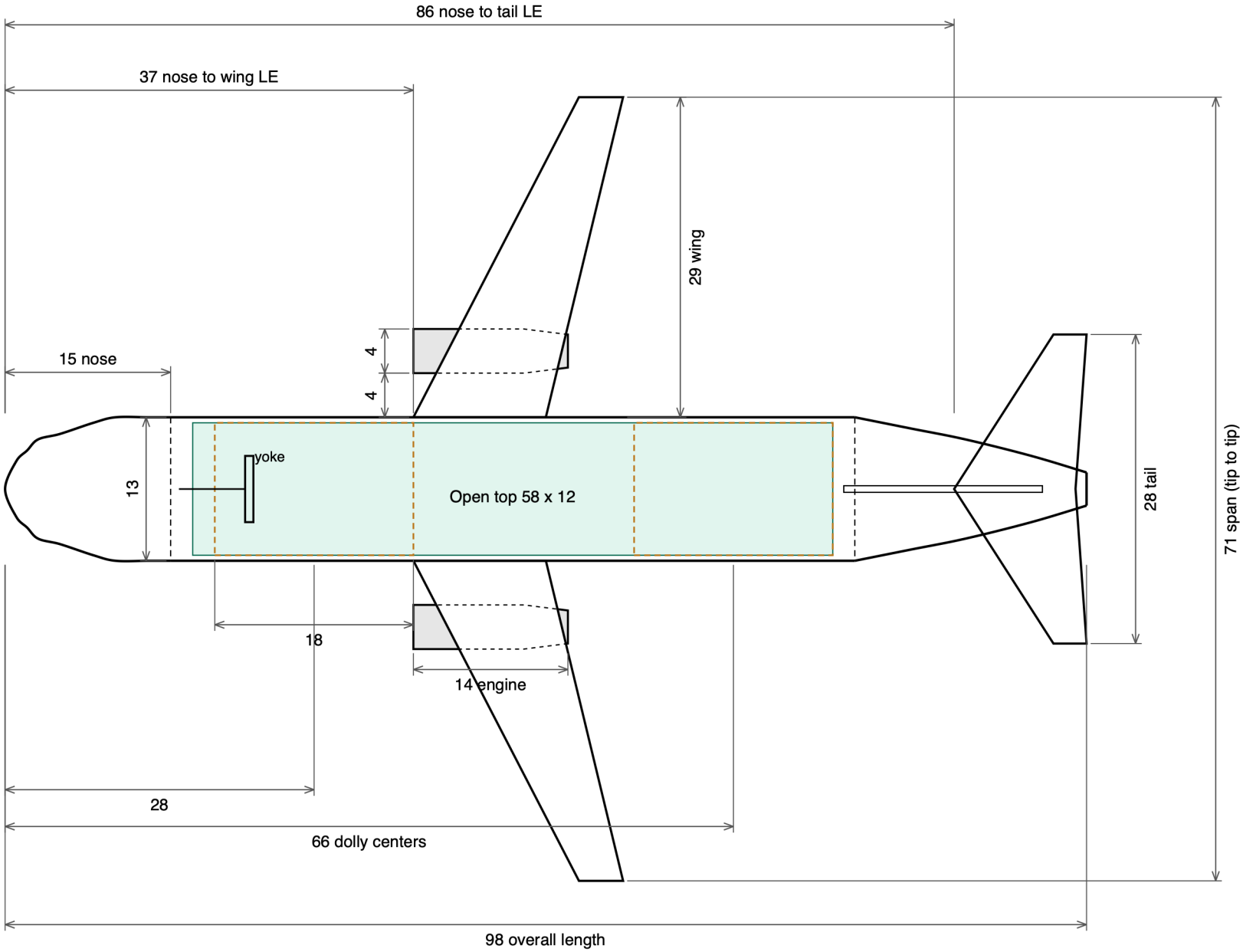
