Bobs Card Models

www.bobscardmodels.altervista.org and www.zealot.com [Resources]

Canadair CL-415 (1:72)

The Bombardier 415 (formerly Canadair CL-415) is a Canadian amphibious aircraft purpose-built as a water bomber. It is the only aircraft designed and built specifically for aerial firefighting and is based on the company's CL-215. It is marketed in the USA as the Superscooper.

General characteristics
Crew: 2 pilots
Payload: 1,350 imp gal (6,140 L)
Length: 65 ft 1 in (19.82 m)
Wingspan: 93 ft 10 in (28.6 m)
Height: 29 ft 6 in (8.98 m)
Empty weight: 28,294 lb (12,834 kg)
Max takeoff weight: 43,758 lb (19,848 kg)
Water capacity 6300 litres

Performance
Maximum speed: 234 mph (377 km/h)
Range: 1,518 miles (2,443 km)
Service ceiling 14,700 ft (4,500 m)
Rate of climb: 1,378 ft/min (420 m/min)

Building Instructions

Bulkheads are labelled by letters A to E, all other parts are numbered.
All green areas and slits, must be cut out, but only when told to do so.

A: Fuselage

1. Cut out all bulk-heads A through E. **Glue each onto (waste) card to give double strength.**
2. Cut out the rear fuselage **[6]**, fold/close/glue, and then insert/glue bulkheads **D** and **E** in the relevant positions.

3. Cut out central fuselage **[5]**, fold, close and glue. Insert and glue in place the bulkheads **A**, **B**, and **C1/C2**.
4. Glue on front fuselage parts **[4]**, **[3]**, **[2]** and **[1]**.
5. Nose Landing Gear Compartment **18**: Cut out, fold, glue, insert and glue in place.
6. Cut out green area in **[2]** and insert/glue Cut out slot on rear of fuselage to accept Fixing Bar **[9]**. Assemble and glue fixing bar with struts **[10]** and **[11].** Lower strut **[11]** must lie flush with the bottom of the fin, and be glues to top of fuselage. Glue fin in place on top of rear fuselage.
7. **Rear Wing/Stabiliser:** Parts **13-16**. Cut out, fold, glue, assemble, and then fix on Fin. Finish by capping with **12 (NB : make sure it is glued in place horizontally).** Add Tail Fin Light **17**.
8. **Front wings :** Cut out both wings **19R** and **19L** , and bend tabs, and close/glue each wing. Insert the struts **20**, and glue in place inside wings (using pointed barbecue sticks), so that in each wing a strut is glued flush at each end of wing, the other 3 distributed equidistantly within the wing.
9. Cut out wing cradle **21**, glue the 4 corner tabs and the side tabs, add and glue the strengtheners under the lip, and glue cradle in position on the fuselage.
10. Glue the wing in position on the wing cradle.
11. Glue the cradle cover **22** in position, carefully positioning and gluing the 2 strips under each wing. Trim excess card.
12. Glue on both wing fin tips **23** .
13. Glue on the spoilers **24** on each wing ¾ of the way to wing tips on the top of the wings 'position marked).
14. Cut out the 8 Aileron Hinges **25** and glue each on the underside of each wing on the positions marked.
15. **Engine Cowlings:** Cut out **[27]**, and assemble. Round the central portion to fit the bulkheads **[28]** and **[28A]**. Glue on wing, fit Exhaust **[30]**. Repeat for right-hand cowling.
16. Cut out and attach the 3 radio masts **32,** and the nose radar **33.**
17. **Wing floats. ....**
65. Cut out the two floats **34**, assemble and glue
71. Cut out the float supports **35** , glue in place (Note: the cross-section should be slightly rounded, and not flat).
72. Add the diagonal struts **36** for strength.
18. **Propellers:** Cut out propellers **[37]**, and glue to give 3x thickness. Pierce centre with a pin, and expand hole to about 1mm diameter. This hole will accommodate the cocktail sticks.
19. Cut out hubs **[38]**, glue to a cone and when dry, cut out the 4 recesses which will accommodate the propeller. Insert propeller, glue. Insert cocktail stick and glue amply.
20. Pierce the engine cowling to accommodate the cocktail stick, push in the propeller/cocktail stick assembly.
73. Cut out Air Intake **[39]** for each wing, bend back tabs, glue tabs, glue in place under each engine cowling.
74. Photo 2: construction complete. Photo 3 shows details of the rear undercarriage.
21. **Landing Gear:** all four wheels should be formed by rolling the glued black strips **41**and **42** around a pin.
22. Use 2mm cocktail sticks for stability; they can either be painted grey, or a sleeve of grey paper **43** rolled around them (see sheet **3_paper.jpg**).
23. **Front double-wheel:** in the front landing gear box, pierce 2 holes using a pin, through the box and further through the fuselage nose under the cockpit (see diagram).
24. Cut the cocktail stick to size, and insert through the hole(s). Glue amply in place.
25. The two wheels are glued on either side of the lower tip of the cocktail stick. For more support, a pin at right-angles to the stick can be inserted, which acts as an axle to the two wheels.
26. **Rear Landing gear:** See the diagram.The strut is composed of a top and bottom. Cut out the 2 struts **[40]**, pierce the 2 holes in each, and re-glue onto card to make 5x thickness. Cut out. Insert the cocktail sticks, cut to size, and glue amply

