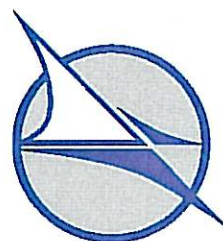


ZAKŁADY LOTNICZE MARGAŃSKI & MYSŁOWSKI

Sp. z o.o.



43-300 Bielsko-Biała, ul. Strażacka 60
tel/fax +48 (33) 8150110
email: e.marganski@pro.onet.pl
www: marganski.com.pl

EASA.21J.117

SERVICE BULLETIN No BO-18/2011 MDM-1 FOX


DESIGNATION-TYPE/MODEL: MDM-1 FOX

SERIA / NUMBER: All MDM-1 FOX model gliders,
variants: MDM-1 FOX, MDM-1P FOX-P, MDM-1M FOX

CONCERNS: Providing inspection opening on wing shell bottom surface
Verification of console and its installation in a wing (aileron control circuit)
Verification of push-rods in elevator control circuit

COMPLIANCE TIME: On receiving this Bulletin

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

ELABOTARED BY	APPROVED BY
[---]	[---]
Sebastian Wierciak	Tadeusz Zboś
VERIFIED BY	
[---]	
Grzegorz Sadłek	
Translated by	
 Tadeusz Zboś	

Bielsko-Biała, 30.11.2011

1. GROUNDS FOR ISSUANCE OF THIS BULLETIN

Information collected after occurrence of June 2011 on MDM-1 FOX glider indicate, at least one more damage of this kind occurred on another MDM-1 FOX glider (in flight the console of bell-crank /Dwg No B2-44.09.00/ broke out from its mount on spar web, the right hand wing panel). Also in this case the information available indicates, the in-flight occurrence has been preceded with on-ground occurrence which initiated the damage (in former case: collision with a car, in which the aileron has been damaged, in latter: aileron control circuit overloaded in glider handling). At the same time, there is no confirmed information on damage of this kind on FOX gliders not preceded with damage initiated in occurrences exceeding the normal, anticipated in Manuals glider operation.

Regardless from actual knowledge on the cause for damage, this Bulletin:

-describes the way for providing on wing skin bottom surface the inspection openings allowing for verification of the condition of the concerned console with its mount on the wing, see Working Instruction in Enclosure No 1 to this Bulletin, and

-imposes requirement to verify the condition of this area at regular time intervals, as well as after every known case of excessive/ different from normal loads to aileron control circuit both on ground as in flight, see Inspection instruction in Enclosure No 2 to this Bulletin as well as revision to Technical Service Manual and to the "Program of MDM-1 FOX inspection on completing 500 flying hours".

Moreover, due to the possible chaffing between fuselage structure and the push-rod connected directly to elevator and to the possible damage to the push-rod next in sequence from control surface in elevator control circuit, this Bulletin imposes requirement to verify the condition of the push-rod connected with elevator, as well as the condition of the push rod with rotary bearing, see revision to Technical Service Manual and to the Program of MDM-1 FOX inspection on completing 500 flying hours.

2. LIST OF FACTORY NOS COVERED WITH THIS BULLETIN

This Bulletin concerns all MDM-1 FOX gliders,
variants: MDM-1 FOX, MDM-1P FOX-P, MDM-1M FOX.

3. PROCEDURE

1. After receiving this Bulletin, modify the LH/RH wing panel, with design change No MDM-1 FOX/5/2011 "Inspection openings on wing skin bottom surface" – following the Working Instruction, Enclosure No 1 to this Bulletin.

Note: Due to interference with wing structure, the modification is to be completed at Repair workshop authorised for repairs of composite structure aircrafts – to the regulations in the country of glider registration

2. Record the modification in the glider log book.

3. On every glider, independent from total flying time accumulated and date of production, complete the initial verification of the concerned console and its mount in a wing following the Inspection instruction, Enclosure No 2 to this Bulletin – to initiate the glider operation following the rules with amended inspection requirements.
4. According to recommendations of Section 3 in Technical Service Manual, repeat the verification as per item 3 above at recommended time interval, as well as after every case of excessive loads to aileron or to aileron control circuit.
In case of identified damage, immediately stop the glider operation. For the repair process contact Producer.
5. On every glider, verify the condition of outer surface of the first (counting from control surface) push-rod in the elevator control circuit – in the area of pass through the cut-out in fuselage frame (see bottom part of Fig. 3, Tailplane assembly in glider TSM). Pay attention to evidence of wear on push-rod top surface.
In case of wear depth up to 0.03 mm – acceptable is push-rod rotation by 180 deg; while in case of depth beyond this value – the push-rod is to be replaced with new one.
6. On every glider, verify the condition of the second (counting from control surface) push-rod in the elevator control circuit (see Fig. 7, Aileron and elevator control system in glider TSM). Pay attention to the push-rod tube and to installation of the push-rod end adjacent to rotary bearing. In case of corrugated surface of push-rod tube or identified play in the end mounting, replace the push rod with new one.
7. According to recommendations of Section 3 in Technical Service Manual, repeat the verification as per positions 5, 6 above at recommended time interval.
8. Verification as per items 3, 5 and 6 must be completed also within the glider overhaul after 500 flight hours, see the Program of 500 hours inspection - with revision No 1.
9. In the glider Technical Service Manual, depending on document version, replace the affected pages and the TSM Enclosure No 1, Program of MDM-1 FOX inspection on completing 500 flying hours, with new ones attached to this Bulletin – see item 5 ENCLOSURES

4. MASS (WEIGHT) AND BALANCE

After wing modification repeat the weighing of empty glider – in accordance with Technical Service Manual.

5. ENCLOSURES

1. Working instruction, inspection openings in wing skin bottom surface, 30.11.2011
2. Inspection instruction, bell-crank console with its mount in a wing, 30.11.2011
3. Program of MDM-1 FOX inspection on completing 500 flying hours, rev. No 1 of 30.11.2011
4. Technical Service Manual , depending on document version – adequately:
TSM MDM-1 FOX, iss. III, December 1996: pg. No 2, 39, 40
TSM MDM-1P FOX-P, iss. I, December 1998: pg. No 2, 41, 42

6. FINAL CONCLUSIONS

Introduction and application of verification means provided with this Bulletin allows for safe operation of glider over the whole range of original operation limitations.

After implementation of this Bulletin recommendations corresponding to bell-crank console in aileron control circuit, see item 3. PROCEDURE, pos. 1, 2, 3, 4, 8, 9 the requirements of Bulletin BO-16/2011 MDM-1 FOX, of 30.09.2011 – including the established there provisional restrictions to Operational Limitations – are not valid any more.

After verification of the concerned area with positive results, operator may remove the placard with provisional restrictions from cockpit and operate the glider within the full envelope of limitations foreseen in Manuals.

- THE END -