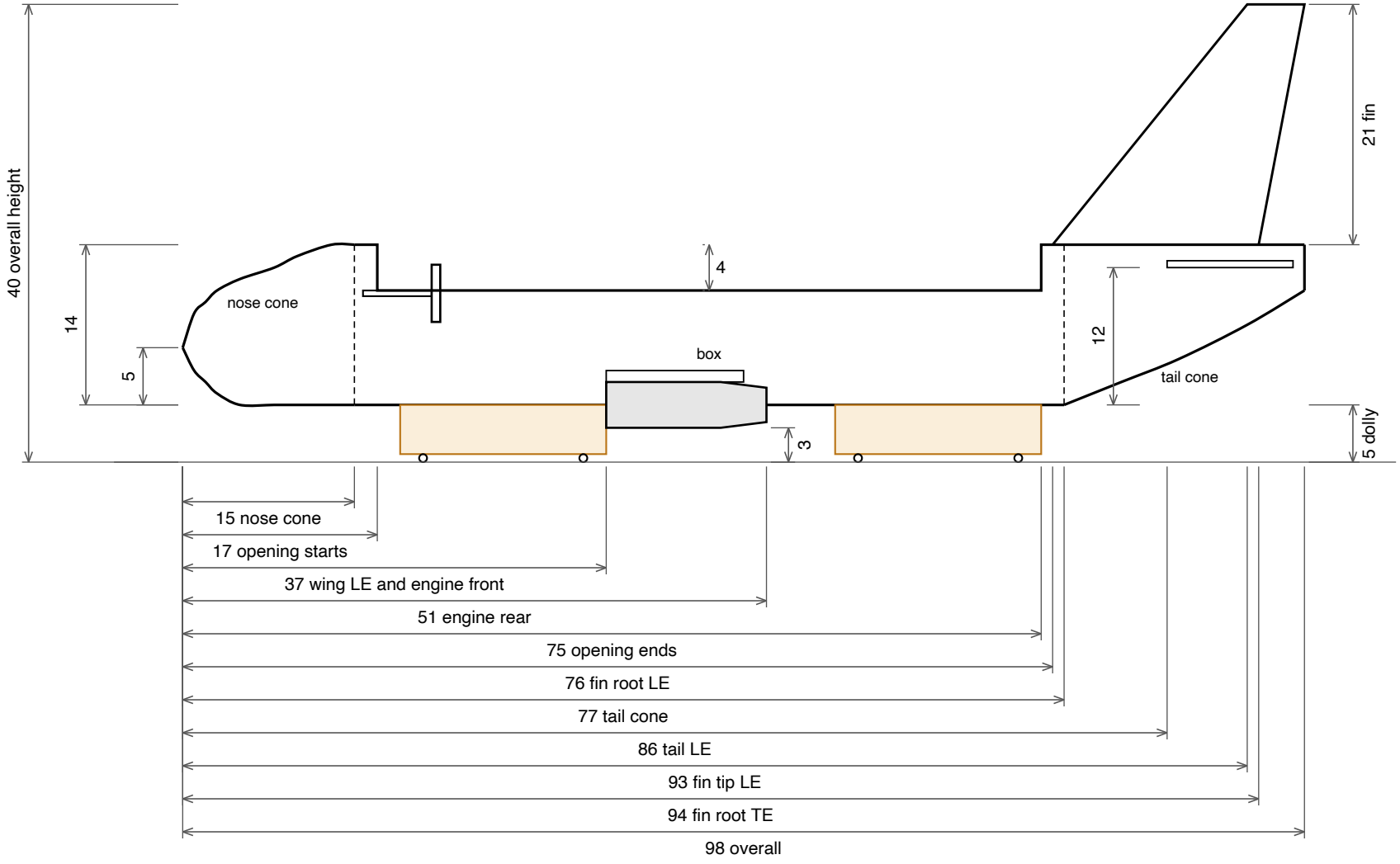
Sheet 1 - Top view (assembly)