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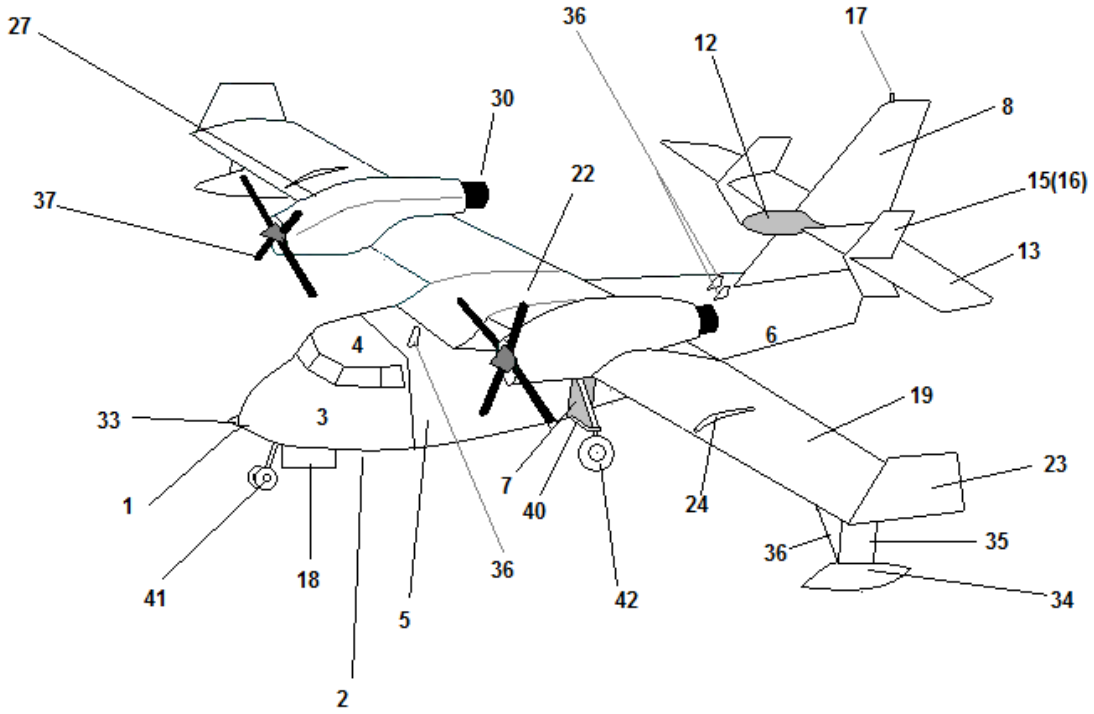
