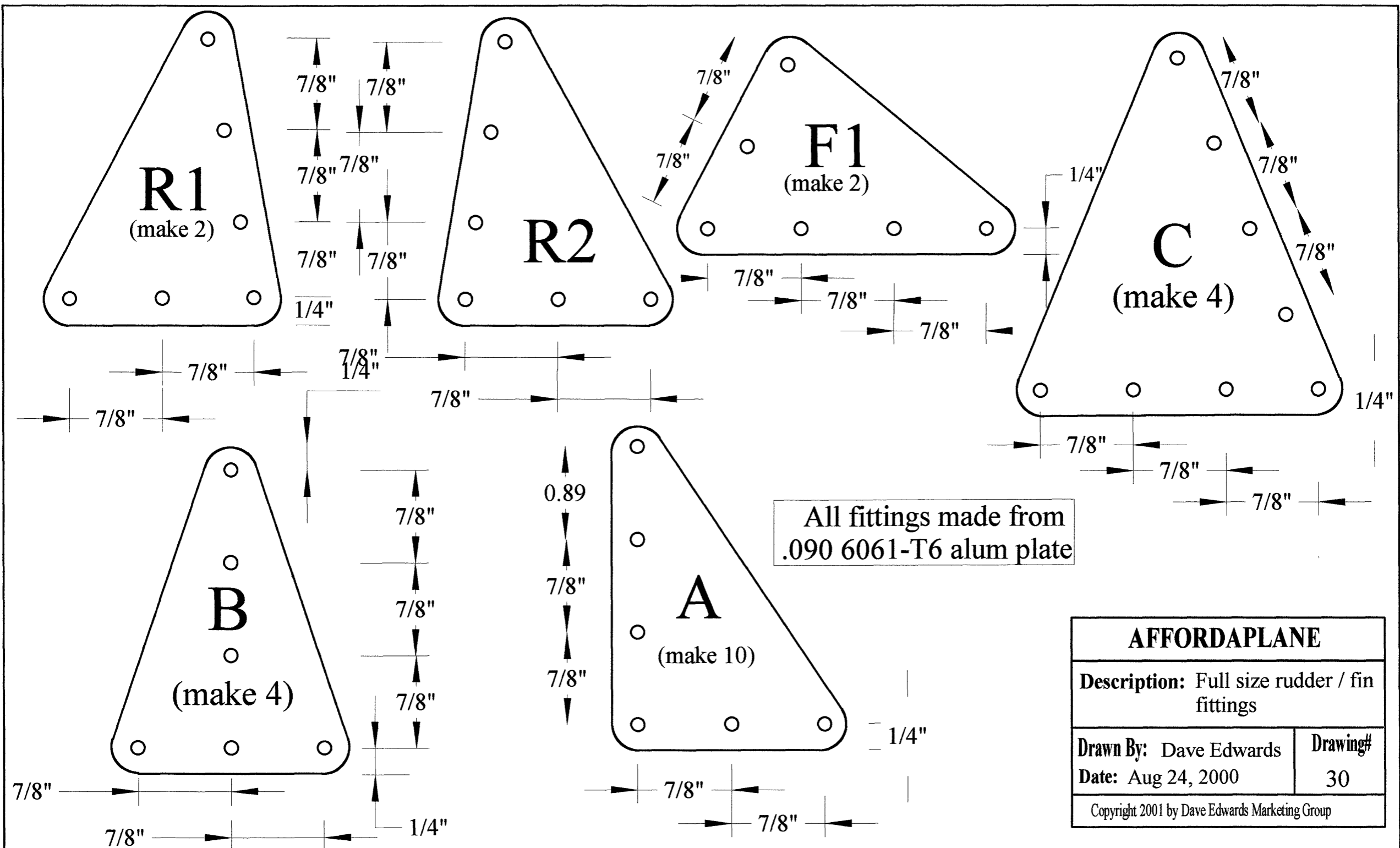
27

Copyright 2001 by Dave Edwards Marketing Group

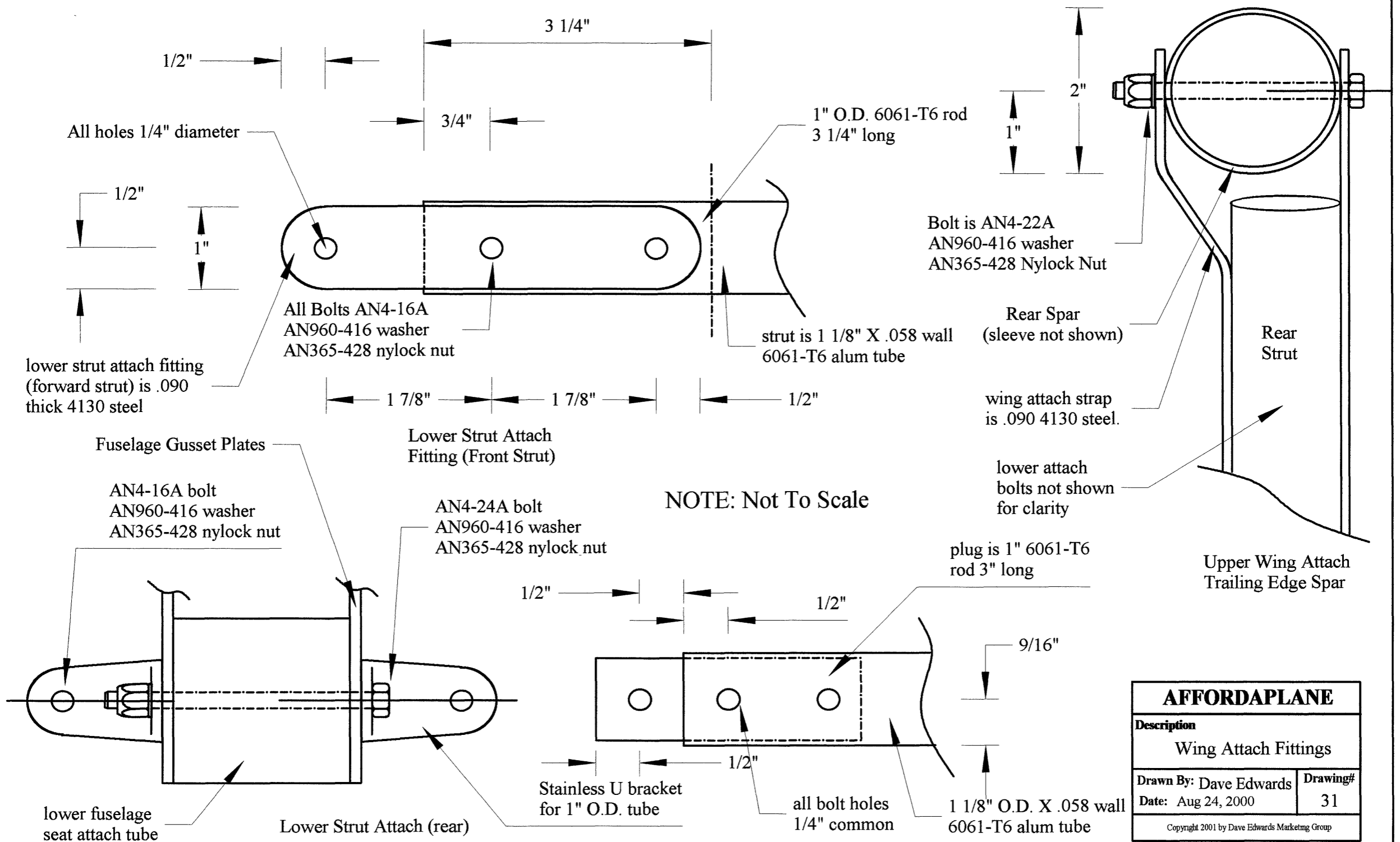


AFFORDAPLANE	
Description:	
Rudder	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	28
Copyright 2001 by Dave Edwards Marketing Group	

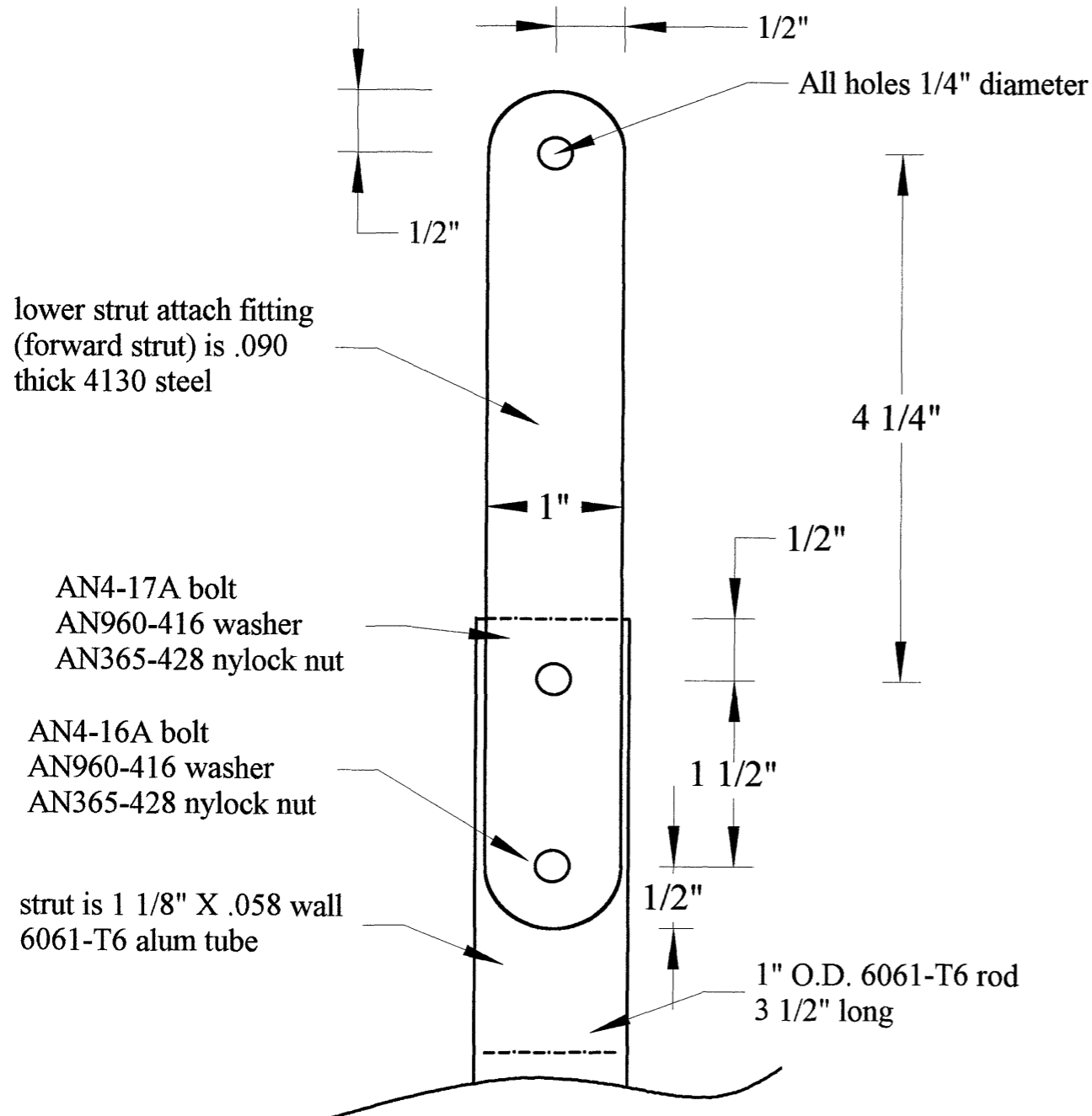




AFFORDAPLANE	
Description: Full size rudder / fin fittings	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	30
Copyright 2001 by Dave Edwards Marketing Group	

