



Aeronautical Works, Kunovice, Czech Republic

Aero

Holding Company, Prague, Czech Republic

MANDATORY BULLETIN No. L23/027a

Sheet: 1
Of: 1
Enclosures: 13

Effectivity: Maintenance Manual for the L23 Super Blaník (Do-L23-1031.3).

Reason: Specification completion and unification of chapter 5 according to modifications performed on sailplanes manufactured since 1996.

Description: Maintenance Manual holders file the changed pages to the appropriate place in chapter 5 - List of eff. pages, page 1, Record of revisions, pages 3,4, 5-10-00 pages 2,3,4,5,6,7,8, 5-20-00 pages 2,3,4,5,6,7,8,9,10,11, dated October 30/95.

To be accomplished not later than: Immediately after receiving this Bulletin.

To be accomplished by: Holder of Maintenance Manual.

Cost covered by: No cost arise.

Material availability: Receiving pages enclosed.

Validity: Since the date of receiving.

Manhours: 0

Manufacturer



96-04-26

Civil Aviation Inspectorate

MAINTENANCE MANUAL

CHAPTER 5

TIME LIMITS/MAINTENANCE CHECKS

LIST OF EFFECTIVE PAGES

Chapter Section Subject	Page	Date
Title page	-	-
List of eff. pages	1	Oct 30/95
	2	Jun 30/88
Record of revisions	1	Feb 8/91
	2	July 1/93
	3	Oct 30/95
	4	Oct 30/95
Contents	1	Jun 30/88
	2	Jun 30/88
5-10-00	1	Jun 30/88
	2	Oct 30/95
	3	Oct 30/95
	4	Oct 30/95
	5	Oct 30/95
	6	Oct 30/95
	7	Oct 30/95
	8	Oct 30/95
5-20-00	1	Jun 30/88
	2	Oct 30/95
	3	Oct 30/95
	4	Oct 30/95
	5	Oct 30/95
	6	Oct 30/95
	7	Oct 30/95

Chapter Section Subject	Page	Date
5-20-00	8	Oct 30/95
	9	Oct 30/95
	10	Oct 30/95
	11	Oct 30/95
	12	Jun 30/88

Chapter: 5

LIST OF
EFF. PAGES

Page 1

Oct 30/95

.....

MAINTENANCE MANUAL

CHAPTER 5

TIME LIMITS/MAINTENANCE CHECKS

LIST OF EFFECTIVE PAGES

Chapter Section Subject	Page	Date	Chapter Section Subject	Page	Date

Chapter: 5

LIST OF
EFF. PAGES

Page 2

Jun 30/88
.....

L 23
 MAINTENANCE MANUAL
 CHAPTER 5
TIME LIMITS/MAINTENANCE CHECKS
 RECORD OF REVISIONS

Revision No.	Chapter Section Subject	Numbers of			Document Number	Operator's Logging Reference and Date	Signature	Date of Revision
		Revised Pages	New Pages	Deleted Pages				
7	List of eff. pages	1	-	-				Oct 30/95
	Record of revisions	-	3	-				
	5-10-00	-	4	-				
		2	-	-				
		3	-	-				
		4	-	-				
		5	-	-				
		6	-	-				
		7	-	-				
		8	-	-				
	5-20-00	2	-	-				
	3	-	-					
	4	-	-					
	5	-	-					
	6	-	-					
	7	-	-					
	8	-	-					
	9	-	-					
	10	-	-					
	11	-	-					

Chapter: 5

RECORD OF REVISIONS

Page: 3

..... Oct 30/95

MAINTENANCE MANUAL

CHAPTER 5

TIME LIMITS/MAINTENANCE CHECKS

RECORD OF REVISIONS

Revision No.	Chapter Section No. Subject	Numbers of			Document Number	Operator's Logging Reference and Date	Signature	Date of Revision
		Revised Pages	New Pages	Deleted Pages				

Chapter: 5

RECORD OF REVISIONS

MAINTENANCE MANUAL

TIME LIMITS
.....1. General

The regular maintenance of the sailplane consists of routine and periodic maintenance depending on the number of flight hours.

2. Routine Maintenance

This maintenance should be performed at the end of every flight day.

3. Periodic Maintenance

The periodic maintenance is divided into inspections 1,2, 3, and 4.

Inspection 1 - after every 100 ± 10 hours, or after 500 ± 40 take-offs, or once a year from the initial start, or from the most recent inspection.

