



MANDATORY BULLETIN

Number: UFM-13 – 2/2009

UFM-11 – 1/2009

Date of issue: 17.8.2009

Applicable for UFM-13 from s.n. 1 to s.n 123, UFM – 11 from s.n. 1 to s.n.18

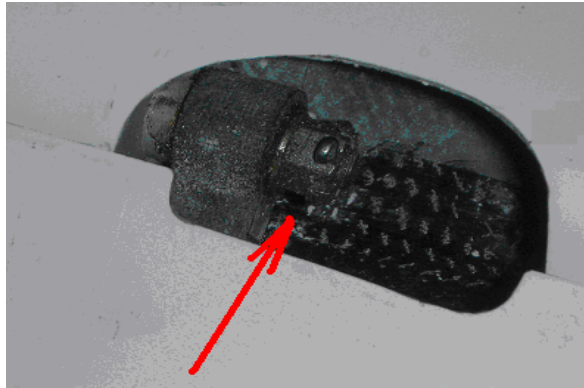
Because a few damaged elevator hungs were found during mandated check according to Mandatory bulletin UFM-13 1/2009 chapter B, URBAN AIR s.r.o. orders to all UFM-11 and UFM 13 Lambada users carry out following safety steps – improvement, reinforcement of elevator hungs.

This bulletin is obligated for all aircrafts UFM-13 (ser. numbers from 1 to 123) in disregard of type (flaperon version and LSA version with ailerons) and UFM 11 aircrafts (s.n. 1 – 18) and must be carried out in following time:

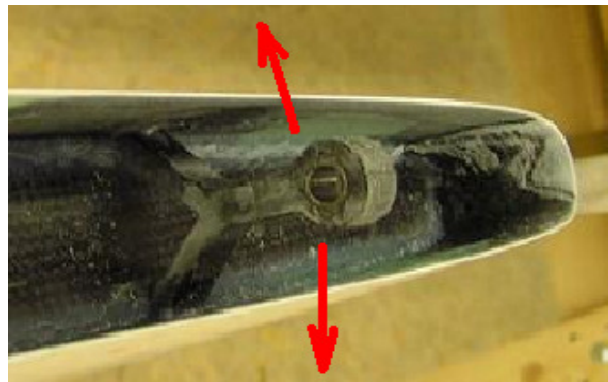
- a) immediately after its receiving – before next flight, if the check according to Mandatory bulletin UFM-13 1/2009 chapter B has not been carried out yet, the check according to articles 1 - 6 of this bulletin must be done (reassembly according to articles 21 - 27). If any damage of elevator hung is found (even if it is damage of a single hung) all described improvements have to be done in full and at all hungs immediately – before the next flight.
- b) If the check according to the Mandatory bulletin UFM-13 1/2009 chapter B was done and no elevator hungs damage was found or the check was done according to previous article a) of this bulletin and no defect was found, then the improvements described in this mandatory bulletin must be done in full at least during the next year inspection, but on 17th August 2010 at the latest.

Aircraft check and elevator hungs improvements on a stabilizer procedure.

1. Dismount the elevator according to the description in Flight manual – aircraft assembly and disassembly.
2. Place the elevator at a suitable place, remove the main middle hinge castle nut security pin, loosen and unscrew the nut and put it at a predefined place (on older aircrafts there is a self locking nut with additional safety Loctitte lock instead of a castle nut with a security pin).



3. Push out carefully the control surface hinges from the stabilizer hungs. Slightly push the control surface in axial direction to the hung axis and at the same time swing the control surface in its deflections. When the middle hinge gets out of the hung then remove the control surface backwards.
4. Check the condition of elevator hungs. Take the hung by hand at the place of turning axis and push slightly (cca 5-10 N) upwards – backwards and check if the hung is hard and if there are no traces of damage or delamination.



Check if there are delamination traces – unstuck hung in the centre according to following picture.



According the next picture check the opposite side when pushing up and down if there is no damage of fabrics or any fissure.

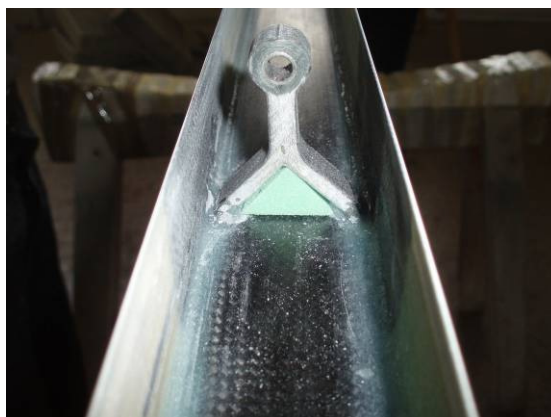


Check gradually all 5 hungs using the same procedure.