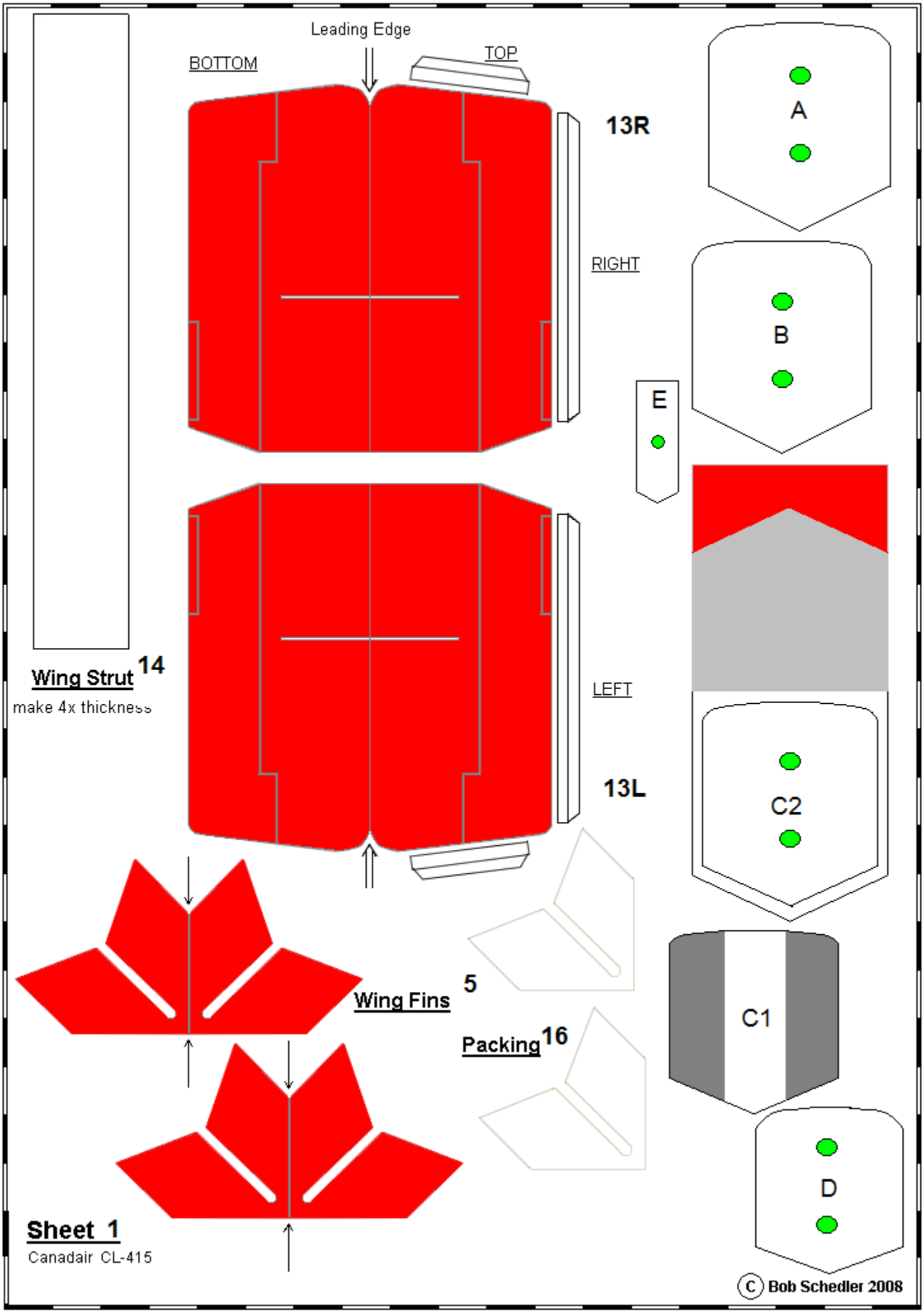
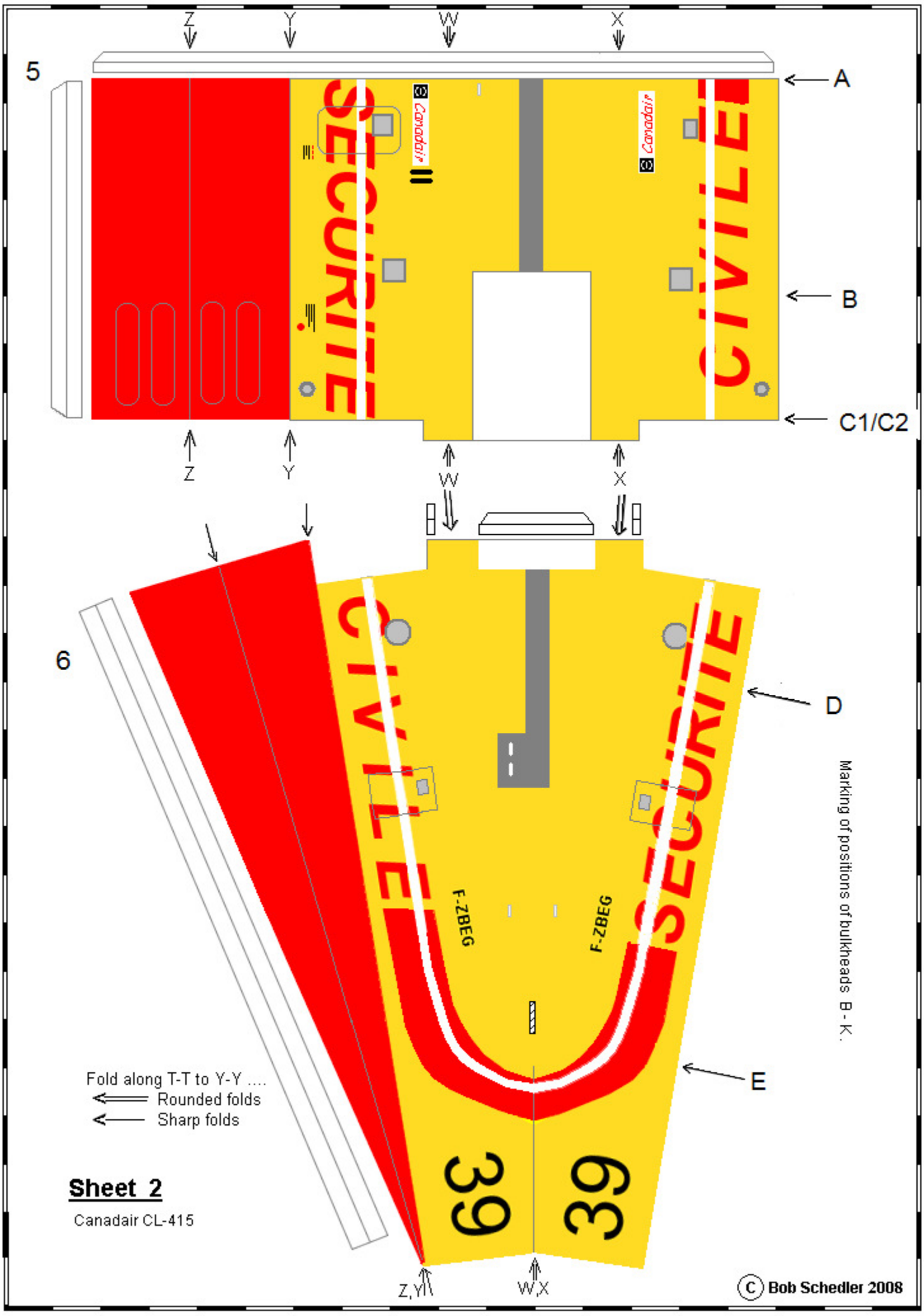