Inspection 2 - after every 500 ± 30 hours of operation, or after 3000 ± 180 take-offs, but after 5 years since the initial start, or since the most recent inspection 2,3, or 4 at the latest.

Inspection 3 - after every 1000 ± 50 flight hours, or after 5000 ± 250 take-offs, but 10 years since the initial start, or since the most recent inspection 3, 4 at the latest.

Inspection 4 - after every 2000 ± 100 flight hours, or

Effectivity: ALL

5-10-00

Page 1

Jun 30/88

MAINTENANCE MANUAL

TIME LIMITS

after 10000 \pm 500 take-offs, but 15 years since the initial start, or since the most recent inspection 4 at the latest.

- After a crash of the sailplane.

4. Airframe Overhaul

The airframe overhaul is not to be performed.

5. Sailplane Service Life

The initial sailplane service life is specified to 6000 flight hours and 30000 landings under the following operating conditions:

- Max. 4.83 take-offs per 1 flight hour;
- The winch launching - aerotow take-off ratio is 5:1;
- Crew: 35% double, 65% single;
- Elementary training-to-advanced training and to performance soaring ratio is 40% : 60%, whereby the acrobatics share is 2 % of the total operation.

If the percentage of acrobatic manoeuvres is exceeded, contact the manufacturer.

TIME LIMITS

Sailplane life L_B versus operation time with wing tip extensions (if they are mounted on the sailplane from ser. No. 938101) is shown on Fig. 1.

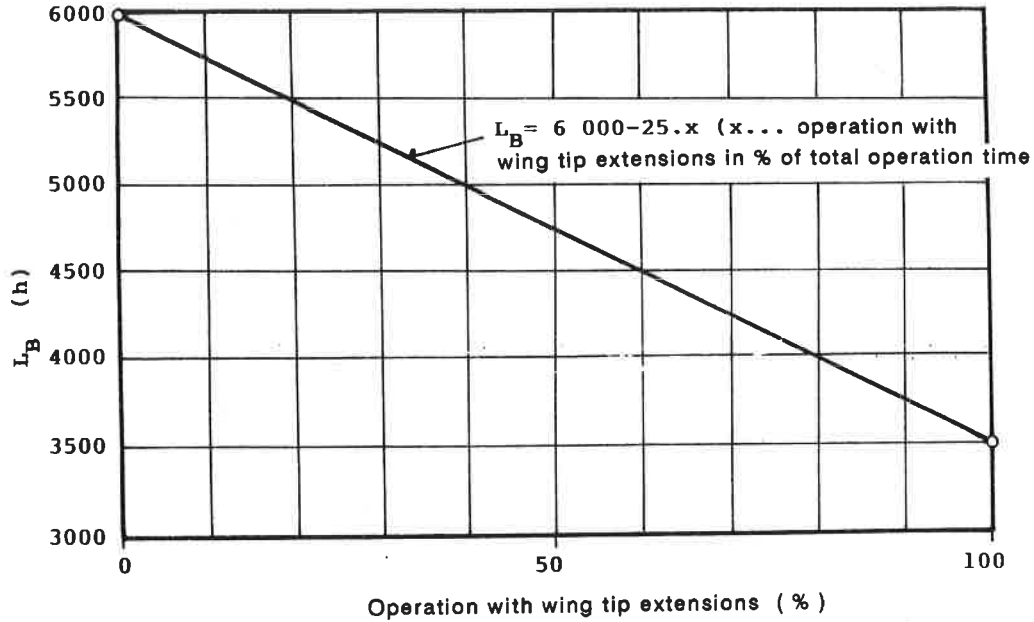


FIG. 1 LIFE VERSUS OPERATION TIME WITH WING TIP EXTENSIONS

6. List of Times to Testing and Inspection in Laboratory and Test Facilities TBO and Service Lives of Vendor Products

This summary may be used by the user to check the prescribed TBOS as well as service lives of the vendor products. Unless a product has a certificate, or unless the TBO, or Service life are specified in the certificate, the information quoted in the following table shall be effective.

Effectivity: ALL

5-10-00

 Str. 3

 Oct 30/95.....

TIME LIMITS

.....

