

## MANDATORY BULLETIN

MB No: L23/032a

Concerning: Flight Manuals for the L23 SUPER - BLANIK (English and German version)

Reason:

Flight Manuals effectivity extension for the "model 96":

- 1. Basic dimensions
- 2. Canopy jettison
- 3. Front cockpit air vent control change
- 4. Minor changes

Flight Manual Do-L23.1012.3 (CAN):

Cancel original pages: 0-1,0-3,1-1,1-3,1-4,2-3,2-9,3-1,3-2,3-3,3-4,4-5,4-7,7-4,7-5 and insert new pages: 0-1,0-3,1-1,1-3,1-4,1-5,2-3,2-9,3-1,3-2,3-3,3-4,3-5,4-5,4-7,

7-4 and 7-5 dated Mar 14/97.

Flight Manual Do-L23.1012.4 (GER):

Cancel original pages: 0-1,0-2,1-1,1-3,1-4,1-5,2-3,3-1,3-2,3-4,3-5,4-4,7-3,7-4 and insert new pages: 0-1,0-2,1-1,1-3,1-4,1-5,1-6,2-3,3-1,3-2,3-4,3-5,3-6,3-7,4-4, 7-3 and 7-4 dated 14.3.1997.

Flight Manual Do-L23.1012.6 (BRAZ):

Cancel original pages: 0-1,0-3,1-1,1-3,1-4,2-3,2-9,3-1,3-2,3-4,3-5,4-5,4-7,7-4,7-5 and insert new pages: 0-1,0-3,1-1,1-3,1-4,1-5,2-3,2-9,3-1,3-2,3-4,3-5,3-6,3-7,4-5,4-7 7-4 and 7-5 dated Mar 14/97.

To be carried out at the latest by:

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No cost arise

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Bulletin becomes effective:

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Enngineering data contained in this Bulletin are CAI APPROVED.

28.3.1997

97/4530/97



#### SAILPLANE FLIGHT MANUAL

Do - L 23. 1012.3

#### 0.1. RECORD OF REVISIONS

Any revision or amendment of the present Manual will be issued in the form of Bulletins, approved by the Civil Aviation Inspectorate of the Czech Republic, supplement of which will contain new (revised) pages. User's duty is to make a note about revisions in the Record of revisions and to replace existing pages with revised and effective ones. Revised or amended parts of the text will be indicated by a vertical line in the left hand margin and the revision No. and the date will be shown on the bottom left hand of the page.

Rev. No	Affected Section	Affected pages	Date	Bulletin No.	Date of Bulletin approval	Date inserted and signature
1.	0, 2, 6	0-1, 0-3, 2-4, 2-9, 2-10, 6-6, 6-7, 6-8, 6-9	Feb 15/95	L23/021a	Feb 28/95	
2.	0, 7	0-1, 0-3, 7-1, 7-4, 7-5	Dec 20/95	L23/026a	Jan 26/96	
3.	0, 6, 7	0-1, 0-3, 6-8, 7-4	Sep 20/96	L23/029a	Sep 23/96	
4.	0, 1, 2, 3, 4, 7	0-1, 0-3, 1-1, 1-3, 1-4, 1-5, 2-3, 2-9, 3-1, 3-2, 3-3, 3-4, 3-5, 4-5, 4-7, 7-4, 7-5	Mar 14/97	L23/032a	Mar 28/97	
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### 0.2. LIST OF EFFECTIVE PAGES

Section	Page	Date	Section	Page	Date
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#### **SECTION 1**

## General

#### CONTENTS

- 1.1 Introduction
- 1.2 Certification basis
- 1.3 Warnings, cautions and notes
- 1.4 Descriptive data
- 1.5.1Three-view drawing to ser. No. XX 8320
- 1.5.2Three-view drawing from ser. No. 96 8401

## SAILPLANE FLIGHT MANUAL

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#### 1.4 DESCRIPTIVE DATA

The L 23 SUPER - BLANIK sailplane is a cantilever, high-wing, two-seat glider of all-metal structure. It is possible to use wing tip extensions.

