

M.I.C.M. - C.N.I.A.R.
INTREPRINDEREA DE CONSTRUCTII AERONAUTICE
2200 B R A S O V

MANDATORY SERVICE BULLETIN

IS-28M2/E0-11

APPROVED BY : Department of Civil Aviation
with no. 16511/24.11.1984

PRODUCT : IS-28M2 motor glider

OBJECT : Replacement of speed limitation placard
(English version) and amending of Flight and
Maintenance Manual.

COMPLIANCE :

1. Record Card no. 417/18.09.1984
2. Amendment SEL 1 to the IS-28M2 Flight and
Maintenance Manual, 2nd issue.
3. Amendment SEL 3 to the IS-28M2 Flight and
Maintenance Manual, 3rd issue.

Date : 26.09.1984

IS-28M2/E0-11
Page 1/4

1. PLANNING INFORMATION

A. Aplicability

The bulletin is applied to the IS-28M2 motor gliders provided with speed limitation placards in English, as follows :

- To the motor gliders S/N 1 to 40, except 07, 09, 23, amendment SEL 1 to the Flight and Maintenance Manual 2nd issue is applied, as well as placard 28-M2-F14-258.

- To the motor gliders S/N 41 and subs. as well as to 07, 09, 23, amendment SEL 3 to the Flight and Maintenance Manual, 3rd issue is applied together with placard 28-M2-F14-257.

Application time : 15 days from the bulletin receiving.

B. Reason

Correction of maximum speed with flap deflected, marked on the speed limitation placard. The correct value is 75 kts.

C. Description

Replacement of speed limitation placard on the instrument panel and modified pages in the Flight and Maintenance Manual.

D. Compliance

- Revision Record Card FM 417/18.09.84
- Amendment SEL 1 to the Flight and Maintenance Manual, 2nd issue.
- Amendment SEL 3 to the Flight and Maintenance Manual, 3rd issue.

E. Accomplishment

The bulletin shall be applied by :

- The Buyer, to the motor glider under servicing ;
- the manufacturing plant, to the motor gliders under fabrication or under stockage for delivery.

F. Material-Cost and Availability

The materials required for applying this bulletin are specified to point 3A and are delivered by the manufacturer together with this bulletin.

G. Tooling

None.

H. Weight and Balance

Not affected.

I. References

For applying this bulletin see the indications of point 2. At the Buyer's request the manufacturer offers any additional information.

J. Documents Affected

Modification of the IS-28M2 Flight and Maintenance Manual, 2nd and 3rd issue with the pages enclosed to this bulletin.

2. USING INSTRUCTIONS

A. Work Preparation

Measures shall be taken in order to prevent the leaving of any remaining object in the cockpit (tool or material).

B. Application

(a). By means of a sharp tool, remove the old speed limitation placard from the instrument panel.

(b). Clean and degrease the place where the new placard will be installed.

(c). Stick the new placard with an adequate adhesive.

C. Servicing Instructions

The speeds and load factors marked on the placard will not be exceeded during flight.

3. MATERIAL INFORMATION

A. Material List

- Speed Limitation Placard
- Adequate Adhesive

B. Tooling List

None.

C. Supply Indications

The placard is delivered together with this bulletin by the manufacturer.

4. IDENTIFICATION

The application of this bulletin is mentioned in the motor glider log book.

Date : 26.09.1984

5. APPENDICES


- Amendment SEL 1 to the IS-28M2 Flight and Maintenance Manual, 2nd issue.
- Amendment SEL 3 to the IS-28M2 Flight and Maintenance Manual, 3rd issue .
- Speed limitation placard.

Ref. No.	Revised pages	Description of revision	Date of approval	Date of insertion	Sign.
19.	Appendix 12	Anticollision Lamps Installation (ACL900-DITTEL) OPTIONAL	11.11.1980.		/
20.	Appendix 13	Position Lights Installation (OPTIONAL)			
21.	0.7.F; 4.13.2.B	Landing gear warning system microswitch mounting (for serial no.40 and subs.)			
22.	07.G; 3.17.A; 4.7.C	Additional inspection for the landing gear.	15.04.81.		
23.	Appendix 14	Landing gear microswitches mounting (optional)	14.09.1981.		
24.	07H, 4.11.C.; 4.11.1.B; 4.11.2.B; Appendix 15	Time between two major overhaul increase.	22.10. 81.		
25.	Appendix 16	TRIM. TABS FITTING. ON ALERONS (OPTIONAL)			
26.	3.15.A 4.4.A	Flying controls inspection			
SEL 1	2.9.E	Correction of English version (the Romanian version is not modified)			
27.	4.11.2.C	Safe life increasing			
28.	2.7B	Adding other types of engine oil			

2.9.- Placards and Markings

The motor glider is provided with the following placards and markings:

2.9.1.- Speed limitations (red coloured)

SEL 1	I S 2 8 M 2 L I M I T S	
	V _{max} V _{LG}	113 Kts.
		V _{max} 75 kts
		n _{max} + 4 g
	V _S	40. kts
	V _A V _B	92 kts
	n	+ 5.8 - 2.65g
	G _{max}	1642.5 lbs
ACCELEROMETER MANDATORY		