Intentionally left blank

MAINTENANCE MANUAL

TIME LIMITS

Item No.	Name	Code	Overhaul	Service life
1	2	3	4	5
A	<u>COCKPIT INSTRUMENTS</u>			
(1)	Airspeed indicator	LUN 1106.02-8	-	On condition
(2)	Rate-of-climb indicator 5m/s	LUN 1141.01	-	On condition
(3)	Rate-of-climb indicator 30 m/s	LUN 1147.12-8	-	On condition
(4)	Turn and bank indicator	LUN 1211.1	-	On condition
(5)	Altimeter	LUN 1124.03-8	-	On condition
(6)	Liquid-type compass	LUN 1221.1-8	-	On condition
(7)	Accelerometer (is valid for sailplanes delivered to Canada and upon the customer's request)	AM-10	-	On condition
B	<u>LANDING GEAR</u>			
(1)	Wheel with brake	HP 4741-Z	-	On condition
(2)	Tyre with tube	350x135	-	On condition
(3)	Landing-gear shock absorber a) Landing gear damper packing	A 019 064 N	-	On condition 2000 \pm 100 hours or 10000 \pm 500 take-offs/ /15 years

5-10-00

Effectivity: ALL

Page 5
Oct 30/95

MAINTENANCE MANUAL

TIME LIMITS

1	2	3	4	5
(4)	Tail wheel (sailplanes to ser. No. 8320 and from ser. No. 8401 optional)	A 751 201 N	-	On condition
(5)	Tail wheel (sailplanes from ser. No. 8401 optional)	CONTINENTAL 210-65	-	On condition
(6)	Tyre with tube (sailplanes from ser. No. 8401 optional)	210-65	-	On condition
(7)	Wheel on wing tip end (sailplanes from ser. No. 8401)	A 750 234 N	.	On condition
C	<u>ELECTRICAL SYSTEM</u>			
(1)	Airborne battery (optional)	NKDU 10 or NKDU 10R	-	On condition
(2)	Switch	VG-15K-2S	-	On condition
D	<u>COMMUNICATION EQUIPMENT</u>			
(1)	Radio station (optional)	LS-5	-	On condition
E	<u>HOSE</u>			
(1)	Hose, total and static pressure system	5/9 CSN 022427.07	-	4000 hr (6 years)

5-10-00

Page 6
Oct 30/95

Effectivity: ALL

MAINTENANCE MANUAL

TIME LIMITS

1	2	3	4	5
F	<u>TOWING GEAR</u>			
(1)	Bottom tow release (effective for gliders at which is installed)	EUROPA G 88	2000 take-offs (4 years)	will be determined by manufacturer
(2)	Front tow release (effective for gliders at which is installed)	EUROPA E 85	2000 take-offs (4 years)	will be determined by manufacturer
(3)	Tow release cables	2 CSN 024311.25	-	2000 \pm 100 hours or 10000 \pm 500 take-offs/15 years
G	<u>FLIGHT CONTROLS</u>			
(1)	Rudder control cables	A 740 254 N A 740 255 N	-	2000 \pm 100 hours or 10000 \pm 500 take-offs/15 years

NOTE: For the general overhaul, the EUROPA G 88 bottom tow release and EUROPA E 85 front tow release (if installed on glider) must be sent to the manufacturer TOST GmbH Flugzeuggerätebau, Thaikirchnerstr.62, 8000 München 2, West Germany.

Effectivity: ALL

5-10-00

Page 7

Oct 30/95

MAINTENANCE MANUAL

TIME LIMITS

.....



Intentionally left blank

MAINTENANCE MANUAL

.....

 SCHEDULED MAINTENANCE CHECKS

.....

1. General

The following Section presents:

- routine maintenance procedures;
- periodic maintenance procedures.

2. Routine Maintenance

Subject No	Name of part/unit Scheduled Maintenance Check	Note
12	<u>SERVICING</u>	
12-10-00-A	Check the tire for pressure	
21	<u>AIR CONDITIONING</u>	
21-00-00-A	Inspect the ventilation system	
24	<u>ELECTRICAL POWER</u>	
24-00-00-A	Inspect the airborne battery compartment	
24-00-00-B	Check the airborne battery and charge it if required.	
25	<u>EQUIPMENT/FURNISHINGS</u>	
25-60-00-A	Check the first-aid kit for attachment.	

Effectivity: ALL

5-20-00.....
 Page ...1.....
 Jun. 30/88...

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS
.....