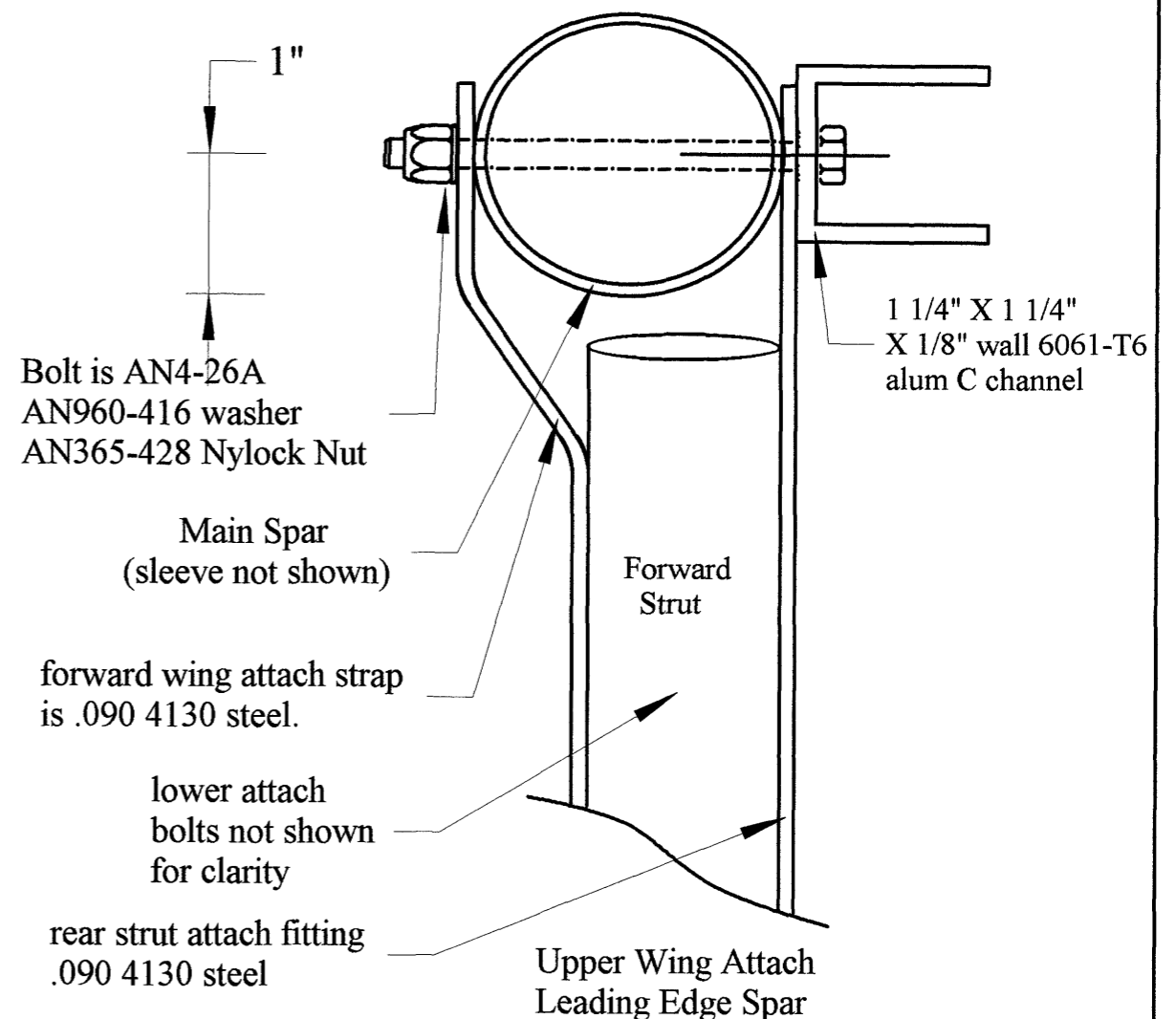


AFFORDAPLANE	
Description	
Wing Attach Fittings	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	31
Copyright 2001 by Dave Edwards Marketing Group	



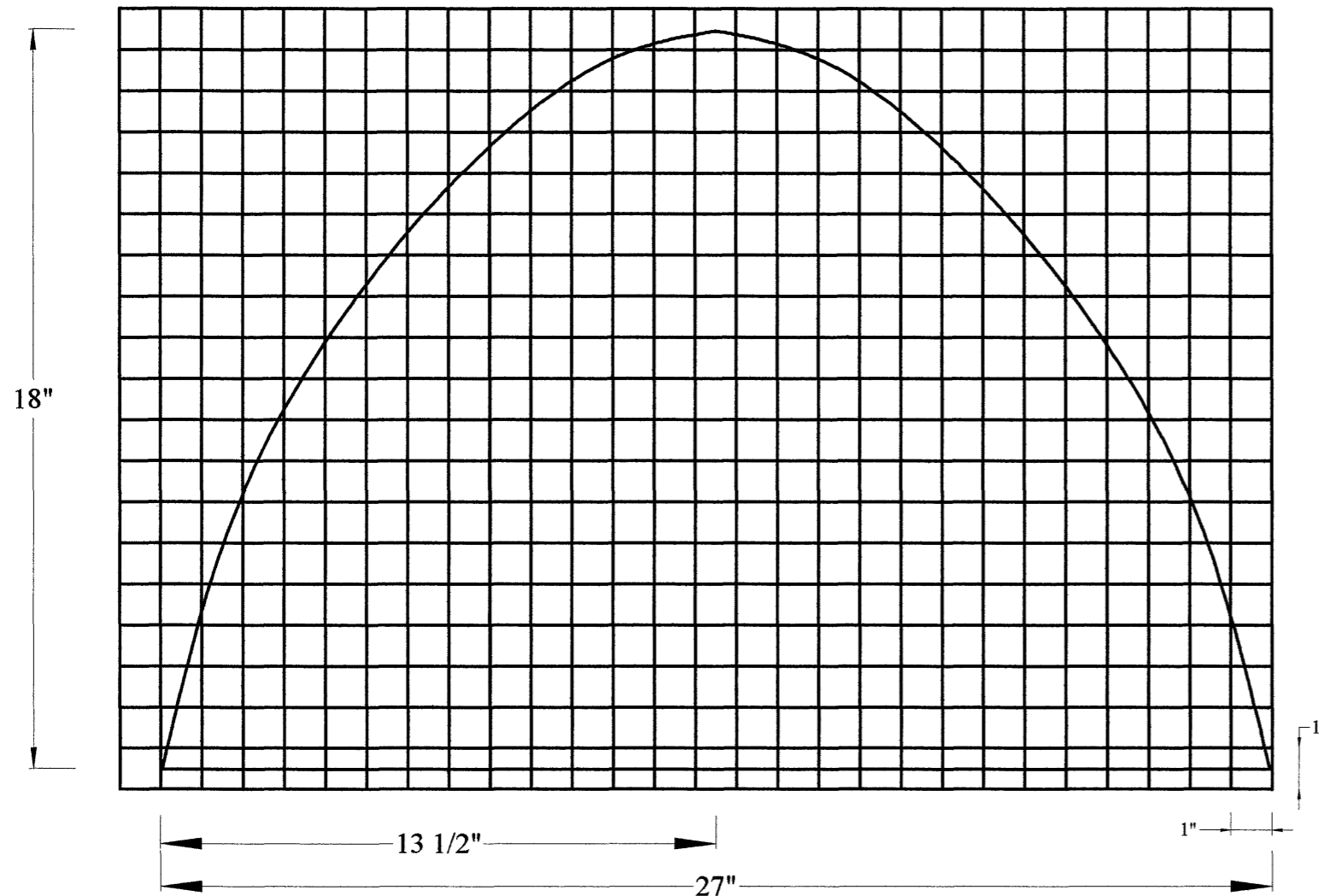
Upper Strut Attach
(rear strut)

NOTE: Not to scale

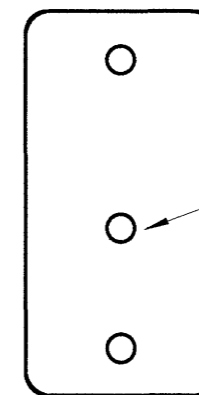
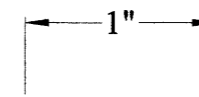


NOTE: Make front strap longer to allow for bend. Back drill through rear strap and strut to get hole locations for forward strap. Once drilled remove and clean up strap to allow $\frac{1}{2}"$ edge grain margin for lower bolt.

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



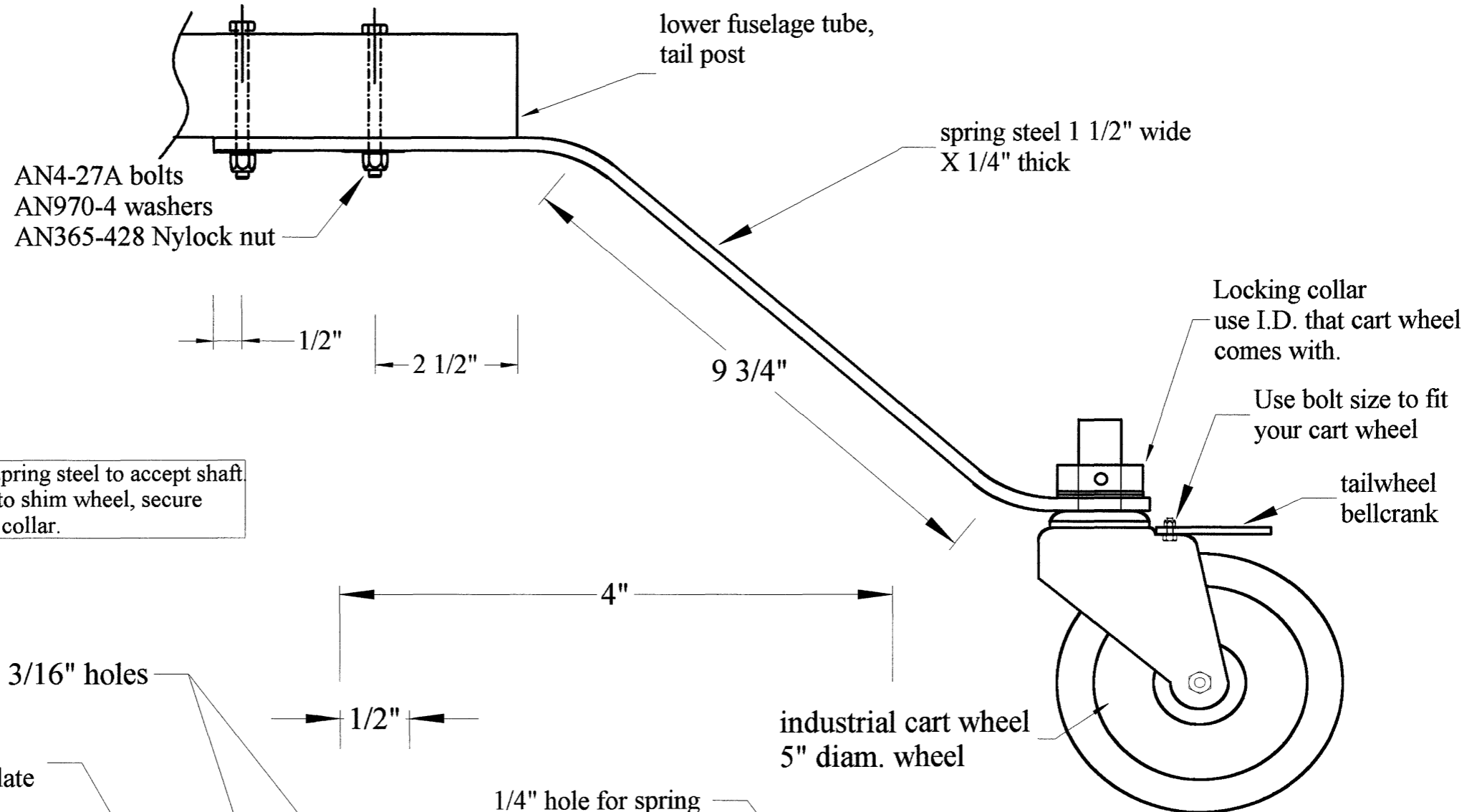
Windscreen made from 1/8" acrylic sheet
(high impact acrylic)