27
36
17
12
30
8
22
15(16)
37
13
4
6
19
33
3
23
1
7
40
24
36
35
18
36
41
42
34
5
2

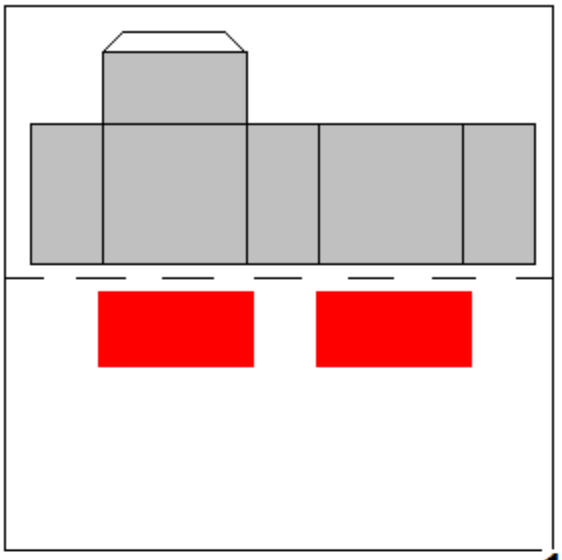

Canadair
SECURITE


Canadair
SECURITE CIVILE

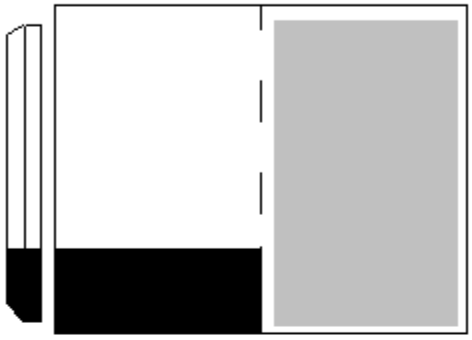

Leading Edge
BOTTOM
TOP
13R
RIGHT
A
B
E
LEFT
13L
C2
C1
D
Wing Strut 14
make 4x thickness
Wing Fins 5
Packing 16
Sheet 1
Canadair CL-415
© Bob Schedler 2008


Z
Y
W
X
5
A
B
C1/C2
SECURITE
CIVILE
Canadair
6
D
E
F-ZBEG
39
Z,Y
W,X
Fold along T-T to Y-Y ....
Rounded folds
Sharp folds
Marking of positions of bulkheads B - K.
Sheet 2
Canadair CL-415
© Bob Schedler 2008

1. Fold and glue
2. Roll to tube



Nose Landing Gear Compartment with Flaps 18



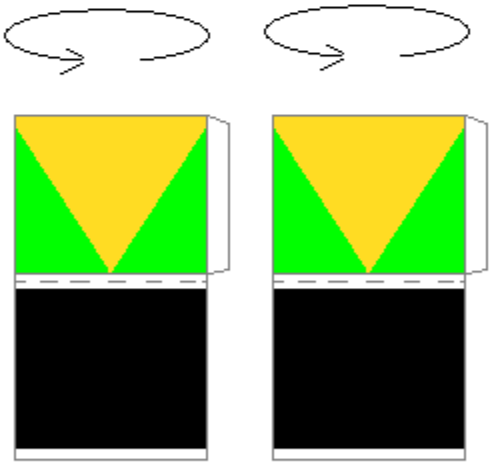
Engine Exhaust Pipes

17

Tail Fin Light

Roll and glue

Paper sleeves for cocktail sticks (roll around and glue) 43



Air Intake 39

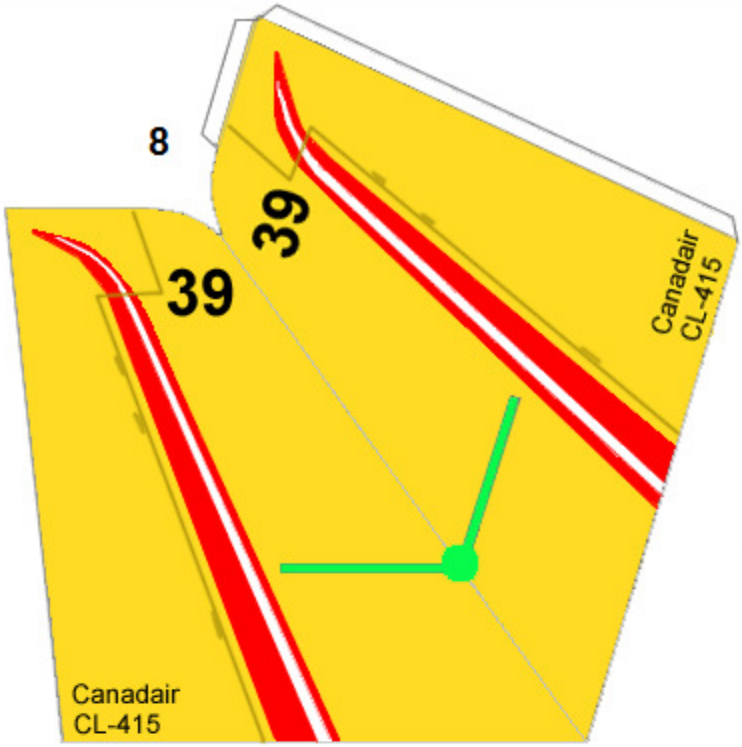
Cut out, fold, glue. Form around ca 8mm rod (black inside), glue tab. When dry, cut out green area. Flatten to oval form, glue under each engine.