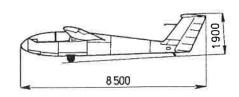
#### Basic dimensions

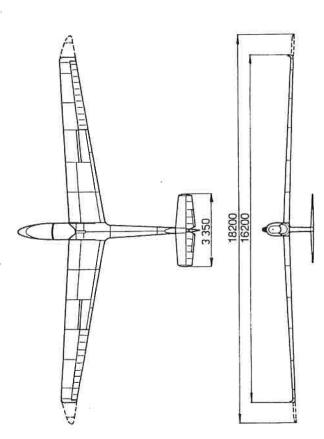
Wing span
Note: If the wing tip with supporting wheel is installed wing span is 16.26 m(53.35 ft)
Length
Height
Wing area
Aspect ratio
Mean aerodynamic chord 1.253 m (4.11 ft)

## SAILPLANE FLIGHT MANUAL

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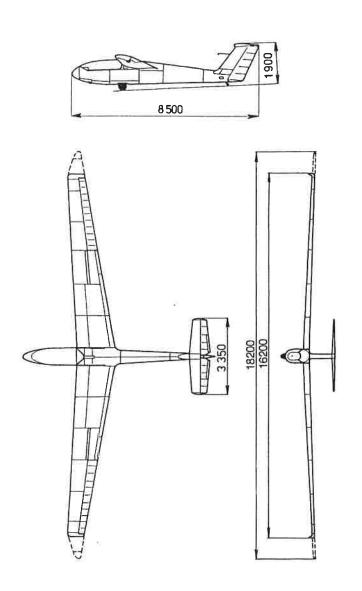
1.5.1 THREE - VIEW DRAWING (Dimensions in mm) - valid to ser. No. XX 8320





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1.5.2 THREE - VIEW DRAWING ( Dimensions in mm ) - valid from ser. No. 96 8401



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#### Note:

V<sub>NE</sub> airspeed limits above 4 200 m (13 780 ft) Pressure Altitude are reduced as follows:

Pressure Altitude m	5000	6000	7000	8000	9000	10 000
V <sub>NE</sub> km/h - without extensions - with extensions	243	230	221	211	202	191
	223	210	201	191	182	171

Pressure Altitude ft	13 780	20 000	25 000	30 000	35 000
V <sub>NE</sub> KIAS - without extensions - with extensions	135	124	116	108	100
	124	114	105	97	89

### 2.3 AIRSPEED INDICATOR MARKINGS

Marking km/h (KIAS) (value - range)		Significance		
Green arc	66 - 160 (36 - 86)	Normal Operating Range. (Lower limit is maximum weight 1.1 vs. at most forward c.g. Upper limit is rough air speed)		
Yellow arc 160 - 250 (86 - 135)		Manoeuvres must be conducted with caution and only in smooth air.		
Red line	250 (135)	Maximum speed for all operations		
Yellow triangle	75 (41)	Approach speed at maximum weight.		
	90* (49*)	^		

#### NOTE:

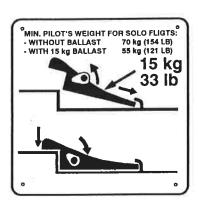
yellow triangle 90\*(49\*) valid from ser. No. 97 8402

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#### 2.12 LIMITATIONS PLACARDS

The following operating limitations are emphasized on the limitation placards in both cockpits:

a) front cockpit



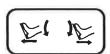
SEAT BACK





AIR VENT

PEDAL ADJUSTMENT





FRONT LIFT OFF para 3.2.1 To ser. No. xx 8320

**CENTRE OF GRAVITY RANGE** 

FRONT LIMIT . 23 % MAC

REAR LIMIT . . 40 % MAC

b) both front and rear cockpits





AIR BRAKES





LANDING GEAR

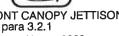


JETTISON/LIFT OFF ( REAR SEAT ONLY ) see para 3.2.1

To ser. No. xx 8320



FRONT CANOPY JETTISON see para 3.2.1 To ser. No. xx 8320





CANOPY LIFT OFF From ser. No. 96 8401



CANOPY JETTISON see para 3.2.2 From ser. No. 96 8401



BAGGAGE ( REAR SEAT ONLY )

WHEEL BRAKE

#### **SECTION 3**

## **Emergency procedures**

#### CONTENTS

- 3.1 Introduction
- 3.2.1 Canopy jettison valid to ser. No. XX 8320
- 3.2.2 Canopy jettison valid from ser. No. 96 8401
- 3.3 Bailing Out
- 3.4 Stall recovery
- 3.5 Spin recovery
- 3.6 Spiral Dive Recovery

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#### 3.1 INTRODUCTION

Section 3 provides check-lists and amplified procedures for handling emergency situatins.

## 3.2.1 CANOPY JETTISON ( SEE FIG. 3 - 1 ) - valid to ser. No. XX 8320

### WARNING:

# THE FRONT CANOPY MUST BE JETTISONED FIRST.

Front pilot

Red Canopy Jettison Lever

(FIG. 3-1, pos. 1)

ROTATE fully anticlockwise and

HOLD.

