GLIDING FEDERATION OF AUSTRALIA

AIRWORTHINESS DIRECTIVE- GLIDERS/POWERED SAILPLANES

GFA/AD 106 LET KUNOVICE 14

ISSUE 2 Date 10/9/81

SUPERSEDES:- Totally replaces AD/106 Issue 1 Dated 12/5/1978

GLIDER TYPE AFFECTED: Blanik L13 - All Serial numbers.

BACKGROUND: Laps due to material flow during the forging of the win g root fitting spacer (drawing No. L13-201-22.01) have been detected; this defect can lead to corrosion. Originally this defect was considered restricted to Serial numbers as listed on Issue 1, however mondatory Bulletin L-13/053 now requires all Blaniks off all Serial numbers to be inspected and modified if necessary.

REQUIRED ACTION:

The spacer marked with standard No. 424206.71 which is riveted to the root rib between the main spar root end fittings is to be inspected and modified if necessary as set out in paragraph A. Should the laps be thicker than stated in paragraph A the spacers are to be replaced according to the text in paragraph B.

A. INSPECTION AND MODIFICATION INSTRUCTIONS

1. Remove wings from fuselage.
2. Put wing on trestles and support it so that it does not move.
3. Remove anodic coating using the chemical solution as per item 1 and inspect spacers using magnifying glass. Probable occurrences of laps is indicated by signs (see figure 1)
4. Should any laps be found remove them by means of a suitable tool (preferably a taper cutter fitted in an electrical hand drill).
   Maximum amount of material to be removed is shown on figure 1.
5. Clean the worked surfaces and transition radii by means of fine emery paper.
6. Coat the cleaned surfaces with the above chemical solution and check for laps. After 5 minutes wash off with water. After drying degrease the spacer and paint with two coats of zinc chromate primer.

1. CHEMICAL COMPOSITION OF THE SOLUTION:

H_3PO_3	(phosphoric acid) (D=1.52)	35 ml
CrO_3	(chromic acid)	20 g
H_2O	(water)	1 litre

2. KEY TO FIGURE 1:

Probable occurrence of laps:

"A" - side face, lap may be removed to the bottom of spacer;

"B" - gentle run-out to be made after removal of laps.

B. FOR SPACER REPLACEMENT PROCEED AS FOLLOWS:

1. Deflect the wing flap to its limit position. Remove two guide rollers of the wing flap from rib No. 1 having removed cotter pins and slotted nuts.
2. Disconnect the aileron control rod from the lever inserted in the bracket on rib No. 1.
3. Unscrew two lower and upper bolts joining rib No. 1 with the main hinge. (See figure 2 pos. 11).
4. Drill out 9 rivets diameter 3.5 from the main spar spacer (see figure 2, poss 12, 14) and 16 rivets diameter 3 fastening rib No. 1 to the auxiliary spar (figure 2 pos. 13). On the periphery of rib No. 1 drill out all the rivets diameter 2.6 joining the rib to the skin. Remove rib No. 1.

5. According to figure 2 drill out carefully 4 rivets diameter 4 (pos 3) and 10 rivets diameter 3 (pos. 2). Remove the spacer.

6. Install a new spacer (pos. 1) on rib No. 1 and rivet on with 10 rivets (pos 2). According to the holes in rib No. 1 redrill 4 holes in the spacer to the diameter of 4.1 and rivet on using 4 rivets (pos 3.) Heights of closing heads of rivets (pos 3.) to be 1.2mm max.

7. Reinstall rib No. 1 in the wing. According to figure 2 rivet the rib to the main spar spacer using 7 rivets (pos.12) and 2 rivets (pos. 14) and to the auxiliary spar using 16 rivets (pos.13).

8. On the periphery of the rib use flush rivets. Rivet dimensions (diameter x length) and locations are given on figure 3.

NOTE: When drilling of the rivets care must be taken not to damage the rivet holes, so that rivets of original dimensions may be used. Should a hole be damaged it must be drilled for a rivet larger by one grade.

9. According to 4 holes in the rib edge (opposite the bolts (pos.11) mark and make holes diameter 6.1 in the wing skin.

10. Through holes diameter 6.1 in the skin and holes diameter 6H8 in main spar hinges re-drill holes in the spacer (pos. 1) to diameter 5.8 and ream to diameter 6H8.