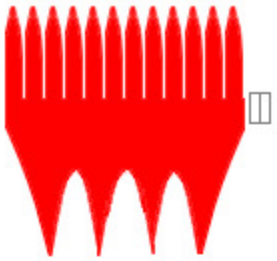
PRINT ON PAPER

Sheet 3

Canadair CL-415

8





Fin Bulb 12

Fixing Bar 9

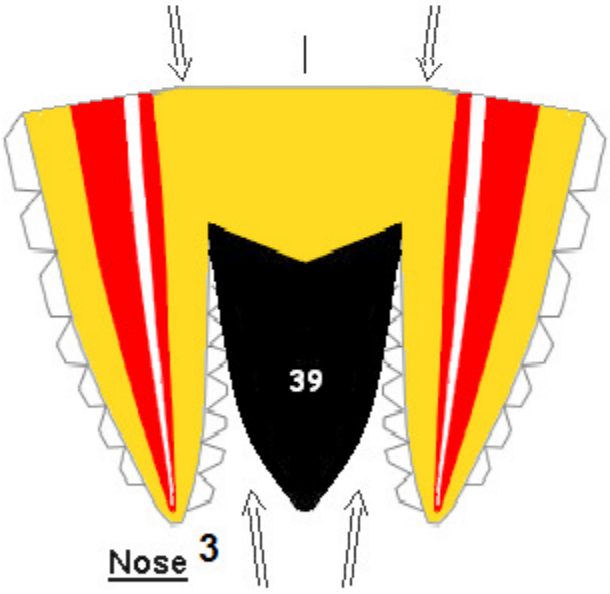
Make 4x thick

Upper Strut 10

make 3x thick

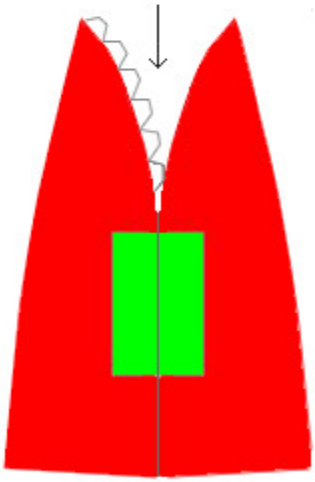
Lower Strut 11

make 3x thick

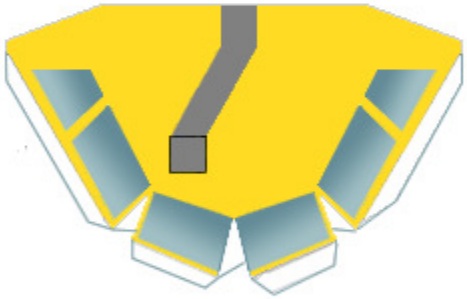


Nose 3

Fold 90°



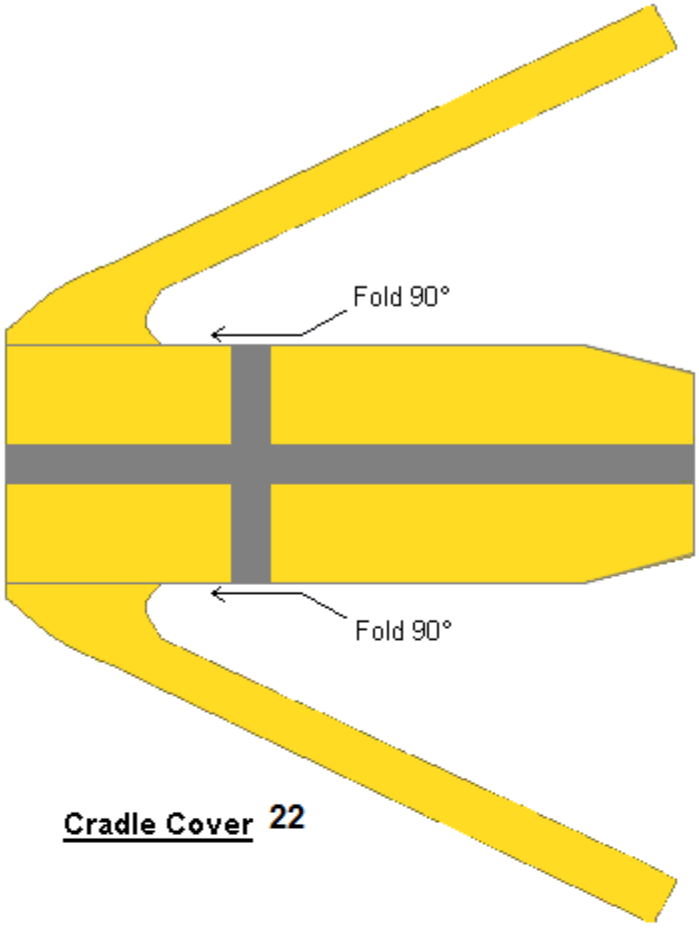
Nose Bottom 2



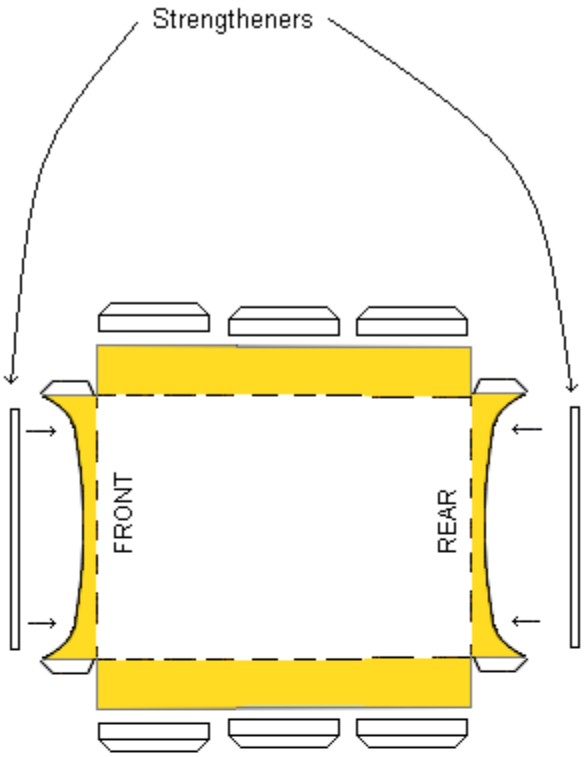
Cockpit 4

Sheet 4

Canadair CL-415

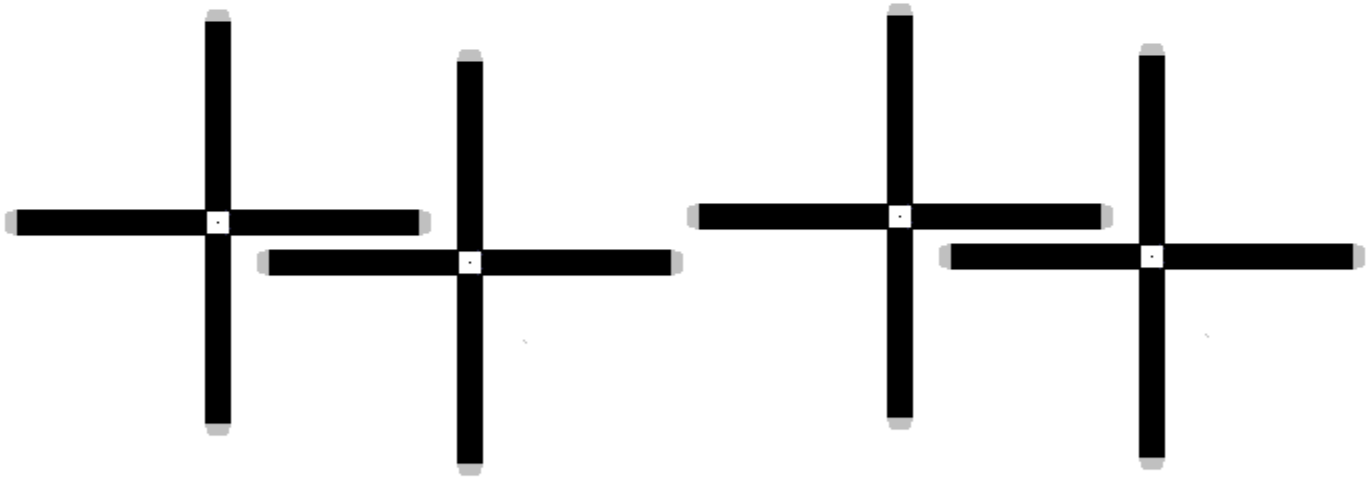


Cradle Cover 22



Bend 90° all dashed lines

Wing Cradle 21

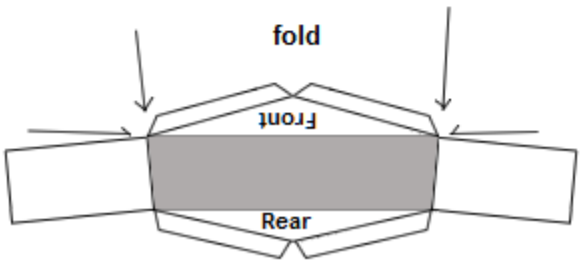


Propellers 37

Glue each pair back to front with card in between, to give 3x thickness.