Carved nose cone (0-15) + plywood box (15-77) + carved tail cone (77-98).



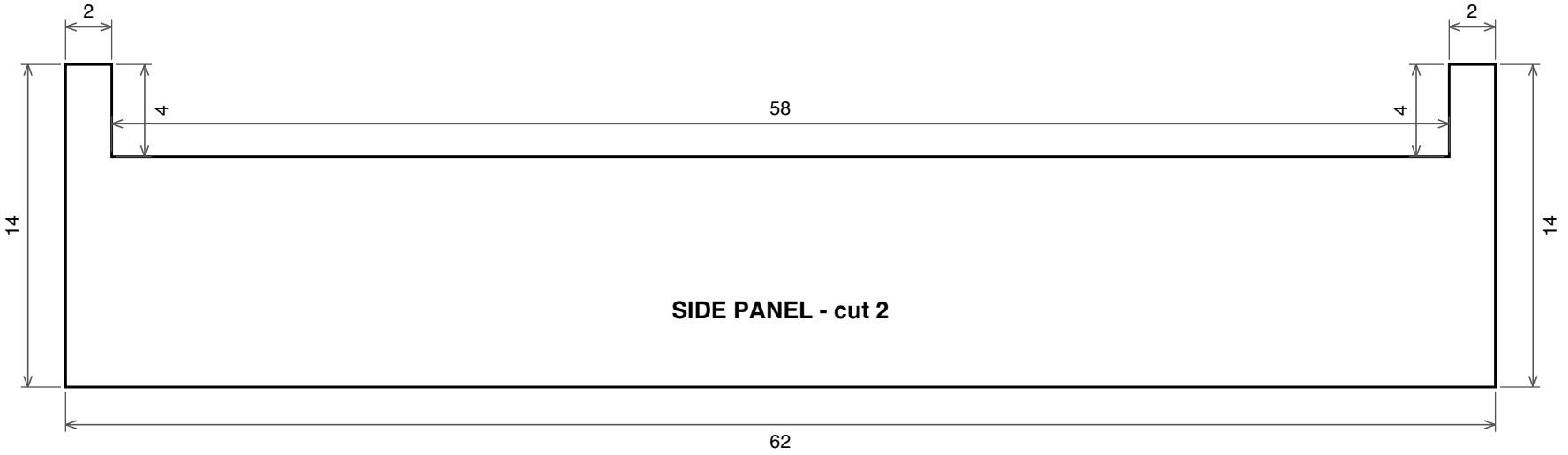
Sheet 2 - Side view (assembly)

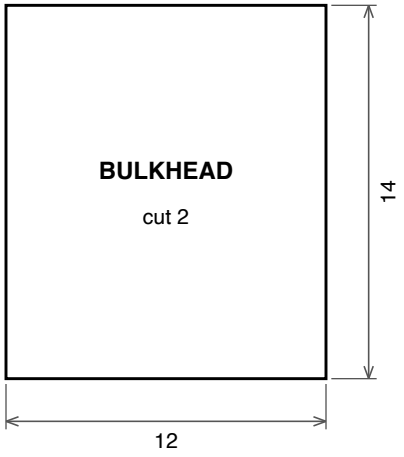
Heights from the ground. Fuselage bottom sits 5 above ground on the dollies.

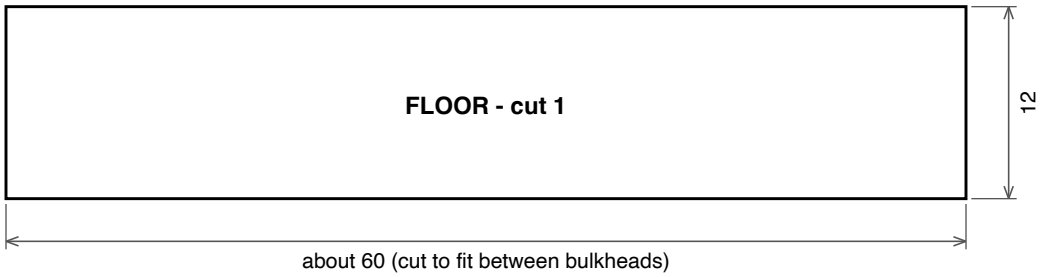


Sheet 3 - Center box (plywood)

Side panels 1/2 ply, bulkheads and floor 3/4 ply. Box runs from x 15 to x 77.





