



MANDATORY BULLETIN No. L 13/042

Sheet 1 of 12

Effectivity: All L 13 Blanik gliders.

Reason: Inspections carried-out to determine the actual state of those gliders, which are nearing the established third overhaul time limit, result in lengthening the time before overhaul No. 3 depending on instructions outlined in this Bulletin.
The Bulletin contains detailed instructions on the Service Inspection Programme /see item 1/ and established Total Safe Service Life /see item C/.

Description: Refer to the Technical Manual of the L 13 sailplane /3rd edition - March 1966/, Part II - INSTRUCTIONS FOR OPERATION, Chapter II, SAILPLANE MAINTENANCE in paragraph 3 - Periodical inspections, lubrications and checkings and delete the text as well as figures in between the title "Survey of periodical inspections" and the title "Inspections after every 50 hr of flying or after 350 take-offs, however not less than once a year" "Inspection." Insert the following text and figures.

Latest date of incorporation: In accordance with the text of this Bulletin.

Incorporation and costs: The Bulletin to be carried-out by operator who will also cover the costs incurred.

Material: Material when ordered will be supplied by The FTC Omnipol, Washingtonova 11, Praha 1, Czechoslovakia.

The Bulletin is effective as soon as received by operator.

Čáslavský
Manufacturer's
Representative

Kadleček
State Aviation
Inspection

16 August 1976

Ing. Běhunčík
Customer's
Representative

Ing. Bena
Foreign Trade
Corporation



• Service Inspection Programme:

This inspection programme incorporates the regular frequency inspections performed every 50 ± 5 hours or every 350 take-offs. The type of checks must be complete after 350 take-offs or 50 ± 5 flying hours as detailed in the Technical Manual, Part II, Chapter II, item 3.

Service Inspection performed every year:

This inspection must be also completely performed in accordance with the Technical Manual, Part II, Chapter II, item 3 no matter whether the sailplane attained the established 350 take-offs or 50 ± 5 flying hours since the last inspection.

NOTE: this inspection may be performed together with a preparation for an additional check.

Overhaul Programme:

The First Overhaul:

This type of overhaul is performed after 1000 flying hours or 5000 take-offs but not later than in 10 years since introduced into operation /since the test flying has been concluded/ providing the instructions contained in SB L13/030 are fulfilled.

The Second Overhaul:

a) On sailplanes which underwent the 1st overhaul at LET Nat.Corp. Uherske Hradiste-Kunovice:

Every 1000 flying hours or 5000 take-offs or in 10 years since the 1st Overhaul subject to performing all inspections and procedures as per the SB L13/034 every 600 flying hours or 4000 take-offs or in 6 years since the 1st overhaul.

b) On sailplanes 1st overhauled in an other repair facility:

Every 800 flying hours or 4000 take-offs or in 8 years since the 1st overhaul, subject to performing all inspections and established procedures as per the SB L13/034 every 600 flying hours or 4000 take-offs or in 6 years since the 1st overhaul.

The Third Overhaul:

a) The sailplanes P/N 175001 and subsequent P/N which have undergone the 1st and 2nd overhaul at LET Nat.Corp. Uh.Hradiste-Kunovice will not be overhauled for the 3rd time. Only the remaining TBO will be used, i.e. 1000 flying hours or 500 take-offs or 10 years, subject to performing inspections and procedures as per item B. of this Bulletin every 600 flying hours or 3000 take-offs or 6 year since the last /second/ overhaul.

b) Will be performed on sailplanes up to P/N 174960 which have undergone the 2nd overhaul at LET, after the limit of 900 flying hours or 4500 take-offs or 9 years since the 2nd overhaul have been attained, subject to performing all inspections and procedures as per item B. of this Bulletin after 600 flying hours or 3000 take-offs or 6 years since the last /second/ overhaul.

- c) On sailplanes which have undergone the 2nd overhaul outside the LET Nat. Corp. on attaining the TBO 700 flying hours or 3500 hours or 7 years of operation since the 2nd overhaul subject to completing inspection and prescribed procedures as per item B. of this Bulletin after 400 flying hours or 2000 take-offs or 4 years since the last (second) overhaul.
- d) On sailplanes post P/N 175001 which were 1st and 2nd overhauled at the LET Nat. Corp. within shorter periods than the established TBO after 1000 flying hours or 5000 take-offs or 10 years since the 2nd overhaul subject to performing the inspection and prescribed procedures as per item B. of this Bulletin after 600 flying hours or 3000 take-offs or 6 years since the last /second/ overhaul.

The sailplane will be overhauled also at any major damage.

