



DOUGLAS C-47D SKYTRAIN

WING CONSTRUCTION

1. Obtain the motors and throttle cables you intend to use. We recommend the use of a fuel pump for the motors. Perry units are available for most motors and the Robart In-Line units are ideal. The fuel line which travels from the motor to the fuselage area should be made from soft 1/8" brass tubing. Terminate at both ends so a short coupling may be made from standard silicone fuel line. Remember, when you set up the throttle cable/servo system, both engines must go to idle and full throttle simultaneously. Also, make provision to adjust both cables so the motors may be synchronized properly. Bench run both motors and be sure of its proper pump set-up.
2. Separate out the wing parts from the rest of the kit. Sub-divide those into wing center-section, wing tip, and nacelle groups.
3. Draw centerlines on all wing ribs.
4. Begin construction on the wing centersection. Place a 3/8" sq. balsa spar over the plans (cover with clear plastic sheet) and pin in place. Glue 4 W-1 ribs and four W-2 ribs in position. Shim the ribs so the centerlines are parallel to the work surface. Add the top 3/8" sq. spar, the top 3/16" sq. spar and the 3/16"x3/8" top sub-spar. Glue the 3/8"x1" leading edge in place.
5. When set, turn the wing over and add the bottom 3/8"x3/16" sub-spar and the bottom 3/16" sq. spar. Flip-over and re-pin in position to dry.
6. Add 4 W-17 ply rib doublers with epoxy glue. At the same time glue 2 W-20 ribs between each pair of W-2 ribs.
7. Drill holes for the throttle cables, fuel lines and aileron pushrods.
8. Glue 2 W-16's in place as well as W-14.
9. Glue 2 W-19 blocks into notches in W-20.
10. Glue 2 W-19 blocks into place atop W-18. Glue W-18's into place between the W-2 ribs. Be sure the notches face down.
11. When dry, place centersection aside.
12. Begin tip assembly by pinning the spar in place on the plans. Glue the ribs W-3 thru W-11 to the spar shimming as necessary to keep the centerlines parallel to the work surface.
13. Add the top 3/16"x3.8" spar and the 3/16" sq. rear spar.
14. Glue W-2A in place angling with W-23 for the dihedral angle, add the top 3/8"x3/16" sub-spar. Be sure to trim carefully for a tight fit where it intersects the main spar. Add W-23 and clamp tightly to the sub-spar.
15. Glue the leading edge in place. Add W-22.
16. When assembly is dry, turn over and add the bottom 3/16" sq. spar and the bottom 3/8"x3/16" sub-spar.
17. Turn assembly over and re-pin to plans until dry completely.
18. Add W-26 between W-2A and W-3.
19. Drill holes for aileron push rod.

20. Mount all 3 1/16" centersect
21. Repeat sti
22. With both the plans, work-surf. ahead of centersect
23. Place one sure the t W-24 and and W-24 portions t
24. Repeat Ne
25. When dry, Use conta
26. Trim the l
27. Contact c the panel are parallel this proce pinned to dihedral
28. Bevel the Contact c panels.
29. Add W-37
30. Relieve th shape as p
31. Glue flap W-21 hing
32. Cut a slot
33. Glue C 17
34. Cut out ai
35. Add 3 W- W-29 cap.
36. Relieve th glue W-30 as you glu
37. Add the s W-32's to outer ends
38. Bevel I.E.
39. Sheet rem
40. Sand any c
41. Sand and in place an
42. Build fuel W-39 ends

S-9



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