Bob's Card Model

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

PHOTO 1: The finished model.

PHOTO 2: The real thing!

Conair C S 2F (Tracker) water-bomber(1:144)

Securité Civile's converted Tracker, used for patrol duty, but also for water-bombing (3200 litres).

Together with the Canadairs and Dash-8, the Tracker can also be seen in the skies of the South of France. They are also based at the airport of Marignane near Marseilles.
I designed and constructed the model on the basis of photographs on the homepage of the friends of Marignane at http://canadairs.marignane.free.fr in their gallery, as well as others I found surfing the internet.

General characteristics
Crew: 2
Length: 43 ft 6 in (13.26 m)
Wingspan: 72 ft 7 in (22.12 m)
Height: 17 ft 6 in (5.33 m)
Empty weight: 18,315 lb (8,310 kg)
Loaded weight: 23,435 lb (10,630 kg)
Max takeoff weight: 26,147 lb (11,860 kg)
Water capacity : 3300 litres

Performance
Maximum speed: 280 mph (450 km/h) at sea level
Cruise speed: 150 mph (240 km/h)
Range: 1,350 mi (2,170 km) or 9 hours endurance
Service ceiling 22,000 ft (6,700 m)

Building Instructions

Print all sheets on 160g card, except sheet Paper.
There is quite a bit of white colour on this model; it is advisable to cut the black outline lines on the model side - I have taken this into account in the design.
I have purposely used cocktail sticks where necessary although this goes against the philosophy of CARD modelling - whenever a trade-off occurs between thickness and strength of a part versus scale authenticity.
TIP: When gluing card parts at right-angles to another piece (eg bulkheads to the outer skin), holding together with fingers until dry usually results in the 'skeleton' image of the bulkheads - not nice! Hold together with 2 flat pieces of wood - I use the flat sides of 2 clothes pegs.
NOTE: Insert the bulkheads using a cocktail stick pushed into a tight hole in the centre of each bulkhead. The fit must be flush, not tight, otherwise ugly "ribbing" will be visible on the fuselage.

Fuselage
1. Cut out parts **[1]** to **[6]** .
2. Fuselage **[1]** : Close/glue from the rear of the fuselage, forwards.
3. Assemble and close/glue part **[2]**, then part **[3]**. Pass **[3]** through **[2]** and glue in place. Cut out the 2 green areas.
4. Glue Nose Cone **[4]** in place.
5. Insert 2 x 0.55g weights, one on each side of the landing gear compartment inside the nose.
6. Assemble front wheel landing gear compartment. Attach assembled unit **[2]**-**[5]** onto **[1]**, and glue in place.
7. Attach Rear Cone **[6]** to rear of fuselage.

Rear Fin and Wings
8. Cut out the rear fin **[7]**, fold, bend back tabs and glue.
9. Cut out the rear fin strut **[8]** and its central slot.
10. Cut out the Rear Wing Stabilising Bar **[9]**, make 4x thickness, bend in the middle so that each strip is about 12.5° upwards from the horizontal. Glue in place in the slots of the rear fin.
11. Cut out the rear fin vertical stabilising bar **[10]**, glue onto waste card thrice so that it becomes 4x thickness, and glue in place through the strut as far as it will go.
12. Cut the receiving slit on the top of the rearmost part of the fuselage.
13. Glue the rear fin in place on the fuselage.
14. Glue on the 2 rear wings **[11L]** and **[11R]** by putting glue on both sides and top and bottom of the Rear Wing Stabilising Bar. When dry, put a bead of glue along all the joints rear wing/rear fin.
15. Cut out Rear Fin Cowling **[12]**, fold centrally, bend back tabs and glue in place just in front of the rear fin on the fuselage.

Main Wings

16. Cut out the 2 wing **[13L]** and **[13R]** and the Front Wings Stabiliser Bar **[14]** (make the latter 4x thick). Fold the leading edges of the wings (rounded, not sharp), and fold back the 2 long tabs. Glue.
17. After slightly bending in the middle (maximum 5mm at either end) to give the final form of the main wings, insert the bar in the slots provided in the fuselage about 3cm behind the cockpit. Bead of glue on both sides of the exit position from the fuselage, as well as on the 4 small tabs on the end of each wing.
18. The paper Fuselage Top **[15]** is cut out, and glued in place between the 2 wings on top of the fuselage.
19. Near the tip of each wing, add the 2 red-painted pointed cocktail sticks set into the leading edge of the wing.

