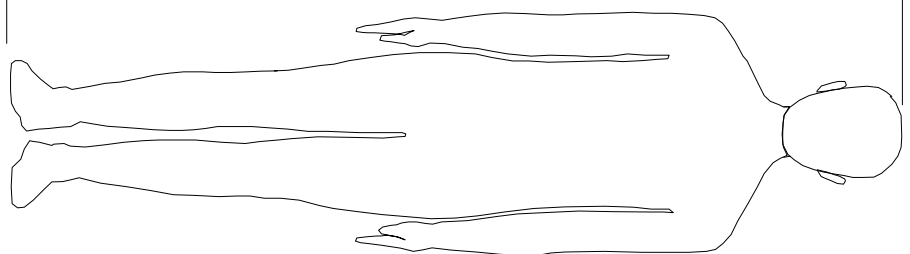


11 feet 0.25 inches

5 feet 10 inches

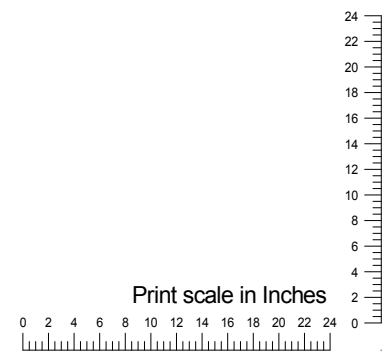


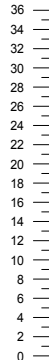
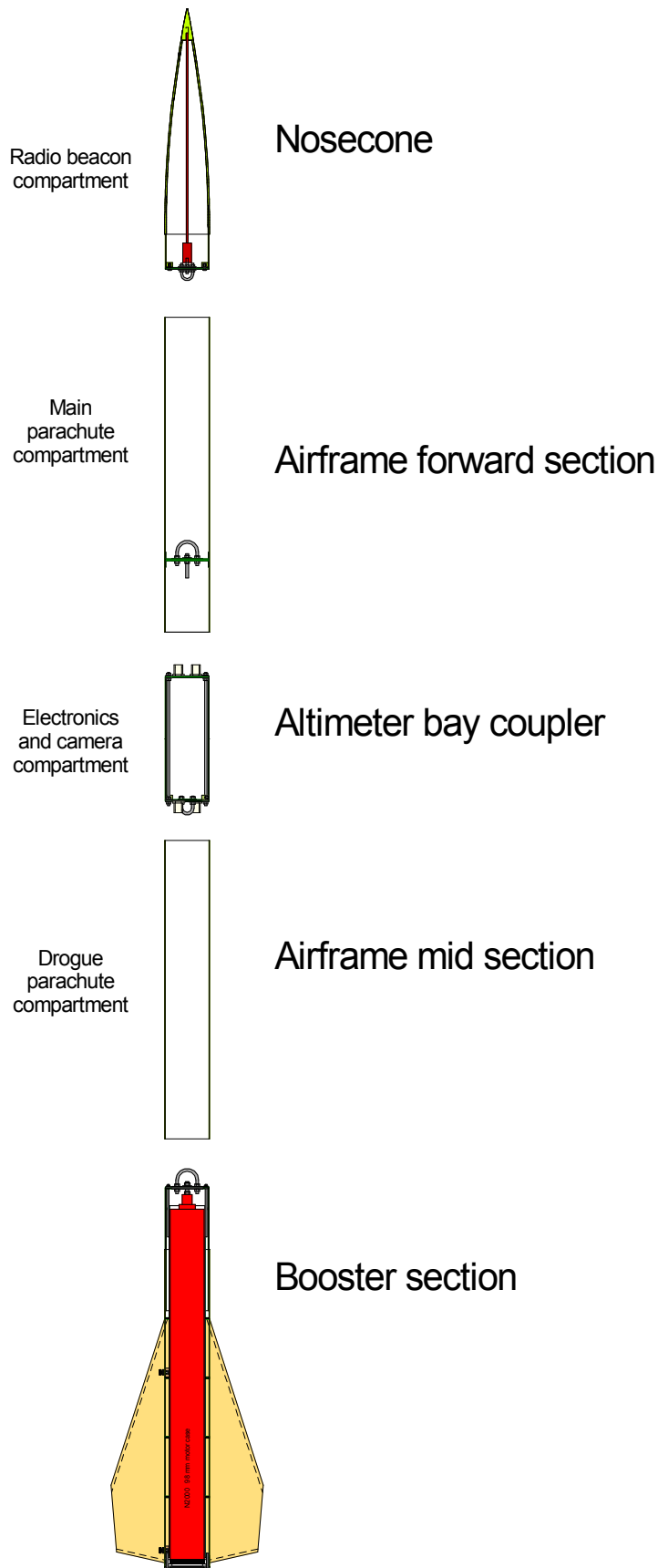
Colors:
Cobalt Blue Metallic
Gold Metallic