Canopy

FORCE UPWARDS.

Rear pilot

Front canopy jettisoned

ROTATE canopy jettison levers (FIG. 3-1, pos 2) in the direction

of arrows. LIFT rear canopy UP.

Front canopy not jettisoned

**RELEASE** safety belts

Red Front Canopy Jettison Lever

ROTATE fully counterclockwise and HOLD. FORCE Front Canopy UPWARDS. ROTATE Rear Canopy Jettison Levers in the Direction of Arrows. LIFT

rear canopy UP.

## 3.2.2CANOPY JETTISON ( SEE FIG. 3 - 2 ) - valid from ser. No. 96 8401

Front or rear pilot

Red Canopy Jettison Lever

**ROTATE** fully counterclockwise

and HOLD.

Canopy

(4)

FORCE UPWARDS.



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#### 3.3 BAILING OUT

RELEASE and REMOVE from Jap Safety Belts

and shoulders

GRASP. STOOP legs below you Hand Holds

BAIL OUT over the side cockpit

rail.

3.4 STALL RECOVER

Low Speed Stall (One g) PUSH control stick slightly. CHECK airspeed within normal

operation range.

PUSH control stick to reach Stall at Speed (Accelerated)

subcritical angle of attack.

ELIMINATE bank by rudder.

3.5 SPIN RECOVERY

APPLY full deflection opposite to Rudder sense of rotation RETURN to

neutral when rotation stopped.

Control Stick forward slightly simultaneously as rudder is

neutralized after rotation has

stopped.

3.6 Spiral Dive Recovery

USE to establish at nose - low Rudder and ailerons

wings level condition

Control stick INCREASE gently back pressure

> to raise the nose to a level flight attitude. Use caution not to obtain excessive accelerations

( q ) with back pressure during

the pull - up.

CANOPY JETTISON DURING FLIGHT - valid to ser. No. XX 8320

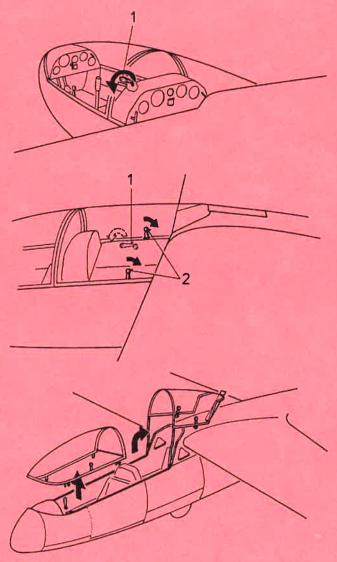


FIG. 3 - 1

CANOPY JETTISON DURING FLIGHT - valid from ser. No. 96 8401

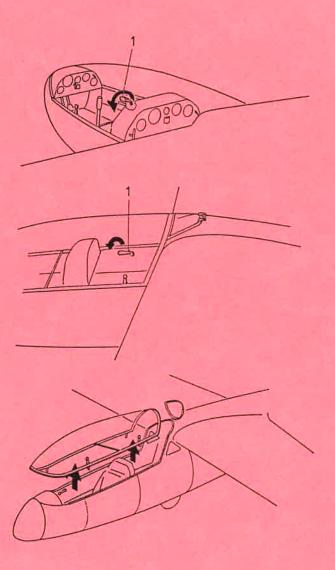


FIG. 3 - 2

Do - L 23. 1012.3

Sequence of the walkaround inspection

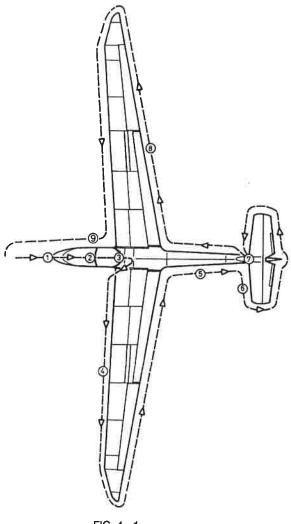


FIG. 4 - 1

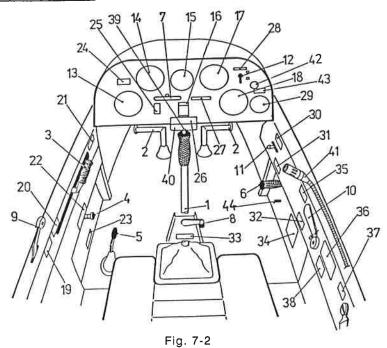
(Cont.)