Subject No.	Name of part/unit Scheduled Maintenance Check	Note
27 27-00-00-A	<u>FLIGHT CONTROLS</u> Check flight controls for function	
31 31-10-00-A	<u>INSTRUMENTATION</u> Check the instrument panels for attachment and check the instruments	
32 32-00-00-A	<u>LANDING GEAR</u> Inspect the main landing gear and the tail-skid wheel. Check the brake and the shock absorber for function. Check the tire pressure.	
34 34-10-05-A	<u>NAVIGATION</u> Inspect the condensate sumps.	
53 53-00-00-A 53-00-00-C	FUSELAGE Inspect the fuselage surface. Check the function of tow release mechanism.	It is recommended to perform this check before each takeoff.

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

Subject No.	Name of part/unit Scheduled Maintenance Check	Note
55 55-00-00-A	<u>STABILIZERS</u> Inspect the stabilizer surfaces. Check the rudder and the elevator for movability.	
56 56-00-00-A	<u>WINDOWS</u> Inspect glasses of canopy and the side window glass.	
57 57-00-00-A	<u>WINGS</u> Inspect the wing surface. Check the movable wing parts.	

The operation of the sailplane without overhauls requires that special attention is given to the sailplane technical condition and any deterioration /depending on its character/ is removed immediately to avoid later more extensive remedies due to non-repaired smaller defects.

3. Periodic Maintenance

Subject No.	Name of part/unit Scheduled Maintenance Check	Maintenance				Note
		1	2	3	4	
8 8-10-00-A	<u>LEVELLING AND WEIGHING</u> Determine mass and center of gravity positions.				+	
8-20-00-A	Perform levelling.				+	
12 12-10-00-A	<u>SERVICING</u> Check the tyre pressure.	+	+	+	+	
23 23-60-00-A	<u>COMMUNICATION</u> Check up all bonding of the control system.	+	+	+	+	

5-20-00

Effectivity: ALL

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

Subject No.	Name of part/unit Scheduled Maintenance Check	Maintenance				Note
		1	2	3	4	
24	<u>ELECTRICAL POWER</u>					
24-00-00-C	Service the airborne battery	+	+	+	+	
24-00-00-D	Inspect cable bundles	+		+	+	
24-00-00-E	Inspect the electrical system	+			+	
25	<u>EQUIPMENT/FURNISHINGS</u>					
25-10-00-A	Inspect the cockpits	+	+	+	+	
25-60-00-B	Check for contents and condition of the first-aid kit	+	+	+	+	
27	<u>FLIGHT CONTROLS</u>					
27-00-00-B	Check flight control elements for movability	+	+	+	+	
27-00-00-C	Inspect control tie rods, pulleys and guides	+	+	+	+	
27-00-00-D	Check control surfaces deflections	+	+	+	+	

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

Subject No.	Name of part/unit Scheduled Maintenance Check	Maintenance				Note
		1	2	3	4	
27-10-00-A	Check the aileron control system	+		+	+	
27-20-00-A	Check the rudder control cables for tension	+	+	+	+	
27-20-00-B	Replace the rudder control cables				+	
27-30-00-A	Check for the control of the elevator and the control of the elevator trim tabs	+		+	+	
27-30-00-B	Check for tightening of the elevator control cables and the elevator trim TAB Cables	+		+	+	
27-60-00-A	Check for air brake control	+		+	+	
32	<u>LANDING GEAR</u>					
32-00-00-B	Check the landing gear suspension clearance	+	+	+	+	

Effectivity: ALL

5-20-00

Page 5

Oct 30/95

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

Subject No.	Name of part/unit Scheduled Maintenance Check	Maintenance				Note
		1	2	3	4	
32-00-00-C	Inspect the landing gear	⊕		⊕	⊕	
32-00-00-D	Replace packing of the landing gear shock absorber				⊕	
32-10-01-A	Check landing gear shock absorber pressure	⊕	⊕	⊕	⊕	
32-30-00-A	Check the landing gear control for function	⊕	⊕	⊕	⊕	
32-40-00-A	Check the tyre for wear	⊕	⊕	⊕	⊕	
32-40-00-B	Inspect the wheel with brake	⊕	⊕	⊕	⊕	
32-40-00-C	Check the wheel bearing condition	⊕			⊕	
32-70-00-A	Inspect the tail-skid wheel	⊕	⊕	⊕	⊕	