B. Sailplane inspection and requirements

- Check for loose skin rivets on the main flangeplates of wing structure at a distance of approximately 200 mm from the wing rib No.1. If the number of loosened rivets has exceeded 6 pcs on top and bottom flangeplates, the sailplane has to be handed over to an overhaul facility for performing an overhaul.
- Check for loose rivets on the wing ribs Nos. 13, 19 and 25 both up and down within the main spar in a chordwise direction /towards the trailing edge/. Should the number of loosened rivets exceed 25 per cent of the total number of rivets within a given area of an individual rib or should there be four rivets loosened one after another it is necessary to repair the rib using new rivets of the subsequent larger diameter.
- Check for water leaks into the bottom flangeplate of the centre-section spar /see Fig.1/. Remove all moisture, if any, check for signs of corrosion and remove any corrosion from attacked surfaces using an emery cloth. Apply a protective coating afterwards. A gap between the rib and attachment fitting on the side of fuselage to be covered by an aviation fabric attached by an adhesive.
- Check for the proper state of the rudder pedal control cables, their proper tension and condition /cracks/ over pulleys at the rudder. There may be no more than 5 cracked wires in the cable, or otherwise the plane is not air worthy. The state of control cables to be checked within this area during every pre-flight inspection. The cables will be replaced if more than 5 wires of the cable failed. The loosened cables to be stretched by a 45 kp force, if not replaced. In case of the cables being replaced they have to be stretched to 65 kp due to reducing of the tension throughout operation and parking.

- Check the fuselage frame No. 15 for possible cracking within the tail skid mounting structure /see Fig. 2/. The aircraft is air worthy even in case of two cracks of 10 mm length max. in the bottom frame structure where the tail skid is attached. Ends of such cracks must be drilled off using a drill of 2.1mm dia. Should the length of these cracks exceed the above limit, the frame is to be replaced. Replacement of the fuselage frame is required also in case there are more than two cracks found in the structure.
- Check for damage and security of the tail skid rubber silencer. Replace partially cracked silencer if necessary.
- Check the undercarriage silencer mounts and the undercarriage mounting structure /support/ /refer to Fig. 3/ for cracks. Check all welded areas for cracks and replace any damaged parts.
- Check for proper clearances of the undercarriage fork /Fig. 9/. The holes and bolts are of the following size:

Refer to section A-A - the hole dia. in fork: 14H7
dia. of bolt: 14f8

Refer to section B-B - the hole dia. in fork: 20H8
dia. of bolt: 20f8

Should the sizes be different and the holes damaged, the following instructions are to be followed in case of a repair:

I. Section A-A

- 1) Reream the holes in fork and support to 14.1H7 dia. or 14.2H7. Install new bolts into the reamed holes. Refer to T.P.G.O./013-058 (dia. 14.1f8) or to T.P.G.O./013-059 (dia. 14.2f8).
- 2) In case of larger clearances ream the holes in fork to 16H7 dia. and press in the bronze bushing (refer to mat. 423016.31). After the bushing has been pressed in, ream the hole to 14H7 dia. The bushings can be manufactured in accordance with Fig. 9 or ordered at the manufacturer according to Dwg.No. specified next to the item. Damaged bolts to be replaced for new ones of the same type.

II. Section B-B

Ream the holes in fork to 22H7 dia., keeping the edge distance, "L", .7 mm min. Press in the bronze bushings, item 3 and replace the bolt for a new one if damaged.

- Check the front pedal controls rocker lever for cracks /Fig.4/. Replace in case this check has revealed any crack. Check for clearance at the end of the foot pedal and use two extreme limit settings of the pedal travel only if the clearance exceeds 2 mm.
- Check for proper clearance of the rudder pedal controls. If the end clearance of pedal when forced sideways exceeds 1 mm, replace its support structure.
- Check the elevator drive for cracks /see Fig.5/. Replace the drive in case any crack is found.

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- Check the stiffeners according to Fig. 6 for cracks within the area designated by an arrow. Cracked stiffeners shall be replaced.
- Check for safety of the front tail skid attachment. Should the mount be damaged, replace it for a new one SK-L 13.165 and strengthen its attachment structure on either side of fuselage using a sheet panel of .8 mm thickness and about 50x100 mm size, made from a material designated D 16 T /see Fig. 7, detail view "T"/.
- Check for proper attachment of the top rudder mount on the topmost fin rib and its surrounding area for cracks. Reinforce the area by angle pieces if any crack are found. Refer to angle piece No. L13.304-03.02 /see Fig. 7, view "S"/
-03.03
- Check of the elevator edge rib radii for cracks /see Fig. 8/. In case any cracks are found, drill off their ends using a drill dia. 2.1mm and stiffen the ribs by angle pieces SK-L 13.276-02 /see Fig. 8, view "U"/and SK-L 13.276-01.
- Check the fuselage structure skin panels for cracks, particularly around cut-outs for attachment joints. Any cracks are to be drilled off, using a drill of 2.1 mm dia. up to the crack length of 10 mm. Longer cracks must receive a special attention, the various parts being repaired or replaced as required.
- Check the aircraft skin panels and all surfaces for damage and security. All surfaces with damaged surface treatment /painting damaged by scratches or nicks/ are to be protected by a paint: AK 113, which is applied as a prime layer and AS 82, which is a second cover layer.
- Check the clearances of a disconnect pin in the main wing joint fitting for damage and security, /disconnect pins used at the sailplanes No. 170101 thru 172530/. The same check to be carried-out at continuous pins, used at the sailplanes P/N 172601 and up. Any damaged pins to be replaced by new ones.
- Check for proper clearances at the front wing mount, principal wing mount and in tail surfaces. The sailplane may not be cleared for flying unless its pin and hole sizes correspond to the values in the following Table, column "0".

