BALANCE POINT

As the servo throws have already been set up, all that remains is to check that the model balances between 4 3/4" and 5" (120 to 126 mm) back from the wing root leading edge at the fuselage side, probably requiring 1oz (30 grm) noseweight, more if a light receiver is used. Err on the forward side if inexperienced or for initial flights. Feed the receiver aerial down inside the fuselage and out through the flutes of one of the elevons.

FLYING

The model is a real confidence booster for the inexperienced pilot, whilst a delight for the more accomplished pilot to develop his skills further. Do NOT ballast the model. If in any doubt ask an experienced pilot for help.

CARE OF THE MODEL

Although EPP models can take a lot of abuse, they will last longer and deteriorate more slowly if properly and regularly maintained, so :-

Always check correct radio operation and ensure taped joints, quicklinks and control horns are sound before relaunching after a collision or crash, thus minimising the risk of further damage in a strike, or even a flyaway which could have more serious consequences.

Repeated opening of the hatch will result in loss of adhesion of its retaining tape which will need to be replaced from time to time. Store the model in a cool dark place and never leave it baking on the parcel shelf of your car.

CAUTION

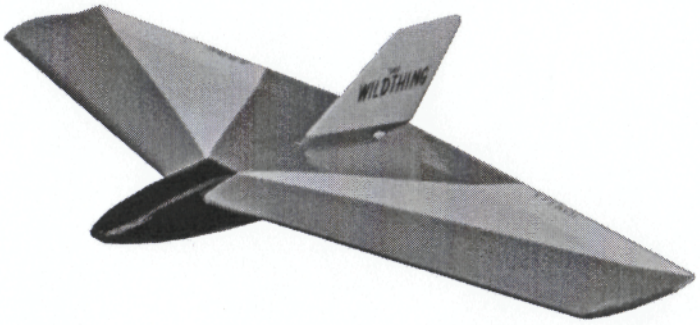
Flying these types of model can be terrific fun since the fear of damage is minimised, so it is even more important that you do it safely, and with consideration for other Modellers who might not be happy flying in such crowded skies. Make sure you have adequate third party insurance - it is cheap, reflecting the low risk, but highly advisable and compulsory with all clubs and most flying sites.

FLY WITH CARE - DON'T HOG THE AIR

Soar Ahead Sailplanes
Chantry House Church Street Henfield West Sussex BN5 9NR
Tel (01273) 494140
email:- alansasepp@hotmail.com
www.freewebs.com/sasepp

BUILDING INSTRUCTIONS FOR THE SAS

WILDTHING MK3-46(MOD)



AN EXCITINGLY DIFFERENT SLOPE SOARER

A glass reinforced tape covered EPP model that complies with the BMFA slope combat rules. This latest variation incorporates a swept forward elevon hinge line.

Specifications:-

Wing span	**46"**	**117 cm.**
Length	**27"**	**68.5cm.**
Weight	**25 ozs.**	**710 grm.**
Wing Area	**3.8 sq.ft.**	**35 sq.dcm.**
Wing Loading	**6.6 oz./sq.ft.**	**20.3 grm./sq.dcm.**
Wing Section	**EH 2/10 (mod)**	
Radio	**2 Channel (with elevon mixing)**	

GENERAL

You have chosen wisely with this model, do not spoil this good start by failing to both read and follow these instructions carefully in numerical order for most rapid and accurate completion.

iF YOU HAVE ANY PROBLEMS, OR WANT TO MODIFY THE MODEL,
PLEASE CALL US FIRST ON (01273) 494140.

n.b. the adhesive on the glass reinforced crossweave tape, (referred to from now on as cw tape) degenerates (goes powdery) when exposed to ultra-violet light, so at least the upper surface should be covered with the coloured tape, and the model ideally stored in a cool dark place.

It is assumed that the modeller has read a basic introduction to radio control models, and so these instructions are kept deliberately brief in the hope that they may be read and no salient points missed, the most common instructions missed are underlined. Ensure you are happy at each stage tticking the instruction before progressing to the next.

Ensure you have adequate insurance, or better still, join the BMFA :-
British Model Flying Association
Chacksfield House, 31 St. Andrews Road, Leicester, LE2 8RE (0116) 244 0028

WING

1) When the wings are hot wire cut, the foam melted away forms a sort of crustiness, most of which has already been removed during our quality inspection stage. Examine the wings carefully, feeling them with your fingertips for any rough spots, and if found, carefully pick them off.

2) Round off the leading edges and tips with a coarse sanding block and smooth the wings with 120 grit paper. Ensure the surfaces are dust free by brushing and vacuuming them.

3) Remove the mounting lugs from two standard servos and check fit them in the pre-cut holes, noting their orientation from the plan, and ensuring there will be ample clearance between the 'Z' bends in the m2 pushrods.