Propeller Hubs 38

Cut out to cones



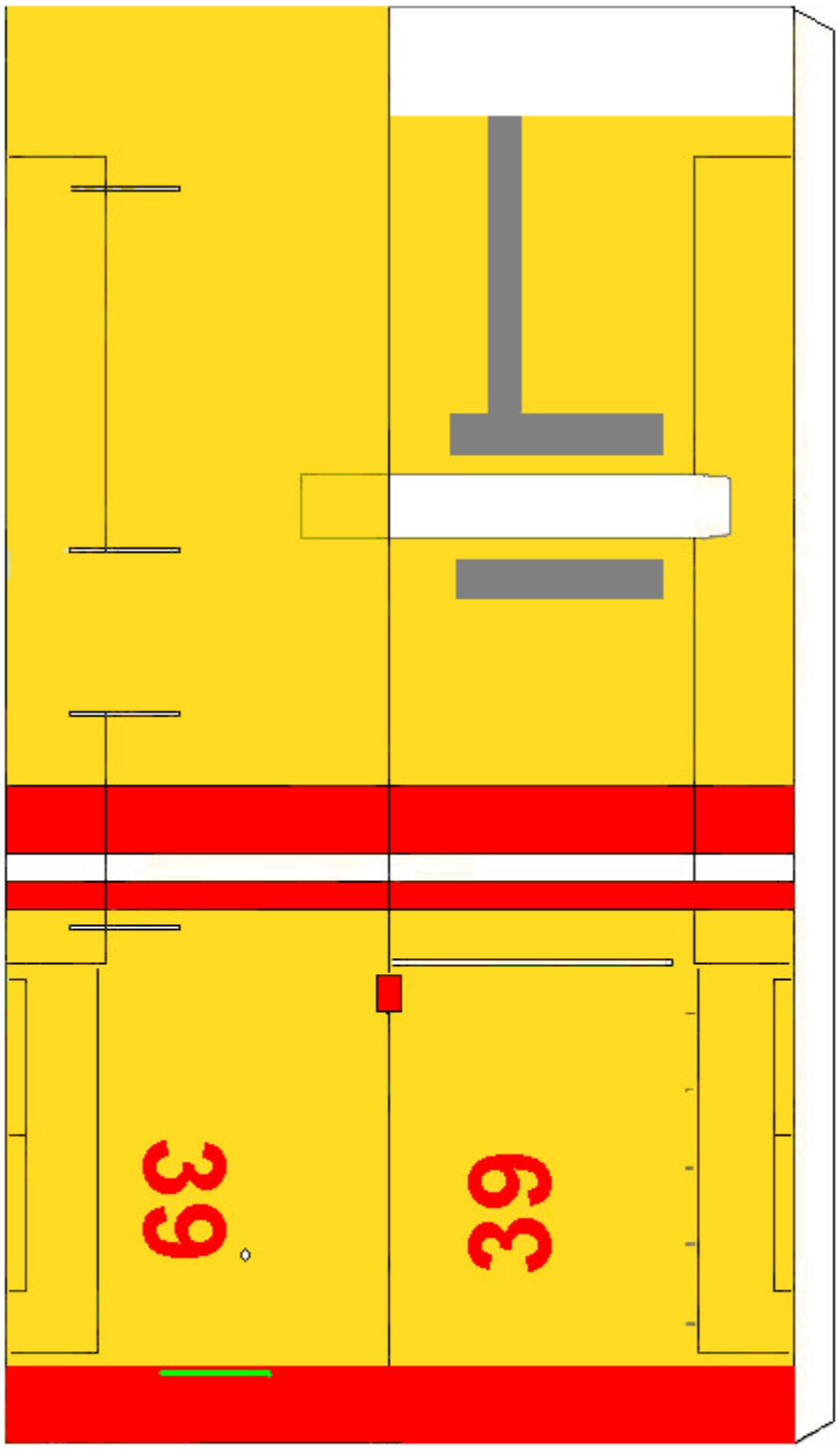
Landing Gear Compartment Floor 7

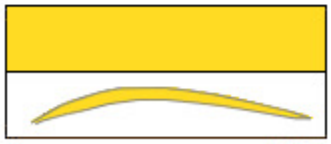
Sheet 5

Canadair CL-415

Leading Edge

Lower Upper **19L**

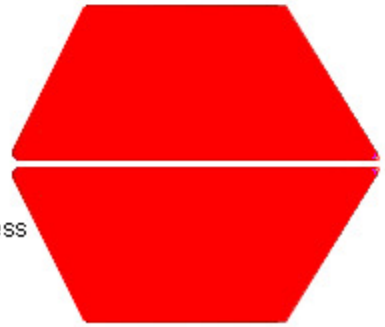




Spoiler 24

Tip Fin 23

make 3x thickness



Sheet 6A

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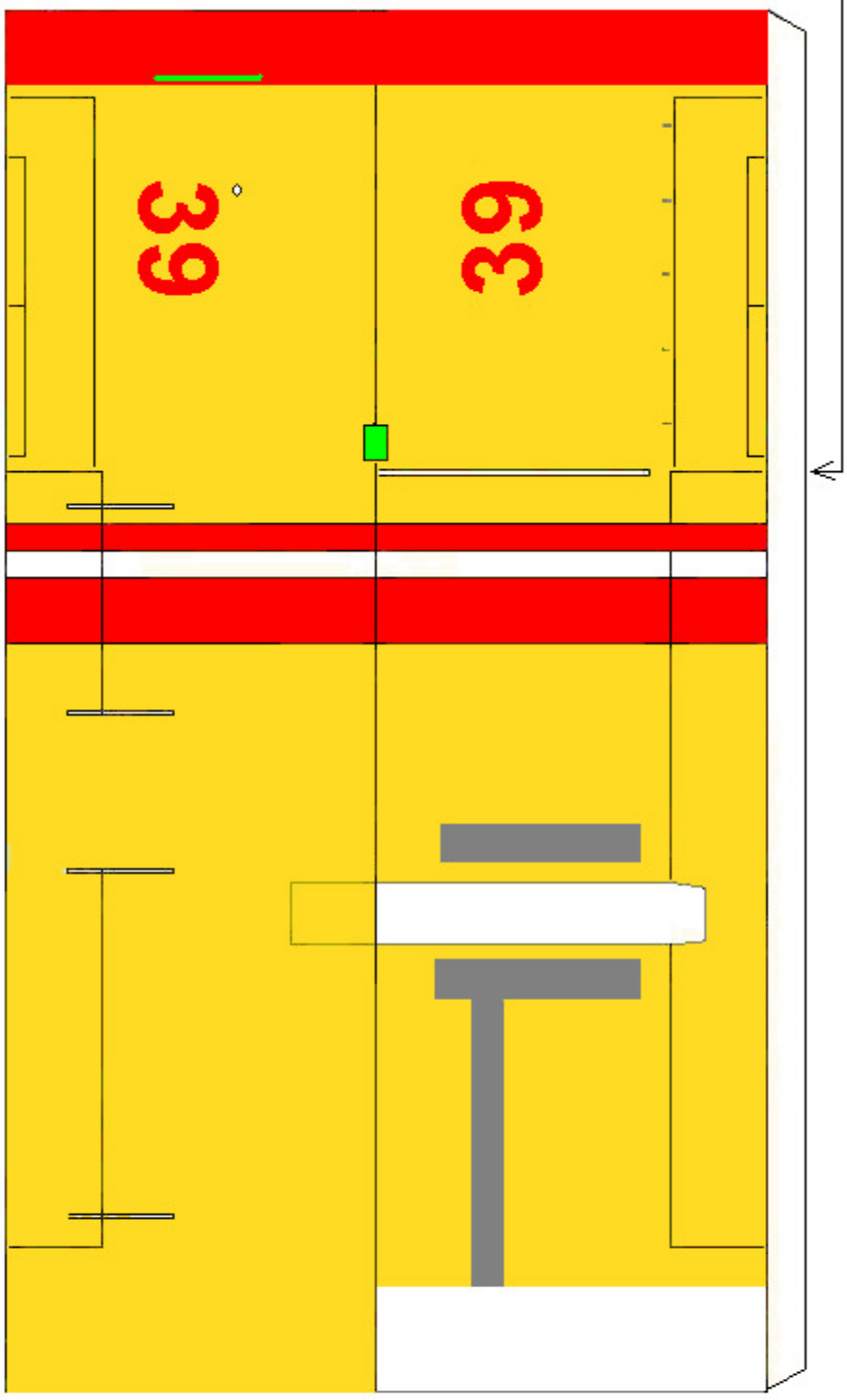
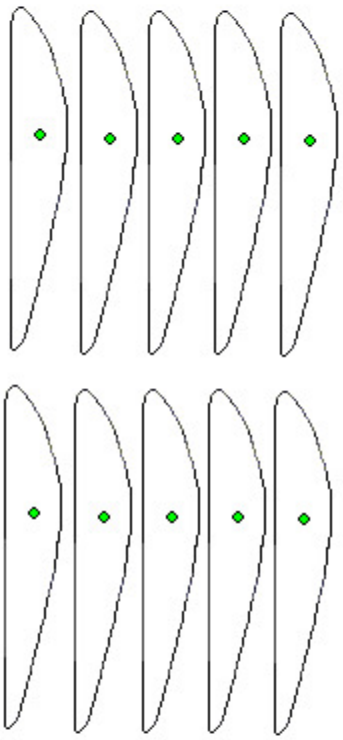
Spoiler 24

