SERVICE BULLETIN no. M ATL – 03 – 09

CHANGE OF ATL LOGBOOK COPY ISSUE

1. CONCERNS: Emergency parachutes:
   ATL – 88, Type approval to use in civil aviation S-101-02/15-92,
   ATL – 88/90, Type approval to use in civil aviation S-103-02/46-96,
   ATL – 88/92 – S, Type approval to use in civil aviation S-102-02/44-96,
   ATL – 88/98 – S, Agreement with product use in civil aviation S- 82- 03,
   ATL – 88 – 1, ETSO Authorization: EASA.210.1011 Rev. A,
   ATL – 88/90 – 1, ETSO Authorization: EASA.210.1011 Rev. A,

2. REASON: Conditions update for issuing ATL parachutes logbook copy.

3. PROCEEDING: In case of logbook loss, visual check of the parachute will be carried out by an authorized person from producer (see attachment no. 1). The check will be connected with a note about the parachute condition into Protocol of parachute inspection to issue parachute logbook copy (see attachment no. 2). Record will be sent to producer and on the basis of satisfactory result of such record, producer issues a new parachute logbook with a sign „DUPLICATE“.
   Visual inspection may be also carried out at the producer and in such a case; the note of parachute condition is stated in Check list.
   In case that the parachutes are damaged, where the character of damage (stains of unknown origin, considerable burns, shifts of thread in fabric, damaged lines, worn out straps or other signs of great damage) supposes changes of mechanical-physical conditions of materials, the producer carries out tests of mechanical-physical conditions of parachute materials.
   Provided that the parachute will require repair, producer will do so on the basis of agreement with user.

4. APPROVAL: This Service bulletin states change of ATL parachute logbook copy issue as minor change of technical conditions TPF 01 – 5348 – 89 of ATL emergency parachutes. Change of parachute logbook issue was approved by Project organization by MarS, a.s. Jevíčko on the basis of positive results of mechanical-physical tests, analysis and material analysis after 15 years lifetime.
5. VALIDITY: From issue date.

6. ATTACHMENTS: Attachment no. 1 - ATL emergency parachute check proceedings for parachute logbook copy issue.

Attachment no. 2 - Inspection procedure of emergency parachute of ATL line to issue parachute logbook copy

7. ISSUE DATE: In Jevíčko on 18th Nov 2009

Ing. Jaroslav Sedlák
Head of technical department MarS a.s. Jevíčko

Stamp and signature:
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Inspection procedure of emergency parachute of ATL line to issue parachute logbook copy

1 Check completeness of emergency parachute completion.

Completeness of emergency parachute completion should be checked according to Technical description – instructions for operation and maintenance of applicable type of parachute line ATL, Chapter I, point 4.

2 Check condition of all individual parachute parts.

Inspection procedure follows Inspection procedure of parachute parts before packing for use.

2.1 Inspection of individual parachute parts.

Individual parts of parachute should be checked in the following order:

a. pilot chute
b. connecting line
c. canopy with suspension lines
d. harness
e. parachute container
f. release
g. portable bag

2.1.1 Inspection description:

ad 2.1 a) pilot chute

Check, if fabric, edging, seams and metal bushings on edgings are not damaged. If the spring is evidently deformed or broken, pilot chute should be replaced. Check sewing of edgings with bushings to the spring and their position in the spring basis center.

ad 2.1 b) connecting line

Check for damage of hollow and sewing. The damaged connecting line replay by a new line.

ad 2.1 c) canopy with suspension lines

Canopy should be checked while stretched out, best against light. Check for fabric, edging and seams damage. Consequently suspension and steering lines should be checked.
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Inspection procedure:

- pole opening lines (sewing);
- sewing of edging – pole opening edging, carrying edgings from pole opening to lower edge, circle edging, lower edge edging;
- sewing of suspension lines – on canopy, on harness;
- inspection of canopy fabric in fields between lines no. 1 to 20.

ad 2.1 d) harness

Check completeness of straps and sewing, release pocket and buckle condition and function.