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Item No.	Subject	Check/ activity			
5	Rear fuselage section				
	Fuselage skin no damage				
6	Empennage				
	Vertical stabilizer	no damage			
	Elevator	free movement			
	Horizontal stabilizers	condition of locking wire on the front pin of the horizontal stabilizer (in front of the leading edge of the top part of the vertical stabilizer)			
	Rudder	free movement			
7	Tail landing gear				
	Landing gear attachment	no damage of attachment			
8	Right wing	see Item 4 - left wing			
9	Front fuselage section				
	Pins for canopy opening	proper position against hinges			

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#### 7.4 FRONT COCKPIT



(1)Control column, (2)Rudder pedals, (3)Airbrake handle, (4)Elevator trim handle, (5)Wheel brake handle, (6)Landing gear handle, (7)Rope release mechanism, (8)Rudder pedals adjustment, (9)Front cockpit hood opening handle, (10)Handle for emergency release of the front cockpit hood, (11)Air vent handle, (12)Turn-and-bank indicator switch, (13)Altimeter, (14)Airspeed indicator, (15)Turn-and-bank indicator, (16)Compass,

(17) and (18) Vertical speed indicators, (19) Label "Front cockpit hood opening", (20) Label "Airbrakes extended", (21) Label "Airbrakes retracted", (22) Label "Elevator trim control",

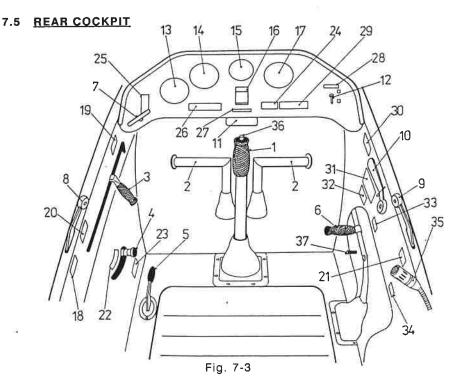
(23) Label "Wheel brake", (24)Label "No smoking", (25)Label "Tow release", (26)Label "Max. airspeeds", (27)Identification number, (28)Label "TURN-AND-BANK INDICATOR", (29)Accelerometer, (30)Label "Air vent", (31)Label "Landing gear extended", (32)Label "Landing gear retracted", (33)Label "Adjustment of pedals", (34)Label "Max. pilot weight", (35)Label "Front cockpit hood emergency release", (36)Label "Permitted manoeuvers", (37)Label "Seat position", (38)Label "Center of gravity", (39)Radio control button, (40)Battery for turn-and-bank indicator, (41)Microphone, (42)Air vent pull rod with handle, (43)Label "Air vent", (44)Positional pin of landing gear opened and locked position (the landing gear handle must be located in front of the positional pin in flight direction)

Note: pos. (11) and (30) - valid to ser. No. XX 8320

pos. (42), (43) and (44) - valid from ser. No. 96 8401

pos. (35) - from ser. No. 96 8401 Label "Canopy jettison"

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(1) Control column, (2) Rudder pedals, (3) Airbrake handle, (4) Elevator trlm handle, (5) Wheel brake handle, (6) Landing gear handle, (7) Rope release mechanism, (8) and (9) Rear cockpit hood opening handle, (10) Handle for emergency release of the front cockpit hood, (11) Battery for turn-and-bank Indicator, (12) Turn-and-bank indicator switch, (13) Altimeter, (14) Airspeed indicator, (15) Turn-and-bank indicator, (16) Compass, (17) Vertical speed indicator, (18) Label "Airbrakes extended", (19) Label "Airbrakes retracted", (20) and (21) Label "Rear cockpit hood opening", (22) Label "Elevator trim control", (23) Label "Wheel brake", (24) Label "No smoking", (25) Label "Tow release", (26) Label "Max. airspeeds", (27) Identification number, (28) Label "TURN-AND-BANK INDICATOR", (29) Label "Manoeuvers with wing tip extensions forbidden", (30) Label "Front cockpit hood emergency release", (31) Label "Permitted manoeuvers", (32) Label "Center of gravity", (33) Label "Landing gear extended", (34) Label "Landing gear retracted", (35) Microphone, (36) Radio control button, (37) Positional pin of landing gear opened and locked position (the landing gear handle must be located in front of the positional pin in flight direction)

Note: pos. (9) and (21) - valid to ser. No. XX 8320

pos. (20) - from ser. No. 968401 Label "Canopy lift off"

pos. (30) - from ser. No. 968401 Label "Canopy jettison"

pos. (10) - from ser. No. 968401 Handle for canopy jettison

pos. (37) - from ser. No. 968401