Should the actual sizes not correspond to the specified ones, these mounts may be repaired by reaming the holes to sizes given in the Table, column I and II or in the extreme case according to values given in the column III.

The reamed holes must be provided, however, by new pins corresponding to the limits of the repair type selected.

	"0"	I	II	III
Wing front pin	dia. 12-0.016 -0.034	12.1-0.016 -0.034	12.2-0.016 -0.034	12.3-0.016 -0.034
Front wing attachment hole	dia. 12+0.027 -0.00	12.1+0.027 -0.00	12.2+0.027 -0.00	12.3+0.027 -0.00
Wing main pin dia. top-bottom	dia. 22-0.020 20-0.033	22.1-0.020 20.1-0.033	22.2-0.020 20.2-0.033	22.3-0.020 20.3-0.033

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	"0"	I	II	III
Wing mount hole, top-bottom	dia. 22+0.033 20-0.00	22.1+0.033 20.1-0.00	22.2+0.033 20.2-0.00	22.3+0.033 20.3-0.00
Tail unit horizon- tal connecting pin	dia. 10-0.005 -0-014	10.1-0.006 -0.017	10.2-0.006 -0.017	10.3-0.006 -0.017
Tail unit connecting pin hole	dia. 10+0.015 -0.00	10.1+0.018 -0.00	10.2-0.018 -0.00	10.3+0.018 -0.00

The result of this technical inspection must be entered into the aircraft logbook and signed a responsible person authorized by an aviation authority to prolong the time to the 3rd overhaul.

C. Service life of the sailplane

Total safe life

or

or

L_B = 3000 flying hours

15,000 take-offs

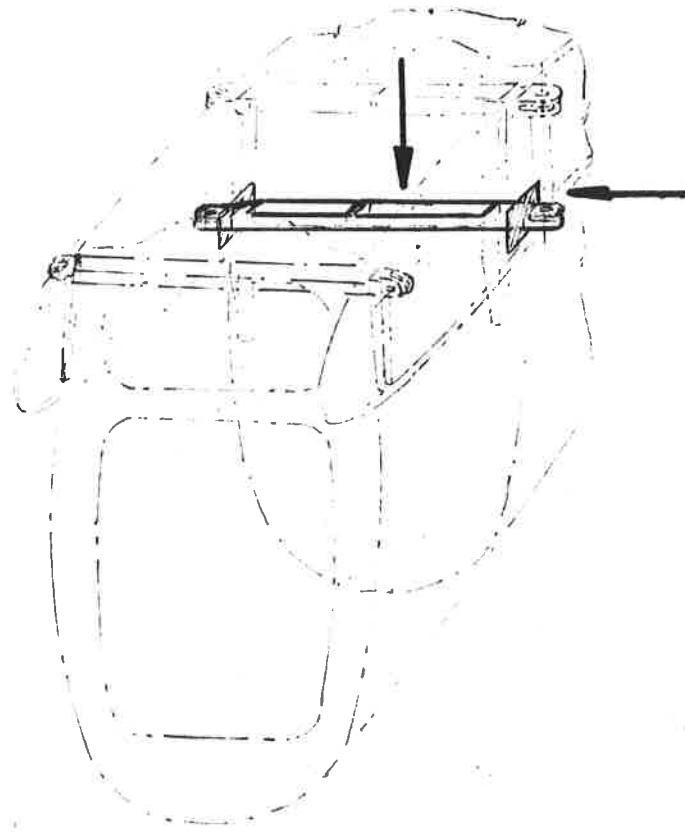
25 years

whichever occurs as the first.

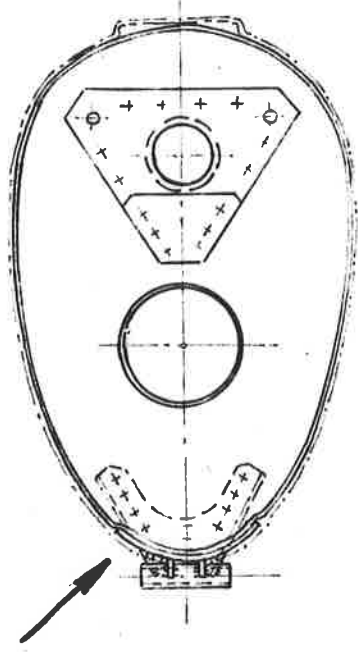
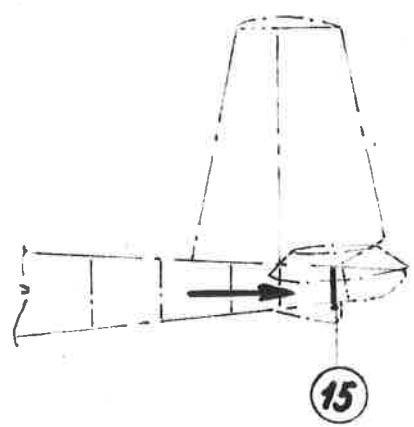
The service life limit of 25 years may be extended up to 3000 flying hours or 15,000 take-offs subject to not attaining the first two limit values as well as a perfect state of the aircraft especially from corrosion attack view.