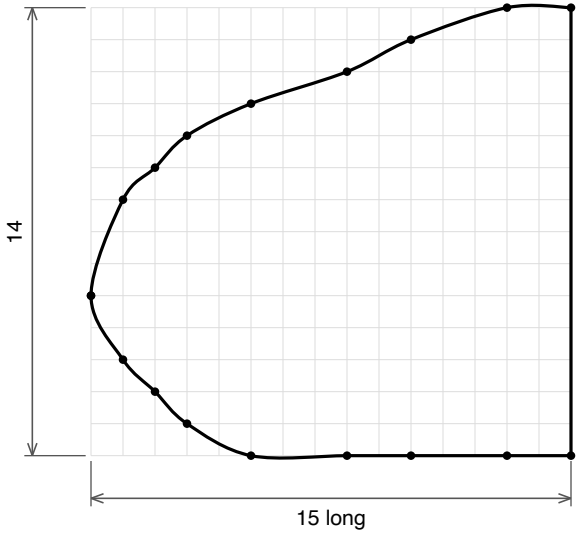


Bulkheads sit at x 15 and x 77. Nose cone glues to the front bulkhead, tail cone to the rear.

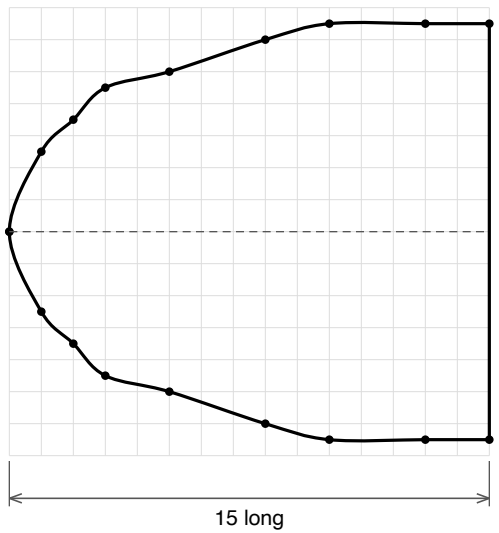
Sheet 4 - Nose cone (carved foam)

Glue up 2 in foam board to a 15 x 13 x 14 block. Cut side profile, then plan, then round to the sections.

SIDE PROFILE template (1 in grid)



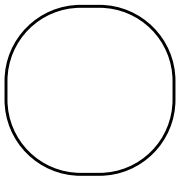
TOP (PLAN) template, centerline dashed



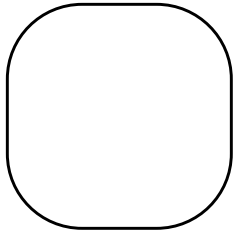
Points: x from nose tip | top z | bottom z | full width

x 0: top 5, bottom 5, width 0
x 1: top 8, bottom 3, width 5
x 2: top 9, bottom 2, width 7
x 3: top 10, bottom 1, width 9
x 5: top 11, bottom 0, width 10
x 8: top 12, bottom 0, width 12
x 10: top 13, bottom 0, width 13
x 13: top 14, bottom 0, width 13
x 15: top 14, bottom 0, width 13

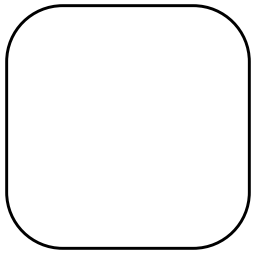
Cross-section templates (cut from cardboard, check shape while carving):



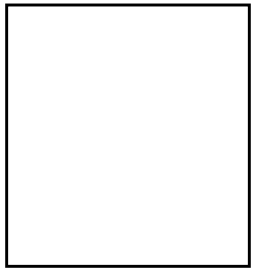
x 3: 9 w x 9 h
corner radius 4, bottom at z 1