Engine Cowling

20. Cut out the 2 engine cowlings **[16]**, form with a round bar or pencil and glue the tabs. Push the black bulkhead inside, put glue on the inside of the cowling and push the bulkhead forward to fit flush with the front of the cowling. When dry, put in position, and with a needle, pierce the bulkhead for the propeller axis. Push the needle further to pierce the leading edge of the wing. Increase the size of the holes to about 1mm. Glue the cowling in place.
21. Cut out the cowling extension **[17]**, form according to the plan, fold back the small triangle and its tab, glue the rear tab. Join to the cowling gluing to the position marked. Glue the module onto the wing.
22. ONLY NOW, when the glue is dry, cut out the dotted lines and bend back the flaps to give the doors to the landing gear compartment (TIP: as it is difficult to start a cut in the middle of the paper, first make a hole with a pin somewhere on the line to be cut, and then increase the cut using nail scissors).
23. Repeat for the second cowling.

Propellers (5-bladed)

24. Cut out the 2 propeller units **[18],** and fold and glue each to form the 5-bladed prop.
25. Cut out the prop cone **[19]**, glue on the tab, form to a cone and glue. Cut the 5 slits at the bottom of the cone, and insert the propeller. Glue.
26. Push a cocktail stick into the centre of each propeller unit, so that 1-2mm protrudes out front. Glue.
27. Insert the prop cone on the front, so that the blades fit in the slits. Increase the width of the slits with a nail scissors if necessary.
28. On the axle behind the prop, add the Back Disc **[20]** and glue in place.
29. Push each propeller into the Engine cowling in the holes provided. If necessary, increase the size of the holes in the cowling using a nail scissors and a rotary movement, or push a cocktail stick into the holes. If desired, glue in place.

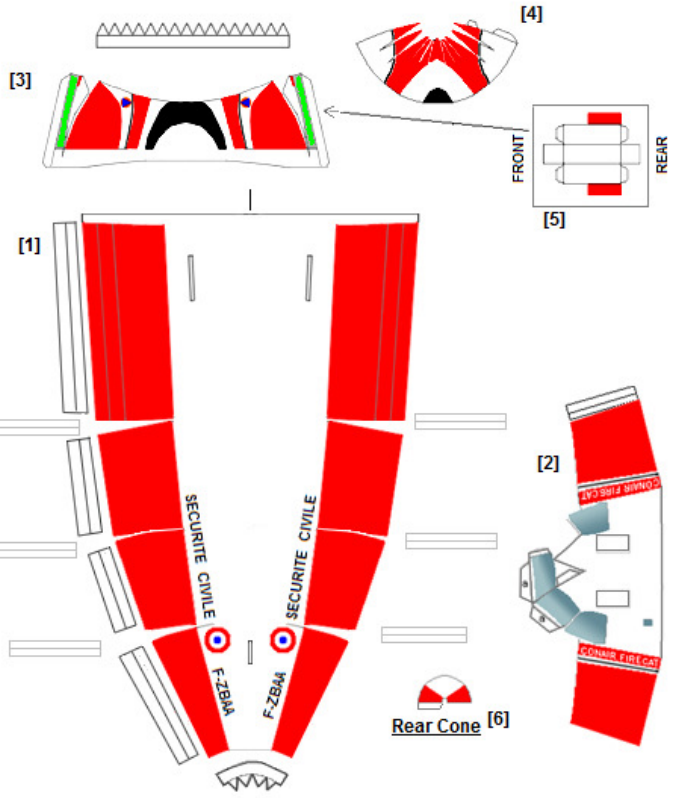
Landing Gear

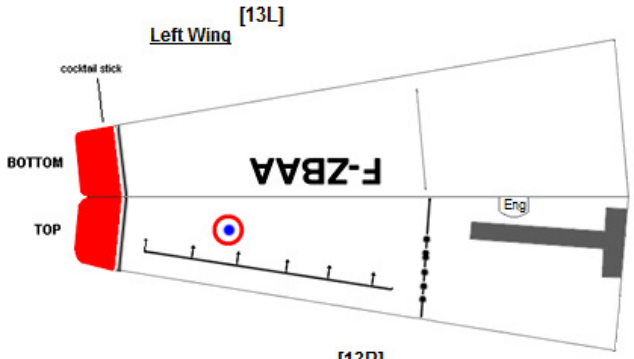
30. Cut out and roll all tyres with glue. Dry.
31. **Front wheels**: Liberally glue the 2 front wheels **[21]** on each side of the tip of a cocktail stick, the latter which has been rolled into an adequately long and wide piece of the grey paper for authenticity.
32. Insert into the fuselage according to the plan, and glue liberally in place.
33. Add the shield **[22]** in front of (and glued to) the cocktail stick and attached to the fuselage.
34. **Main wheels [23]:** Take a cocktail stick, roll into a piece of the grey paper so that the bottom 5mm is free of the grey paper. Bend and crack (but do not break off) the 5mm tip to 90°, glue liberally the crack and add the wheel onto the 90° bent "axle". Let dry well. Add some more glue to the wheel/cocktail stick contact for added strength.
35. Assemble as per sketch.

