ANNEX

Annex I (Part-M) to Regulation (EU) No 1321/2014 is amended as follows:

(a) Point M.A.606(g) is replaced by the following:

'(g) The maintenance organisation shall have sufficient certifying staff to issue M.A.612 and M.A.613 certificates of release to service for aircraft and components. They shall comply with the following requirements:

1. Annex III (Part-66) in the case of aircraft; and

2. Article 5(6) of this Regulation in the case of components.'

Annex II (Part-145) to Regulation (EU) No 1321/2014 is amended as follows:

(a) Points 145.A.30(f), (g), (h) and (i) are replaced by the following:

'(f) The organisation shall ensure that personnel who carry out and/or control a continued-airworthiness non-destructive test of aircraft structures and/or components are appropriately qualified for the particular non-destructive test in accordance with the European or equivalent standard recognised by the Agency. Personnel who carry out any other specialised task shall be appropriately qualified in accordance with officially recognised standards. By derogation from this point, those personnel specified in points (g), (h)(1) and (h)(2), qualified in category B1, B3 or L in accordance with Annex III (Part-66), may carry out and/or control colour contrast dye penetrant tests.

(g) Any organisation maintaining aircraft, except where stated otherwise in point (j), shall in the case of aircraft line maintenance, have appropriate aircraft-rated certifying staff qualified as category B1, B2, B2L, B3 and L, as appropriate, in accordance with Annex III (Part-66) and point 145.A.35.

In addition such organisations may also use appropriately task-trained certifying staff holding the privileges described in points 66.A.20(a)(1) and 66.A.20(a)(3)(ii) and qualified in accordance with Annex III (Part-66) and point 145.A.35 to carry out minor scheduled line maintenance and simple defect rectification. The availability of such certifying staff shall not replace the need for category B1, B2, B2L, B3 and L certifying staff, as appropriate.

(h) Any organisation maintaining aircraft, except where stated otherwise in point (j), shall:

1. in the case of base maintenance of large aircraft, have appropriate aircraft-type-rated certifying staff, qualified as category C in accordance with Part-66 and 145.A.35. In addition, the organisation shall have sufficient aircraft-type-rated staff qualified as category B1 and B2, as appropriate, in accordance with Part-66 and point 145.A.35 to support the category C certifying staff.

(i) B1 and B2 support staff shall ensure that all relevant tasks or inspections have been carried out to the required standard before the category C certifying staff issues the certificate of release to service.

(ii) The organisation shall maintain a register of any such B1 and B2 support

staff.

(iii) The category C certifying staff shall ensure that compliance with point (h)(1)(i) has been met and that all work required by the customer has been accomplished during the particular base maintenance check or work package, and shall also assess the impact of any work not carried out, with a view to either requiring its accomplishment or agreeing with the operator to defer such work to another specified check or time limit.

2. in the case of base maintenance of aircraft other than large have either:

(i) appropriate aircraft-rated certifying staff, qualified as category B1, B2, B2L, B3 and L, as appropriate, in accordance with Annex III (Part-66) and point 145.A.35; or

(ii) appropriate aircraft-rated certifying staff, qualified in category C and assisted by support staff, as specified in point 145.A.35(a)(i).

(i) Component certifying staff shall be qualified in accordance with Article 5(6) of this Regulation and point 145.A.35.'

(b) Points 145.A.35(a) and (b) are replaced by the following:

'(a) In addition to the appropriate requirements of points 145.A.30(g) and (h), the organisation shall ensure that certifying staff and support staff have an adequate understanding of the relevant aircraft and/or components to be maintained together with the associated organisation procedures. In the case of certifying staff, this shall be accomplished before the issue or reissue of the certification authorisation.

1. 'Support staff' means those staff holding an aircraft maintenance licence under Annex III (Part-66) in category B1, B2, B2L, B3 and/or L with the appropriate aircraft ratings, working in a base maintenance environment while not necessarily holding certification privileges.

2. 'Relevant aircraft and/or components', means those aircraft or components specified in the particular certification authorisation.

3. 'Certification authorisation' means the authorisation issued to certifying staff by the organisation and which specifies the fact that those staff may sign certificates of release to service within the limitations stated in such authorisation on behalf of the approved organisation.

(b) Excepting those cases listed in points 145.A.30(j) and 66.A.20(a)3(ii), the organisation may only issue a certification authorisation to certifying staff in relation to the basic categories or subcategories and, except for the category A licence, any type rating listed on the aircraft maintenance licence as required by Annex III (Part-66), subject to the licence remaining valid throughout the validity period of the authorisation and to the certifying staff remaining in compliance with Annex III (Part-66).'

Annex III (Part-66) to Regulation (EU) No 1321/2014 is amended as follows:

(a) In 'Table of Contents', the following point 66.B.111 is added between points 66.B.110 and 66.B.115:

'**66.B.111 Procedure for the change of an aircraft maintenance licence in category B2L to include an additional system rating**'

(b) In 'Table of Contents', the following appendices are added after Appendix VI:

— 'Appendix VII — Basic knowledge requirements for category L aircraft maintenance licence'; and

— 'Appendix VIII — Basic examination standards for category L aircraft maintenance licence'.