x 8: 12 w x 12 h
corner radius 4, bottom at z 0



x 10: 13 w x 13 h
corner radius 3, bottom at z 0

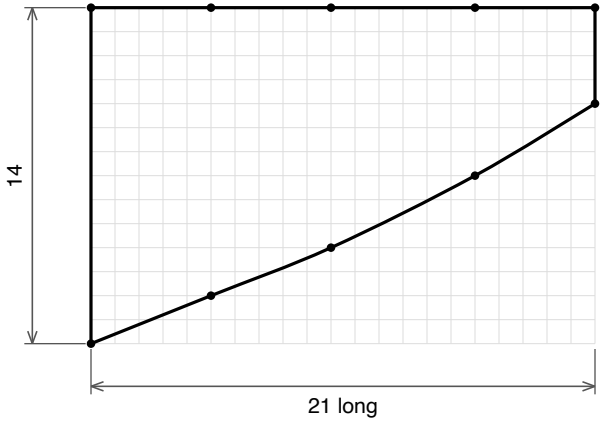


x 15: 13 w x 14 h
square, bottom at z 0

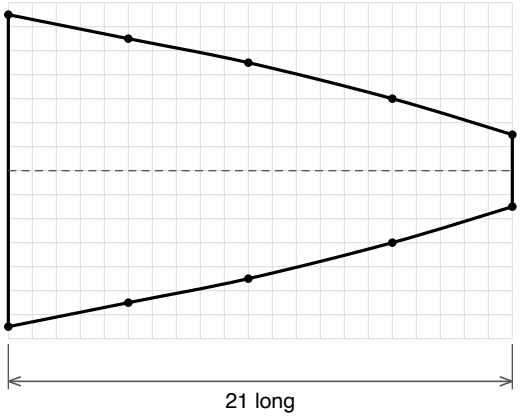
Sheet 5 - Tail cone (carved foam)

Glue up a 21 x 13 x 14 block. Cut side profile, then plan, then round to the sections. Top stays flat for the fin.

SIDE PROFILE template (1 in grid)



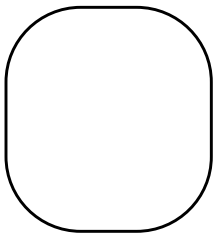
TOP (PLAN) template, centerline dashed



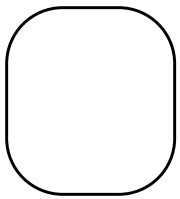
Points: x from nose tip | top z | bottom z | full width

x 77: top 14, bottom 0, width 13 x 82: top 14, bottom 2, width 11 x 87: top 14, bottom 4, width 9 x 93: top 14, bottom 7, width 6 x 98: top 14, bottom 10, width 3

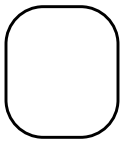
Cross-section templates (cut from cardboard, check shape while carving):



x 82: 11 w x 12 h
corner radius 4, bottom at z 2



x 87: 9 w x 10 h
corner radius 3, bottom at z 4



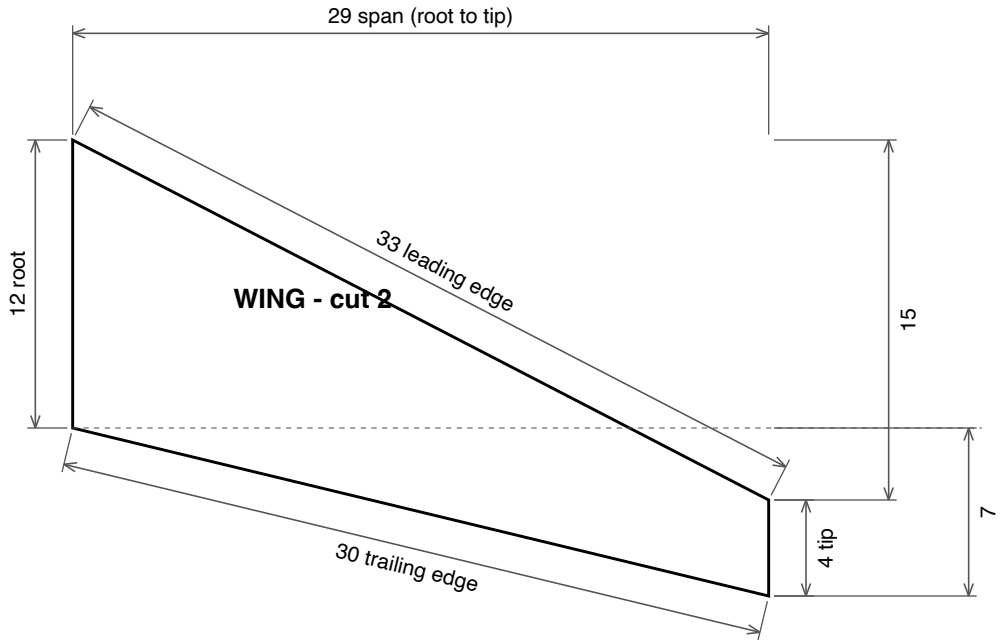
x 93: 6 w x 7 h
corner radius 2, bottom at z 7

