FLIGHT	ma nua l	
GLIDER	IS-29D	

EDITION Nr.2

April 1973

FLIGHT MANUAL

of the performance - type standard glider

IS - 29D

BUILDER: AIRCRAFT CONSTRUCTION ENTERPRISE

BRASOV - ROMANIA

Ghimbav Airport

P.O.B. No.118

from 11.08.1973 TYBE CEETIFICATE No.P.N. 01. SERIES No · · · · · · · · MATRICULATION APPROVED BY THE CIVIL AVIATION AUTHORITY

- Chapters 2,3,4,5

- Approved pages; 2,0-2.6; 3.0-3.2; No 0.E.78.68 /30.06_1973 4.0-4.9; 5.0-5.3.

Visa of the Civil Aviation Authority

- This glider may be used with the observance of the limitations specified in the present Flight Manual.

THIS DOCUMENT SHOULD BE PERMANENTLY ON BOARD THE GLIDER

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INTRODUCTION

This manual includes the minimum necessray instructions for the pilot to get him accustomed with the IS-29D glider and its use.

The manual is divided in the following chapters;

1. GENERAL

2. OPERATING LIMITATIONS

3. EMERGENCY PROCEDURES

4. NORMAL OPERATING PROCEDURES

5. PERFORMANCES

6. APPENDICES

The pages are separately numbered for each chapter.

Modifications to this manual may be carried out only by the manufacturing plant and should be approved by the Civil Aviation Authority, when they are referring to chapters, 2,3,4,5.

Glider maintenance and overhauls are dealt with in the "Operation and maintenance manual" delivered with the glider.

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6.2. ASSEMBLING - DISMANTLING OPERATIONS

6.2.1. WING ASSEMBLING

The operation is achieved by a minimum four persons team, and is divided like that one kups the fuse lage in ballance the other three cooperate for :

- the luggage room cover is pulled out.
- the bolt fitted ou the panel is pulled out (Fig. 6.3. position 1).
- the right wing is presented and the central spar fitting is introduced in the jonction tunnel of the fuselage, such way the tapered holes both, of the fullelage and the wing match of the
- bearing the tap wing the bolt 1 is fitted in its hole.
- Pulling the wing, the locking effect of the bolt is checked.

- Make the wing rest horizontally on a support.

- when inserting the spar fitting of the second wing - half into the fuselage junction groove, match its fitting with the previously introduced wing - half fitting.
- tighton with the junction key the central screw puti ing into action the junction central cones (through the fairing orifice);
- tighten up the tapered bolts of the front junction by rotating the central sleeve(from the pilot cockpit) and lock.

Dismantling implies the repeating of these eperations in reverse order, bout only after unlocking the wing spar `locks, by putting into action the flaps item 1 on Fig. 6.3.

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6.2.2. CONTROL EOUPLING

a)AILERON CONTROLS

Clean and lubricate the rods end and bearings(if

need be);

- Explore the coupling position by handling the control stick.

- Insert the rod ends in the respective levers and loc (with locking pins);

- Check the aileron and stick neutral position;

- Completely lock

- Carry out those operations in reverse order for

dismantling.

b) AIR BRAKE CONTROL

This is carried out at the same time as wing

assembling on fuschage, by means of a spherical coupling. After coupling, also check the correct closing and opening of the air brakes.

c) WING FLAP CONTROL

This is carried out at the same time as wing assembling. The control and synchronizing central lever with

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the coupling fittings are interlacking with the fittings installed on the flaps. After control coupling, check the wing flap position. Verify their operation and looking at the maximum stroke and in various working positions.

6.2.3. INSTALLATION OF THE ELEVATOR

This operation is carried out by a team formed of

tuc persons:

- a person supports the evelator during assembling;

- the second person carries out the evelator

installation.

Assembling includes the following operations;

- matching the elevator fitting to that of the fin;

- introduction of the elevator into the guiding bolts;

- following up of the correct anti - flettner control coupling;

matching the guiding screw with the front guiding bush and rotation of the counterweight rod, completely tightening it;

- releasing of the spring locking pin and rotation of the counterweight rod until the pin enters one

of the rod seats (for locking)

The operation sequence is reversed for dismantling.

6.3. GLIDER TRANSPORT

6.3.1. INDICATIONS FOR GLIDER TRANSPORT AND

OLAMPING POINTS

The transport from hangar to the starting point and the glider shifting may be carried out with at least 3 men or with a motor vehicle. When the glider is shifted by men, then two men will push towards the flight direction on the wing upper side near the junction with the fuselage and another/man

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3.1. EMERGENCY PROCEDURES 3.1. LANDING GEAR CANNOT BE DRIVEN OUT

In case the pilot cannot drive out the landing gear, landing may be carried out on belly, and in this case it is recommended to chose a field without unevennesses. The fuselage will slide on the fairing of release hock and tail skid without getting damaged.

If this is the case, the pilot should carry out a landing at the manimum possible speed, latting the glider flatten out at 20-30 (8-12 in) cm from the ground without executing a marked level- off motion. Braking will be strong and the glider will stop on a much reduced distance. It is advisable to avoid landing with retracted wheel on a stony ground or on concrete. 3.2. GLIDER ABANDONMENT DURING FLIGHT

In order to be able to sbandon the damaged glider during flight the movable, canopy be jettisoned.

To lanch the canopy in a emergency, the pilot will push fermly and simultaneous the hinges release handle (locked, port frame) and the unlocking handle (starboard frame). Acting this way, the hinges bolts are extracted and the bocks released. After achieving the share extracted to the bocks released.

After achiezing the above monoevre, the two handles should be pushed upwards to lift the canopy, which afterwards will be pulled out by the air stream.

The necessary force for breaking the locking wire of the lounching handle is of about 8 kgf(17.637 1b).

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