(c) Point 66.A.3 is replaced by the following:

'66.A.3 **Licence categories and subcategories**

Aircraft maintenance licences include the following categories and, when applicable, subcategories and system ratings:

(a) Category A, divided into the following subcategories:

— A1 Aeroplanes Turbine

— A2 Aeroplanes Piston

— A3 Helicopters Turbine

— A4 Helicopters Piston

(b) Category B1, divided into the following subcategories:

— B1.1 Aeroplanes Turbine

— B1.2 Aeroplanes Piston

— B1.3 Helicopters Turbine

— B1.4 Helicopters Piston

(c) Category B2

The B2 licence is applicable to all aircraft.

(d) Category B2L

The B2L licence is applicable to all aircraft other than those in Group 1 and is divided into the following 'system ratings':

— communication/navigation (com/nav),

— instruments,

— autoflight,

— surveillance, and

— airframe systems.

A B2L licence shall contain, as a minimum, one system rating.

(e) Category B3

The B3 licence is applicable to piston-engine non-pressurised aeroplanes of 2 000 kg Maximum Take-off Mass (MTOM) and below.

(f) Category L, divided into the following subcategories:

— L1C: composite sailplanes,

— L1: sailplanes,

— L2C: composite powered sailplanes and composite ELA1 aeroplanes,

— L2: powered sailplanes and ELA1 aeroplanes,

— L3H: hot-air balloons,

— L3G: gas balloons,

— L4H: hot-air airships,

— L4G: ELA2 gas airships, and

— L5: gas airships other than ELA2.

(g) Category C

The C licence is applicable to aeroplanes and helicopters.'

(d) Point 66.A.5 is replaced by the following:

'For the purpose of ratings on aircraft maintenance licences, aircraft shall be classified into the following groups:

1. Group 1: complex motor-powered aircraft, helicopters with multiple engines, aeroplanes with maximum certified operating altitude exceeding FL290, aircraft equipped with fly-by-wire systems, gas airships other than ELA2 and other aircraft requiring an aircraft type rating when defined as such by the Agency.

   The Agency may decide to classify into Group 2, Group 3 or Group 4, as appropriate, an aircraft which meets the conditions above, if it finds that the lower complexity of the particular aircraft justifies so.

2. Group 2: aircraft other than those in Group 1 belonging to the following subgroups:

   — subgroup 2a: single turboprop engine aeroplanes;

   — subgroup 2b: single turbine engine helicopters; and

   — subgroup 2c: single piston engine helicopters.

3. Group 3: piston engine aeroplanes other than those in Group 1.

4. Group 4: sailplanes, powered sailplanes, balloons and airships, other than those in Group 1.'

(e) Point 66.A.20(a)(4) and (5) are replaced by the following points (4), (5), (6) and (7):

‘4. A category B2L aircraft maintenance licence shall permit the holder to issue certificates of release to service and to act as B2L support staff for the following:

— maintenance performed on electrical systems;

— maintenance performed on avionics systems within the limits of the system ratings specifically endorsed on the licence, and

— when holding the ‘airframe system’ rating, performance of electrical and avionics tasks within power plant and mechanical systems, requiring only simple tests to prove their serviceability.

5. A category B3 aircraft maintenance licence shall permit the holder to issue certificates of release to service and to act as B3 support staff for the following:

— maintenance performed on aeroplane structure, power plant and mechanical and electrical systems; and

— work on avionics systems requiring only simple tests to prove their serviceability and not requiring troubleshooting.

6. A category L aircraft maintenance licence shall permit the holder to issue certificates of release to service and to act as L support staff for the following:

— maintenance performed on aircraft structure, power plant and mechanical and electrical systems;

— work on radio, Emergency Locator Transmitters (ELT) and transponder systems; and

— work on other avionics systems requiring simple tests to prove their serviceability.

Subcategory L2 includes subcategory L1. Any limitation to subcategory L2 in accordance with point 66.A.45(h) becomes also applicable to subcategory L1.

Subcategory L2C includes subcategory L1C.

7. A category C aircraft maintenance licence shall permit the holder to issue certificates of release to service following base maintenance of the aircraft. The privileges apply to the aircraft in its entirety.’

(f) Point 66.A.25(a) is replaced by the following:

‘(a) For licences other than B2L and L, an applicant for an aircraft maintenance licence, or for the addition of a category or subcategory to such a licence, shall demonstrate by examination a level of knowledge of the appropriate subject modules in accordance with Appendix I to Annex III (Part-66). The examination shall comply with the standard described in Appendix II to Annex III (Part-66) and shall be conducted either by a training organisation appropriately approved in accordance with Annex IV (Part-147), or by the competent authority.’