Any decision is however dependent upon the aviation authority.




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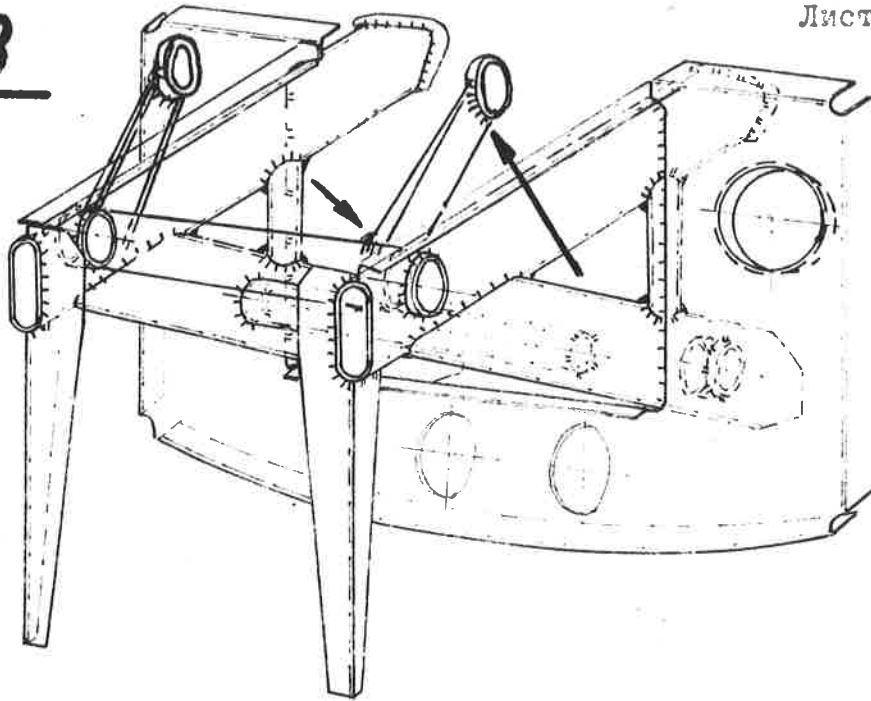
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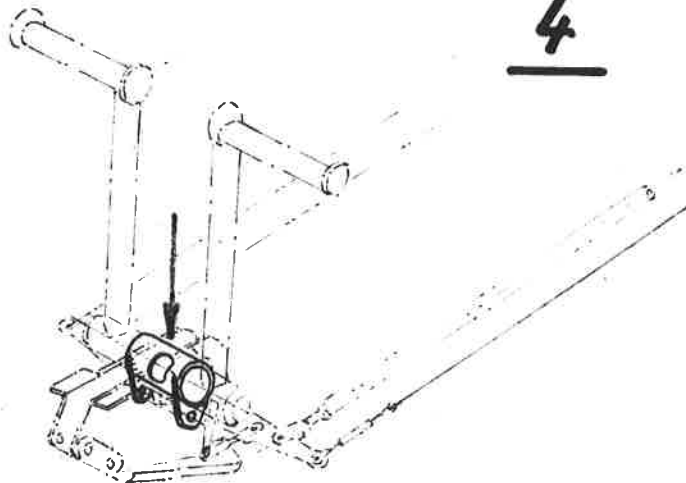
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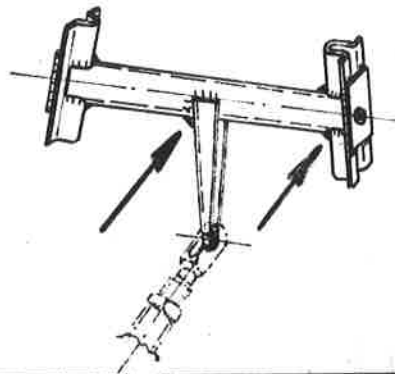