11. Screw in original bolts (pos 11.)
12 Connect and secure the aileron control rod.
13. Re-install wing-flap rollers, lock in position, and reinstall the wing.

MATERIAL INFORMATION:-

Pos.	Description	Quantity	Dwg/Standard No.
1	Spacer	2	L13 201-22.01
2	Rivet	20	3x9 CSN 022302.5
3	Rivet	8	4x11 CSN 022302.5
12	Rivet	14	3.5x7 CSN 022302.5
13	Rivet	32	3x7 CSN 022302.5
14	Rivet	4	3.5x8 CSN 022302.5
-	Rivet	4	2x3.5 CSN 022320.5
-	Rivet	4	2x3.5 CSN 022320.5
-	Rivet	40	2.6x5 CSN 022320.5
-	Rivet	160	2.6x6 CSN 022320.5
-	Rivet	24	2.6x7 CSN 022320.5
-	Rivet	4	2.6x8 CSN 022320.5
-	Cotter pin	4	2.6x12 CSN 022320.5
-	Cotter pin	2	1.6x15 CSN 02178109K

COMPLIANCE:

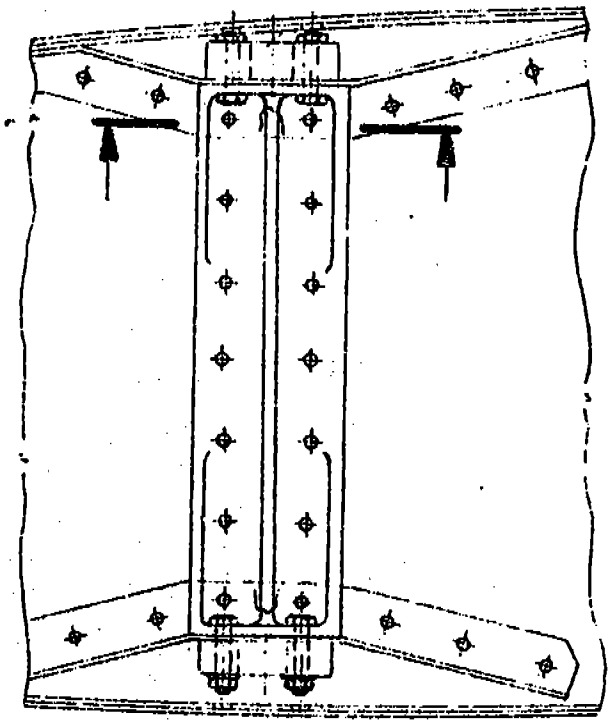
(1). NO ACTION - Where the log book shows a certification for previous inspection/modification to AD 106 Issue 1.

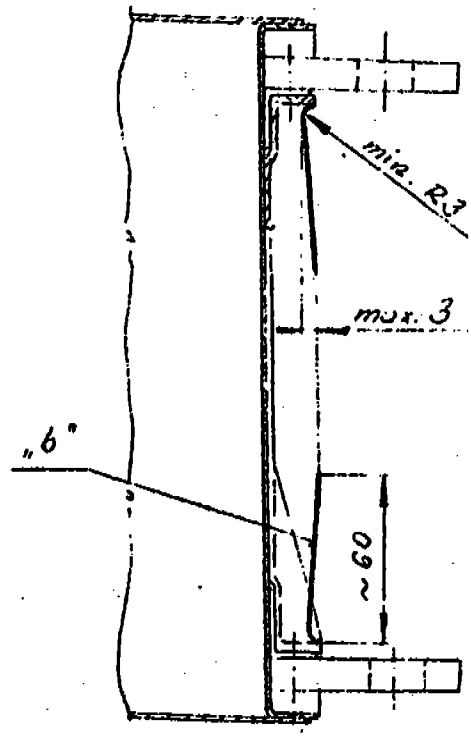
(2) Within 50 hours - This inspection and modification if necessary is mandatory and may be carried out by the holder of a Glider Inspectors Certificate (DOT1109) endorsed for standard repairs - metal. This Directive is issued pursuant to the Air Navigation Regulations under the delegated authority of the Department of Transport.