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

Subject No.	Name of part/unit Scheduled Maintenance Check	Maintenance				Note
		1	2	3	4	
34	<u>NAVIGATION</u>					
34-00-00-A	Blow through the total, static, and compensated pressure piping	+	+	+	+	
34-00-00-B	Inspect the instruments of the total, static, and compensated pressure system	+	+	+	+	
34-00-00-C	Check the total, static, and compensated pressure system for leakage			+	+	
34-00-00-D	Replace the total, static, and compensated pressure hoses				+	
34-10-01-A	Remove and install the LUN 1106.02-8 airspeed indicator				+	
34-10-01-B	Check the LUN 1106.02-8 airspeed indicator				+	
34-10-02-A	Remove and install the LUN 1124.03-8 altimeter				+	

Effectivity: ALL

5-20-00

Page 7

Oct 30/95

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

Subject No.	Name of part/unit Scheduled Maintenance Check	Maintenance				Note
		1	2	3	4	
34-10-02-B	Check the LUN 1124.03-8 altimeter				+	
34-10-03-A	Remove and install the LUN 1147.12-8 rate-of-climb indicator				+	
34-10-03-B	Check the LUN 1147.12-8 rate-of-climb indicator				+	
34-10-04-A	Remove and install the LUN 1141.01 rate-of-climb indicator				+	
34-10-04-B	Check the LUN 1141.01 rate-of-climb indicator				+	
34-10-05-A	Remove and install the AM 10 accelerometer		+	+	+	} is valid for saiplanes delivered to Canada and upon the customer's request
34-10-05-B	Check the AM 10 accelerometer		+	+	+	
34-20-01-A	Remove and install the LUN 1211.1 turn and bank indicator	+	+	+	+	
34-20-01-B	Clean the LUN 1211.1 commutator	+	+	+	+	} In the USA-shop item only not for mechanic
34-20-01-C	Check the LUN 1211.1				+	

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

Subject No.	Name of part/unit Scheduled Maintenance Check	Maintenance				Note
		1	2	3	4	
34-20-02-A	Remove and install the LUN 1221.1-8				+	
34-20-02-B	Check the LUN 1221.1-8 liquid-type compass				+	
34-20-02-C	Compensate the LUN 1221.1-8 liquid-type compass	+	+	+	+	
52	<u>DOORS</u>					
52-00-00-A	Check for emergency canopy jettison	+	+	+	+	
53	<u>FUSELAGE</u>					
53-00-00-B	Inspect the fuselage	+	+	+	+	
53-00-00-C	Check the function of tow release mechanism.	+	+	+	+	
53-00-00-D	Inspect the skin of the fuselage bottom part between frames 1 and 6	+	+	+	+	

Effectivity: ALL

5-20-00

 Page 9

 : Oct 30/95....

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

Subject No.	Name of part/unit Scheduled Maintenance Check	Maintenance				Note
		1	2	3	4	
53-00-00-E	Inspect the frame No. 14 in the area of the tail-skid wheel attachment	+	+	+	+	
53-00-00-F	Inspect skins in the area of cut-outs for various fittings	+		+	+	
53-00-00-G	Inspect launching hooks	+		+	+	
53-00-00-H	Inspect the sailplane paint and ornamentation			+	+	
53-00-00-I	Replace cables to the side towing hooks				+	On glider with side towing hooks
53-00-00-I	Replace cable to the bottom tow release				+	On gliders with bottom tow release
55	STABILIZERS					
55-00-00-B	Inspect stabilizers	+	+	+	+	
55-00-00-C	Measure the holes and pins in the stabilizers hinges			+	+	

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

Subject No.	Name of part/unit Scheduled Maintenance Check	Maintenance				Note
		1	2	3	4	
57	<u>WINGS</u>					
57-00-00-B	Inspect the wing	+	+	+	+	
57-00-00-C	Inspect rivets on ribs Nos. 13, 19, 25 at the top and at the bottom between the spar and the trailing edge.	+	+	+	+	
57-00-00-D	Measure holes and pins in the wing-fuselage hinges				+	
57-00-00-E	Inspect critical areas of the wing lower flange	+			+	
57-00-00-F	Check the lower air brake for rigidity	+			+	
57-00-00-G	Inspect the connecting pins of the front and rear wing hinges	+		+	+	

Effectivity: ALL

5-20-00.....

Page 11.....

Oct 30/95
.....

MAINTENANCE MANUAL

SCHEDULED MAINTENANCE CHECKS

.....

Intentionally left blank