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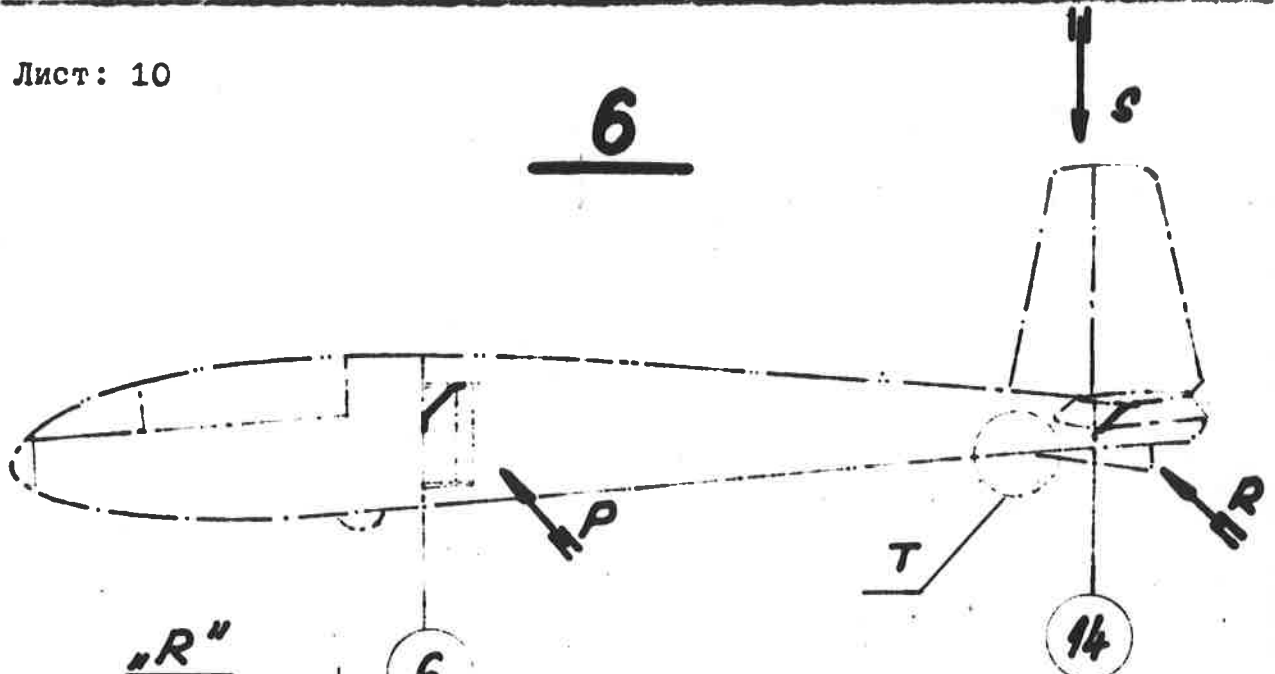
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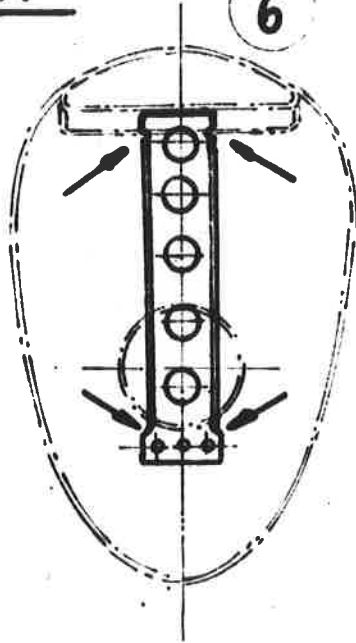
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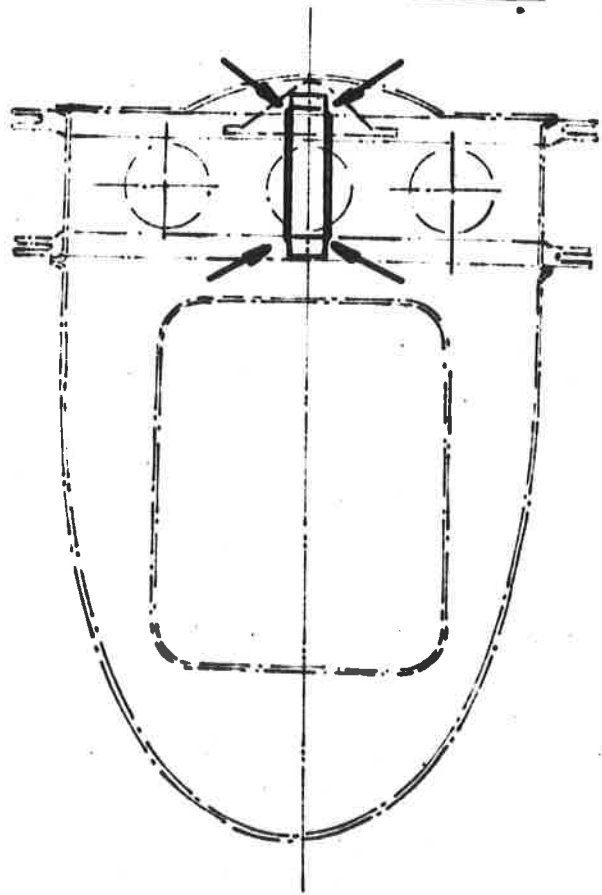