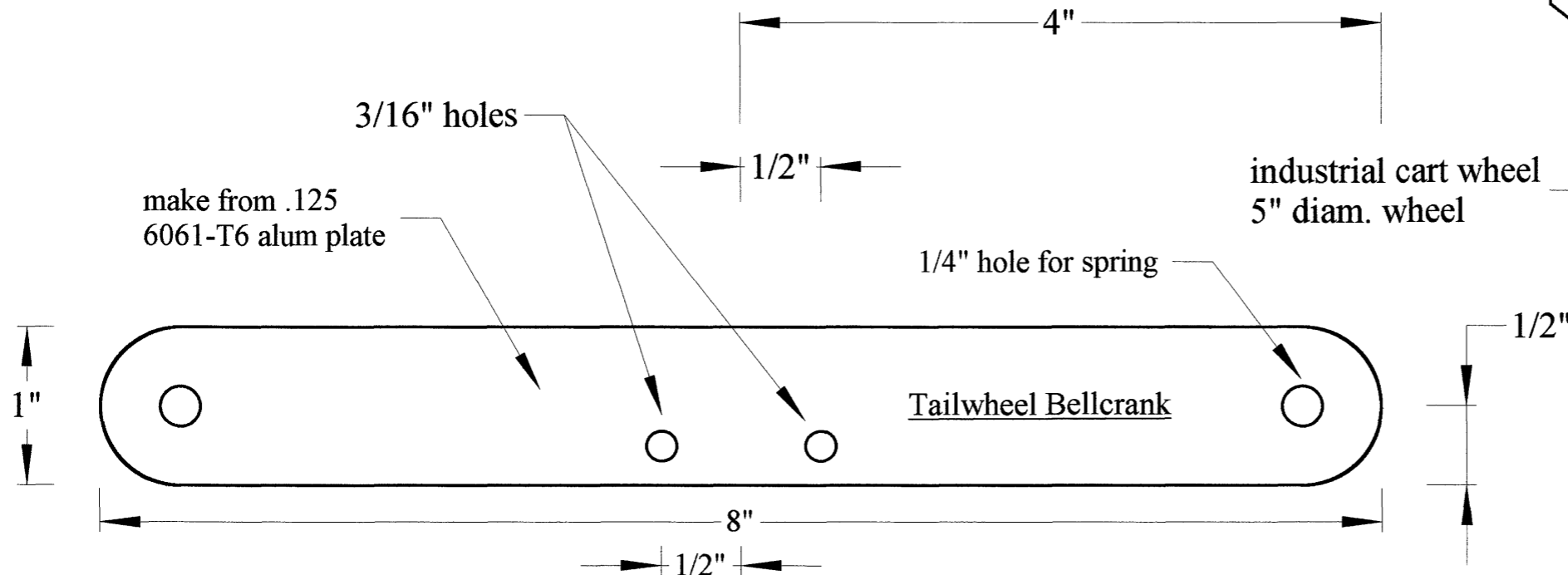
all holes 1/8"
pop rivet windscreen to clips
with 1/8" pop rivets

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

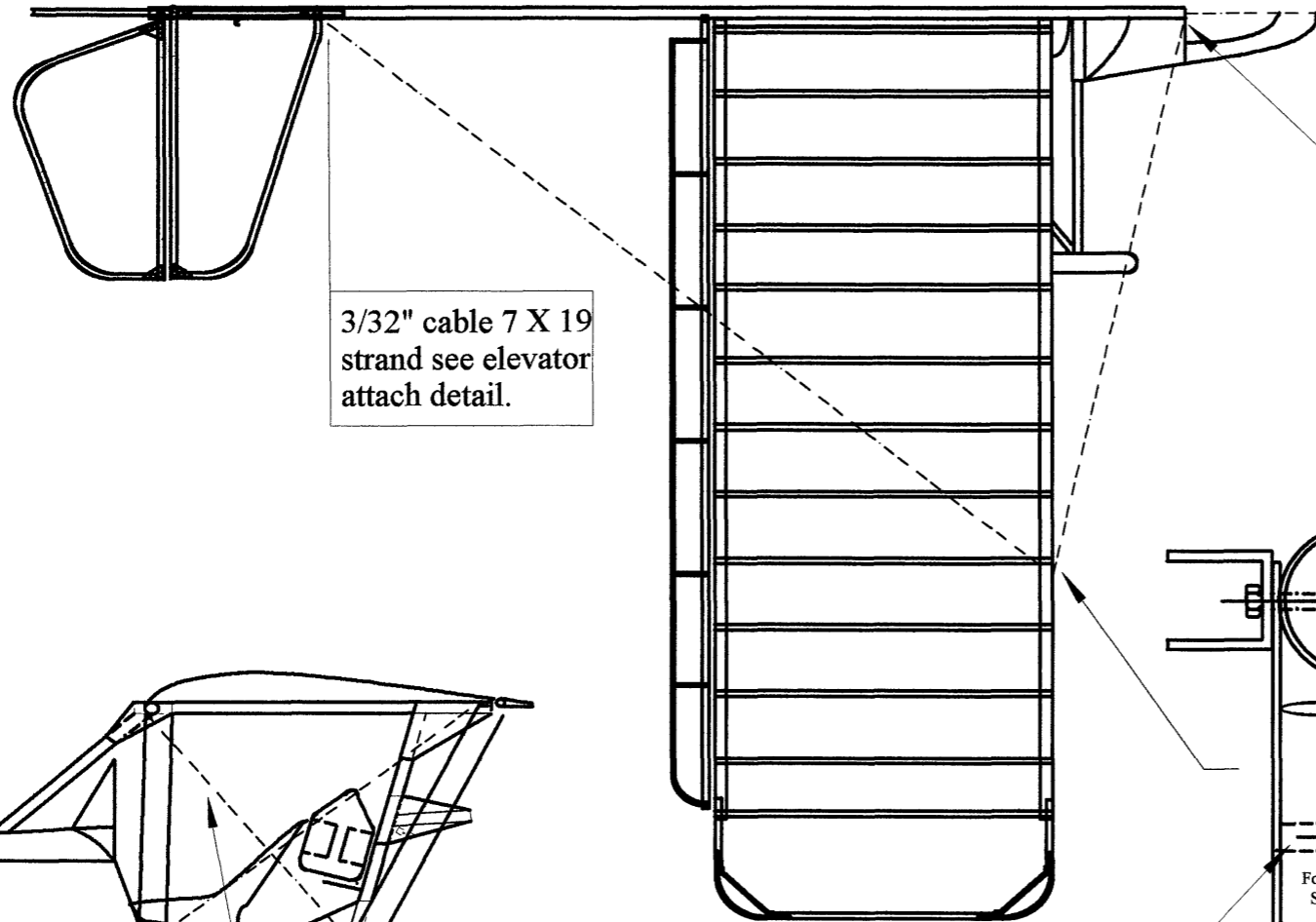
AFFORDAPLANE	
Description: Windscreen	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	33
Copyright 2001 by Dave Edwards Marketing Group	



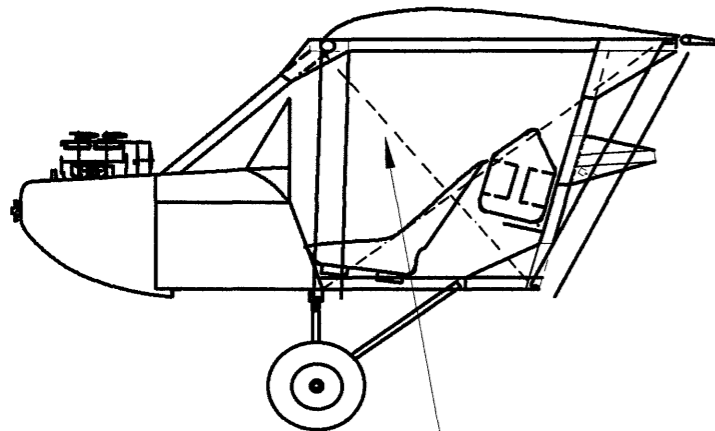
NOTE: drill spring steel to accept shaft.
Use washers to shim wheel, secure
with locking collar.



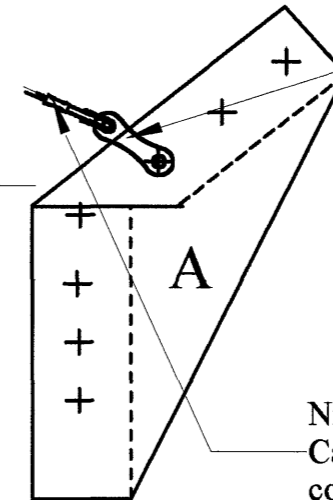
AFFORDAPLANE	
Description: Tailwheel Detail	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	34
Copyright 2001 by Dave Edwards Marketing Group	



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

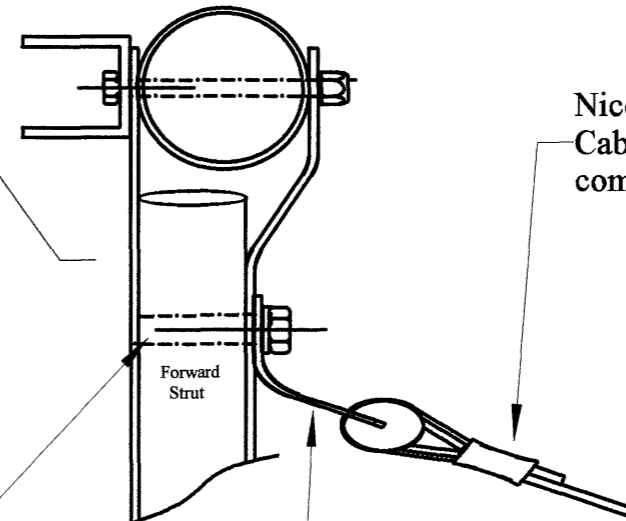


Cross bay wires 3/32" 7 X 19 strand
Use same assembly as detail on
right side of page. Tangs attach
to most upper bolts and most lower
bolts.