Project: Angelfire	All dimensions are in inches
	CAD scale: 1" = 15"
Drawing: COMPLETE AIRFRAME AND PAINT SCHEME	Rev: A

Date: Jan. 29, 2005

By: Vern Knowles





Project: **Angelfire**

All dimensions are in inches
CAD scale: 1" = 20"

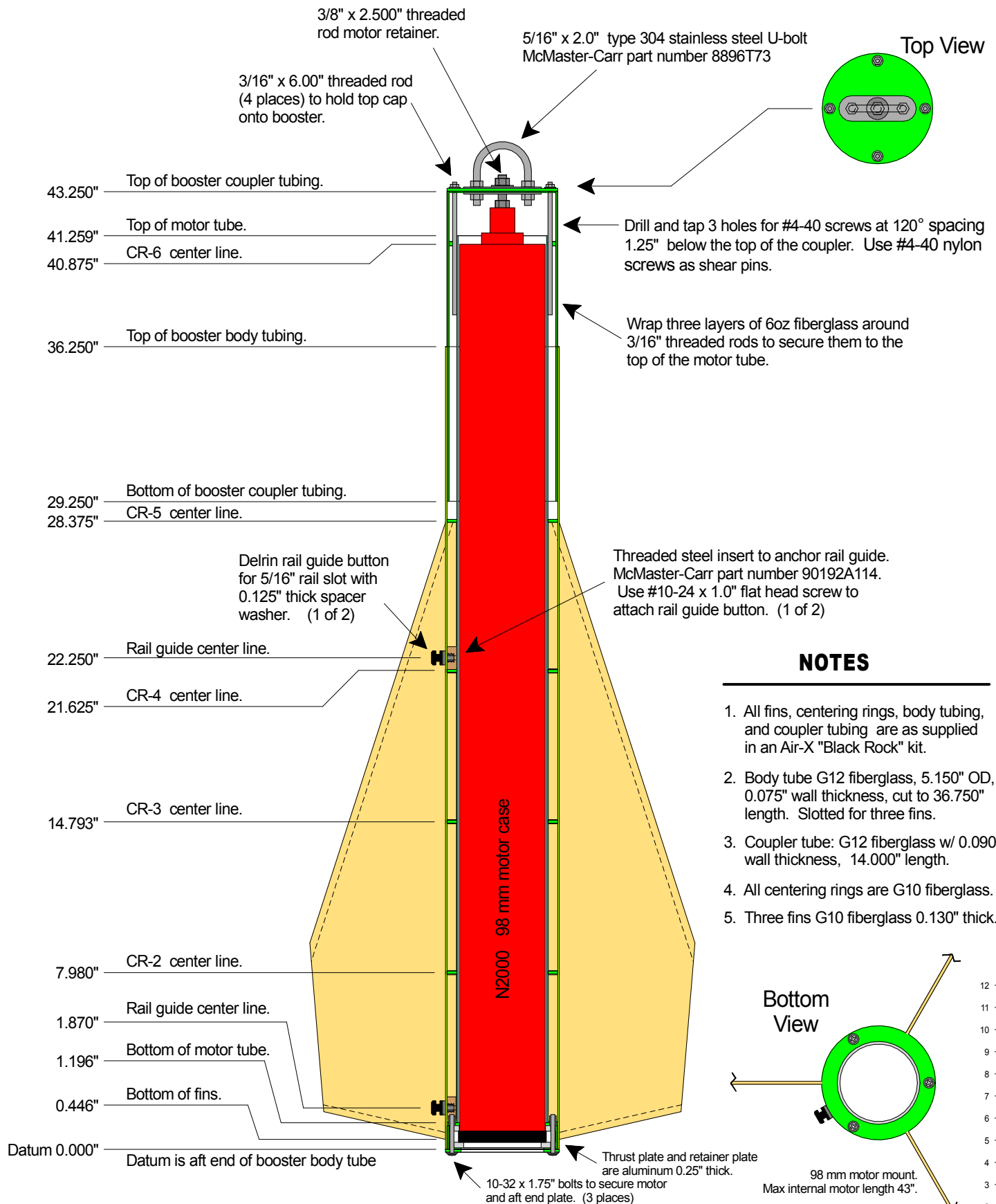
Print scale in Inches
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Drawing: AIRFRAME ASSEMBLY