(g) Point 66.A.25(b) and (c) are replaced by the following points (b), (c), (d), (e) and (f):

‘(b) An applicant for an aircraft maintenance licence in category L within a given subcategory, or for the addition of a different subcategory, shall demonstrate by examination a level of knowledge of the appropriate subject modules in accordance with Appendix VII to Annex III (Part-66). The examination shall comply with the standard described in Appendix VIII to Annex III (Part-66) and shall be conducted by a training organisation appropriately approved in accordance with Annex IV (Part-147), by the competent authority or as agreed by the competent authority.

The holder of an aircraft maintenance licence in category/subcategory B1.2 or B3 is deemed to meet the basic knowledge requirements for a licence in subcategories L1C, L1, L2C and L2.

The basic knowledge requirements for subcategory L4H include the basic knowledge requirements for subcategory L3H.

The basic knowledge requirements for subcategory L4G include the basic knowledge requirements for subcategory L3G.

(c) An applicant for an aircraft maintenance licence in category B2L for a particular ‘system rating’, or for the addition of another ‘system rating’, shall demonstrate by examination a level of knowledge of the appropriate subject modules in accordance with Appendix I to Annex III (Part-66). The examination shall comply with the standard described in Appendix II to Annex III (Part-66) and shall be conducted either by a training organisation appropriately approved in accordance with Annex IV (Part-147), or by the competent authority.

(d) The training courses and examinations shall have been passed within 10 years prior to the application for an aircraft maintenance licence or the addition of a category or subcategory to such a licence. Should this not be the case, examination credits may be obtained in accordance with point (e) below.

(e) The applicant may apply to the competent authority for full or partial examination credits for the basic knowledge requirements for:

1. basic knowledge examinations that do not meet the requirement described in point (d) above; and

2. any other technical qualification considered by the competent authority to be equivalent to the knowledge standard of Annex III (Part-66).

Credits shall be granted in accordance with Subpart E of Section B of this Annex (Part-66).

(f) Credits expire 10 years after they were granted to the applicant by the competent authority. The applicant may apply for new credits after expiration.’

(h) Points 66.A.30(a)(3), (4) and (5) are renumbered as (5), (6) and (7) respectively, and the following new points (3) and (4) are added:

‘3. for category B2L:

(i) three years of practical maintenance experience in operating aircraft, covering the corresponding system rating(s), if the applicant has no previous relevant technical training; or

(ii) two years of practical maintenance experience in operating aircraft, covering the corresponding system rating(s), and completion of training, considered relevant by the competent authority, as a skilled worker in a technical trade; or

(iii) one year of practical maintenance experience in operating aircraft, covering the corresponding system rating(s), and completion of a Part-147 approved basic training course.

For the addition of (a) new system rating(s) to an existing B2L licence, three months of practical maintenance experience relevant to the new system rating(s) shall be required for each system rating added.

4. for category L:

(i) two years of practical maintenance experience in operating aircraft covering a representative cross section of maintenance activities in the corresponding subcategory;

(ii) as a derogation from paragraph 4(i) above, one year of practical maintenance experience in operating aircraft covering a representative cross section of maintenance activities in the corresponding subcategory, subject to the introduction of the limitation described in point 66.A.45(h)(3).

For the inclusion of an additional subcategory in an existing L licence, the experience required by paragraphs 4(i) and 4(ii) above shall be 12 and 6 months respectively.

The holder of an aircraft maintenance licence in category/subcategory B1.2 or B3 is deemed to meet the basic experience requirements for a licence in subcategories L1C, L1, L2C and L2.'

(i) Point 66.A.45 is replaced by the following:

'66.A.45 **Endorsement with aircraft ratings**

(a) In order to be entitled to exercise certification privileges on a specific aircraft type, the holder of an aircraft maintenance licence needs to have their licence endorsed with the relevant aircraft ratings:

— For category B1, B2 or C, the relevant aircraft ratings are the following:

1. for Group 1 aircraft, the appropriate aircraft type rating;

2. for Group 2 aircraft, the appropriate aircraft type rating, manufacturer subgroup rating or full subgroup rating;

3. for Group 3 aircraft, the appropriate aircraft type rating or full group rating; and

4. for Group 4 aircraft, for the category B2 licence, the full group rating.

— For category B2L, the relevant aircraft ratings are the following:

1. for Group 2 aircraft, the appropriate manufacturer subgroup rating or full subgroup rating;
2. for Group 3 aircraft, the full group rating; and
3. for Group 4 aircraft, the full group rating.

— For category B3, the relevant rating is 'piston-engine non-pressurised aeroplanes of 2 000 kg MTOM and below'.

— For category L, the relevant aircraft ratings are the following:

1. for subcategory L1C, the rating 'composite sailplanes';
2. for subcategory L1, the rating 'sailplanes';
3. for subcategory L2C, the rating 'composite powered sailplanes and composite ELA1 aeroplanes';
4. for subcategory L2, the rating 'powered sailplanes and ELA1 aeroplanes';
5. for subcategory L3H, the rating 'hot-air balloons';
6. for subcategory L3G, the rating 'gas balloons';
7. for subcategory L4H, the rating 'hot-air airships';
8. for subcategory L4G, the rating 'ELA2 gas airships';
9. for subcategory L5, the appropriate airship type rating.