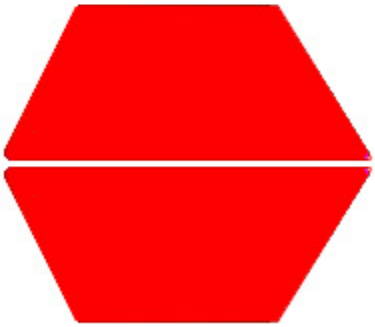
Lower Upper 19R





Struts 20
make 3x thickness

Leading Edge

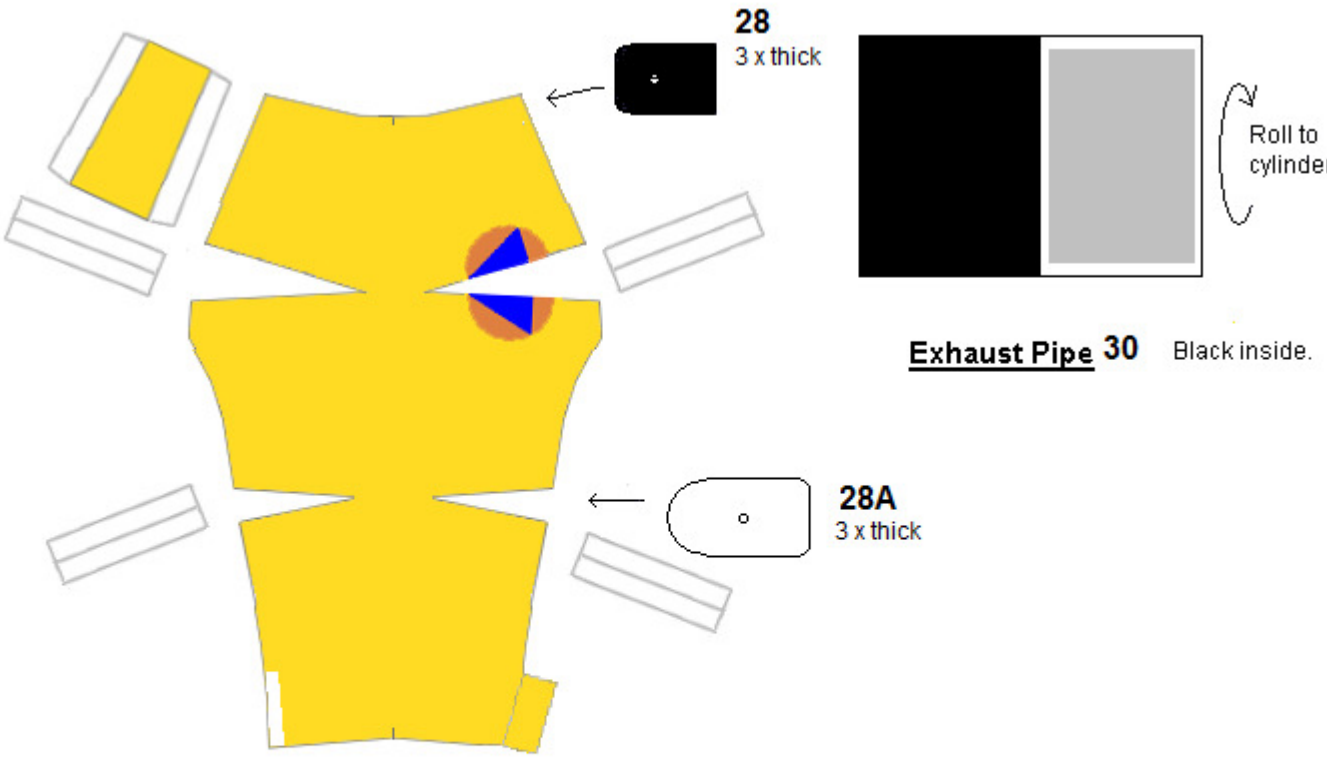


Tip Fin 23
make 3x thickness

Sheet 6B
Canadair CL-415

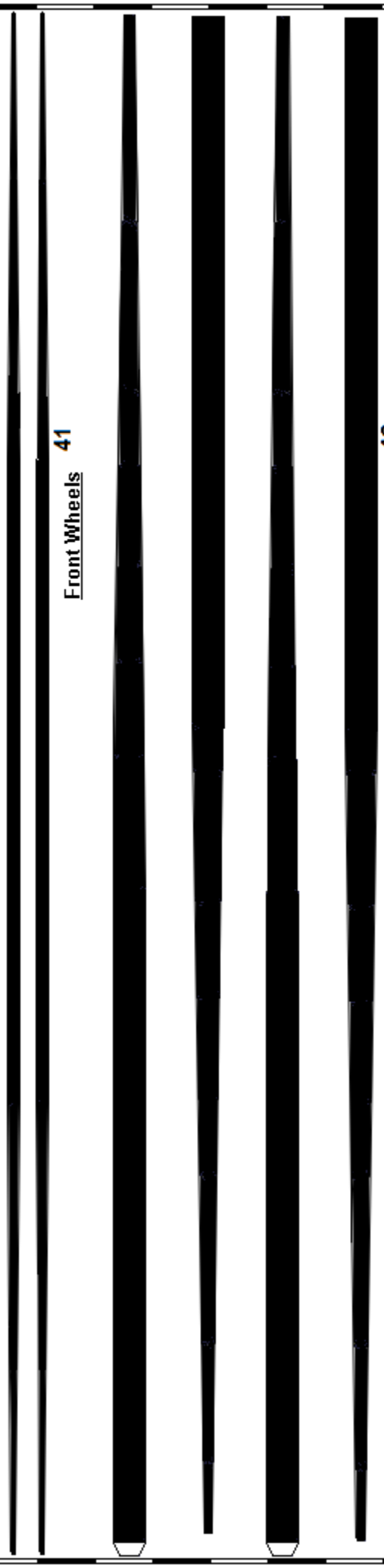
Exhaust Pipe 30 Black inside.

Left Cowling 27



Exhaust Pipe 30 Black inside.