Rev: A

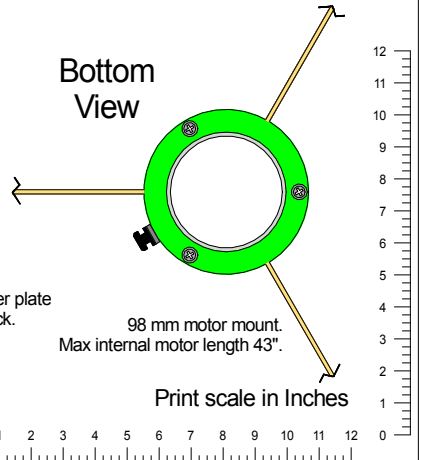
Date: Jan. 29, 2005

By: Vern Knowles



NOTES

1. All fins, centering rings, body tubing, and coupler tubing are as supplied in an Air-X "Black Rock" kit.
2. Body tube G12 fiberglass, 5.150" OD, 0.075" wall thickness, cut to 36.750" length. Slotted for three fins.
3. Coupler tube: G12 fiberglass w/ 0.090" wall thickness, 14.000" length.
4. All centering rings are G10 fiberglass.
5. Three fins G10 fiberglass 0.130" thick.



Project: **Angelfire**

All dimensions are in inches
CAD scale: 1" = 6"