— For category A, no rating is required, subject to compliance with the requirements of point 145.A.35 of Annex II (Part-145).

(b) The endorsement of aircraft type ratings requires the satisfactory completion of:

— the relevant category B1, B2 or C aircraft type training described in Appendix III to Annex III (Part-66); or

— in the case of gas airship type ratings on a B2 or L5 licence, a type training approved by the competent authority in accordance with point 66.B.130.

(c) For other than category C licences, in addition to the requirements of point (b) above, the endorsement of the first aircraft type rating within a given category/subcategory requires satisfactory completion of the corresponding on-the-job training. This on-the-job training shall comply with Appendix III to Annex III (Part-66), except in the case of gas airships, where it shall be directly approved by the competent authority.

(d) By derogation from points (b) and (c) above, for Group 2 and 3 aircraft, aircraft type ratings may also be endorsed on a licence after:

— satisfactory completion of the relevant category B1, B2 or C aircraft type examination described in Appendix III to this Annex (Part-66); and

— in the case of B1 and B2 category, demonstration of practical experience in the aircraft type. In that case, the practical experience shall include a representative cross section of maintenance activities relevant to the licence category.

In the case of a category C rating, for a person qualified by holding an academic degree as specified in point 66.A.30(a)(7), the first relevant aircraft type examination shall be at the category B1 or B2 level.

(e) For Group 2 aircraft:

1. the endorsement of manufacturer subgroup ratings for category B1 and C licence holders requires complying with the aircraft type rating requirements for at least two aircraft types from the same manufacturer, which combined are representative of the applicable manufacturer subgroup;

2. the endorsement of full subgroup ratings for category B1 and C licence holders requires complying with the aircraft type rating requirements for at least three aircraft types from different manufacturers, which combined are representative of the applicable subgroup;

3. the endorsement of manufacturer subgroup and full subgroup ratings for category B2 and B2L licence holders requires demonstration of practical experience which shall include a representative cross section of maintenance activities relevant to the licence category and to the applicable aircraft subgroup and, in the case of the B2L licence, relevant to the applicable system rating(s); and

4. by derogation from point (e)(3) above, the holder of a B2 or B2L licence, endorsed with a full subgroup 2b, is entitled to be endorsed with a full subgroup 2c.

(f) For Group 3 and 4 aircraft:

1. the endorsement of the full Group 3 rating for category B1, B2, B2L and C licence holders and the endorsement of the full Group 4 rating for B2 and B2L licence holders require demonstration of practical experience, which shall include a representative cross section of maintenance activities relevant to the licence category and to Group 3 or 4, as applicable;

2. for category B1, unless the applicant provides evidence of appropriate experience, Group 3 rating shall be subject to the following limitations, which shall be endorsed on the licence:

   — pressurised aeroplanes,

   — metal-structure aeroplanes,

   — composite-structure aeroplanes,

   — wooden-structure aeroplanes, and

   — aeroplanes with metal-tubing structure covered with fabric;

3. by derogation from point (f)(1) above, the holder of a B2L licence, endorsed with a full subgroup 2a or 2b, is entitled to be endorsed with Groups 3 and 4.

(g) For the B3 licence:

1. the endorsement of the rating ‘piston engine non-pressurised aeroplanes of 2 000 kg MTOM and below’ requires demonstration of practical experience,

which shall include a representative cross section of maintenance activities relevant to the licence category; and

2. unless the applicant provides evidence of appropriate experience, the rating referred to in point 1 shall be subject to the following limitations, which shall be endorsed on the licence:

— wooden-structure aeroplanes,

— aeroplanes with metal-tubing structure covered with fabric,

— metal-structure aeroplanes, and

— composite-structure aeroplanes.

(h) For all L licence subcategories, other than L5:

1. the endorsement of ratings requires demonstration of practical experience which shall include a representative cross section of maintenance activities relevant to the licence subcategory;

2. unless the applicant provides evidence of appropriate experience, the ratings shall be subject to the following limitations, which shall be endorsed on the licence:

(i) for ratings ‘sailplanes’ and ‘powered sailplanes and ELA1 aeroplanes’:

— wooden-structure aircraft covered with fabric,

— aircraft with metal-tubing structure covered with fabric,

— metal-structure aircraft,

— composite-structure aircraft, and

(ii) for the rating ‘gas balloons’:

— other than ELA1 gas balloons; and

3. if the applicant has only provided evidence of one-year experience in accordance with the derogation contained in point 66.A.30(a)(4)(ii), the following limitation shall be endorsed on the licence:

‘complex maintenance tasks described in Appendix VII to Annex I (Part-M), standard changes described in point 21.A.90B (Part-21) and standard repairs described in point 21.A.431B (Part-21).’