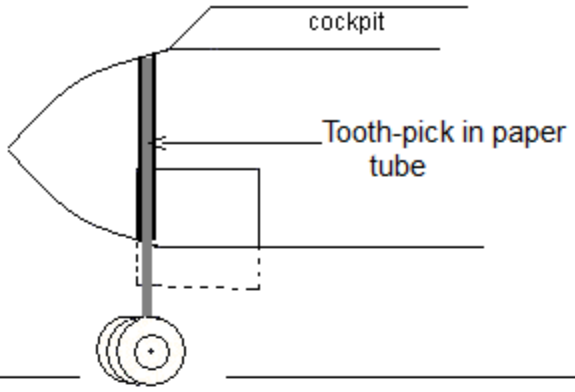
Right Cowling 27



Front Wheels 41

Main Wheels 42

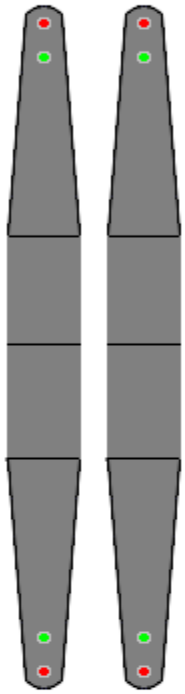
Front Landing Gear



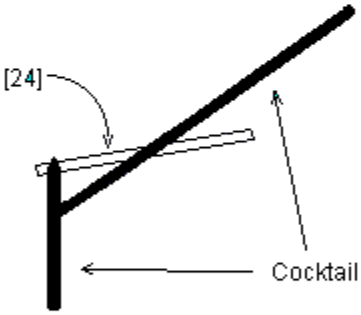
Main Landing Gear

Landing Gear Strut 40

make 5x thickness



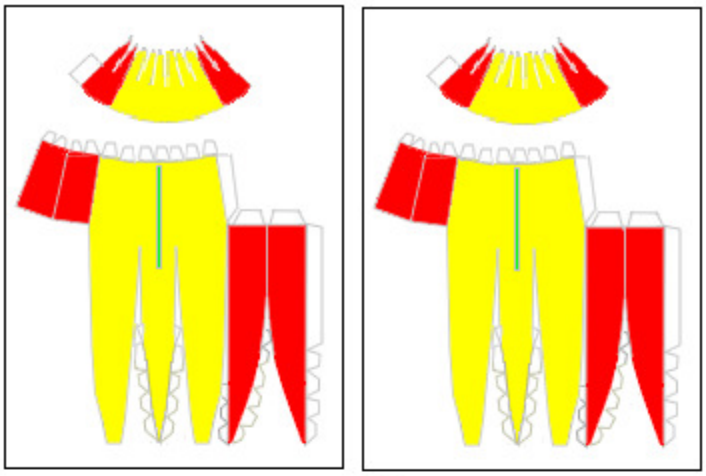
Red holes: vertical
Green holes: slanting



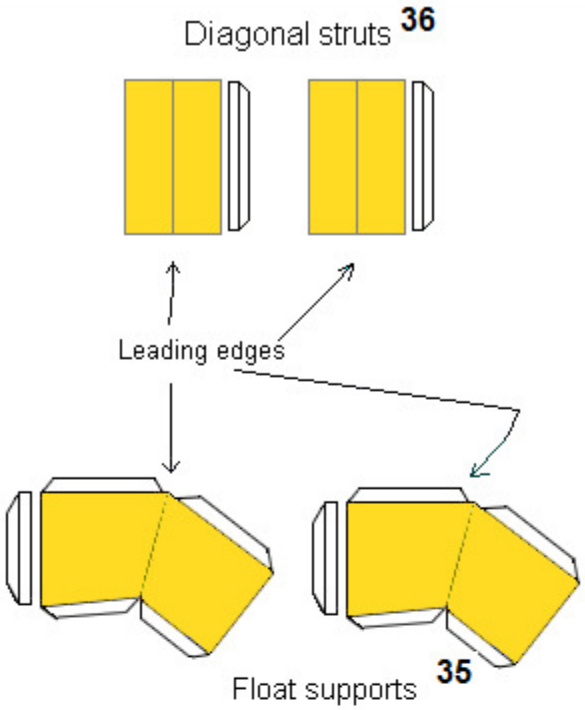
Side view

Sheet 8

Canadair CL-415



Floats 34



Radio mast 32

Make 2x thickness
Glue on 1 mast just behind cockpit on top, LH side. The other 2 just in fron of the tail fin

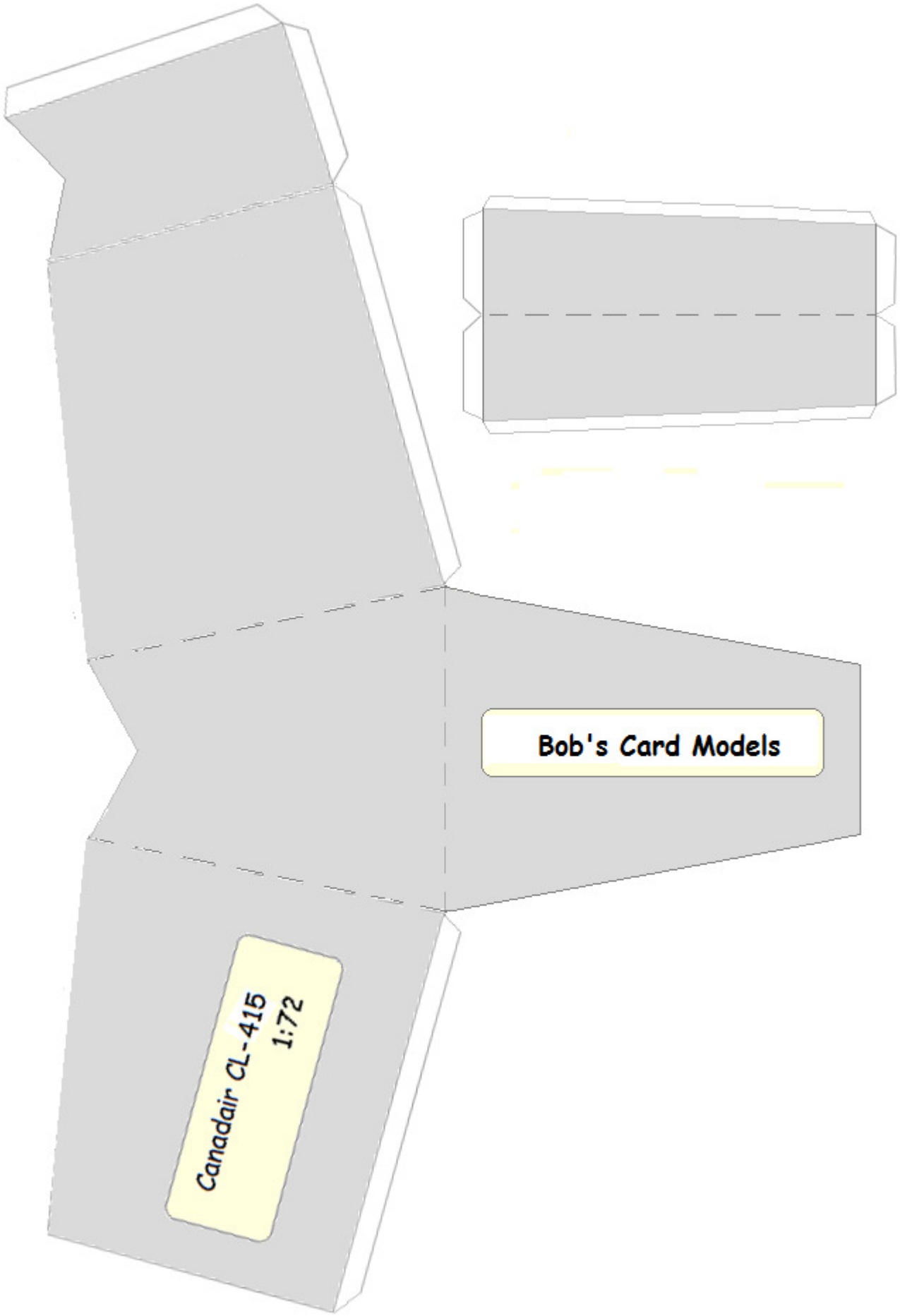
Nose radar 33

Fold, glue, cut out, and glue to front of nose

Aileron Hinges 25

Sheet 9

Canadair CL-415



Sheet 10

Canadair CL-415