- straps must not be damaged in any way on any of their parts;
- firm sawing of harness must be compact and without damage in all parts;
- metal parts (buckles have to function well, without any evident deformations and signs of corrosion or any other surface damage)

ad 2.1 e) parachute container

Check for fabric, edging and braces damage and for condition of metal bushing. Special attention has to be paid to closing line – if damaged, it is necessary to replace it.

- Fabric and edging must not be damaged;
- Braces without cracks and fractures;
- Metal bushings in flaps without deformation, corrosion, sharp edges in their passing part.

ad 2.1 f) release

Check condition of release strap and needles (rust, notch). Damaged release is replaced by a new

- strap without deformation, compact without fractures (rolls of strap not damaged)
- needles without deformation
- connection of needles with strap – not deformed, strap of whipping has to be linked up by tin or pressed.

ad 2.1 g) portable bag

- Check for damage of fabric (stains), edging of handles and zip fastener condition.
3 Evaluation of parachute airworthiness for issue of logbook copy.

3.1 Parachute is worthy

All parts of parachute fulfill requirements for flawless function and parachute is fit to be packed and for further use.

Parachute is also accepted as airworthy if its main parts are suitable, provide flawless function and some of the damaged parts, which are replaceable, are replaced by new parts. Note of such fact is stated in Note section. After replacement of damaged part, parachute is functional and suitable for packing and further use.

3.2 Parachute is not fit

Some of the main parts of the complete or the whole complete are

- damaged:
such unfit parachute is fixed by the producer in accordance with repair conditions. After repair the parachute is functional and suitable for packing and further use.

- greatly stained, not well maintained and looked after:
If the parachutes show damage, in which case the character of damage (stains of unknown origin, considerable burns, shifts of threads in the fabric, line damage, worn-out straps or other signs of great wear) supposes changes of mechanical and physical conditions of materials. On the basis of inspection and after potential repair, parachute is approved by the producer to be suitable for further use. In case of unsatisfactory mechanical-technical tests, parachute is excluded from function for good without any chance of repair. Parachute is marked by a sign „EXCLUDED“ on the canopy by the lower edge, between lines no. 1 and 20 and on parachute cover on mark tag. Front page of parachute logbook is marked the same way.

4 Results of parachute inspection should be noted in Protocol of parachute inspection to issue parachute logbook copy. The protocol should be sent to the producer by post, fax or email with the requirement of issuing parachute logbook copy.

5 Inspection result is noted by the producer into the checked parachute logbook copy. Protocol of parachute inspection is stored in MarS a.s. Jevíčko for at least the whole lifetime of inspected parachute.
Protocol of parachute inspection to issue parachute logbook copy

<table>
<thead>
<tr>
<th>Parachute type mark:</th>
<th>Parachute production no.:</th>
<th>Parachute production date:</th>
<th>Disagreement description / note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

| 1. Pilot chute       | suitable                   | Unsuitable                  |                                |
| Type mark:          |                           |                             |                                |
| 2. Connecting line  | suitable                   | Unsuitable                  |                                |
| Type mark:          |                           |                             |                                |
| 3. Canopy           | suitable                   | Unsuitable                  |                                |
| Type mark:          |                           |                             |                                |
| 4. Harness          | suitable                   | Unsuitable                  |                                |
| Type mark:          |                           |                             |                                |
| 5. Parachute container| suitable                 | Unsuitable                  |                                |
| Type mark:          |                           |                             |                                |
| 6. Release          | suitable                   | Unsuitable                  |                                |
| Type mark:          |                           |                             |                                |
| 7. Portable bag     | suitable                   | Unsuitable                  |                                |
| Type mark:          |                           |                             |                                |
| 8. **Total parachute condition** | suitable | Unsuitable |                                |

Parachute is checked according to Inspection procedure of emergency parachute line ATL and it is suitable / unsuitable for issue of parachute logbook copy.

Place: Date:

Certificate no.: Data for sending the protocol:

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569 43 Jeviško

Name, surname, signature Česká Republika

Note: For data suitable / unsuitable score out a invalid data.