5. If traces of delamination are found – unstuck fabric in the centre, middle hung repair must be carried out according to articles 7 - 16 of this bulletin, other hungs repair must be carried out according to articles 16 - 20 of this bulletin.
6. **ATTENTION.** If any fissures are found, please consult the repair procedure or the necessity of whole damaged hung change with a below standing contact person

Repair procedure – middle hung reinforcement.

7. Clean and degrease the elevator hung surface with a suitable agen (nitro-diluent etc.)
8. Sandpaper the hung surface and adjacent surfaces with a sand paper nr. 150. Pay an attention not to grind too much in any place – weak hung.
9. Protect the pin hole from resin pollution with a filler or a sticky tape.
10. Cut out a piece from a foam (see the picture) and fit it to the hole in a centre of middle hung.



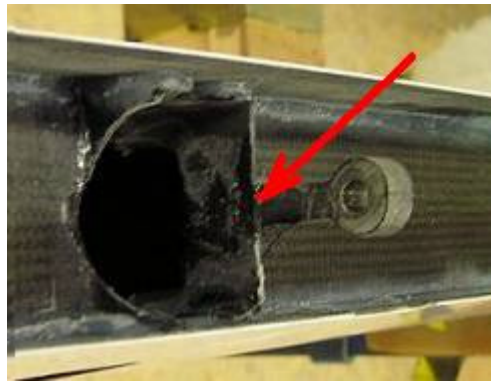
11. Coat the hung and adjacent surfaces with a thin resin.

Mandatory bulletin UFM-13 - 2/2009, UFM-11 – 1/2009

Soak cca 0,5 m of carbon roving 800 tex (use suitable mat – polythene etc.) and wrap it equally around a hung – see the picture.



12. Fill the gap between a hung and a hem of a back stabilizer web with a resin inspissated with a cracked glass or cotton flakes and insert a prepared foam piece into a hole in a hung.



13. Put the inspissated resin also on a foam surface and a hung and over laminate with 3 plies of carbon fabric 160 g/ m² (diagonal fibre direction) pull out the fabric to adjacent surfaces to cca 15 mm distance.



14. Cover fabric edges with a peel of ply (Abrais) and let it hard. When it gets hard just slightly grind and rims and edges. Pay attention to not damage the hung.

Repair procedure of other hungs

15. Clean and degrease the elevator hung surface with a suitable agent (nitro-diluent etc.)
16. Sandpaper the hung surface and adjacent surfaces with a sand paper nr. 150. Pay attention not to grind too much in any place – weak hung.
17. Protect the pin hole from resin pollution with a filler or a sticky tape.
18. Soak cca 0,5 m of carbon roving 800 tex (use suitable mat – polythene etc.), coat the hung with a thin resin and wrap it equally around a hung – see the picture.



19. Let it hard. When it gets hard, don't grind, when it is necessary just slightly neaten an outstanding end of carbon roving.

Assembly procedure

20. Clean the elevator hungs on stabilizer and hung pins on a rudder.
21. Put the elevator into the hungs and check carefully if there is no touch or rubbing between elevator coat cutouts edges and hungs, in all elevator deflections. Enlarge cutouts when it is necessary.
22. Remove the elevator from a stabilizer.
23. Clean again and grease the elevator hungs on stabilizer and hung pins on a rudder. Put the elevator into the hungs, put a washer, screw and tighten a castle nut on a pin of a middle hung and match nut cutout with a safety pin hole. When the nut is tightened check elevator free movements in its deflections. Movement must be free without rubbing. Secure the nut with a new safety pin.
24. Mount the elevator according to procedure described in Flight manual.
25. Check the proper assembly and control function.
26. Check the setting of elevator deflections.
27. Make a record to the aircraft documentation.

Used materials.

Resin L-285, producer MGS Stuttgart (Scheufler in the past)
Hardener L-287, producer MGS Stuttgart (Scheufler in the past)
Carbon fabric 160g/m² structure kept
Carbon roving 800 tex
Foam 8 mm thick Divinycell (Herex)(Conticell)
Cotton flakes
Crushed glass (any glass fabric strands cutted into pieces cca 10 mm long)

Competence for fulfillment of this bulletin.

The check and assembly according to articles 1-6 and 21-27 of this bulletin can be done by every user of an aircraft.

Hung improvements according to articles 7 - 20 of this bulletin can be done only by service authorised by Urban Air Mr. Karel Faltus or approved worker of succession company of Urban Air s.r.o. in bankrupt, Urban Air dealer in each country, a service or a person recommended by a dealer who has experience with production and a service of composite airplanes.

Appendix: - no appendix

For any other information please contact :

URBAN Air s.r.o. (in bankrupt)
Authorised service - Karel Faltus
tel: +420 604 272 154

E-mail: jkmentova@hotmail.com

In Ústí nad Orlicí 17.8.2009

Miloš Hunka