

## Motorhead's 42" Outdoor EPPYak55

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CAD PLANS BY DZ1SFB

SPECIFICATIONS:

WINGSPAN - 42.25" LENGTH - 39.5" HIEGHT - 10.75" AUW - 15-17 oz

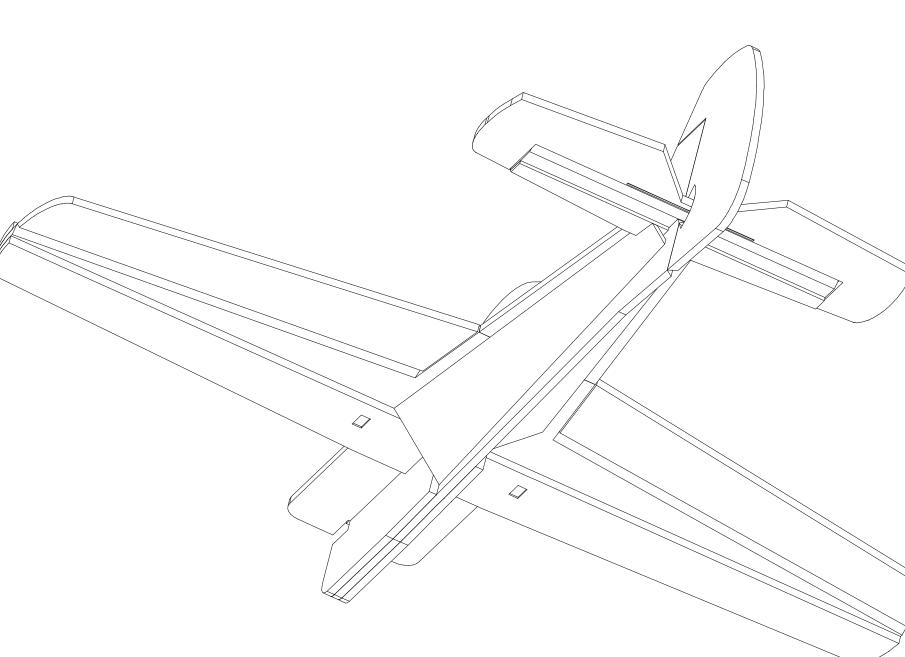
## **EQUIPMENT**:

MOTOR - A20-22L SPEED CONTROL - 20A PROPELLER - 10 X 4.7 SERVOS - 4 HXT 900 9G BATTERY - 3s 1000-2000 Mah RECEIVER - 4 CHANNEL MINIMUM (Y HARNESS CAN BE SUBSTITUTED)

## INSTRUCTIONS:

- 1. Cut out all parts.
- 2. Paint the foam parts.
- 3. For my kit to fit in a box the wing and wing KF doublers will be cut in half.
  Use Welders to glue them together.
  4. Glue in the spar. I used Welders and held it flat with some weights.

- 5. Hinge ailerons and elevator with welders.
- 6. I like to cut a slit about 1/2" long in the motor stick to make it easier to
- remove the motor if I have to later.
- 7. Mark the center line of the front horizontal piece along with the motor and
- motor mount stick cutouts. My motor cutout is 1.25" wide x 1.5" long.
- 8. Glue the motor stick into position with Welders.
- 9. Glue all the horizontal parts together with welders. 10. Glue (welders) in elevator stiffener. It is a 1/8" carbon tube 6" long in a
- v-groove that I cut in the bottom of the elevator.
- 11. Mark the center line on the top and bottom for placement of the vertical fuselage pieces. 12. Glue (3M 77) on the lower wing KF doubler. I sprayed a wet coating on
- the KF doubler and then pressed it onto the wing to transfer glue onto the wing with out having to deal with over spray. I took it off for a couple of minutes and then stuck it back into place.
- 13. Use the same 3M 77 method as the KF doubler; glue the lower nose doublers onto the sides of the lower nose. Looking from the top down the left
- nose doubler is shorter than the right. 14. Cut motor clearance in the front of the lower fuselage.
- 15. Glue (welders) the lower fuselage onto the bottom of the horizontal assembly. The front is stiff due to the doublers. I used a strait edge to help place the back part
- and keep it strait.
- 16. Cut the holes for the servos but do not glue them in. I have the tail servos just
- behind the nose doubler and the ailerons servos are 3.5" out from the center. I have
- the aileron tabs sitting on top of the main wing. The top KF doubler will go over the top of them. Remember the spar is 1/2" in front of the aft side of the KF doubler. The aft of
- my servo is 1/4" in front of the spar so they do not hit. 17. Using the wing KF glue method with 3M 77 glue on the bottom horizontal tail KF doublers.
- 18. The left side stiffener is longer to match the different lengths of the nose doublers.
- Position the tail braces along the fuse. You will have to notch them for the horizontal KF double To help keep from inducing a twist I like to lightly hold the braces in place and use hot glue. I pu
- a 1/2" long swipe of glue every inch working both sides as I go from front to back. This is why the bottom of the plane is built flat on the board.
- 19. Glue the servos in place with hot glue.
- 20. Place the top wing KF doubler upside down behind the servos and mark the servo locations. Cut out the holes and check the KF doubler fit. I had to cut a little more out of one hole so the leading edges lined up.
- 21. Glue the top wing KF doubler in place. After the glue tacked up I carefully aligned the KF doubler to the wing lightly pressing it into place to I could move it if needed. Once happy I place the plane top side down on the work bench and pressed on the bottom KF doubler to lock the
- one in place. 22. Cut the motor cutout in the top vertical fuselage.
- 23. Glue the upper fuselage in place with Welders. Again use a strait edge to make sure it is strait
- 24. Use Welders to glue the hinge for the vertical stab. 25. Use the 3M77 method to glue on the top horizontal tail KF doublers.
- 26. With 1/16" ply make some control horns. These are 1.25" x .5". 27. Make your pushrods.
- 28. Mount the Motor, ESC, battery and receiver. My battery went towards the back of the nose doubler to get the CG at 4" behind the wing leading edge or at the aft edge of the wing KF dou



LOWER REAR VIEW - 1:4 SCALE