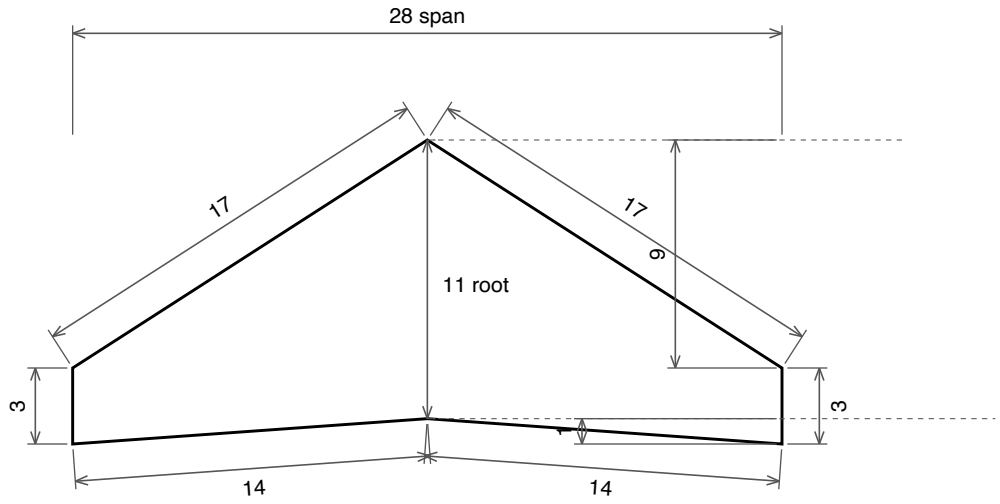


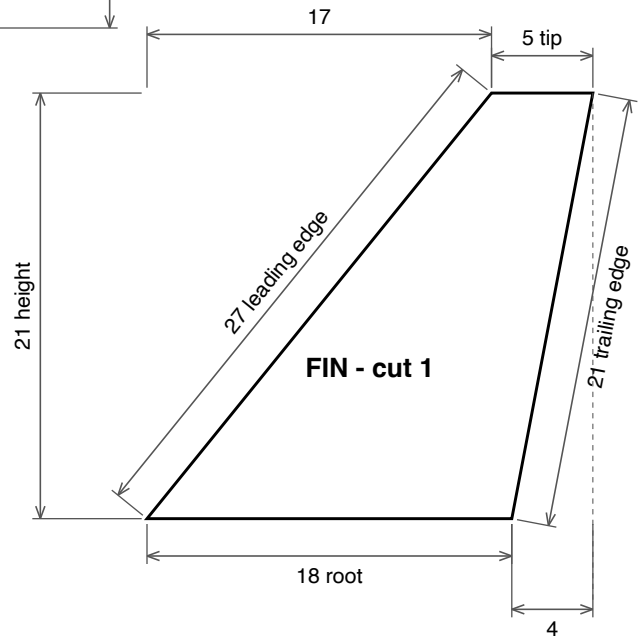
x 98: 3 w x 4 h
corner radius 1, bottom at z 10

Sheet 6 - Wing, horizontal tail, fin

Every edge dimensioned. Edge lengths rounded to the nearest inch; cut using the offsets for exact proportions.

