



EASA.21J.117

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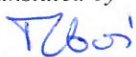
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SERVICE BULLETIN No BO-28/2023 MDM-1 FOX

CONCERNS:

revisions to glider Flight Manual comprising :
supplemented information on stall & spin characteristics,
added recommendations to improve safety of flight operations

The technical content of this document is approved
under the authority of DOA ref. EASA.21J.117

ELABOTARED BY	APPROVED BY
[---]	[---]
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Bielsko-Biała, 29.11.2023

1. TYPE/ MODEL/ ORIGINAL APPROVAL

MDM-1 "FOX" glider has been approved with Type Certificate (TC) in accordance with airworthiness requirements JAR-22 Change 4, iss. 7 May 1987, original approval by Polish CAA Doc. No: BG-197 of 1994, replaced by TC No: EASA.A.039 of 2005.

2. SERIAL NOS COVERED WITH THIS BULLETIN

This Bulletin concerns all MDM-1 FOX glider Serial Numbers (S/N) (in the MDM-1 "FOX" and MDM-1P "FOX-P" variants), which are operated based on the listed below Manuals (specified in the Type Certificate Data Sheet for TC No. EASA.A.039), as appropriate:

for MDM-1 "FOX" variant

- Flight Manual (FM), iss. III, December 1996

for MDM-1P "FOX-P" variant

- Flight Manual (FM), iss. IV, December 1998

3. REASON FOR ISSUING THIS BULLETIN

In year 2019, 2 serious aircraft accidents occurred in a flight realized with MDM-1 FOX aerobatic glider.

In accident investigations conducted by the National Safety Agencies responsible for the site of accident, no technical causes of the accident (i.e. ones related to the design or construction of the glider) have been identified in any one of the above cases.

At the same time, one of the involved Agencies, in the final report from aircraft accident investigation recommended to the glider Producer (also the Holder of TC No EASA.A.039 for the concerned design) to supplement the description of the flying characteristic in flight conditions for stall & spin, provided in the current version of the glider Flight Manual (FM).

Indicated was, among others, the need to describe in more detail that the sailplane reacts differently to different types of initiation or entry to the spin and, behaves differently in dynamic or "snap" initiation than e.g. when initiating a spin at minimum speed. Suggested also was a need to describe in more detail the procedure for recovering from various unusual flight conditions (flat spin, dynamic stall) that may occur in the FOX glider.

Following this recommendation, the revisions to glider FM listed below under item 6. CONFIGURATION CHANGES have been elaborated by Producer.

4. APPROVAL

The revisions to the glider Flight Manual (FM) specified in item 6 of this Bulletin have been approved By European Union Aviation Safety Agency (EASA) with the document MAJOR CHANGE APPROVAL No 10083362, of 28.11.2023 as a major change to Type Certificate of MDM-1 FOX No EASA.A.039.

(revision to the EASA approved FM /
of the glider operated on a basis of an EASA Type Certificate).

5. INTENT OF THIS BULLETIN

The FOX glider, as one of the few models allowed for unlimited aerobatics with a 2-person crew, is used for introductory and advanced training in glider acrobatics. With growing fleet of glider units built/used, the availability of this model increases and it becomes available to pilots with different pilotage skills, at different stages of their familiarization with aerobatics.

Hence, expanding the information in the FM related to the specific properties of the FOX glider in unusual flight attitudes/ recovery procedures from such flight conditions may contribute to improving a safety of flight in this glider model.

6. CONFIGURATION CHANGES

Changes to configuration are restricted to the (EASA approved) revisions to glider FM , as follows:

FM ver/ glider variant	FM date of issue	Rev No	Rev. Date	Rev. approval date	Rev details specified in
FM iss. III / MDM-1 "Fox"	October 1996	8	December 2020	November 2023	Enclosure 1 to this Bulletin
FM iss. IV / MDM-1 "Fox" & MDM-1P "Fox-P"	Dec. 1998	4	December 2020	November 2023	Enclosure 2 to this Bulletin

7. PROCEDURE

The following procedure has been used to ensure compliance with the requirements of Bulletin BO-28/2023 MDM-1 FOX.

A. MANUALS

The user/ owner of each glider covered by this Bulletin is required to introduce the appropriate change in the copy of the Flight Manual for his FOX glider, as appropriate for the glider variant.

The introduction of the change in question consists in:

For FM issue III, October 1996 - replacing the pages listed below under item D. LIST OF ENCLOSURES (for Enclosure No 1 to this Bulletin) as "Pages affected" by Rev No. 8 – with new pages included in the Enclosure No 1.

For FM issue IV, December 1998 - replacing the pages listed below under item D. LIST OF ENCLOSURES (for Enclosure No. 2 to this Bulletin) as "Pages affected" by Rev No. 4 – with new pages included in the same document.

When replacing pages in the copy of FM used for your glider, make sure to transfer all entries about the individual characteristics of the individual glider (limitations, loading plan, weighing, other).

B. LABOUR DEMAND

Time required to implement this Bulletin 1 day/ 1 person

C. PROPOSED BULLETIN COMPLIANCE TIME

Within 1 month after receiving this Bulletin

D. LIST OF ENCLOSURES

Enclosure No 1 :

FM iss. III with revisions up to No 8 of 15.12.2020

List of pages affected by Rev No 8, according to item 0.1. RECORD OF REVISIONS

0.1, 0.2, 2.4, 2.5, 3.2, 3.3, 3.3i, 4.5, 4.8, 4.9, 4.9i, 5.3, 5.4, 5.5

Enclosure No 2 :

FM iss. IV with revisions up to No 4 of 15.12.2020

List of pages affected by Rev No 4, according to item 0.1. RECORD OF REVISIONS

2, 3, 14, 15, 19, 20, 20i, 26, 29, 30, 30i, 31, 32, 35, 36, 54

8. FINAL CONCLUSIONS

In case of problems in updating the document, in individual cases Producer will provide the glider user with an updated copy of the FM with the relevant changes in electronic form - after submitting a request for such a document by e-mail to the address: office@marganski.pl

For the sake of glider identification, please provide the data as follows:

- Fact. No
- Year of construction
- Wing-tip version (fixed/ detachable).