

ROYAL PRODUCTS CORP.

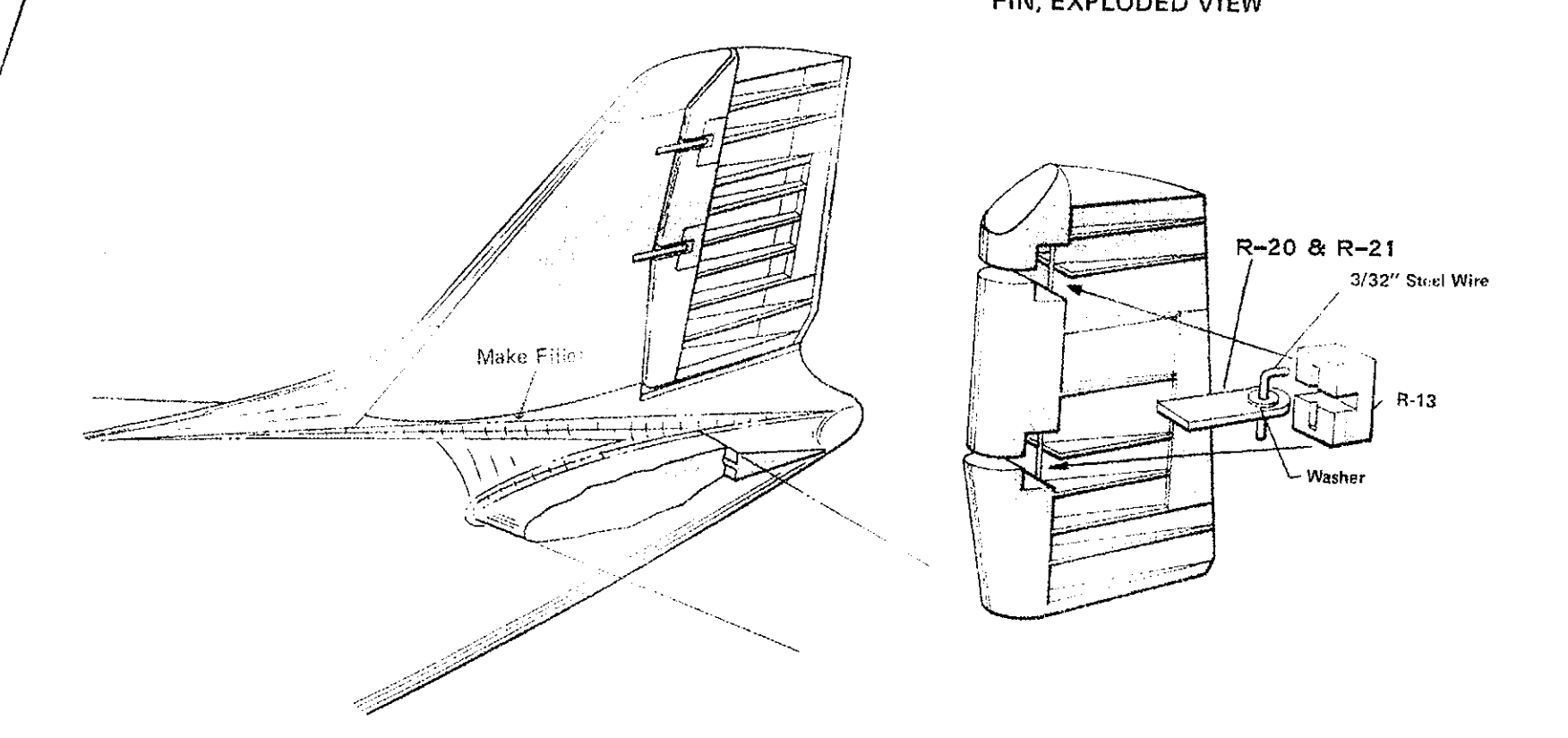
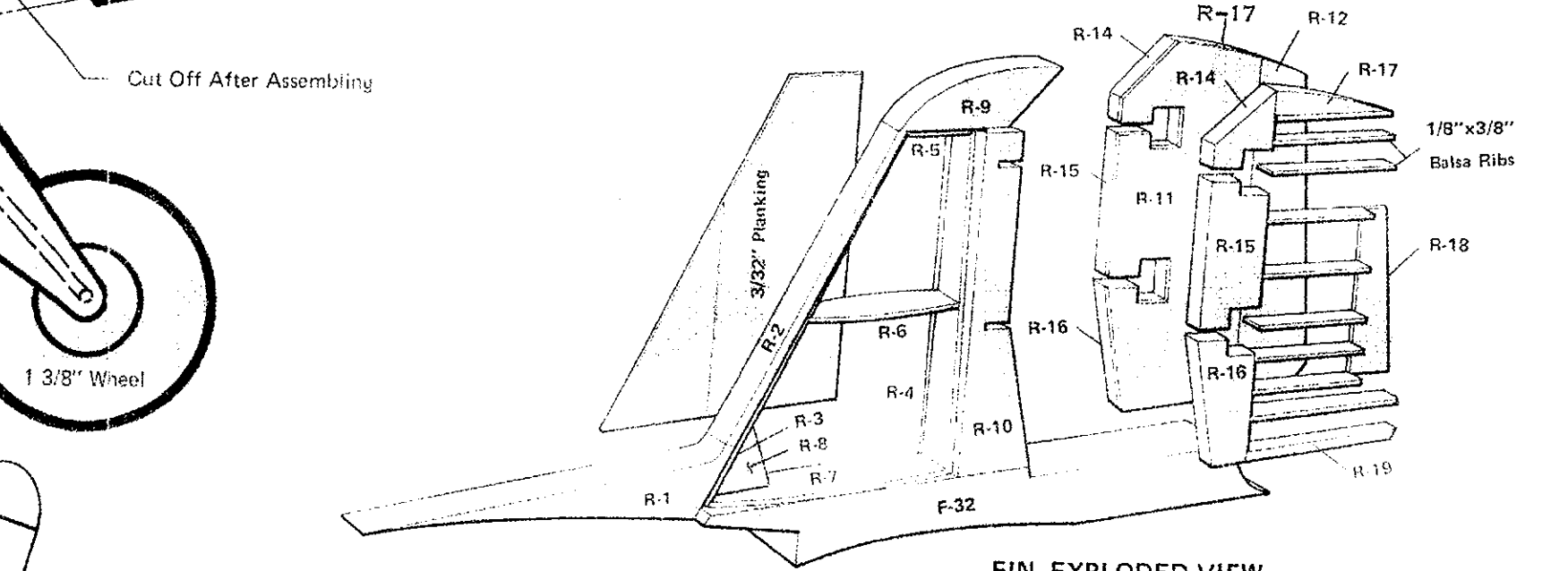
DOUGLAS C-47D

