

Bob's Card Models

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



Fairchild C-26D 1:72

The Fairchild Swearingen Metroliner or the Fairchild Aerospace Metro is a 19-seat, pressurised, twin turboprop airliner first produced by Swearingen Aircraft and later by Fairchild at a plant in San Antonio, Texas. The C-26D is the Navy's designation for the C-26B (military version of the Fairchild Metro 23/SA227DC). The Metro III has its roots in the Swearingen Merlin, a turboprop eight-seat executive aircraft that first flew in 1965.

General characteristics

Crew: 2

Capacity: 22/14 passengers

Length: 42 ft 2 in (12.85 m)

Wingspan: 46 ft 3 in (14.01 m)

Height: 16.83 ft (5.13 m)

Max takeoff weight: 14,000 lb (6,400 kg)

Fuel: 625 gal (2,370 L)

Powerplant: 2× Allied Signal Garrett TPE-331-IIUG-601G turboprops, 1,100 hp (820 kW) each

Performance

Maximum speed: 248 knots (285 mph, 460 km/h)

Range: 2,025 nm (2,331 mi, 3,750 km)

Service ceiling 31,000 ft (9,500 m)

Power/mass: 0.08 hp/lb (130 W/kg)

Building Instructions

Print all sheets on 210 to 230 g card, except sheet Paper, Sheet 20.

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 or plastic.

Green areas must be cut out, BUT only after gluing any folds. The Instructions will tell you when!

Fuselage

1. Cut out parts **1** to **5** and assemble. NOTE: Part **2** covers only the grey tabs of Part **3**. The remaining tabs are covered by the cockpit **4**.
2. Insert a mass of 8g or more, as far forward as possible in the fuselage.
3. Cut out the cockpit **4**, bend down all tabs, glue the front side windows to the tabs, and when dry, flip down the front window and glue in place to the 2 side tabs. Glue the assembly in place on the fuselage.
4. When assembled, cut out or slit all green areas or lines (position of wings, tailplane/fin).
5. Cut out and fold Fin part **7**. Cut out slit for tail-plane, fold and glue.
6. Cut out Tail-plane **6**, fold and glue.
7. Insert **6** through Fin and glue in place.
8. Cut numerous slits in the front of the nose cone **1** - each slit about 5mm long, glue liberally, and round with finger pressure. Repeat procedure with the Fuselage Tail **5**.
9. Press in very slightly, the sides of the fuselage, to give a slightly elliptical form.

Main Wings

The width of the lower surface is 98% that of the upper surface, to give the correct curvature of the wing.

10. Cut out Wings **8**, fold and glue.
11. Using the Wing template, fix the wing so that each wing is about 6° off the horizontal, glue the central portion along the top to keep this angle.
12. Glue the wing in the cut-out position marked under the fuselage.

Engines

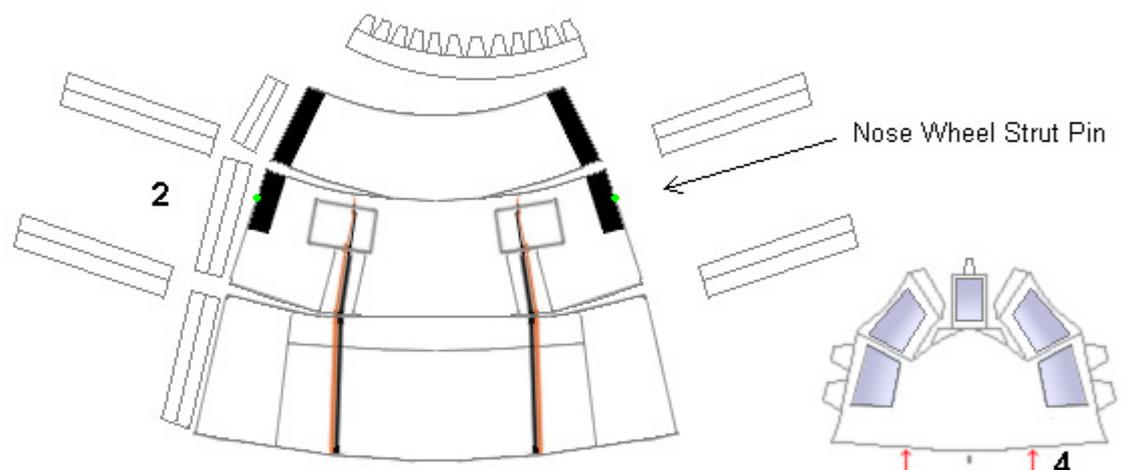
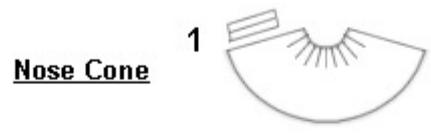
13. Cut out **12L** roll, glue on tab, glue; likewise **11L**, **10L** and **13L**. Join **10L** to **11L** then insert/glue **9L** about 1mm countersunk from the front of **10L**. Insert/glue **11bL** into the middle of **11L** 'serves as a support for the prop axle).
14. Finish the assembly by joining on **12L** and **13L**. Glue assembly on wings in position marked.
15. Cut out green slits for fitting assembly on wing.
16. **Rear undercarriage:** Fold/roll/glue wheels **15**. Cut out one of parts **17**, fold, and insert a decapitated pin, glue and close. When dry, cut out exact strut. On each red point, glue a wheel. Insert the pin of the undercarriage in the hole provided under the engine, and glue well. When dry, glue on a main landing gear door **19L** on each side.
17. Repeat for the right-hand side undercarriage.
18. **Nose Wheel:** Similar to the rear undercarriage, using parts **14** and **16**.
19. On all undercarriages, glue the doors **19L**, **19R**, and **18** in place. For authenticity, one can round them a bit longitudinally, using a 5mm diameter rod.