Drawing: BOOSTER SECTION

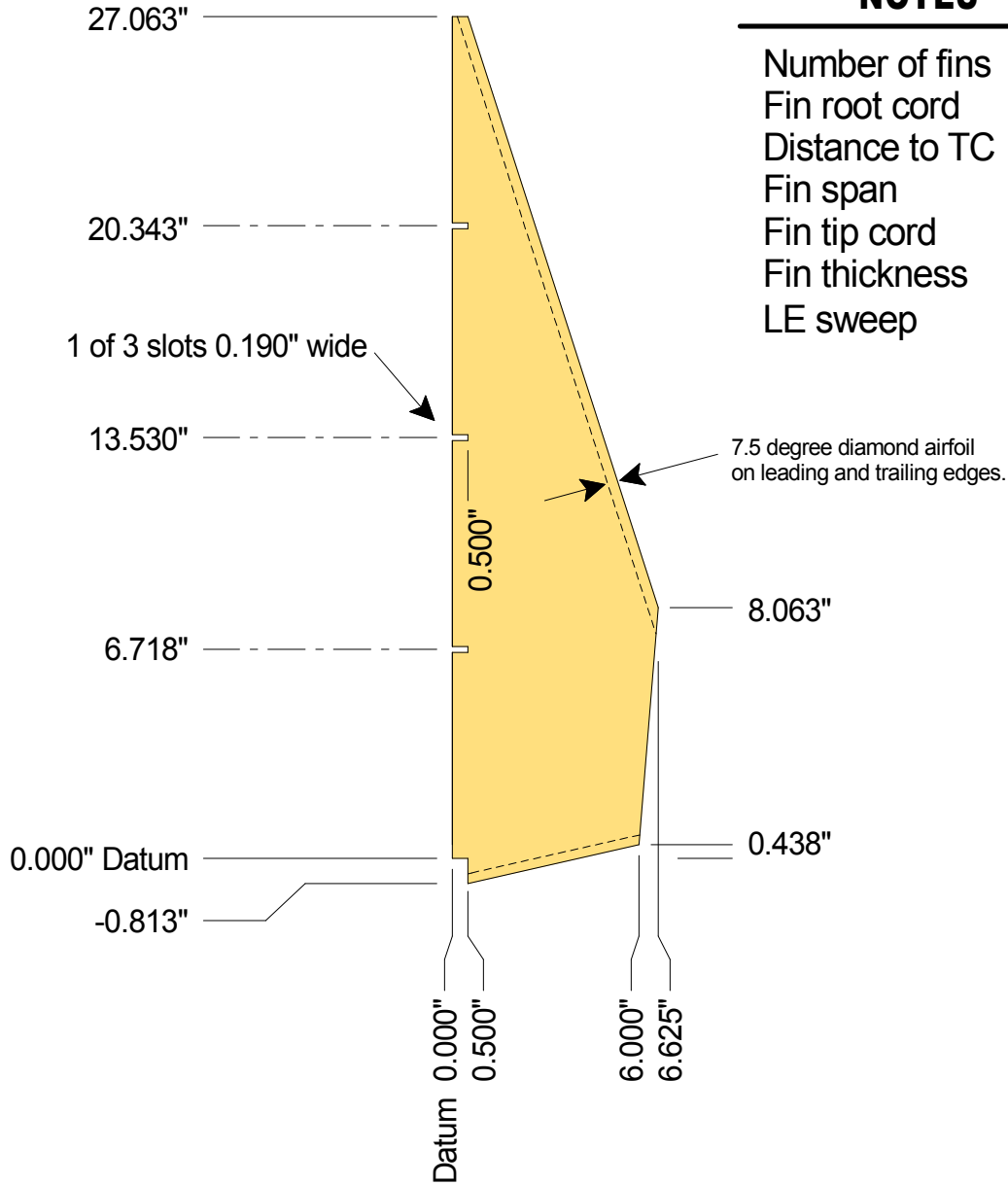
Rev: A

Date: Jan. 29, 2005

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FIN DIMENSIONS

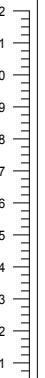


NOTES

Number of fins	3
Fin root cord	27.876"
Distance to TC	19.000"
Fin span	6.125"
Fin tip cord	7.625"
Fin thickness	0.130"
LE sweep	72°

Material: 0.130" thick G10 fiberglass sheet

Epoxy root edge of fin to central motor tube and reinforce joints with 8oz fiberglass strips.



Project: **Angelfire**

All dimensions are in inches

Print scale in Inches

Drawing: FIN DIMENSIONS

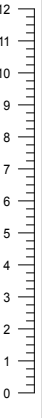
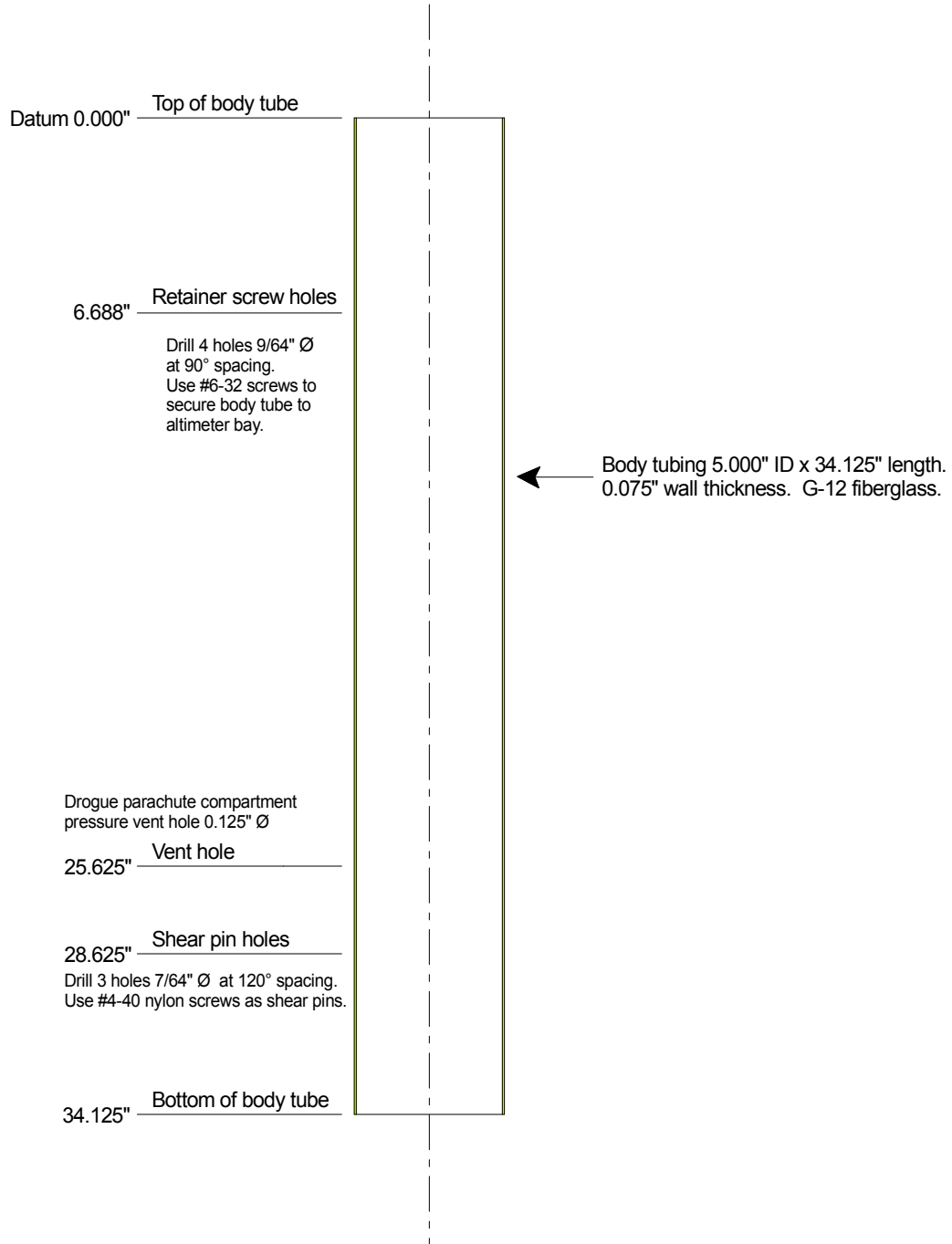
Rev: A