2.9.2.- Weight placard (red coloured)

IS-28M2 MOTOR GLIDER Serial no....
Weight.....lb Empty C.G.....%SMC
Min.Cockpit Load.....lb
Max.Cockpit Load.....lb

2.9.3.- Engine limitations (red coloured)

MAX.PERMISSIBLE REVS.	3600 RPM
MAX.CONTINUOUS REVS.	3200 RPM
IDLING	700 RPM

2.9.4.- Inverted flight Prohibition (red coloured)

PROHIBITED INVERTED FLIGHT WITH ENGINE RUNNING

2.9.5.- Cockpit opening (red coloured)

DO NOT OPEN THE CANOPY AT SPEEDS
GREATER THAN 80 kts

2.9.6.- Prohibition of baggage over the fuel tank (red coloured)

BAGGAGE PROHIBITED

Rev. No.	No. of Pages	Description of Revision	Revision Date	Date Incorporated	Signature
7.	P.V.1.E 1.2.A; 1.3.A; 1.4.A; 1.5.A; 2.10.A; 3.20.A; 3.21.B; 4.22; 4.30.A	Additional indications concerning the flight servicing	8602/ 6.06.1984		
SEL 2	1.6.A; 2.3.A; 2.4.A; 2.5.A; 2.7.A; 2.12.A; 2.1A.A	Correction of the English version (the Romanian version is not modified).	6.06.1984		
SEL 3	1.2.B; 2.12.B; P.V.1.F	Correction of the English version (the Romanian version is not modified).			
SEL 1A"	2.12.B.A"	Correction only S/N 04 and 33.			
8.	P.V.1.G; 4.18.B	Safe life increasing			
9.	2.9.A	Adding other types of engine oil.			
10.		Only for Romania			
11.	1.1.A; A.2.1.A; A.2.4.A	Installation of 160-BT blade.	17.03.1992		
12.	1.1.B; 3.8.A; A.2.4.B	Application of Service Bulletin no. 1N/18.12.1991 Hoffmann.	19.05.1992		
13.	P.V.1.I. 2.9.B	Modification of oil grade, completion of oil types	03.06.1997		

The flaps can be selected and locked in the following positions:

Position	-1	-5° of Flap
Position	0	0° of Flap
Position	1	+10° of Flap
Position	2	+20° of Flap
Position	3	+30° of Flap

The Dive Brakes consist of two paired blades in each wing which extend from the upper surface of the wing. The Dive Brakes can be easily handled up to 210km/h (113 kts) (Vne) and together with a positive flap setting provide a good control for approach and landing especially in restricted areas.

Performance

The IS-28M2 motor glider achieves outstanding performance in flight with either the engine running or shut-down.

The high load factor to which the aircraft was designed and its robust construction allows the execution of aerobatics and provides an additional safety factor in flight.

In this chapter the speed values are CAS.

Flight (Engine On):

7

- Horizontal maximum speed 180±5 Km/h ; (97±3 Kt.)
- Maximum cruise speed (sea level) 160 Km/h ; (86 Kt.)
- Economical cruising speed (sea level) at 2400 rpm and a fuel consumption of 7.5 l/hr (1.6 imp gall/hr) 132 Km/h ; (71 Kt.)
- Minimum flying speed (at G_{max} 79 km/h (43 kts)
- SEL 3 | 1 | 760 kg - Flaps Neutral, 0°
- Take-off distance (sea level) 250 m (820 ft)
- 1 | - Take-off distance passing over an obstacle of 15 m (sea level) 593 m (1.945 ft)
- Minimum landing distance (sea level) 90 m (295 ft)

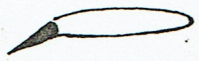
NOTE: T-O and Landing distances refer to grassy runways,

2.9 Mandatory Placards and Markings

The motor glider is provided with the following mandatory placards and markings.

2.9.1 Speed/G Limitations (White on Red)

SEL 3

IS-28M2 LIMITS	
Maximum Speed (Calm Air) (V_{NE})	
Maximum Speed Landing Gear Extended (V_{LG})	
113 Kt.	
	$V_{max.}$ 75 Kt.
	$N_{max.}$ +4 g
Stall Speed (V_{SO})	
40 Kt.	
Manoeuvring Speed (V_A)	
Maximum Speed Rough Air (V_B)	
92 Kt.	
N	
+5.3; -2,65 g	
Maximum Weight	
1675,5 lb.	

2.9.2 Weight Placard (White on Red)

IS - 28M2 MOTOR GLIDER SERIAL NO. 33	
WEIGHT 1267.6 lb.	EMPTY C.G. 31.9% SMC
MIN COCKPIT LOAD 121	Lb
MAX COCKPIT LOAD 352.4	Lb

2.9.3 Engine Limitations (White on Red)

Max Permissible Revs	3600 rpm
Max Continuous Revs	3000 rpm
Idling	700 rpm