Propellers

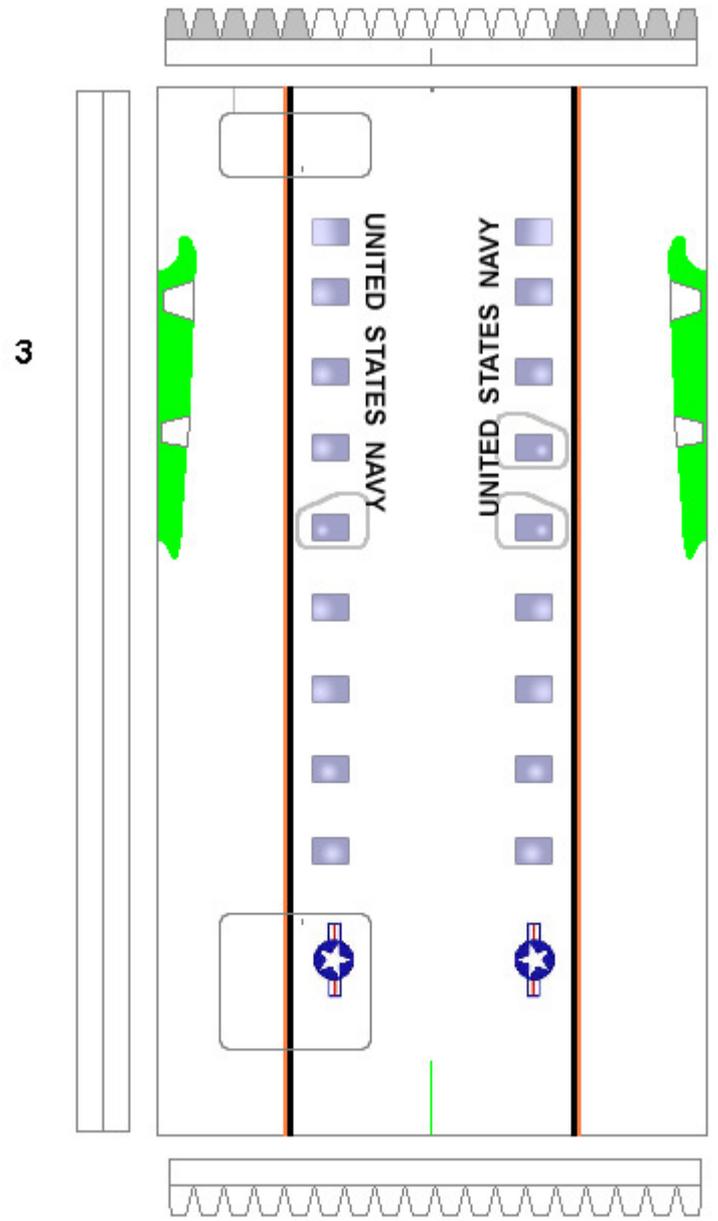
20. Add the propellers **20** with their cones **21**. For shafts, again use pins.