The holder of an aircraft maintenance licence in subcategory B1.2 endorsed with the Group 3 rating, or in category B3 endorsed with the rating ‘piston engine non-pressurised aeroplanes of 2 000 kg MTOM and below’, is deemed to meet the requirements for the issuance of a licence in subcategories L1 and L2 with the corresponding full ratings and with the same limitations as the B1.2/B3 licence held.’

(j) Point 66.A.50(a) is replaced by the following:

‘(a) Limitations introduced on an aircraft maintenance licence are exclusions from the certification privileges and, in the case of limitations referred to in point 66.A.45, they affect the aircraft in its entirety.’

(k) Points 66.A.70(c) and (d) are replaced by the following:

‘(c) Where necessary, the aircraft maintenance licence shall contain limitations in accordance with point 66.A.50 to reflect the differences between:

1. the scope of the certifying staff qualification valid in the Member State before the entry into force of the applicable Part-66 licence category/subcategory; and

2. the basic knowledge requirements and the basic examination standards laid down in Appendices I and II to this Annex (Part-66).

(d) By derogation from point (c), for aircraft other than large which are not involved in commercial air transport and for balloons, sailplanes, motor-powered sailplanes and airships, the aircraft maintenance licence shall contain limitations in accordance with point 66.A.50 to ensure that the certifying staff privileges valid in the Member State before the entry into force of the applicable Part-66 licence category/subcategory and those of the converted Part-66 aircraft maintenance licence remain the same.’

(l) Point 66.B.100(b) is replaced by the following:

‘(b) The competent authority shall verify an applicant's examination status and/or confirm the validity of any credits to ensure that all module requirements of Appendix I or Appendix VII, as applicable, have been met as required by this Annex (Part-66).’

(m) Point 66.B.110 is replaced by the following:

‘66.B.110 **Procedure for the change of an aircraft maintenance licence to include an additional basic category or subcategory**

(a) At the completion of the procedures specified in points 66.B.100 or 66.B.105, the competent authority shall endorse the additional basic category, subcategory or, for category B2L, system rating(s) on the aircraft maintenance licence by stamp and signature or shall reissue the licence.

(b) The record system of the competent authority shall be changed accordingly.

(c) Upon request by the applicant, the competent authority shall replace a licence in category B2L with a licence in category B2 endorsed with the same aircraft rating(s) when the holder has demonstrated:

1. by examination the differences between the basic knowledge corresponding to the B2L licence held and the basic knowledge of the B2 licence, as described in Appendix I and;

2. the practical experience required in Appendix IV.

(d) In the case of a holder of an aircraft maintenance licence in subcategory B1.2 endorsed with the Group 3 rating or in category B3 endorsed with the rating ‘piston engine non-

pressurised aeroplanes of 2 000 kg MTOM and below', the competent authority shall issue, upon application, a fully rated licence in subcategories L1 and L2, with the same limitations as the B1.2/B3 licence held.'

(n) A new point 66.B.111 is added as follows:

'66.B.111 **Procedure for the change of an aircraft maintenance licence in category B2L to include an additional system rating**

(a) When satisfied by the demonstration of knowledge required by 66.A.25(c) and of the experience required for the addition of a system rating specified in 66.A.30(a)3, the competent authority shall endorse the additional system rating on the aircraft maintenance licence for the relevant aircraft rating by stamp and signature or shall reissue the licence.

(b) The record system of the competent authority shall be changed accordingly.'

(o) Point 66.B.115(f) is replaced by the following:

'(f) Compliance with the practical elements of the type training shall be demonstrated:

(i) by the provision of detailed practical training records or a logbook provided by the organisation which delivered the course directly approved by the competent authority in accordance with point 66.B.130; or

(ii) where available, by a training certificate, covering the practical training element, issued by a maintenance training organisation appropriately approved in accordance with Annex IV (Part-147).'

(p) Point 66.B.125(b)(1) is replaced by the following:

'1. for category B1 or C:

— helicopter piston engine, full group: converted to 'full subgroup 2c' plus the aircraft type ratings for those single piston engine helicopters which are in Group 1;

— helicopter piston engine, manufacturer group: converted to the corresponding 'manufacturer subgroup 2c' plus the aircraft type ratings for those single piston engine helicopters of that manufacturer which are in Group 1;

— helicopter turbine engine, full group: converted to 'full subgroup 2b' plus the aircraft type ratings for those single turbine engine helicopters which are in Group 1;

— helicopter turbine engine, manufacturer group: converted to the corresponding 'manufacturer subgroup 2b' plus the aircraft type ratings for those single turbine engine helicopters of that manufacturer which are in Group 1;

— aeroplane single piston engine — metal structure, either full group or manufacturer group: converted to 'full group 3'. For the B1 licence, the following limitations shall be included: composite-structure aeroplanes, wooden-structure aeroplanes, and metal-tubing and fabric aeroplanes;