"R"

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"P"



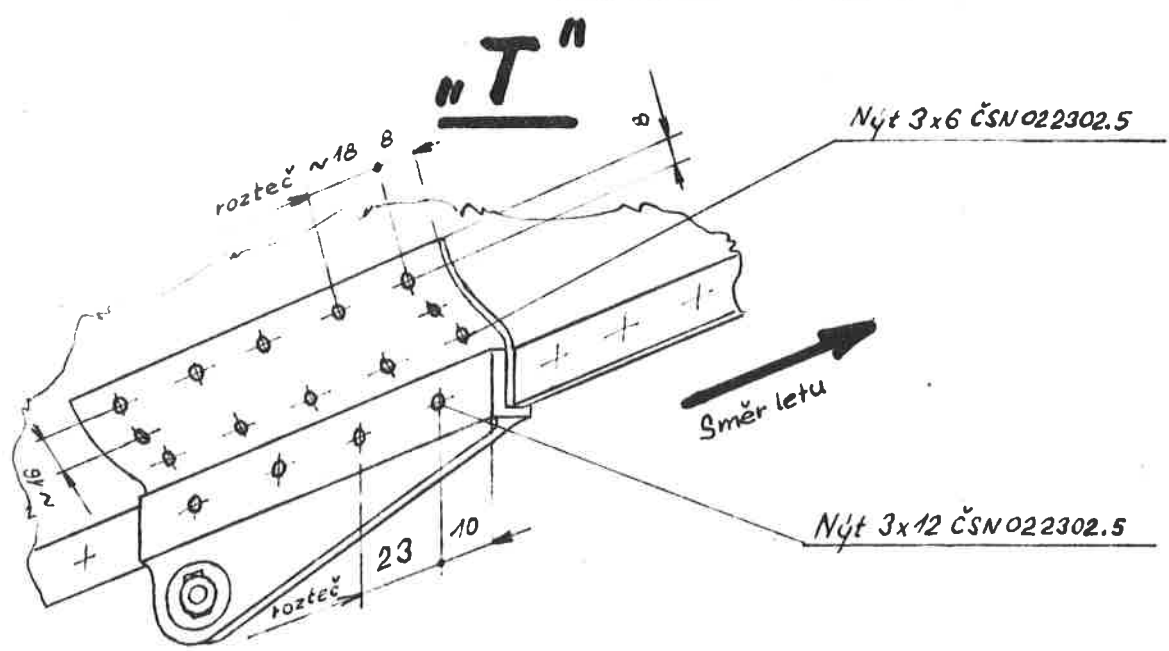
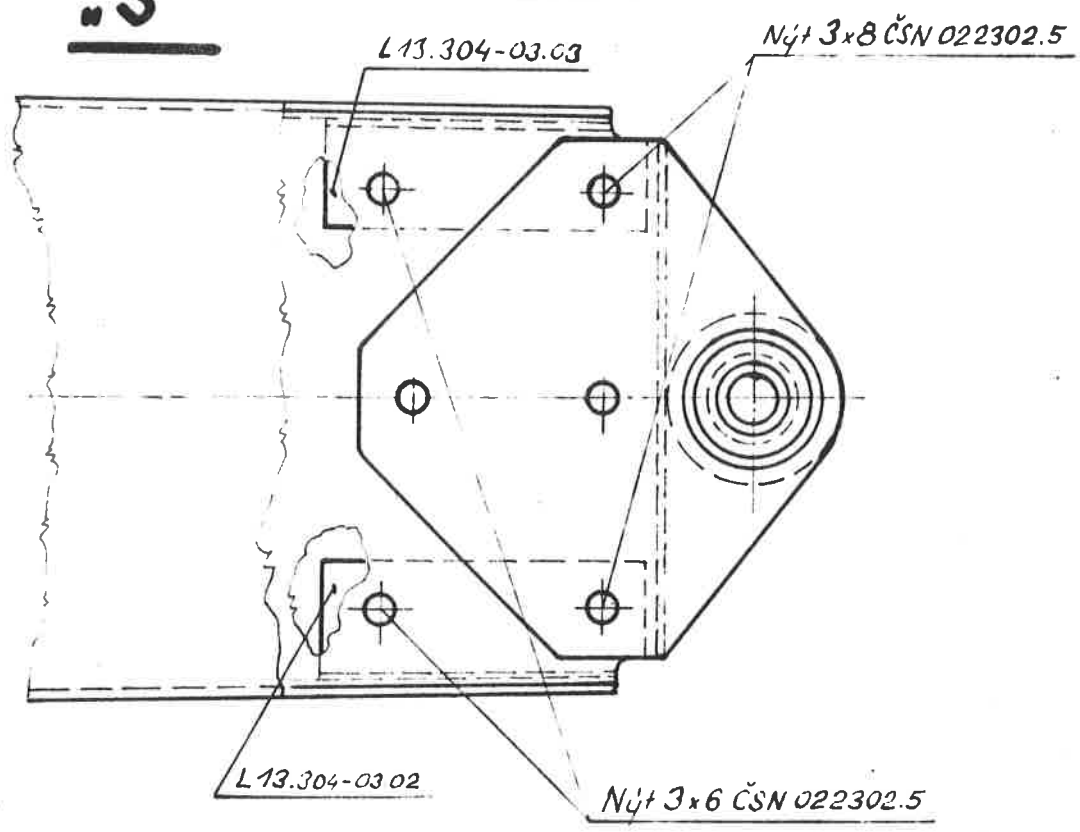
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"S"