Date: Jan. 29, 2005

By: Vern Knowles



AIRFRAME MID SECTION



Project: **Angelfire**

All dimensions are in inches

CAD scale: 1" = 6"

Print scale in Inches



Drawing: AIRFRAME MID SECTION



Rev: A

Date: Jan. 29, 2005

By: Vern Knowles

AIRFRAME FORWARD SECTION

Igniter wire seal plates

-  Top plate These plates seal off the wires from two Daveyfire igniters.
-  Bottom plate

Two plates of 1/16" thick G10 fiberglass with 5/32" diameter holes at each end for 6-32 x 0.5" screws. Two slots 7/64" wide are cut into the bottom plate for igniter wire routing.

1.25" diameter holes for ejection charge holder to pass through the bulkhead.

5/16" x 2.0" U-bolt for recovery harness attachment.

Top View

Two 3/4" PVC end plugs screwed to bulkhead to serve as redundant ejection charge holders.

Left side

Top View

(1 of 2) 3/4" PVC end plugs for ejection charge holders.

Left side

Bottom View

Four altimeter bay vent holes 7/32" Ø spaced 90° apart 5.0" inches from bottom of body tube.

1 of 2 0.25" x 15.25" threaded rod

5/16" x 1.0" stainless steel U-bolt McMaster-Carr part number 8896T68

Main Chute Compartment

5/16" x 2.0" U-bolt stainless steel McMaster-Carr part number 8896T73

Camera lens port hole 1.0" from end of body tube.

Drill 3 holes 7/64" Ø at 120° spacing 2.0" below the top of the body tube. Use #4-40 nylon screws as shear pins.

Parachute compartment pressure vent hole 0.125" Ø 5.0" inches from top.

Body tubing 5.000" ID x 36.000" length. 0.075" wall thickness. G12 fiberglass.

36.000"

Two sections of coupler tubing 0.75" long. One above and one below the bulkhead.

0.196"

Altimeter bay removed from airframe.

8.294"

Altimeter bay installed in airframe.

14.000"

(1 of 4) threaded brass inserts for securing mid-section body tube to altimeter bay. McMaster-Carr part number: 900164007. Use six #6-32 x 0.500" button head screws.

Remove 1/4" nuts for access inside the altimeter bay.