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

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



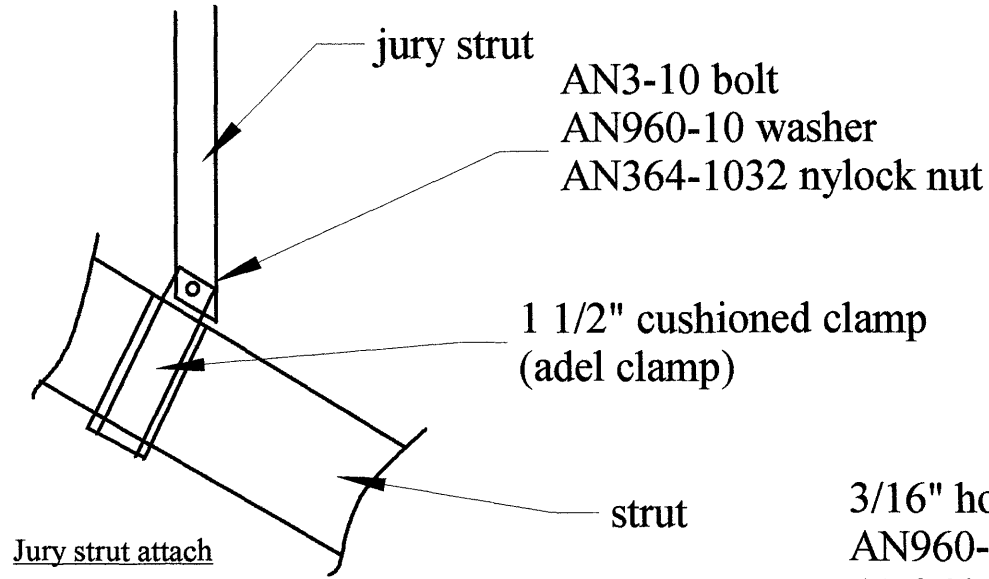
upper bolt

Upper Wing Attach
Leading Edge Spar

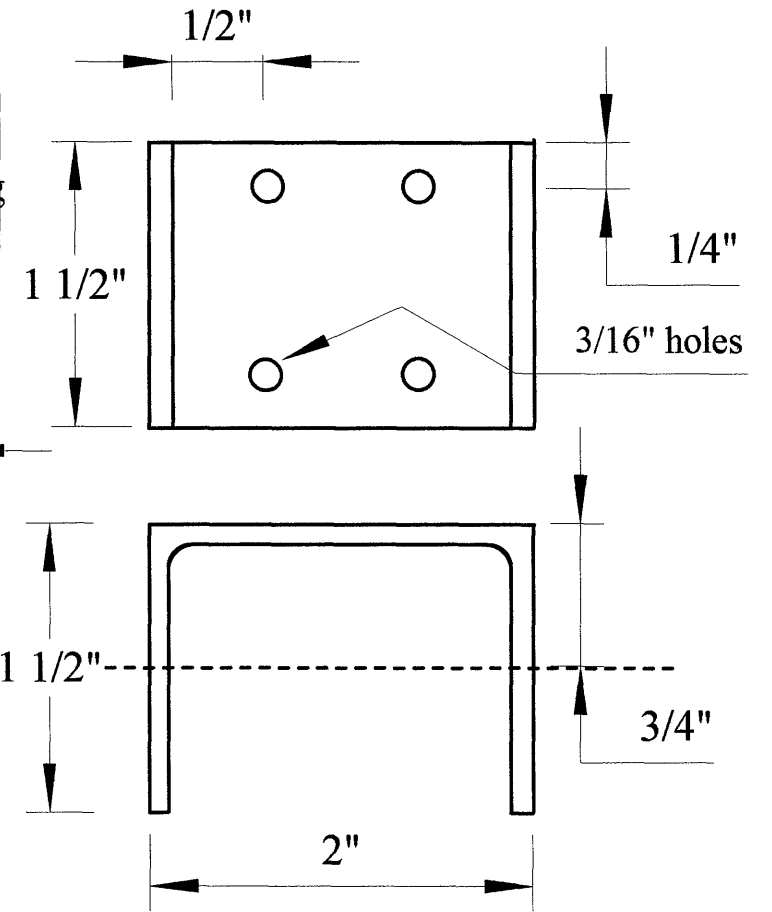
Nicopress sleeve 18-2-6
Cable thimble AN100-4
common for all wires

Stainless Steel Cable Tang

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

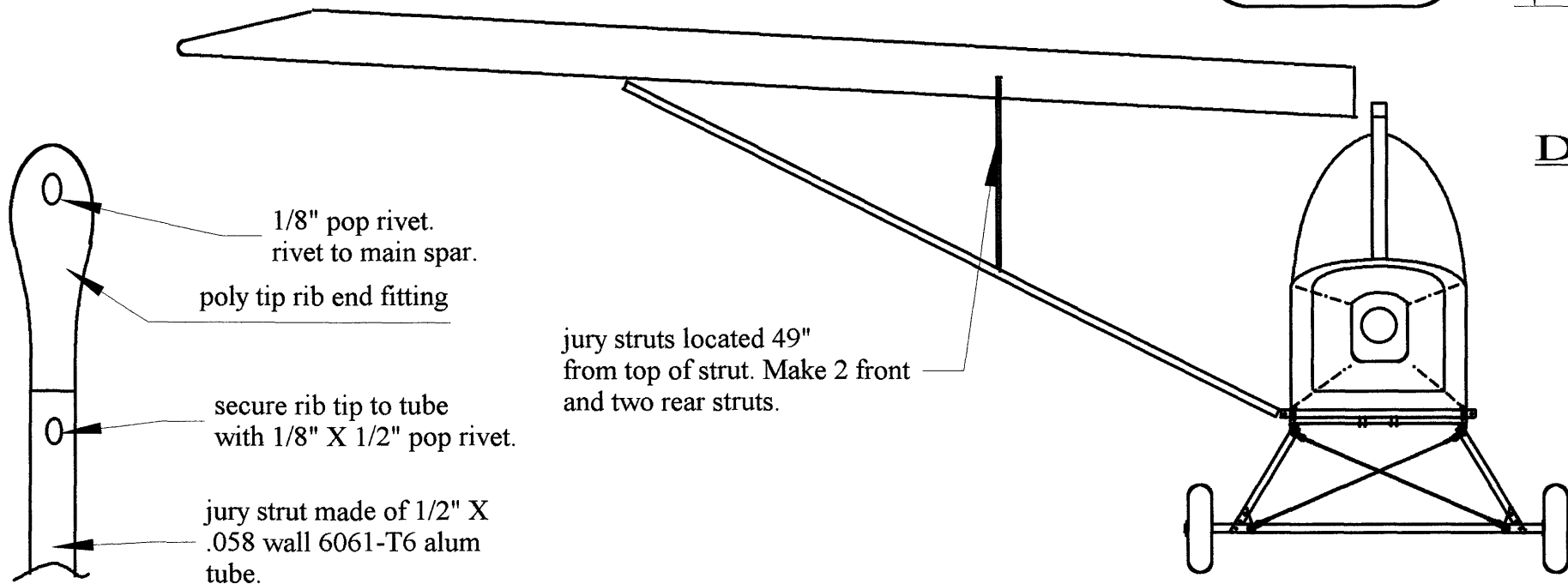


Saw out of 2" .125 Wall
6063- T351 Square Tubing



Diagonal Support Bracket

4 Required



AFFORDAPLANE

Description:

Diagonal brackets / jury struts

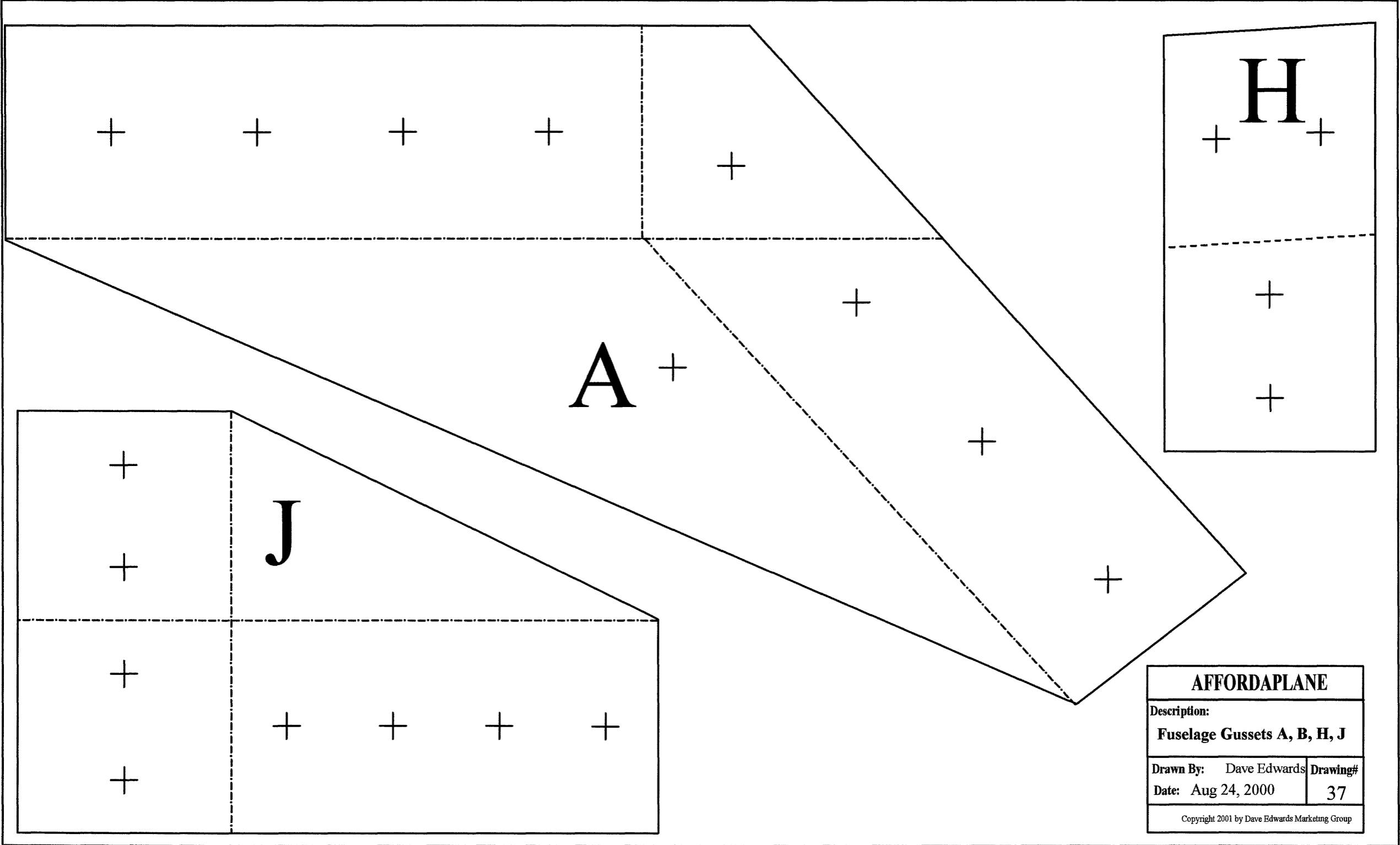
Drawn By: Dave Edwards

Drawing#

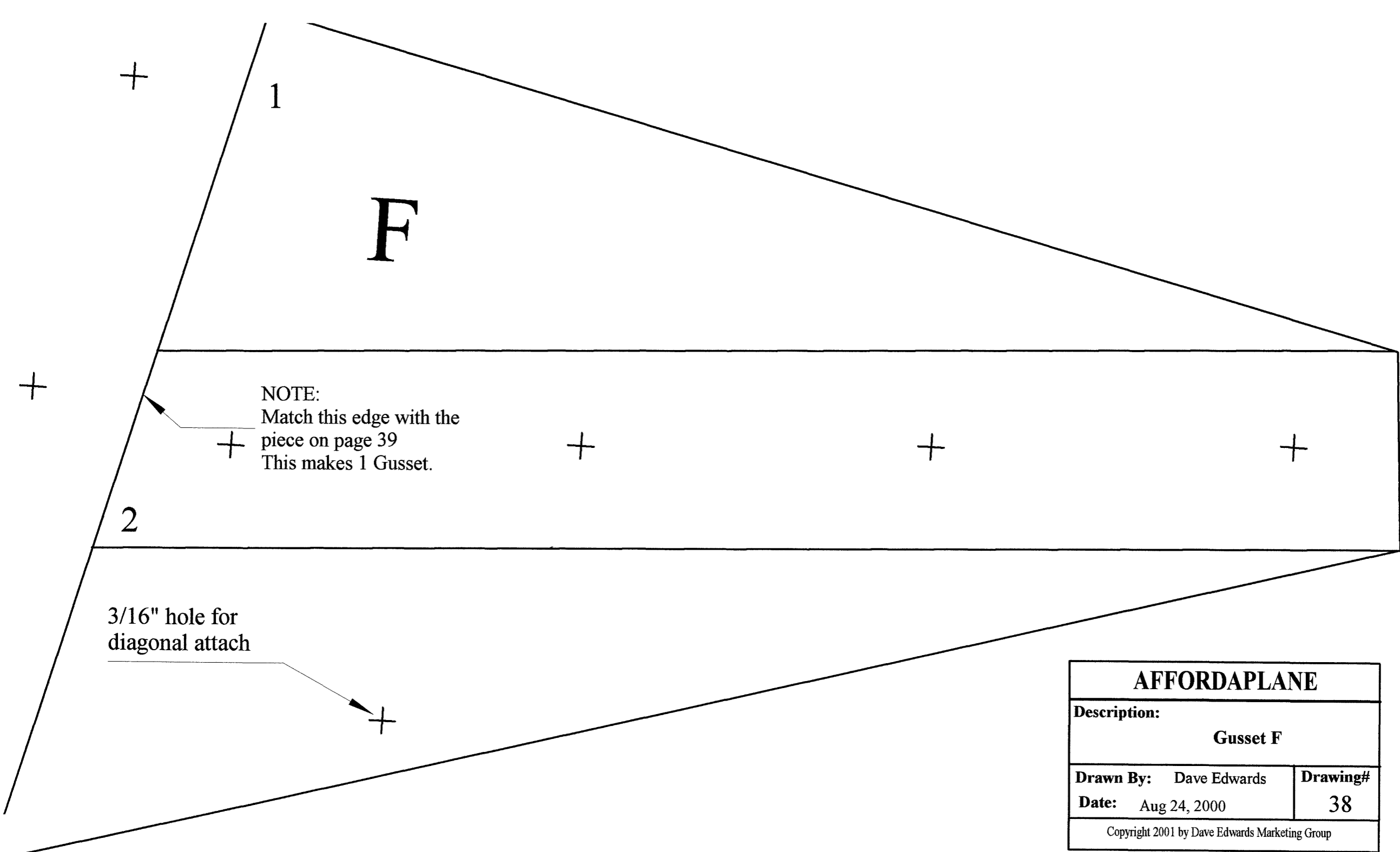
Date: Aug 24, 2000

36

Copyright 2001 by Dave Edwards Marketing Group



AFFORDAPLANE	
Description: Fuselage Gussets A, B, H, J	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	37
Copyright 2001 by Dave Edwards Marketing Group	