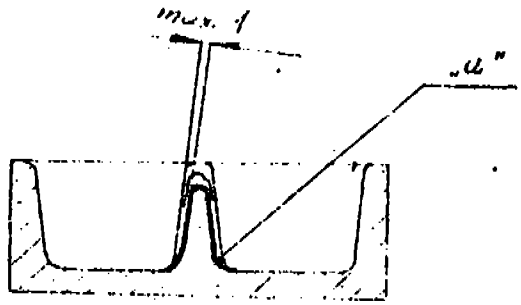
Douglas Lyon

DOUGLAS LYON
G.F.A. CHIEF TECHNICAL OFFICER AIRWORTHINESS.

1. GFA/AD 106







	Vypracoval	Kontroloval	Schválil	List:
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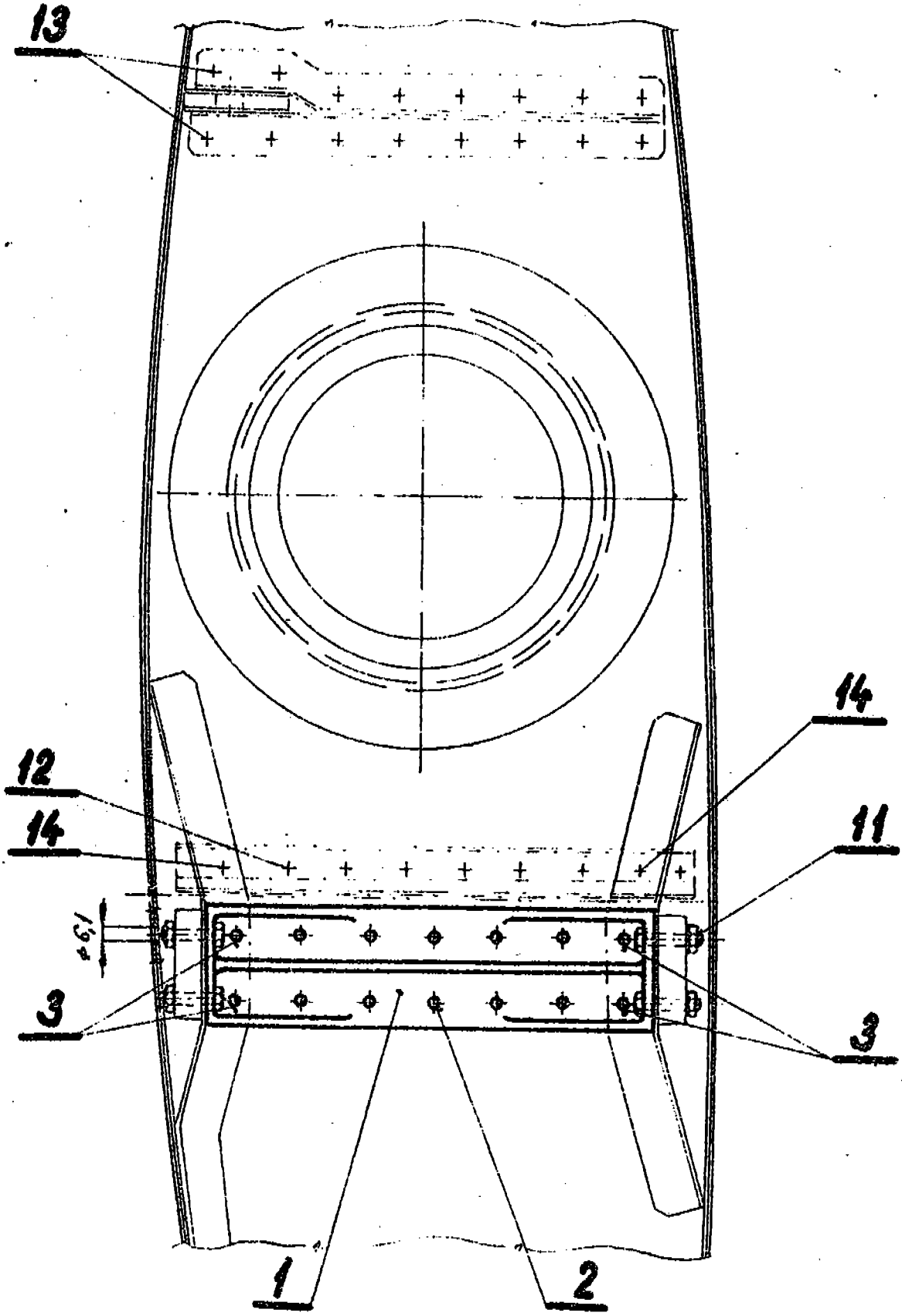
2. GFA/AD 106