— aeroplane multiple piston engines — metal structure, either full group or manufacturer group: converted to ‘full group 3’ plus the aircraft type ratings for those aeroplanes with multiple piston engines of the corresponding full/manufacturer group which are in Group 1. For the B1 licence, the following limitations shall be included: composite-structure aeroplanes, wooden-structure aeroplanes and metal-tubing and fabric aeroplanes;

— aeroplane single piston engine — wooden structure, either full group or manufacturer group: converted to ‘full group 3’. For the B1 licence, the following limitations shall be included: pressurised aeroplanes, metal-structure aeroplanes, composite-structure aeroplanes and metal-tubing and fabric aeroplanes;

— aeroplane multiple piston engines — wooden structure, either full group or manufacturer group: converted to ‘full group 3’. For the B1 licence, the following limitations shall be included: pressurised aeroplanes, metal-structure aeroplanes, composite-structure aeroplanes and metal-tubing and fabric aeroplanes;

— aeroplane single piston engine — composite structure, either full group or manufacturer group: converted to ‘full group 3’. For the B1 licence, the following limitations shall be included: pressurised aeroplanes, metal-structure aeroplanes, wooden-structure aeroplanes and metal-tubing and fabric aeroplanes;

— aeroplane multiple piston engines — composite structure, either full group or manufacturer group: converted to ‘full group 3’. For the B1 licence, the following limitations shall be included: pressurised aeroplanes, metal-structure aeroplanes, wooden-structure aeroplanes and metal-tubing and fabric aeroplanes;

— aeroplane turbine — single engine, full group: converted to ‘full sub-group 2a’ plus the aircraft type ratings for those single turboprop aeroplanes which did not require an aircraft type rating in the previous system and are in Group 1;

— aeroplane turbine — single engine, manufacturer group: converted to the corresponding ‘manufacturer subgroup 2a’ plus the aircraft type ratings for those single turboprop aeroplanes of that manufacturer which did not require an aircraft type rating in the previous system and are in Group 1;

— aeroplane turbine — multiple engines, full group: converted to the aircraft type ratings for those aeroplanes with multiple turboprop engines which did not require an aircraft type rating in the previous system.’

(q) Point 66.B.130 is replaced by the following:

‘66.B.130 **Procedure for the direct approval of aircraft type training**

In the case of type training for aircraft other than airships, the competent authority may approve aircraft type training not conducted by a maintenance training organisation approved in accordance with Annex IV (Part-147), pursuant to point 1 of Appendix III to this Annex (Part-66). In such case, the competent authority shall have a procedure to ensure that the aircraft type training complies with Appendix III to this Annex (Part-66).

In the case of type training for airships in Group 1, the courses shall be directly approved by the competent authority in all cases. The competent authority shall have a procedure to ensure that the syllabus of the airship-type training covers all the elements contained in the maintenance data from the Design Approval Holder (DAH).'

(r) Point 66.B.200(c) is replaced by the following:

'(c) Basic examinations shall follow the standard specified in Appendices I and II or in Appendices VII and VIII to this Annex (Part-66), as applicable.'

(s) In point 66.B.305(b), 'Appendix III' is replaced by 'Appendix I'

(t) Point 66.B.405 is replaced by the following:

'66.B.405 **Examination credit report**

(a) The credit report shall include a comparison between:

(i) the modules, submodules, subjects and knowledge levels contained in Appendices I or VII to this Annex (Part-66), as applicable; and

(ii) the syllabus of the technical qualification concerned, relevant to the particular category being sought.

This comparison shall state if compliance is demonstrated and contain the justifications for each statement.

(b) Credits for examinations, other than basic knowledge examinations carried out in maintenance training organisations approved in accordance with Annex IV (Part-147), can only be granted by the competent authority of the Member State in which the qualification has been obtained, unless a formal agreement exists with such competent authority advising otherwise.

(c) No credit can be granted unless there is a statement of compliance for each module and submodule, indicating where the equivalent standard can be found in the technical qualification.

(d) The competent authority shall check on a regular basis whether:

(i) the national qualification standard; or

(ii) Appendices I or VII to this Annex (Part-66), as applicable

have changed and assess if changes to the credit report are consequently required. Such changes shall be documented, dated and recorded.'

(u) Point 66.B.410(c) is replaced by the following:

'(c) Upon expiration of the credits, the applicant may apply for new credits. The competent authority shall extend the validity of the credits for an additional period of 10 years without further consideration if the basic knowledge requirements defined in Appendices I or VII to this Annex (Part-66), as applicable, have not been changed.'

(v) The title and the first paragraph of point 1 of Appendix I are replaced by the following:

'*Appendix I*

Basic Knowledge Requirements
(except for category L licence)

1. **Knowledge levels for category A, B1, B2, B2L, B3 and C aircraft maintenance licences**

Basic knowledge for categories A, B1, B2, B2L and B3 is indicated by knowledge levels (1, 2 or 3) of each applicable subject. Category C applicants shall meet either the category B1 or the category B2 basic knowledge levels.'