+

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

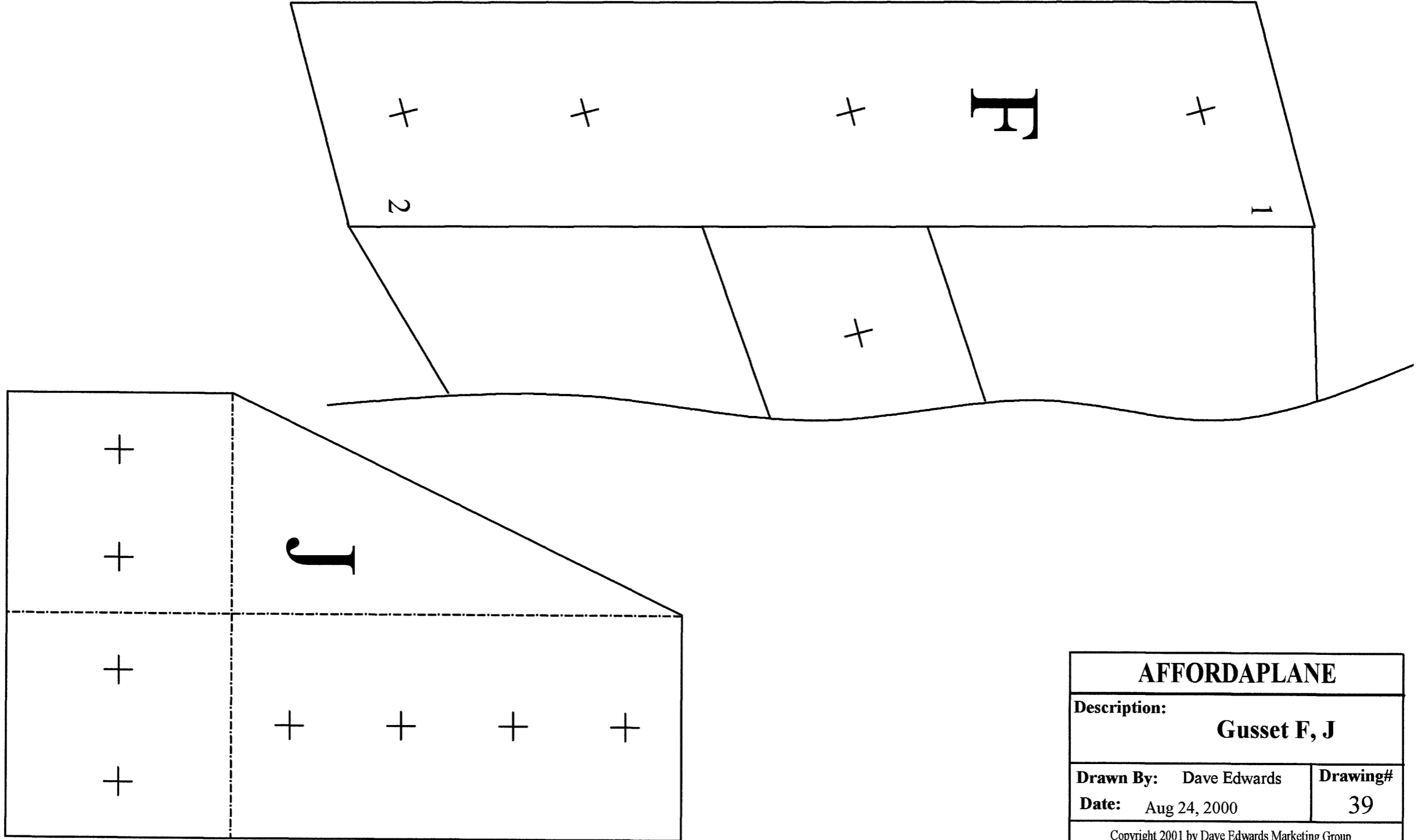
Drawn By: Dave Edwards

Drawing#

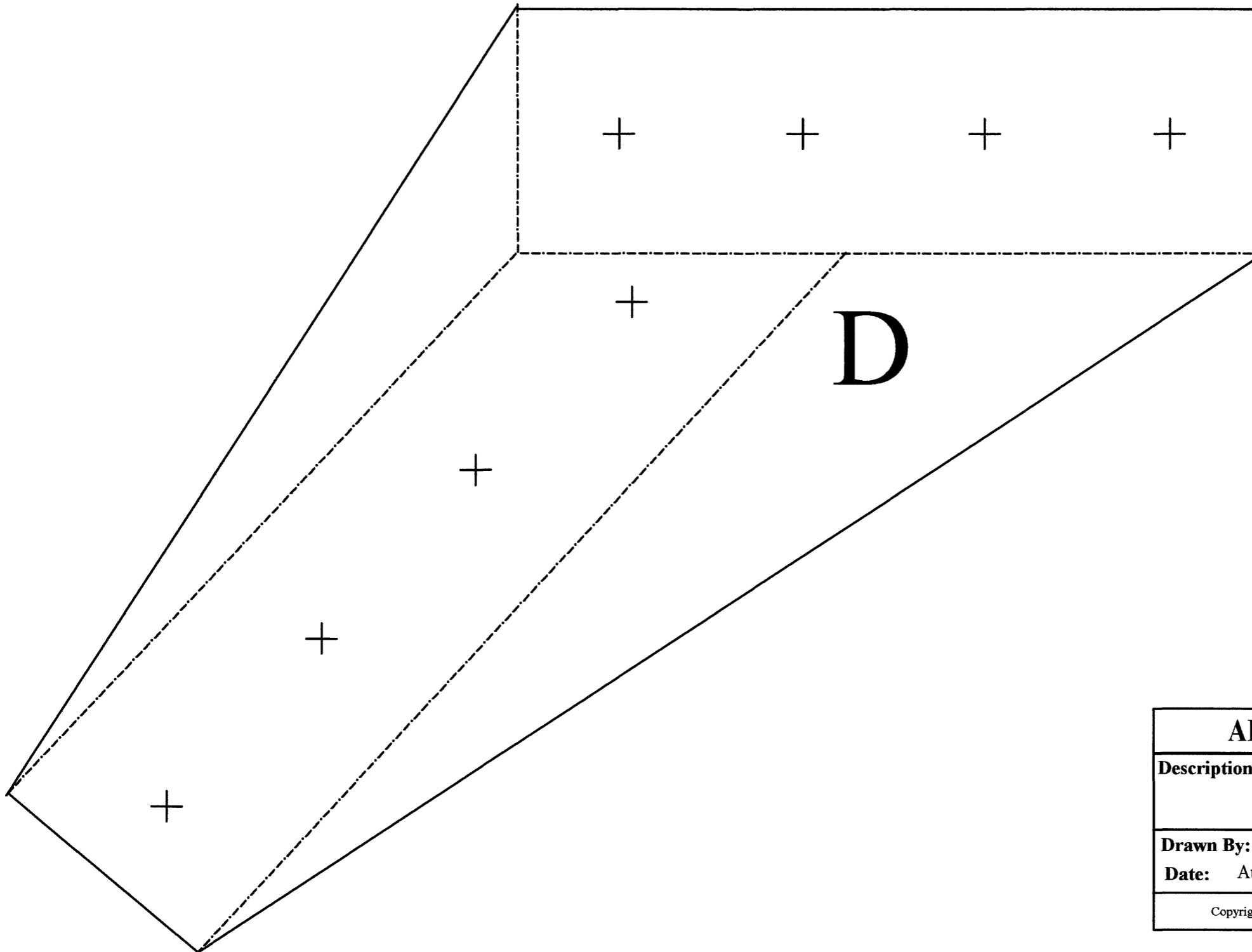
Date: Aug 24, 2000

38

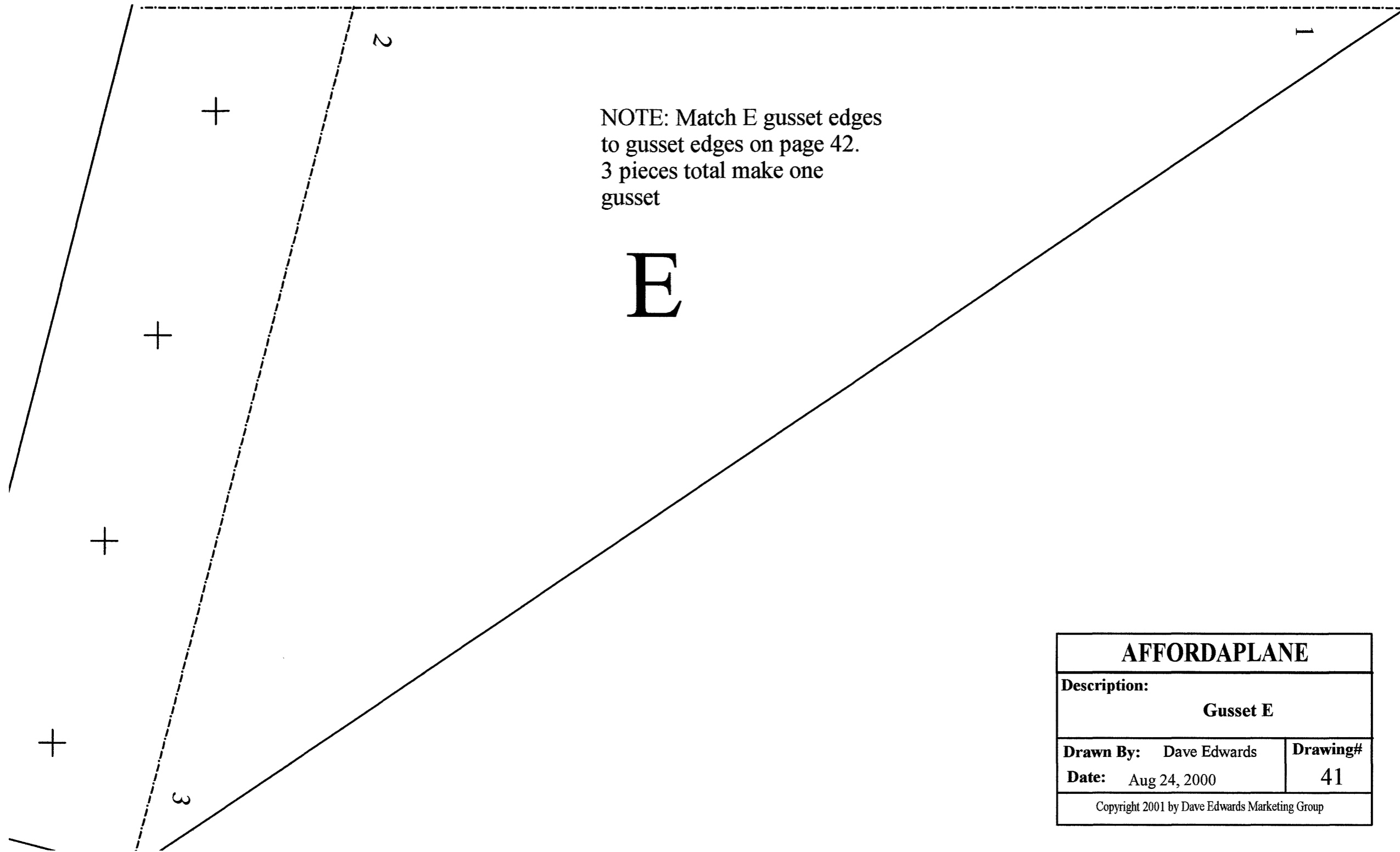
Copyright 2001 by Dave Edwards Marketing Group



AFFORDAPLANE		
Description: Gusset F, J		
Drawn By: Dave Edwards		Drawing#
Date: Aug 24, 2000		39
Copyright 2001 by Dave Edwards Marketing Group		



AFFORDAPLANE		
Description:		
Gusset D		
Drawn By:	Dave Edwards	Drawing#
Date:	Aug 24, 2000	40
Copyright 2001 by Dave Edwards Marketing Group		



AFFORDAPLANE

Description:

Gusset E

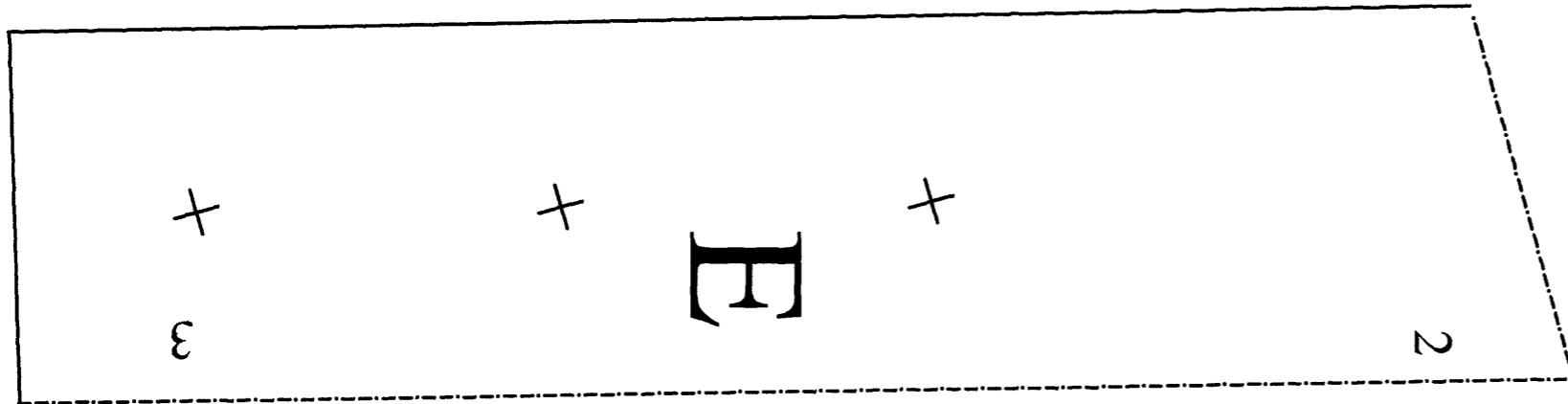
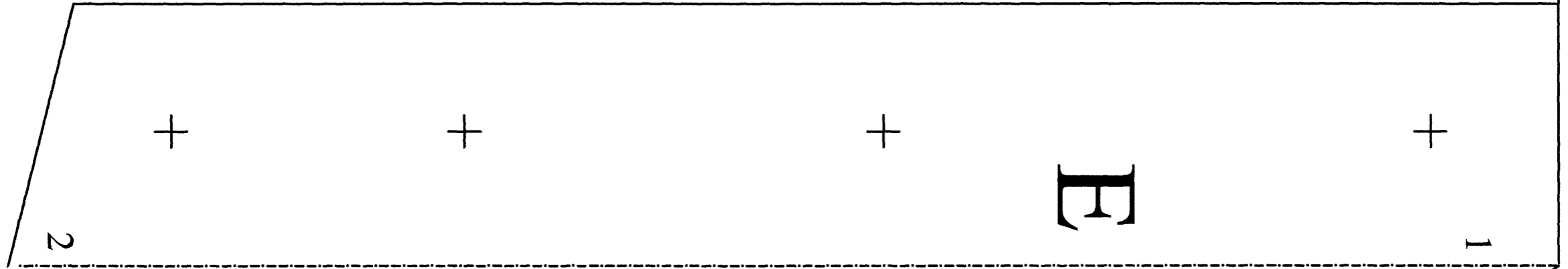
Drawn By: Dave Edwards