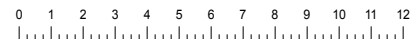


Project: **Angelfire**

All dimensions are in inches

Print scale in Inches

CAD scale: 1" = 6"



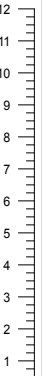
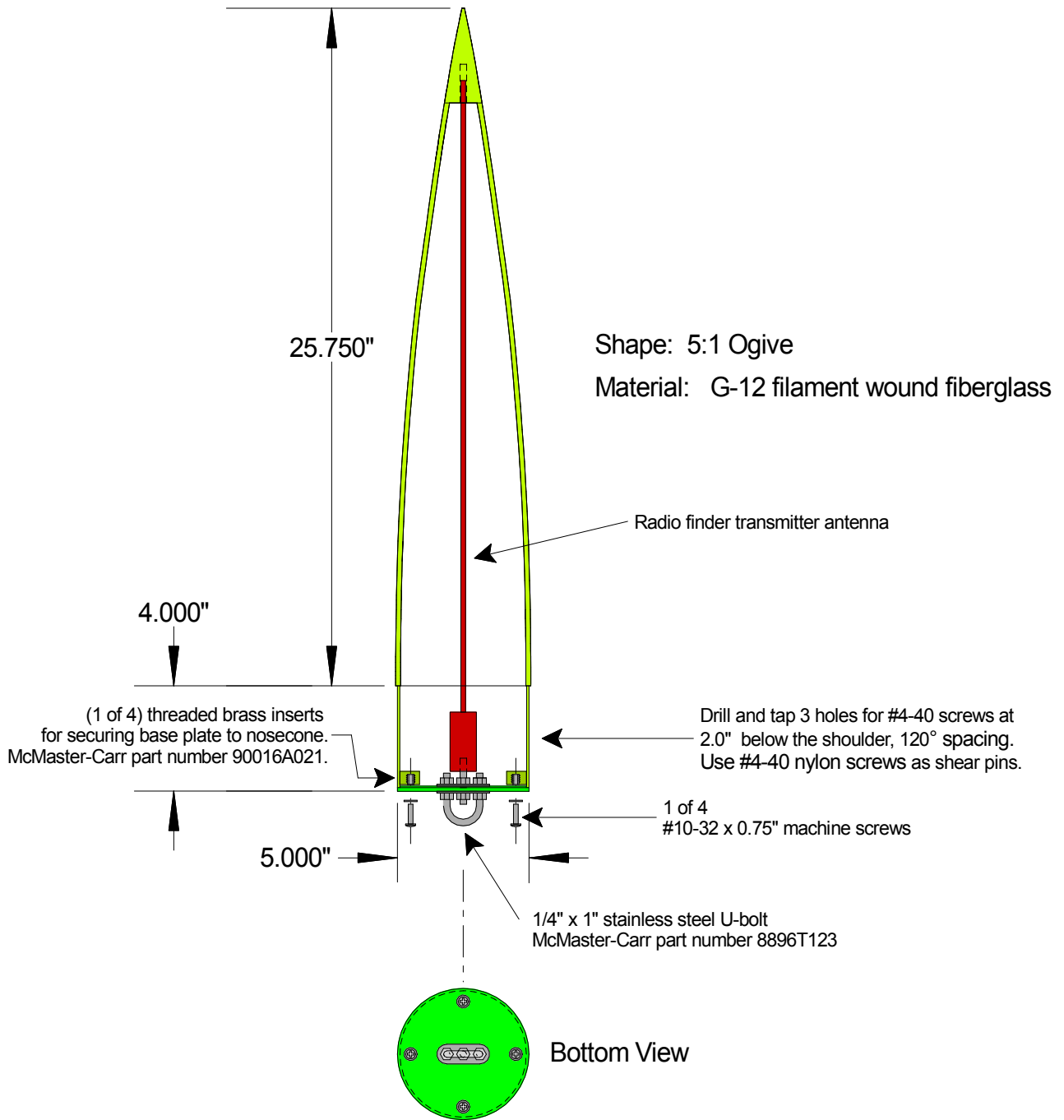
Drawing: AIRFRAME FORWARD SECTION

Rev: A

Date: Jan. 29, 2005

By: Vern Knowles

NOSECONE



Project: **Angelfire**

All dimensions are in inches
CAD scale: 1" = 6"