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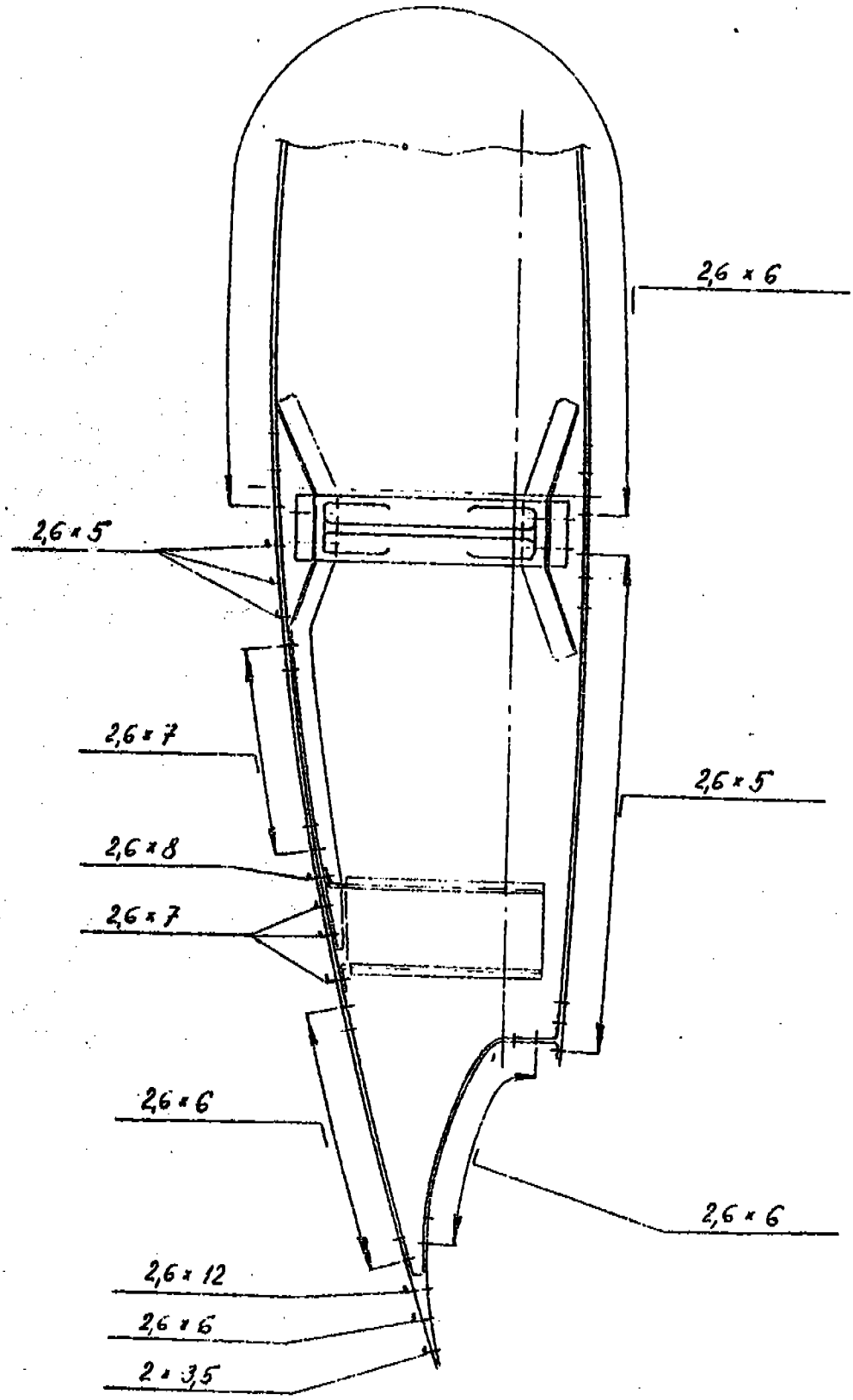
3.

GFA/AD 105



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