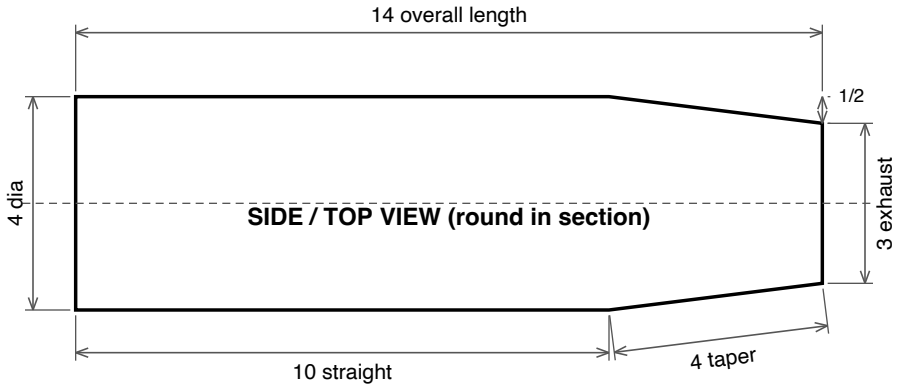


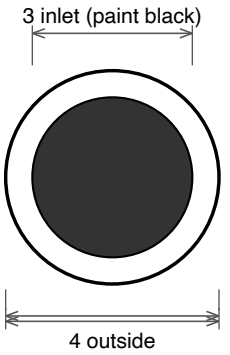




Sheet 7 - Engine nacelle (make 2)

JT8D-style engine. Carve from 2 in foam (two layers = 4 x 4 x 14 block) or use a 4 in tube with a foam tail cone.





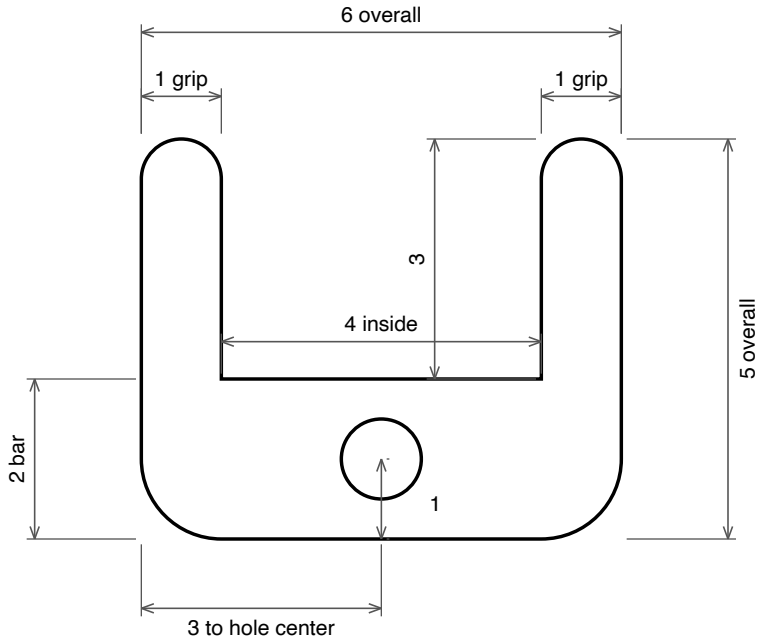
FRONT VIEW

Placement

- Front of engine 37 from the nose (3 ahead of the wing leading edge at the engine). Rear at 51 (about 1 past the trailing edge).
- Inner edge 4 out from the fuselage side; engine centerline 12 1/2 from the plane centerline.
- Top of engine sits tight against the wing underside, like the real 737-100 (no tall pylon).
- Sand a 2 wide flat along the top of the engine. Glue to the wing and add 2 screws through the wing from above.
- Bottom of engine ends up 3 above the ground. Paint the inlet black and the exhaust dark gray.
- 4 dia matches the true-scale fuselage; 14 length is shortened to suit the 73% wing (about 1.4x the local wing chord).

Sheet 8 - Yoke (front seat)

