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-17/2011 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:	inspection of control stick at front seat
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, 21.10.2011

1. GROUNDS FOR ISSUANCE OF THIS BULLETIN

During an aerobatic training flight on one MDM-1 FOX glider, the tube of control stick at front seat (Dwg No B2-10.25.01) has been broken approx 40 mm above the top edge of control column mount. The concerned flight was performed in 2-person crew thus, by means of control from rear seat, the glider has been brought to safe landing.

To the information available, the described case has been preceded by another in flight occurrence on the same S/N, some years ago. In this latter case, in aerobatic training flight, the instructor on rear seat had to apply at control stick very high forward control force for recovering from inadvertent spinning, and for overriding the effort of student pilot's – under stress holding the control stick pulled back with his full power. This occurrence could originate a damage which developed to critical size.

The damage of control stick at front seat, if encountered in solo flight, may result in critical reduction of flight control – therefore it is considered critical for safety.

At actual stage of investigation, prior to tests on the affected control stick, the described above scenario - however probable - does not exclude other possible causes of occurrence.

The preventive measures covered with this Bulletin are undertaken to avoid next occurrences over the time necessary to complete the analysis and to elaborate the final remedies.

Until next recommendations on this matter, required is inspection of control stick at front seat for verification of tube geometry (bending curve) and for verification of tube external surface condition. Details - see Item 3. Procedure of this Bulletin.

2. LIST OF FACTORY NOS COVERED WITH THIS BULLETIN

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

3. PROCEDURE

1. Remove the control stick at front seat from the glider.

2. Check the bending line of control stick against the shape provided in Enclosure to this Bulletin. In case of perceptible differences (several milimeter) which might be evidence of uncontrolled plastic deformation of the detail, withdraw the concerned detail from operation immediately, and contact Producer for a spare part.

3. Visually inspect the external surface of control stick tube at front seat against evidence of chaffing, indents, cracks – use reading glass with magnifying power x10. Pay attention to area of higher curvature and to area of installation in control column. In case of surface failure, identify the depth - necessary for detail assessment in accordance with criterion in item 6.

4. In case of doubts on inspection result interpretation (suspected cracks) apply liquid penetrant method, consult Producer.

5. In case of cracks and surface failures of size exceeding the limit values (acc. to item 6 below) - withdraw the concerned detail from operation immediately, and contact Producer for a spare part

6. Surface failure depth acceptable for continued operation may not exceed : for scratch 0.045 mm/ other failures 0.14 mm

7. Install the verified control stick on the glider. Check/ adjust regulation of control stick limiters at control column – as necessary.

4. MASS (WEIGHT) AND BALANCE

Not applicable.

5. ENCLOSURES

Enclosure No 1. Geometry (bending line) for front seat control stick.

6. FINAL CONCLUSIONS

The details for compliance with this SB might be ordered at Producer at the cost of glider operator.

- THE END -