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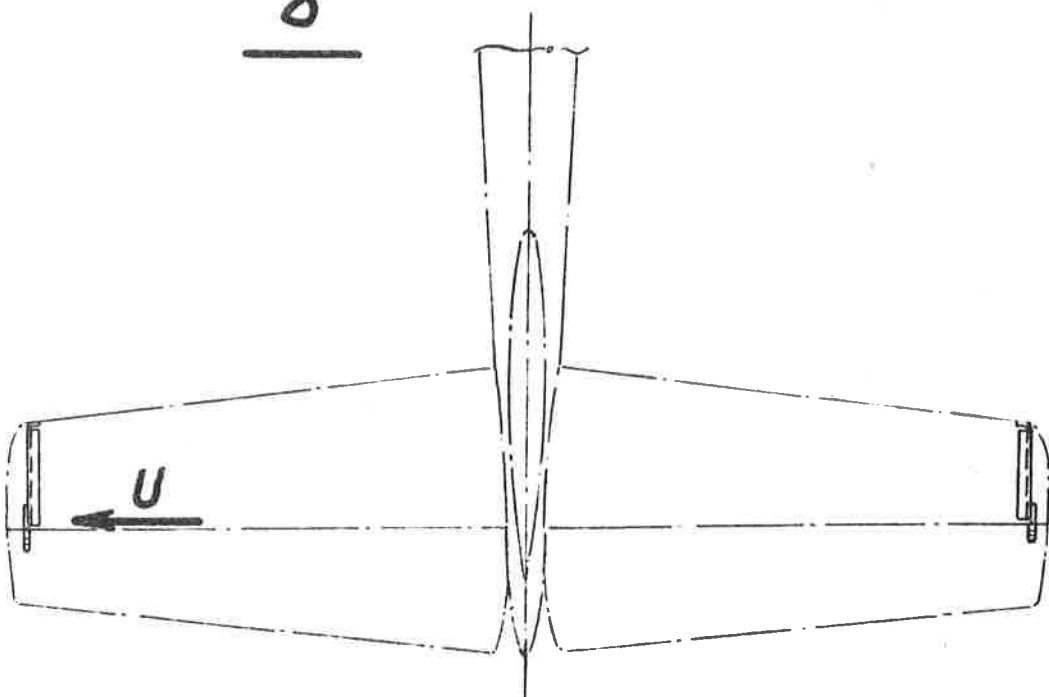
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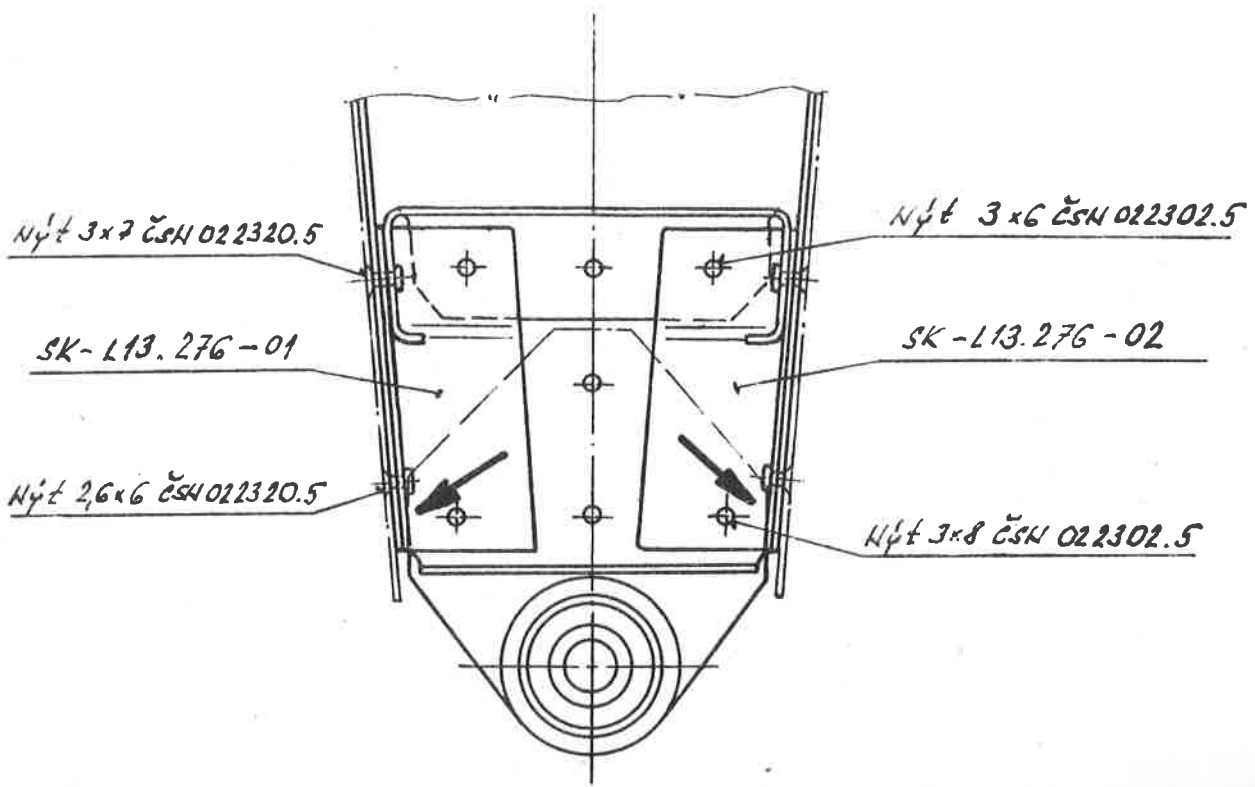
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"U"