(w) Point 2 of Appendix I is replaced by the following:

'2. Modularisation

Qualification on basic subjects for each aircraft maintenance licence category or subcategory shall be in accordance with the following matrix, where applicable subjects are indicated by an 'X':

For categories A, B1 and B3:

Subject module	A or B1 aeroplane with:		A or B1 helicopter with:		B3
	Turbine engine(s)	Piston engine(s)	Turbine engine(s)	Piston engine(s)	Piston engine non-pressurised aeroplanes of 2 000 kg MTOM and below
1	X	X	X	X	X
2	X	X	X	X	X
3	X	X	X	X	X
4	X	X	X	X	X
5	X	X	X	X	X
6	X	X	X	X	X
7A	X	X	X	X	
7B					X
8	X	X	X	X	X
9A	X	X	X	X	
9B					X
10	X	X	X	X	X
11A	X				
11B		X			
11C					X
12			X	X	
13					
14					

15	X		X		
16		X		X	X
17A	X	X			
17B					X

For categories B2 and B2L:

Subject module/submodules	B2	B2L
1	X	X
2	X	X
3	X	X
4	X	X
5	X	X
6	X	X
7A	X	X
7B		
8	X	X
9A	X	X
9B		
10	X	X
11A		
11B		
11C		
12		
13.1 and 13.2	X	X
13.3(a)	X	X (for system rating ‘Autoflight’)
13.3(b)	X	
13.4(a)	X	X (for system rating ‘Com/Nav’)
13.4(b)	X	X (for system rating ‘Surveillance’)

13.4(c)	X	
13.5	X	X
13.6	X	
13.7	X	X (for system rating ‘Autoflight’)
13.8	X	X (for system rating ‘Instruments’)
13.9	X	X
13.10	X	
13.11 to 13.18	X	X (for system rating ‘Airframe systems’)
13.19 to 13.22	X	
14	X	X (for system ratings ‘Instruments’ and ‘Airframe systems’)
15		
16		
17A		
17B		

,

(x) In modules 1, 2, 3, 4, 5, 6, 7A, 8, 9A, 10 and 14 of Appendix I, the content of box

LEVEL
B2

is replaced by the following:

LEVEL
B2 B2L

(y) In module 5 of Appendix I, level ‘1’ is deleted from submodule 5.5(a) for the B3 licence.

(z) In module 7B of Appendix I, level ‘1’ is added to submodule 7.4 for the B3 licence.

(aa) In module 7B, submodule 7.10, of Appendix I, level ‘1’ is replaced by level ‘2’ for the B3 licence.

(ab) In module 11A, submodule 11.8, point (b), of Appendix I, level ‘1’ is replaced by level ‘2’ for the B1.1 licence.

(ac) In module 11A of Appendix I, submodule 11.16 is replaced by the following:

‘11.16 *Pneumatic/Vacuum (ATA 36)*

System lay-out;

Sources: engine/APU (Auxiliary Power Unit), compressors, reservoirs, ground supply;

Pressure and vacuum pumps

Pressure control;

Distribution;

Indications and warnings;

Interfaces with other systems.’

(ad) In module 11A of Appendix I, submodule 11.20 is replaced by the following:

‘11.20 *Cabin Systems (ATA44)*

The units and components which furnish a means of entertaining the passengers and providing communication within the aircraft (Cabin Intercommunication Data System (CIDS)) and between the aircraft cabin and ground stations (Cabin Network Service (CNS)). They include voice, data, music and video transmissions.

CIDS provides an interface between cockpit/cabin crew and cabin systems. These systems support data exchange between the different related Line Replaceable Units (LRUs) and they are typically operated via Flight Attendant Panels (FAPs).

CNS typically consists of a server, interfacing with, among others, the following systems:

— Data/Radio Communication;

— Cabin Core System (CCS);

— In-flight Entertainment System (IFES);

— External Communication System (ECS);

— Cabin Mass Memory System (CMMS);

— Cabin Monitoring System (CMS); and

— Miscellaneous Cabin Systems (MCSs).

CNS may host functions such as:

— access to pre-departure/departure reports;

— e-mail/intranet/internet access; and

— passenger database.’

(ae) In module 11B, submodule 11.8, point (b) of Appendix I, level ‘3’ is replaced by level ‘2’ for the B1.2 licence.

(af) In module 11B of Appendix I, submodule 11.16 is replaced by the following:

‘11.16 *Pneumatic/Vacuum (ATA 36)*

System lay-out;

Sources: engine/APU, compressors, reservoirs, ground supply;

Pressure and vacuum pumps

Pressure control;

Distribution;

Indications and warnings;

Interfaces with other systems.'

(ag) In module 12 of Appendix I, submodule 12.16 is replaced by the following:

'12.16 *Pneumatic/Vacuum (ATA 36)*

System lay-out;

Sources: engine/APU, compressors, reservoirs, ground supply;

Pressure and vacuum pumps

Pressure control;

Distribution;

Indications and warnings;

Interfaces with other systems.'