---oooOooo---

**Nose Landing
Gear Doors** 81



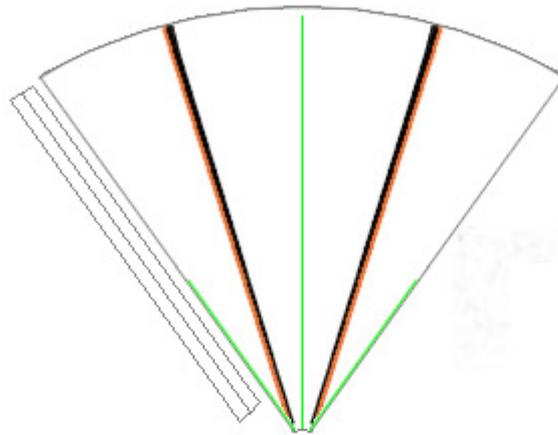
Cockpit 4



Sheet 1

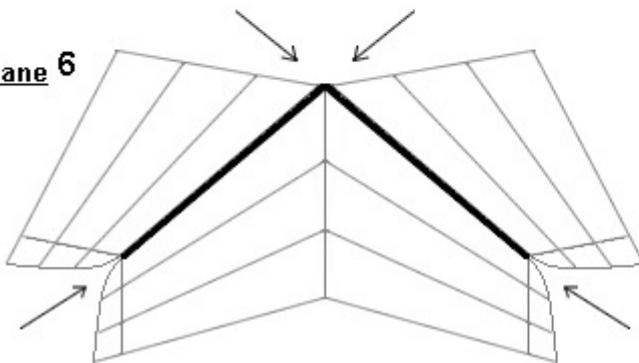
Fairchild - Metro

Fuselage Tail 5

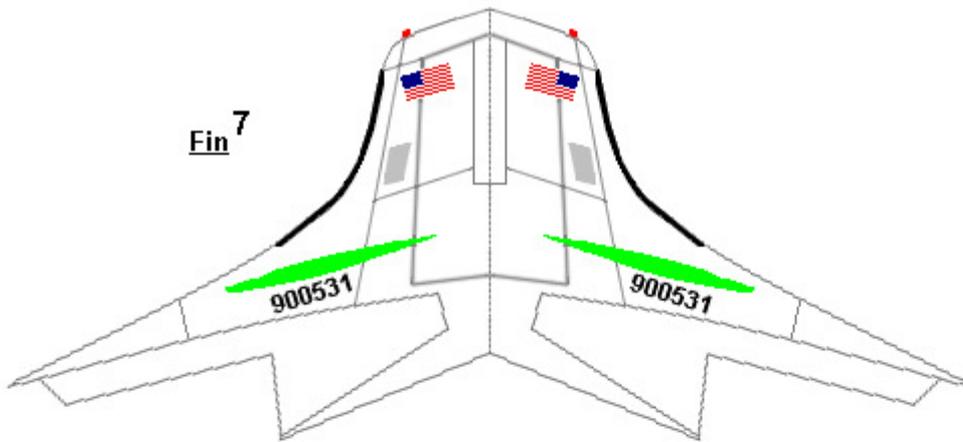


Fold

Tail-plane 6

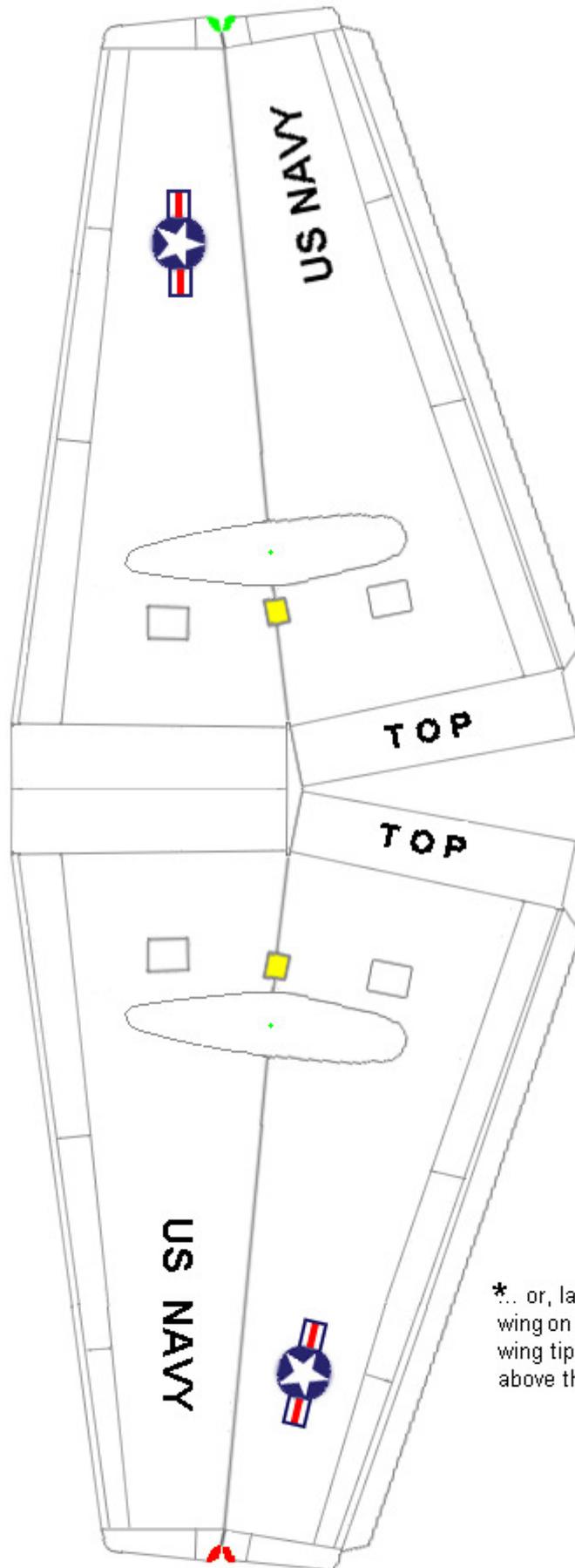


Fin 7



Sheet 2

Fairchild - Metro



Template for adjusting wing dihedral angle
 (6° left and right)

*.. or, lay the assembled wing on a flat surface, both wing tips should be 5mm above the surface.

Sheet 3

Fairchild - Metro

Engines

LEFT

RIGHT

9L



← Make 2x thick →



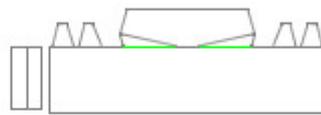
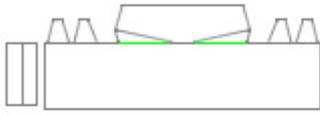
9R

10L



10R

11L



11R

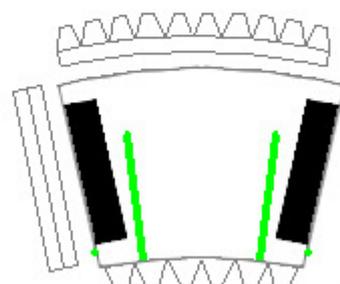
