

TECHNICAL INSTRUCTION No. 49

Kestrel Modification No. 11

Fitting of Cloth Blinds to Kestrel Sailplanes

Introduction

The performance of the Kestrel shows considerable improvement if the ailerons and flaps are sealed.

Procedure

1. With the flaps and ailerons fitted to the wing scribe along the trailing edge of the shroud marking the bottom faces of the control surfaces showing the extent of the shroud in the fully up and fully down control positions.
2. Remove the flaps and ailerons from the wing and degrease along the inside of the bottom shroud. Abrade a 1" strip of the shroud and finally degrease again. Leave for 30 minutes.
3. Prepare strips of terylene tape or P.T.F.E. coated glass cloth 108AE/03T in approximately 6' lengths tapering from about 60mm. at the root to 45mm. at the tip. One surface is a mat finish, this is the surface to be bonded, and it must not be contaminated with oil, grease, etc.
4. Mix and apply a $\frac{1}{2}$ " strip of Bostik 2762 Adhesive to both surfaces and leave for 15 minutes.
5. Bond the tape to the lower shroud as shown in Fig. 1. Pull back on the cloth to obtain a smooth bond line (leaving the bond at least $\frac{1}{2}$ " wide) as shown in Fig. 2.
6. Tape the cloth back onto the wing as shown in Fig. 3.
7. Degrease and abrade the flaps and ailerons between the two lines drawn at 1.
8. Fit the flaps and ailerons to the wing and place in the fully up position.
9. Mix and apply Bostik 2762 Adhesive to both surfaces to be joined. Leave for 15 minutes.
10. Bond the cloth to the control surfaces taking care not to put wrinkles in the cloth and having the cloth tight.
11. Press the bond well down and put the control surfaces fully down. Trim the excess cloth off the flaps by running a knife along the trailing edge of the shroud.
12. Ensure that full easy movement exists and leave to fully cure with the flaps and ailerons fully down.

Parts Required

1. (a) $3\frac{1}{2}$ " wide Terylene Tape - length = aircraft span
17M, 19M or 22M.
OR
(b) $3\frac{1}{2}$ " wide P.T.F.E. Tape 108AE/03T - length as above.
2. Bostik 2762 - 500 ml.
3. Bostikure D10 Hardener - 10 ml.

These parts can be obtained from Slingsby Sailplanes, Kirkbymoorside,
York, England.

Fig. 1.

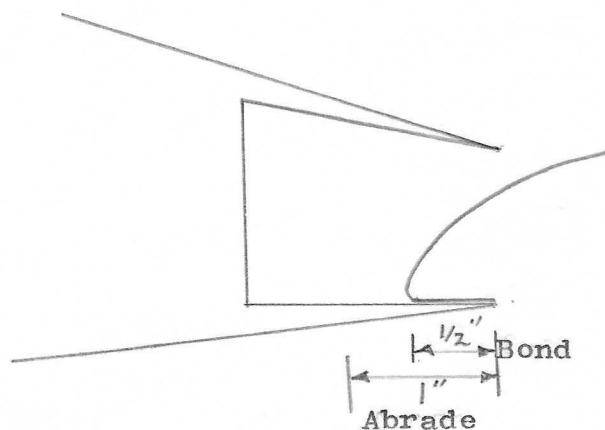


Fig. 2.

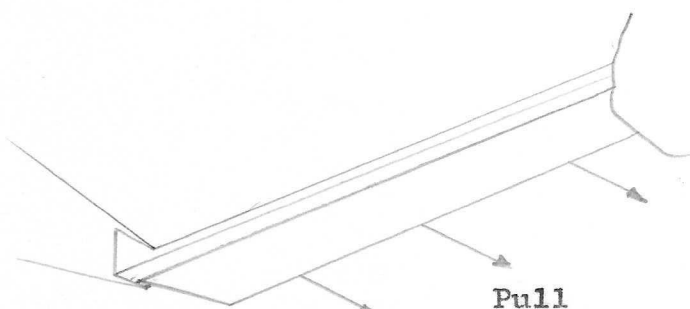


Fig. 3.

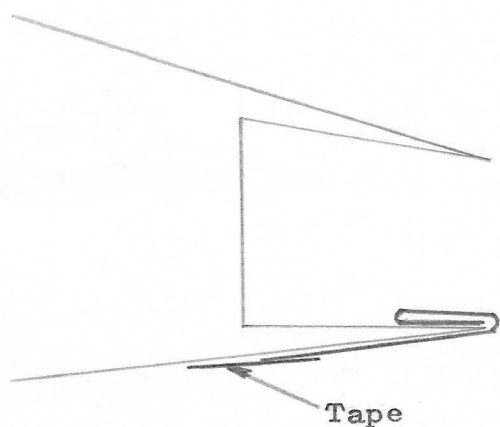


Fig. 4.

Bond in Fully Up Position

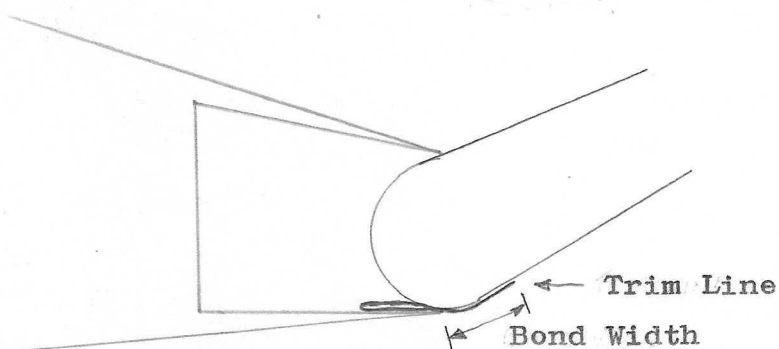


Fig. 5.

Trim in Fully Down Position