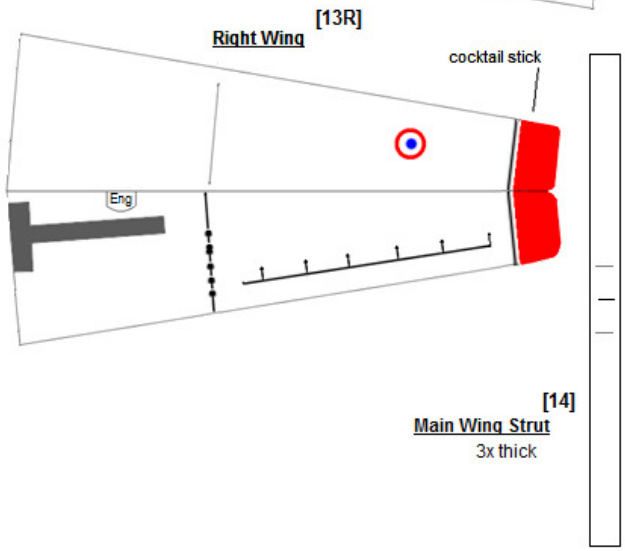
Accessories

36. Cut out, fold and glue the Tail Skid **[24]**.
37. Cut out and glue the 2 Wing Tanks **[25]**. Before closing the front bulb, insert the tail cone from the front, push through the main tube (whose rear end has been wetted with glue) until it nearly it protrudes in its full length. Allow to dry. Cut, glue and close the front end. Add the cones **[25A]**.
38. Cut out the Tank Suspension Units **[26]**, fold in the middle, bend tab and glue so that the profile is rounded, not flat. With a bead of glue along the edges, glue in place under the wing in the position marked. Glue on the wing tank. Repeat for the second tank unit.
39. Cut our, roll and glue rear fin red light **[36]** and glue on top of fin.
40. Add the 2 aerials **[27]** on top of the fuselage, 1 just in front of the rear fin, 1 over cockpit.
41. Assemble and fit an Exhaust Pipe **[31]** on to the side of each engine cowling as shown.
42. Cut out **[28]** , fold to a quadratic rod, glue. Snip slits in the rear, to fit over the rear port wing, and in the front to form a streamlined front portion.
43. Cut out **[29]** and fit in place on top of rear fin.
44. Tail Fin Light **[30]**: Assemble & glue in place.

---oooOooo---



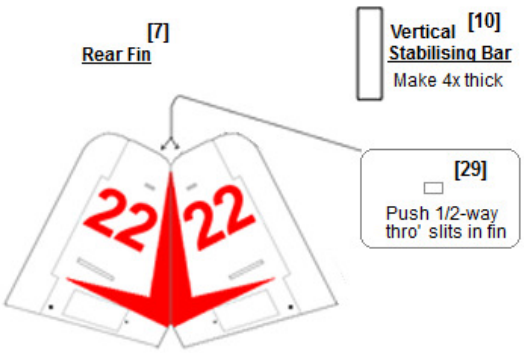


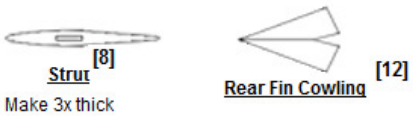


Fold 180° → ← Fold 90° & glue tahs to fuselage

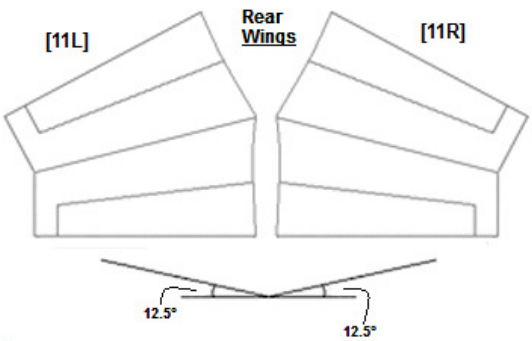
Tail Skid [24]