Skytrain

Scale	7/8"=1'
Length	56 7/8"
Wing Span	83 1/8"
Wing Area	767 Sq. In.
Weight	9-10 lb.
Engine	40 R/C Twin
Control	4-6 CH. Prop.

SPECIFICATIONS	
Span	95 ft.
Length	64 ft. 6 in.
Height	17 ft.
Weight, Empty	17,087 lb.
Max. Gross Weight	29,300 lb.
Cruising Speed	185 m.p.h.
Maximum Speed	230 m.p.h.
Service Ceiling	24,100 ft.
Range	2,125 mi.

Powerplant: Two 1200 h.p. Pratt & Whitney Twin Wasp R.1830-92



- FIN AND RUDDER**
1. Mark centerlines on R-3,4,5,6, and 7.
 2. Pin R-4 to work surface with centerline facing up. Using cyanoacrylate adhesive (Hot Stuff, Zap, Jet) and a small right triangle glue R-7, 8, and 5 to R-4. Align centerlines and be sure ribs are square to R-4. Add R-9.
 3. Unpin and add R-3 to the face of the ribs. Be sure the centerline on R-3 intersects the rib centerlines.
 4. Carefully sheet the fin structure.
 5. Add R-2, R-10, R-9, and R-1.
 6. Pin R-11 to work surface. Glue R-12 to rear edge.
 7. Glue R-14, 15, 16, 17, 18, and 19 to surface of R-11/R-12.
 8. Add the 1/8" x 3/8" balsa ribs.
 9. When dry, flip over and repeat step 7 and 8.
 10. Release the two R-13 pieces for R-20 and 21 hinge pieces. Drill a 3/32" hole in R-20 and R-21. Make up hinge pin and drill R-13 accordingly. Assemble R-20, R-21, and hinge pins to the R-13 pieces. Glue R-13's in place in rudder assembly.
 11. Sand rudder and fin to shape but do not glue R-13's into R-10 until model is finished.