FUSELAGE

15) Check that the cutout in the centre spine is sufficient to clear the pushrods and control horns, and that the join between the top of the fuselage and the rear of the wing cut-out is good, adjusting if necessary.

16) If an onboard mixer is to be used, ensure that there is adequate clearance in the receiver bay for this combined unit, do not force it into position.

17) Sand the fuselage smooth and prepare it for covering.

18) Cover the fuselage longitudinally with cw tape ensuring that there is at least 1/4" (6 mm) overlap on all joints.

19) Mount the on/off switch as per plan.

THE FUSELAGE IS NOW READY TO MOUNT TO THE WING

20) Trial fit the fuselage to the wing ensuring that there are no obstructions to prevent a good fit. Use the double sided tape provided only on top of the fuselage sides and carefully stick together.

21) Use 3" strips of cw tape to form a fillet between the underside of the wing and the fuselage sides, 1 1/2" onto the wing, and 1 1/2" onto the fuselage. use further strips laterally on top of the fuselage and extending onto the wing, then three more strips ontop of each another, 1 1/2" onto the fuselage rearwards 1 1/2" onto the fuselage.

FIN

22) Study Figs. 3A to 3D. Use double sided tape to stick the 1/2" (12 mm) triangular section balsa to the base of the fin. Wrap around this joint with cw tape extending up 1/2" onto the plastic.

23) Double sided tape this assembly onto the wing and reinforce the joint with a strip of cw tape from the top of the wood onto the wing and extending 1 1/2"(37 mm) in front of the fin. Use a further strip of tape to cover across these two forward extending strips.

24) Attach the **SAS *WILDTHING*** sticker into position.

... the horns into position.

8) Study Figs. 2A and 2B. The elevons should now be hinged in place with a 1" (25 mm) strip of cw tape forming the top hinge and a second piece the lower part which should be stuck in place with the elevon folded back onto the upper wing surface. Ensure there is 1/4" (6 mm) clearance between the roots at their leading edge for the fin, The gap is larger at the trailing edge.

9) Trim the elevons to length.

INSTALLATION OF SERVOS AND SETTING UP

10) Set up the transmitter for elevon mixing and set the output arms at right angles to the servos, which should now be positioned in the wing with the arms pointing downwards, and nearer to the back end of the cut outs. Check that the m2 rods will not interfere with one another between the two servos (see 12 below).

11) When satisfied that all is correct, tape the servos in position.

12) Connect up the elevons to the servos with the m2 rods and quicklinks with the 'Z' bends in the m2 rods at the servo ends such that with the trims at neutral, the elevons should be a continuation of the lower wing surface at the root for light winds, more down trim will be necessary as the wind strength increases.

13) Set up the elevons so that they give the following movements:-

Aileron ..... 7/8" (22 mm) either side of neutral
Elevator ..... 1/2" (12 mm) either side of neutral
Reduce these throws by 1/3rd if not very experienced.

30% negative exponential is pleasant to use on both functions (if you have a computerised transmitter with this facility).

14) Cover the entire upper surface of the wing with the coloured vinyl tape to protect the cw tape from u.v. degradation. If using a light colour, use two layers to give a more solid colour. Covering the lower wing surface with the coloured tape is optional.

THE WING IS NOW COMPLETE

when attached to each servo arm. (If using new servos, ensure that they are working properly before performing this operation since your supplier would be unlikely to change them if faulty.)

4) Study Fig. 1. Each wing is now ready for covering with the glass reinforced (cw) tape. DO NOT USE SPRAYMOUNT. To avoid warps, weight each panel down in the appropriate saddle (which should subsequently be safely stored for when the model needs recovering). Start 1 1/4"(3 cms) from, and parallel to, the trailing edge on the upper wing surface wrapping the strip around the trailing edge onto the underside. The next strip should be on the underside, overlapping that already there by 1/4" (6 mm). Strip 3 should then be positioned on the upper side, again with the same overlap. Progress in a similar manner until the entire panel is covered. Double the overlap where the top and bottom covering meet at the tips and along the leading edge. Do not cover the roots. Do not pull the tape tight when positioning it and only rub down firmly once the whole wing is covered, and properly supported in the saddles. Since the tape does not stretch, you will need to make several small cuts to cover around the compound curves at the tips.. . The wings are now ready for joining.

5) Insert the carbon fibre spar into one wing and slide the other wing into position. If the tube is loose in the hole, then masking tape can be wrapped around the spar at the end to increase its diameter.

6) Bind the centre of the spar with masking tape and mark its centre. Using a small piece of sponge or paper towel, stipple both the wing roots with the white latex contact adhesive supplied and (gently using a hairdryer if necessary) when dry, i.e. when the adhesive clears, bring the two wing roots together using firm pressure once correct alignment has been achieved. Bind around the join line with a strip of cw tape.