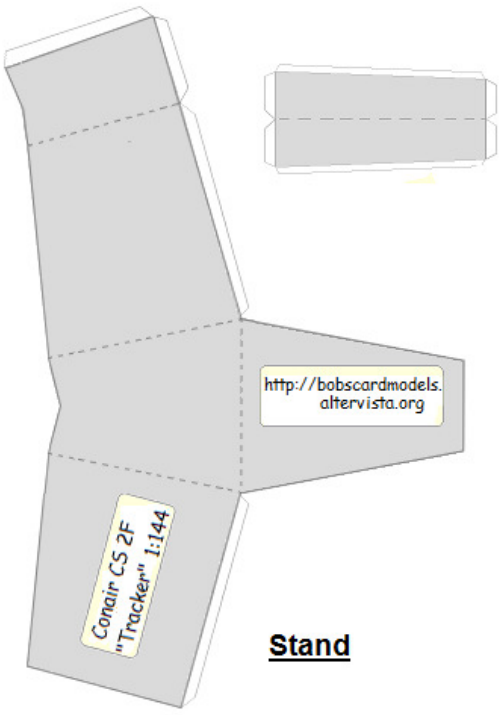
Radio Aerials (2) [27]
Fold, glue flaps together





Rear Wing Stabilising Bar [9] make 4x thick





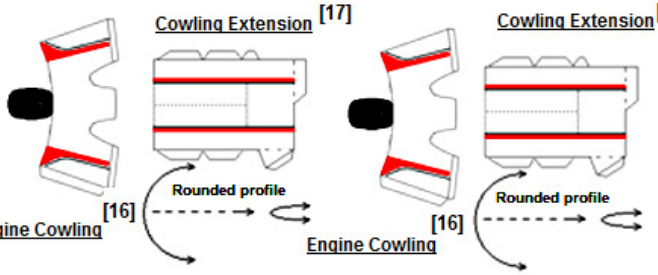
Stand

Sheet 1

tracker144

Cowling Extension [17]

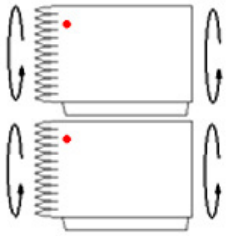
Cowling Extension [17]



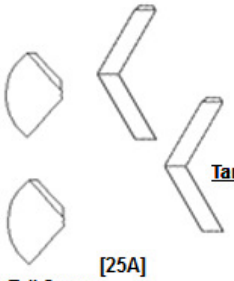
Engine Cowling [16]

Engine Cowling [16]

Engine Cowling



Wing Tanks [25]



Tank Suspension [26]

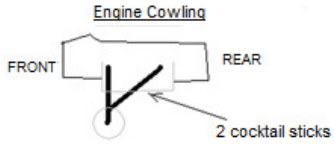
Tail Cones [25A]

Front Wheels [21]

Main Wheels [23]

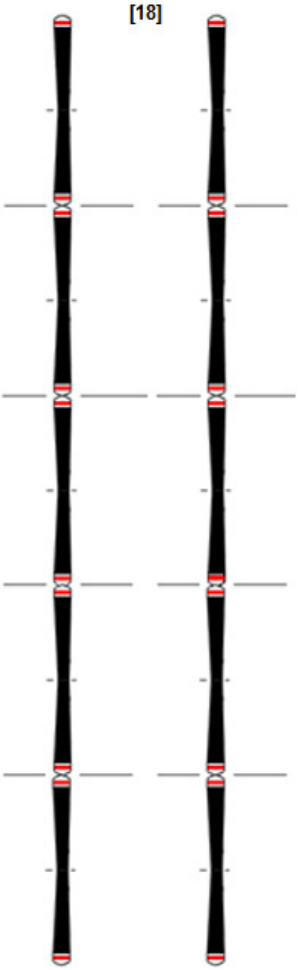
Front Landing Gear

Main Landing Gear x 2



Front Wheel Shield [22]

[18]



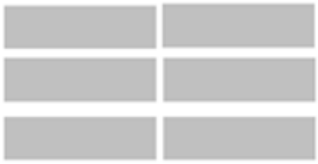
Nose Cones [20]

Back Discs [18]

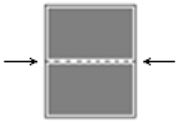
Sheet 2

tracker144

Fuselage Top [15]



Grey sleeves for rolling & gluing to cocktail sticks



Exhaust Pipes (2) [31]

Fold & glue. Cut awat the light grey. Roll a tube of 1-2mm & glue.

Using a thin blade, cut in 2 to give 2 short pipes

Glue in position on the engine cowling.

Tail Fin Light [30]

Roll and glue.

Roll around a pin & glue, slit the rear, form the front to a point.

Slip on wing, glue.

Rear Wing Aerial [28]

Print on 80-90g paper

Sheet 3

tracker144