NACELLE CONSTRUCTION

- Note that two nacelles are constructed the same with the exception that C-3 and C-4 are in the right nacelle and C-5 and C-6 are in the left nacelle.
- Make a dry assembly of the nacelle. Check fit of parts.
- Start with the right nacelle. Glue C-3 and C-4 to two C-7 pieces. Be sure that C-3 and C-4 are oriented properly. Work over the right nacelle drawing. Check that C-3, C-4 and 90° are the C-7 side inches. Also be sure that the C-7 pieces are oriented such that the airfoil cutout is the same as the wing top and bottom. Trial fit the assembly to the wing before the glue sets. Slow epoxy is recommended for this use.
- Repeat for left nacelle but use formers C-5 and C-6.
- The following steps refer to both nacelles.
- Glue the motor mount rails in place.
- Glue C-1 in place. Be sure cut-out is oriented correctly.
- Mark nacelles on back of C-1 as to right and left assembly.
- Glue C-2 in place on face of C-7's.
- Mount motors and install blind nuts.
- Trial fit on wing and check that throttle and fuel lines are proper. Make any necessary changes.
- Glue nacelles in place on wing. Be sure they are not glued on with "open" or "side" thrust. The motor mounts have the thrust offset built into them. Measure carefully!
- Add C-14's and C-15's.
- Glue blocks C-9, C-10 and C-11 in place.
- Glue C-12 and C-13 in place after hollowing C-13.
- Add C-8 and C-16.
- Shape and fair the nacelles.
- Sand entire wing unit ready for finishing.

NOTE TO THE MODELLER:

All formers and ribs shown actual size to make "scratch" building easily accomplished from these plans, and to facilitate any repairs that may be necessary.

NOTE: UNICUT ENGINE COWL AVAILABLE IF WANKEL ENGINES ARE TO BE USED.

3/16"

Cowling

Wood Screw

EM

Engine Thrust

C-15

C-2

C-5

C-10

C-9

C-7

C-11

C-6

Left Nacelle

W-13

Dowel

W-14

W-15

Engine Control Wire

Engine Servo

Engine Control Wire

3/8" Balsa Spar

C-17

C-12

C-13

W-1

W-1

Flap Servo

Aileron Servo

Fuel Tank Box Position

3/32" Balsa Planking Top & Bottom

W-16

W-21

W-18

W-34

W-37

W-21

W-21

W-35 (Flap)

Refer to Nacelle Side View for Additional Detail

W-36 (Top)

W-16

W-21

W-18

W-34

W-37

W-21

NOTE: Shows areas to be cut away for retract gear installation.

C-4

C-1

C-15

EM

Engine Thrust

C-2

C-5

C-10

C-9

C-7

C-11

C-6

Left Nacelle

W-13

Dowel

W-14

W-15

Engine Control Wire

Engine Servo

Engine Control Wire

3/8" Balsa Spar

C-17

C-12

C-13

W-1

W-1

Flap Servo

Aileron Servo

Fuel Tank Box Position

3/32" Balsa Planking Top & Bottom

W-16

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W-35 (Flap)

Refer to Nacelle Side View for Additional Detail

W-36 (Top)

W-16

W-21

W-18

W-34

W-37

W-21

W-21

Cowling

40 R/C Engine

C-1

C-15

EM

Engine Thrust

C-2

C-3

C-7

C-8

C-7

Right Nacelle

W-17

W-17

Engine Thrust

W-19

C-12

C-17

W-2

W-2

W-19

W-20

W-2

W-2

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W-2

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W-4

W-6

3/16" Sq. Scrap

3/32" Balsa Planking

3/16" Sq. Rear Spar

W-20

W-30

W-31

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3/16" Sq. Scrap

3/32" Balsa Planking

3/16" Sq. Rear Spar

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