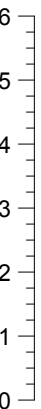
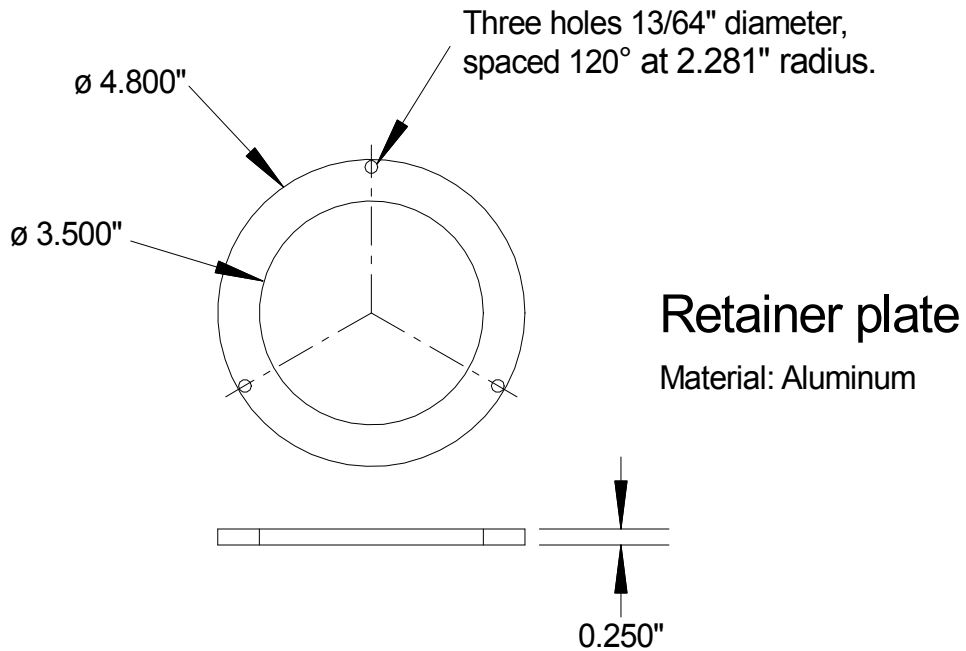
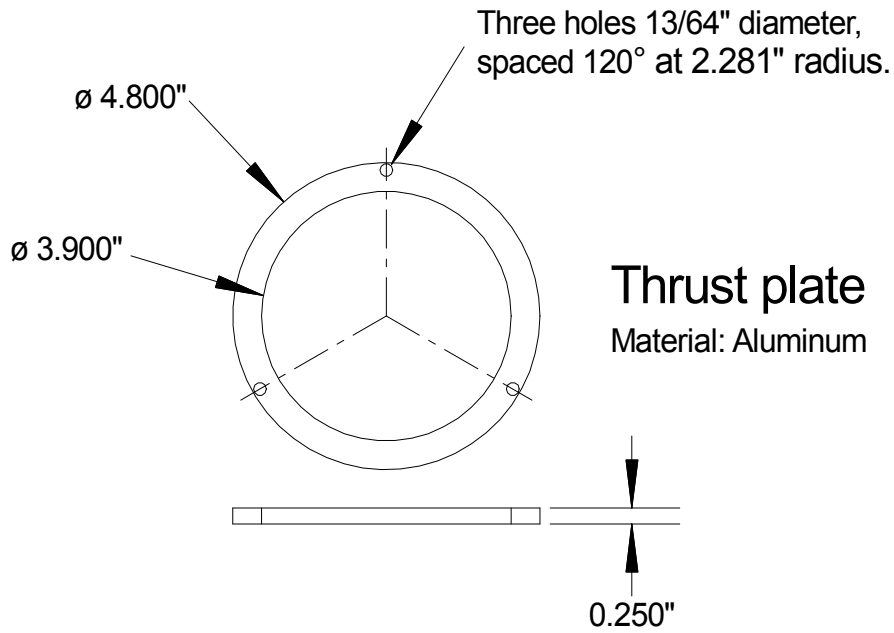
Print scale in Inches
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Drawing: NOSECONE

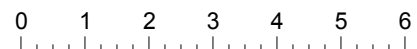
Rev: A

Date: Jan. 29, 2005

By: Vern Knowles



Print scale in Inches



Project: **Angelfire**

All dimensions are in inches

CAD scale: 1" = 3"

Drawing: MOTOR PLATES

Rev: A

Date: Jan. 29, 2005

By: Vern Knowles