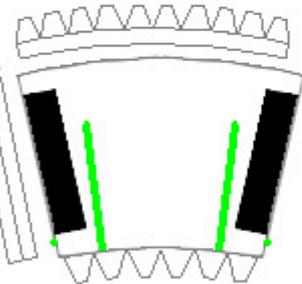
11bL



11bR



12L



12R

19L

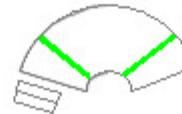
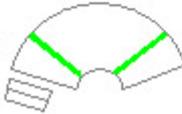


19R

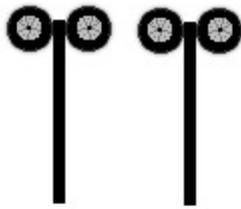
Main Landing Gear Doors

Main Landing Gear Doors

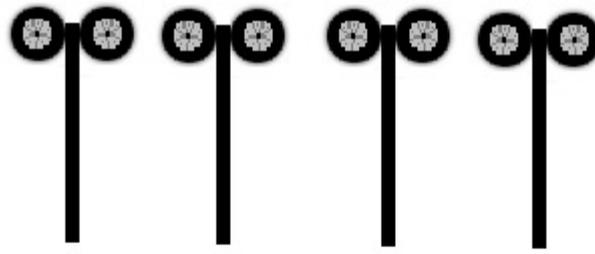
13L



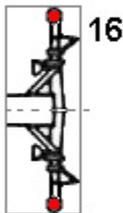
13R



Front Wheels 14



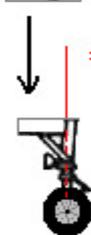
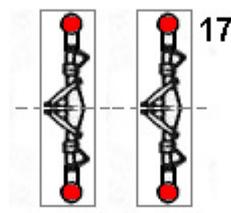
Rear Wheels 15



←

Cut out, fold, insert pin, glue, cut out final form

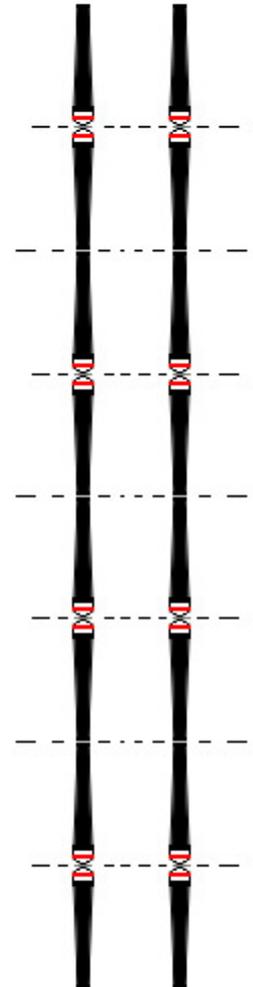
→



steel pin

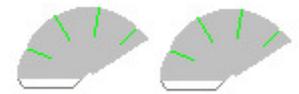


steel pin



Propellers 20

Cut out, fold and glue



Propeller Cones 21

Use a pin as shaft

Sheet 4

Fairchild - Metro