Drawing#

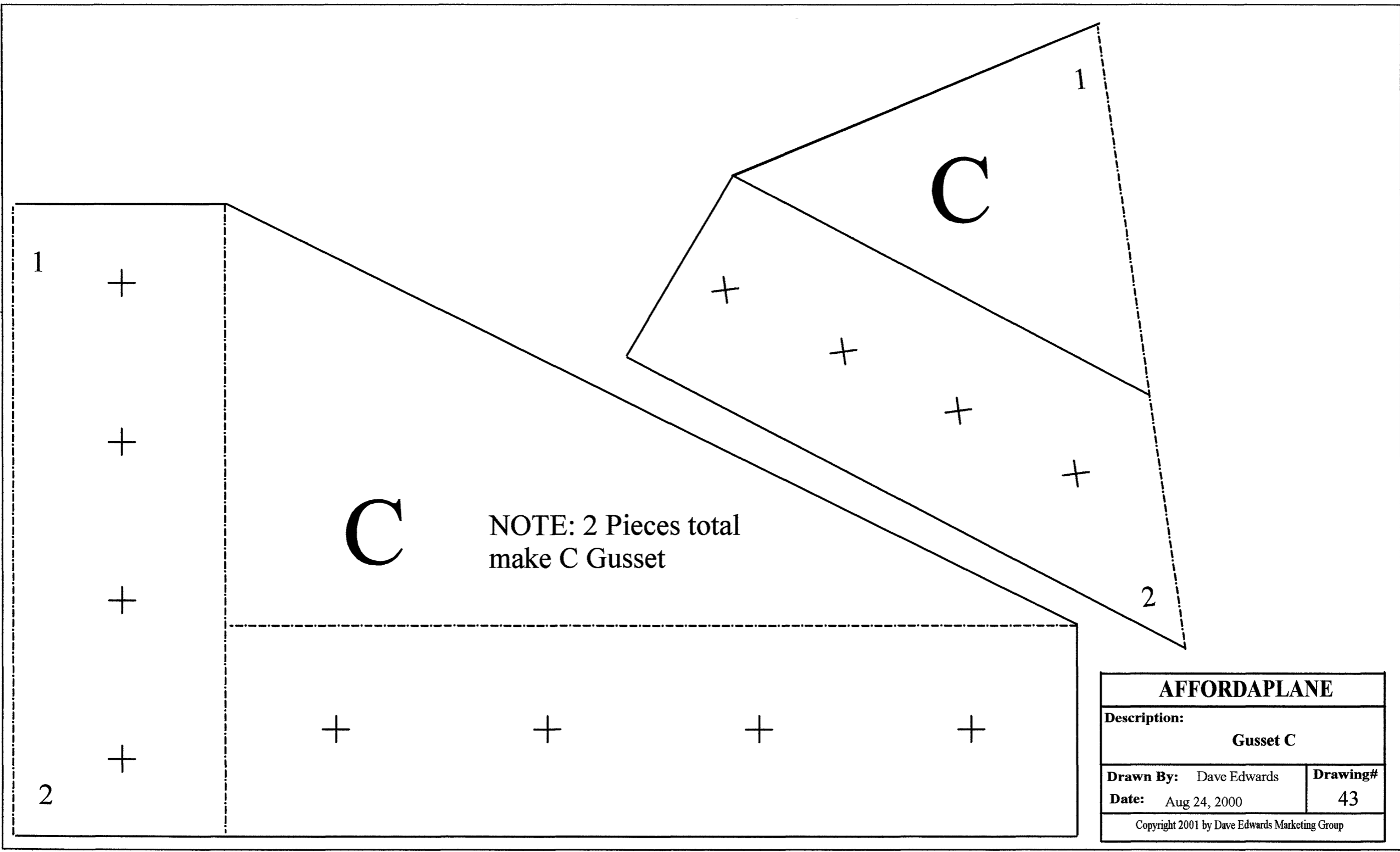
Date: Aug 24, 2000

41

Copyright 2001 by Dave Edwards Marketing Group



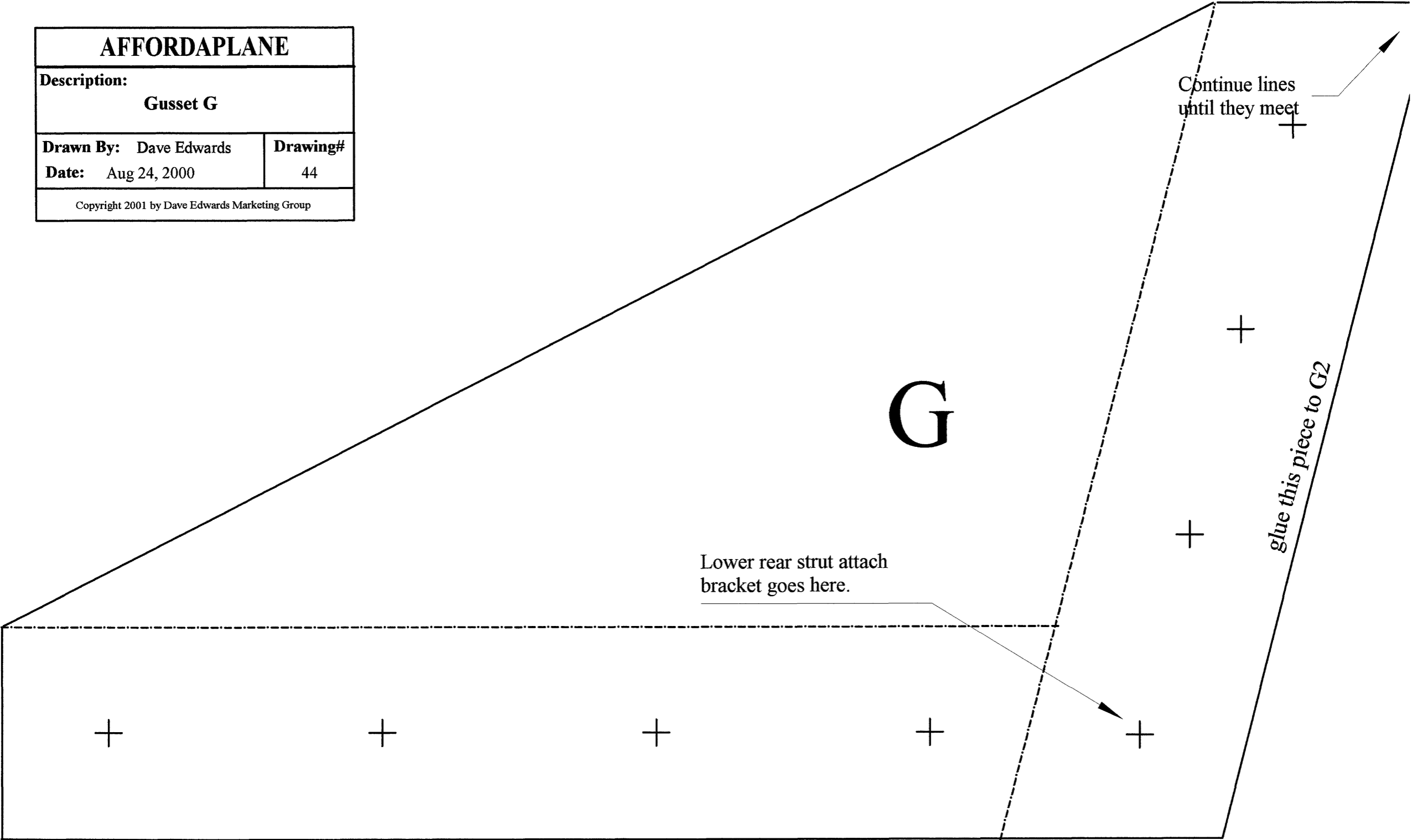
AFFORDAPLANE		
Description:		
Gusset E		
Drawn By:	Dave Edwards	Drawing#
Date:	Aug 24, 2000	42
Copyright 2001 by Dave Edwards Marketing Group		



NOTE: 2 Pieces total
make C Gusset

AFFORDAPLANE		
Description:		
Gusset C		
Drawn By:	Dave Edwards	Drawing#
Date:	Aug 24, 2000	43
Copyright 2001 by Dave Edwards Marketing Group		

AFFORDAPLANE	
Description: Gusset G	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	44
Copyright 2001 by Dave Edwards Marketing Group	



glue this edge to G

G2

+

+

+

+

AFFORDAPLANE

Description:

Gusset G2

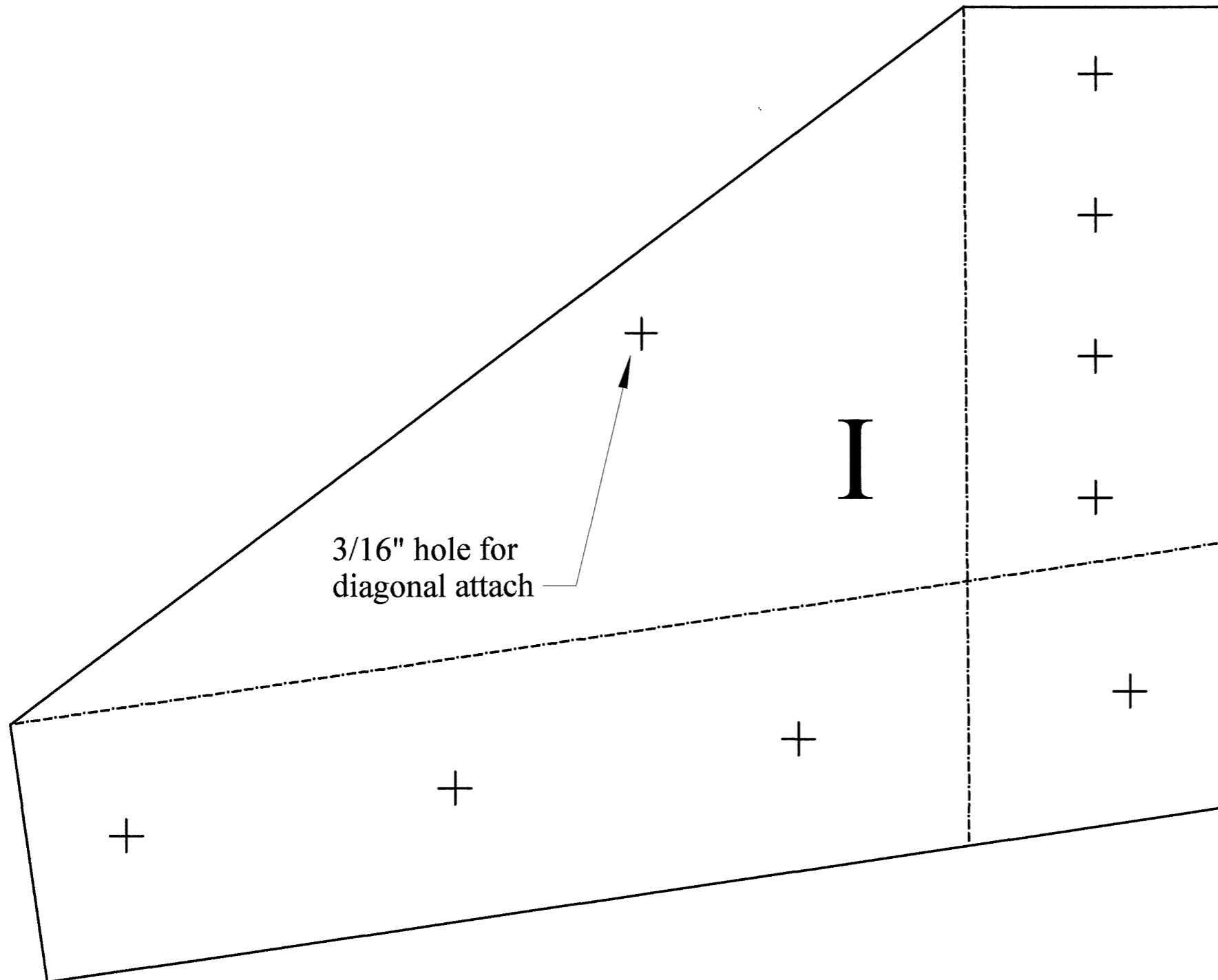
Drawn By: Dave Edwards

Drawing#

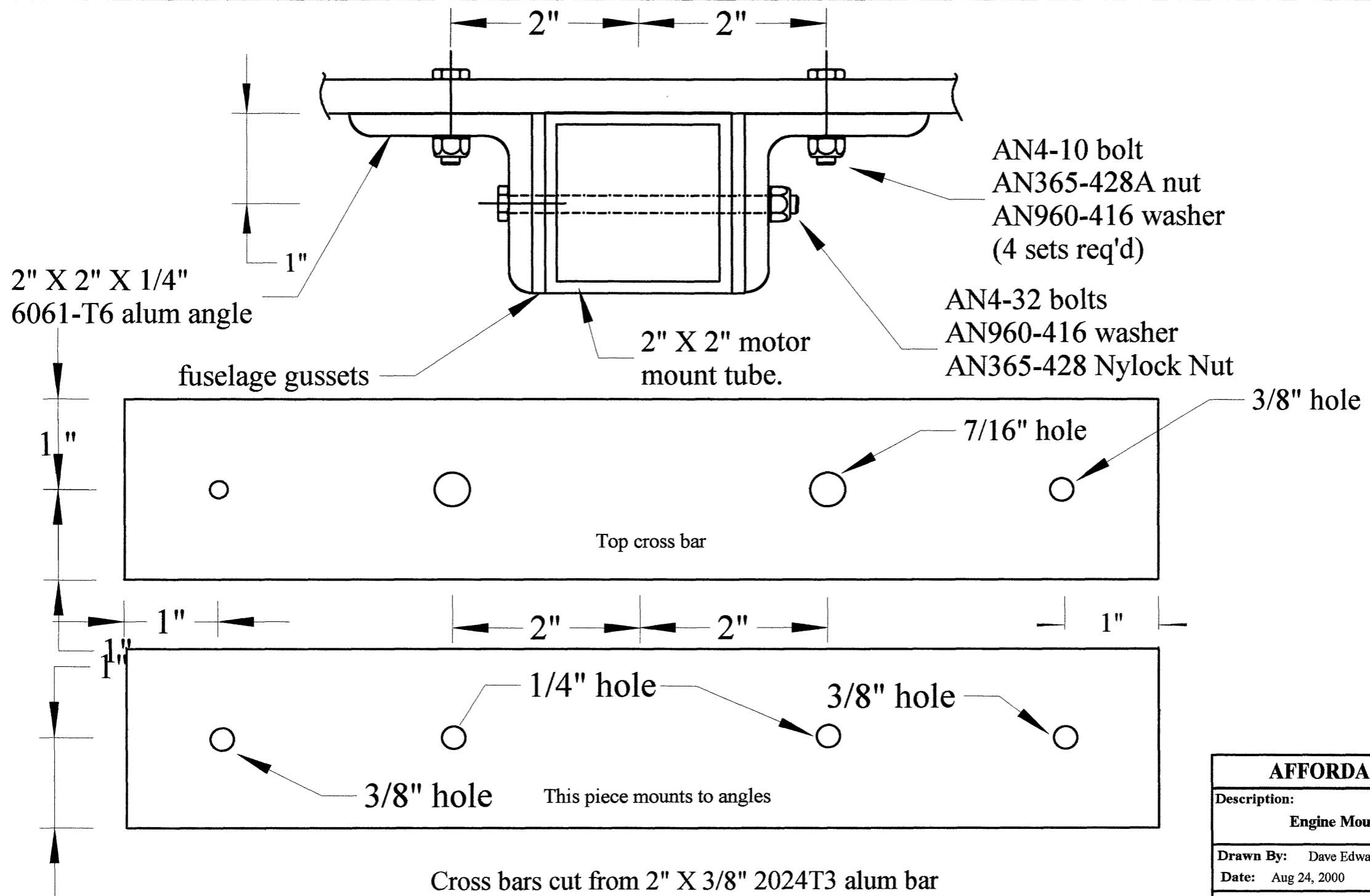
Date: Aug 24, 2000

45

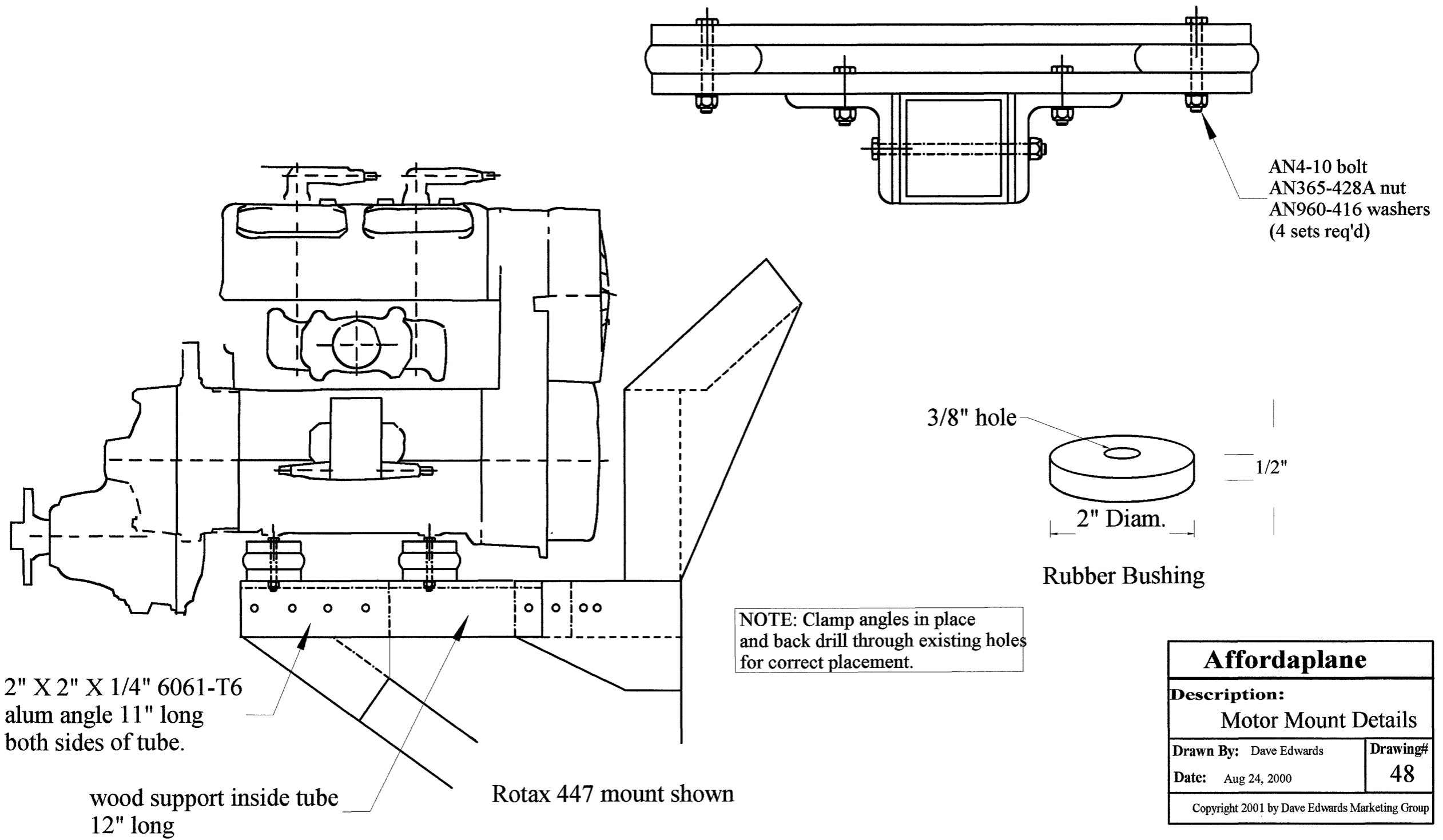
Copyright 2001 by Dave Edwards Marketing Group



AFFORDAPLANE	
Description:	
Gusset I	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	46
Copyright 2001 by Dave Edwards Marketing Group	



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



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

3/8" hole
1/2"
2" Diam.

Rubber Bushing

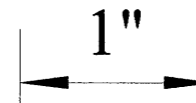
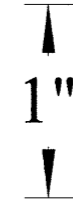
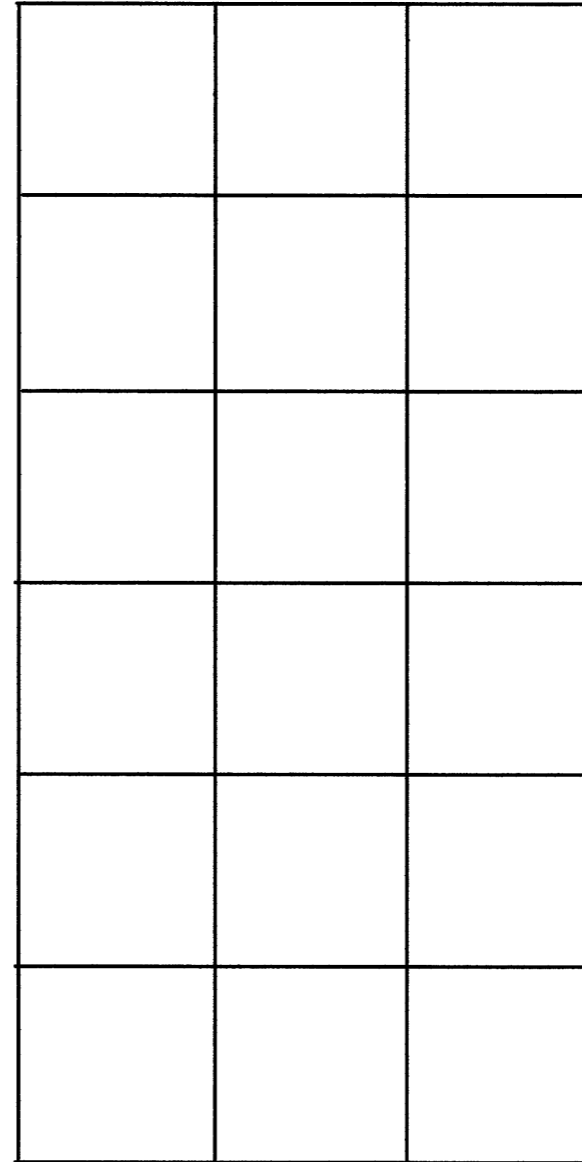
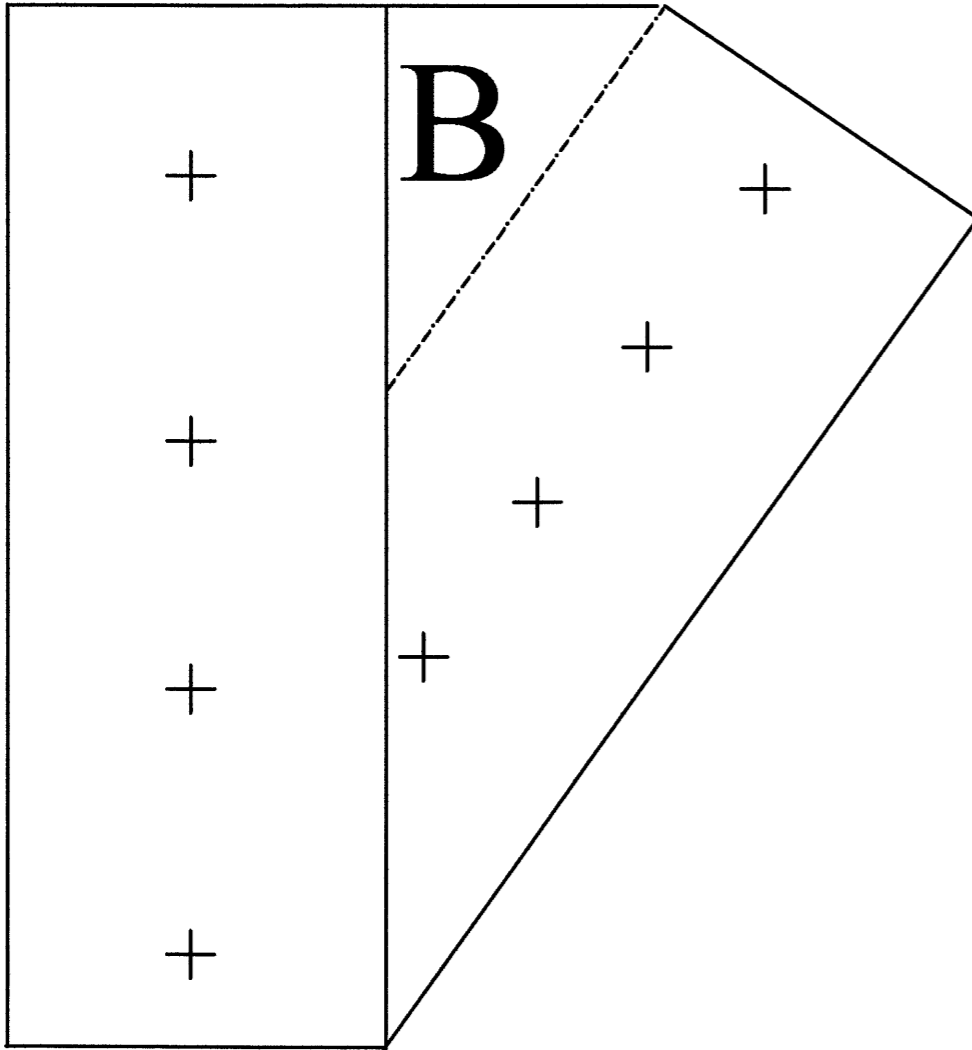
NOTE: Clamp angles in place
and back drill through existing holes
for correct placement.

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

Affordaplane	
Description: Motor Mount Details	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	48
Copyright 2001 by Dave Edwards Marketing Group	



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

AFFORDAPLANE	
Description:	
CALIBRATION PAGE	
Gusset C	
Drawn By: Dave Edwards	Drawing#
Date: Aug 24, 2000	1 A
Copyright 2001 by Dave Edwards Marketing Group	