ELEVONS

7) The elevons, larger at the root, are pre-shaped for top hinging and are cut at the correct angle at the root, but are overlength. The control horn screws are screwed directly through the corrugated plastic into the horns, which should be mounted as near to the wing root and the hinge line as possible. Overtightening or severe impact could result in the vertical flutes being crushed, so to minimise this risk, cut the piece of 1/8" sq. (3 mm sq) balsa into six equal lengths and slide into position between the flutes prior to fixing the horns into position.

SAS

WILDTHING

MK3-46(MOD)

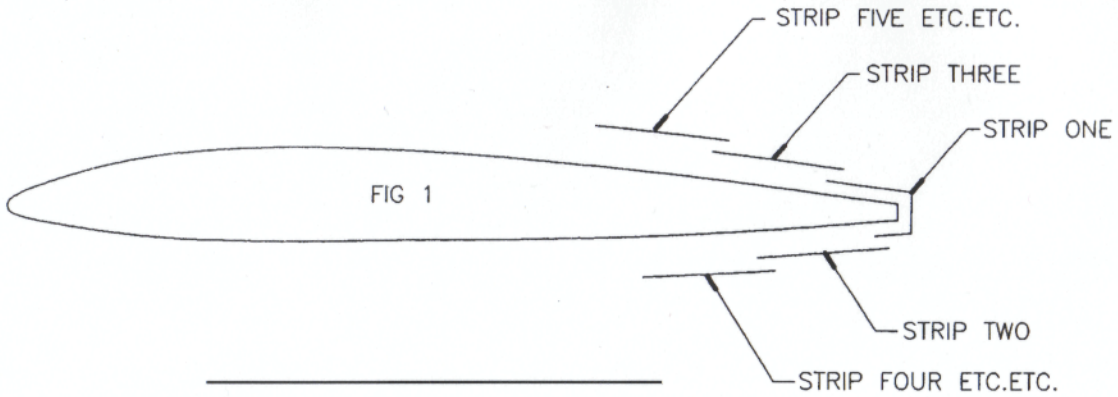
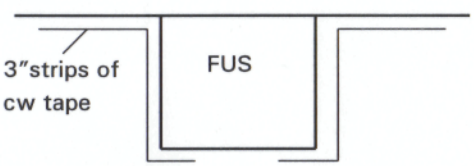


FIG 1

WING





Wrap the battery with a 1" wide strip of cw tape, leaving a 3" tongue to aid its removal from the fuselage.

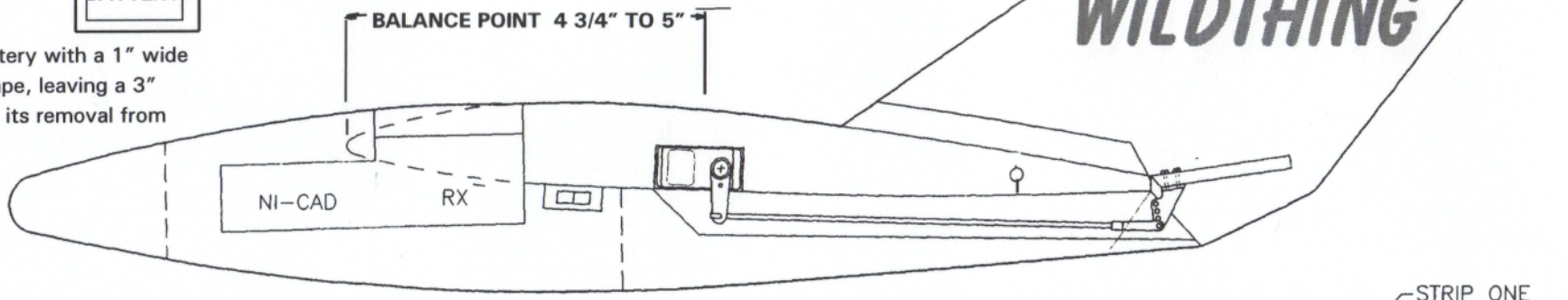




FIG 3/A



FIG 3/B



FIG 3/C

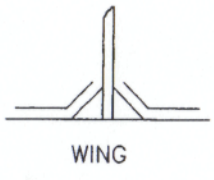


FIG 3/D

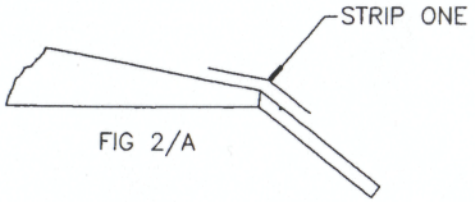


FIG 2/A

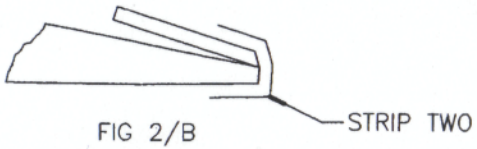


FIG 2/B

DESIGNED BY ALAN HEAD
DRAWN BY MIKE RIGBY