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Нýt 3x6 ĀSN 022302.5

SK-L13.276-01

SK-L13.276-02

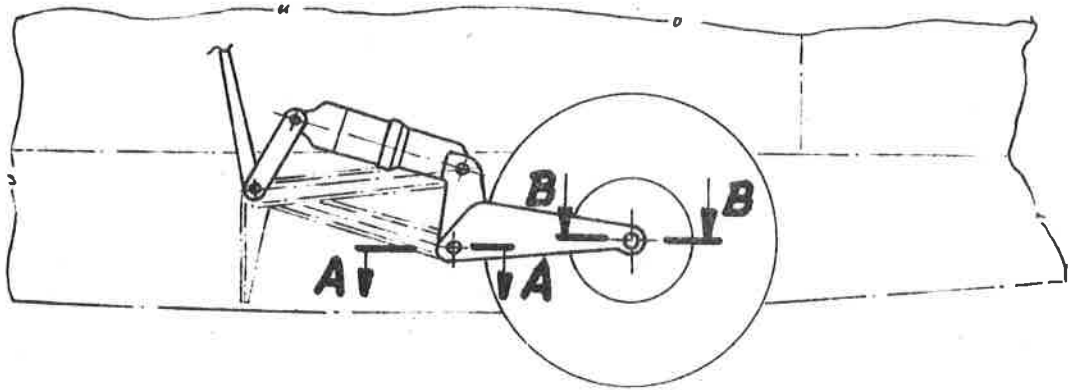
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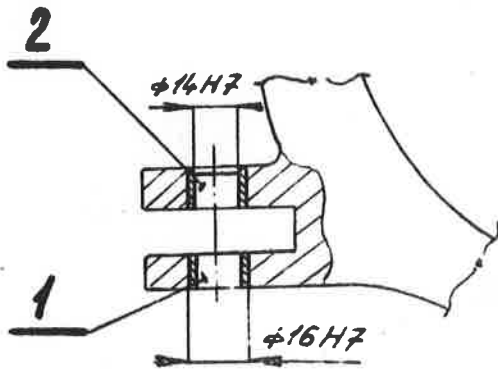
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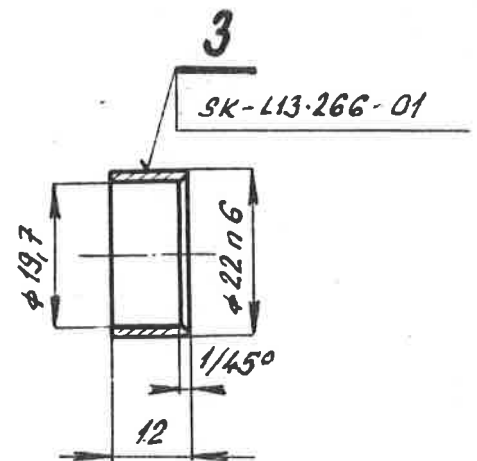
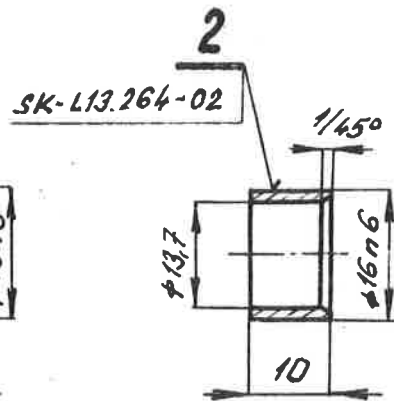
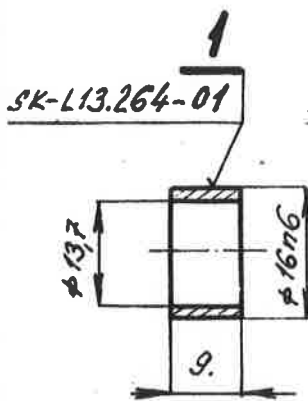
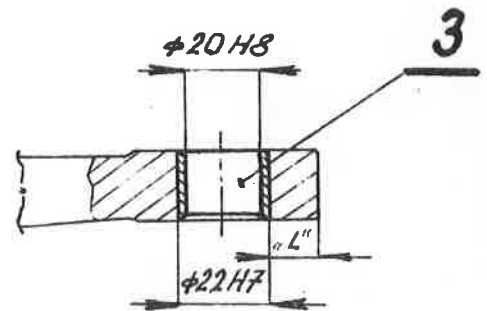
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A-A



B-B



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Z.B.L13/042	Выработал <i>giamy</i>	Контроловал	Схвалит	Лист: 13
				Листů: 13