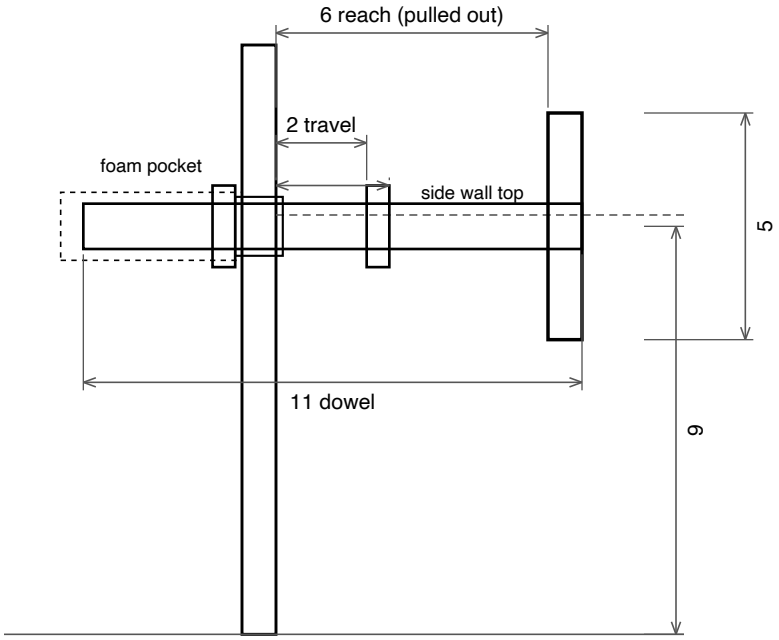
Ram's horn yoke on a 1 in shaft through the front bulkhead. Pushes in 2 and turns. Heights measured from the floor top.



Hole: 1 dia, centered 1 up from bottom

Corners: R1 at bottom, R1/2 on grip tops

YOKE - cut 1, 3/4 ply



SIDE VIEW - assembly

Front collar stops yoke 4 from bulkhead when pushed.

Rear collar stops it at 6 when pulled.

Part	Qty	Size
Yoke	1	3/4 ply, pattern at left
Shaft	1	1 in hardwood dowel x 11
Sleeve	1	1 in PVC pipe x 1 1/4, in a 1 5/16 hole in the front bulkhead
Shaft collar	2	1 in ID (hardware store)
End cap	1	1 1/2 dia wood disk glued over shaft end
Grip foam	2	3/4 in foam pipe insulation x 3

- Shaft center 9 above the floor top, on the cabin centerline. Carve a 1 1/2 x 4 deep pocket in the nose foam for the shaft.
- 6 wide leaves 3 of knuckle room each side of the 12 cabin. Round over all edges.
- Glue the yoke on the shaft. Keep the 4 minimum gap so fingers can't get pinched.

Sheet 9 - Cut list and placement

All panels between the side panels are 12 wide (inside width).

Part	Qty	Size / shape	Placement
Side panel	2	62 x 14, 1/2 ply (Sheet 3)	x 15 to 77, 12 apart
Bulkhead	2	12 x 14, 3/4 ply	x 15 and x 77
Floor	1	12 x about 60, 3/4 ply	Between bulkheads
Nose cone	1	Foam block 15 x 13 x 14 (Sheet 4)	x 0 to 15
Tail cone	1	Foam block 21 x 13 x 14 (Sheet 5)	x 77 to 98
Wing	2	Sheet 6	Root LE 37 from nose, 2 above bottom
Horizontal tail	1	Sheet 6	Center LE 86 from nose, 12 above bottom
Fin	1	Sheet 6	Root 76 to 94 (front 1 on box rear wall)
Yoke assembly	1	Sheet 8	Shaft 9 above floor, front bulkhead
Engine	2	4 dia x 14 (Sheet 7)	x 37 to 51, 4 out from fuselage side
Dolly	2	12 x 18 (18 fore-aft)	Centers 28 and 66 from nose

Seating (58 in opening, 12 in wide)

- Sled-style: each child sits between the legs of the one behind. Total load about 100 lb.

Notes

- Fuselage, fin and height are true 1:11.5 (checked against Boeing 737-100 data). Wing and horizontal tail planforms are 73% of scale to fit 6 ft.
- Opening is cut 4 deep, leaving 10 in side walls. Add a padded top rail on both edges; supervise young children.
- Cones: stack 2 in XPS foam board with foam-safe adhesive. Saw side profile, then plan, then sand to the sections.
- Skin cones with fiberglass cloth + epoxy (or glue-soaked fabric) so kids can lean on them, then paint.
- Fin: run a 3/4 ply spar from the fin root down into the box rear bulkhead; foam alone will not hold it.
- No dorsal fin: on the real plane it would sit over the cabin opening.
- Lock casters, or use fixed casters on the rear dolly, so it tracks straight.