(ah) Module 13 of Appendix I is replaced by the following:

'MODULE 13 — AIRCRAFT AERODYNAMICS, STRUCTURES AND SYSTEMS

	LEVEL
	B2 B2L
13.1 <u>Theory of Flight</u>	
(a) *Aeroplane Aerodynamics and Flight Controls*	1
Operation and effect of: — roll control: ailerons and spoilers; — pitch control: elevators, stabilators, variable incidence stabilisers and canards; and — yaw control: rudder limiters; Control using elevons, ruddervators; High lift devices: slots, slats, flaps;	

	LEVEL
	B2 B2L
Drag inducing devices: spoilers, lift dumpers, speed brakes; and Operation and effect of trim tabs, servo tabs and control surface bias.	
(b) High-Speed Flight	1
Speed of sound, subsonic flight, transonic flight, supersonic flight; Mach number, critical Mach number.	
(c) Rotary Wing Aerodynamics	1
Terminology; Operation and effect of cyclic, collective and anti-torque controls.	
13.2 Structures — General Concepts	
Fundamentals of Structural Systems	1
Zonal and Station Identification Systems	2
Electrical bonding	2
Lightning strike protection provision.	2
13.3 Autoflight (ATA 22)	
(a)	3
Fundamentals of automatic flight control including working principles and current terminology; Command signal processing; Modes of operation: roll, pitch and yaw channels; Yaw dampers; Stability Augmentation System in helicopters; Automatic trim control; Autopilot navigation aids interface;	
(b)	3
Autothrottle systems; Automatic landing systems: principles and categories, modes of operation, approach,	

	LEVEL
	B2 B2L
glideslope, land, go-around, system monitors and failure conditions.	
13.4 <u>Communication/Navigation (ATA 23/34)</u>	
(a)	3
Fundamentals of radio wave propagation, antennas, transmission lines, communication, receiver and transmitter;	
Working principles of following systems:	
— Very High Frequency (VHF) communication;	
— High Frequency (HF) communication;	
— Audio;	
— Emergency Locator Transmitters (ELTs);	
— Cockpit Voice Recorder (CVR);	
— Very High Frequency Omnidirectional Range (VOR);	
— Automatic Direction Finding (ADF);	
— Instrument Landing System (ILS);	
— Flight Director Systems (FDSs), Distance Measuring Equipment (DME);	
— Area navigation, RNAV systems;	
— Flight Management Systems (FMSs);	
— Global Positioning System (GPS), Global Navigation Satellite Systems (GNSSs);	
— Data Link, Automatic Dependent Surveillance — Broadcast (ADS-B).	
(b)	3
— Air Traffic Control transponder, secondary surveillance radar;	
— Traffic Alert and Collision Avoidance System (TCAS);	
— Weather avoidance radar;	
— Radio altimeter;	
(c)	3
— Microwave Landing System (MLS);	
— Very Low Frequency and hyperbolic navigation (VLF/Omega);	

	LEVEL
	B2 B2L
— Doppler navigation; — Inertial Navigation System (INS); — ARINC (Aircraft Radio Incorporated) communication and reporting.	
13.5 Electrical Power (ATA 24) Batteries installation and operation; Direct Current (DC) power generation; Alternating Current (AC) power generation; Emergency power generation; Voltage regulation; Power distribution; Inverters, transformers, rectifiers; Circuit protection; External/Ground power.	3
13.6 Equipment and Furnishings (ATA 25) Electronic emergency equipment requirements; Cabin entertainment equipment.	3
13.7 Flight Controls (ATA 27) *(a)* Primary controls: aileron, elevator, rudder, spoiler; Trim control; Active load control; High lift devices; Lift dump, speed brakes; System operation: manual, hydraulic, pneumatic; Artificial feel, Yaw damper, Mach trim, rudder limiter, gust locks;	2

	LEVEL
	B2 B2L
Stall protection systems.	
(b) System operation: electrical, fly-by-wire.	3
13.8 Instruments (ATA 31)	3
Classification; Atmosphere; Terminology; Pressure-measuring devices and systems; Pitot-static systems; Altimeters; Vertical-speed indicators; Airspeed indicators; Machmeters; Altitude-reporting/alerting systems; Air data computers; Instrument pneumatic systems; Direct-reading pressure and temperature gauges; Temperature-indicating systems; Fuel-quantity-indicating systems; Gyroscopic principles; Artificial horizons; Slip indicators; Directional gyros; Ground Proximity Warning Systems (GPWSs); Compass systems; Flight Data Recording Systems (FDRSs); Electronic Flight Instrument Systems (EFISs);	

	LEVEL
	B2 B2L
Instrument warning systems including master warning systems and centralised warning panels;	
Stall warning systems and angle of attack-indicating systems;	
Vibration measurement and indication;	
Glass cockpit.	
13.9 Lights (ATA 33)	3
External: navigation, landing, taxiing, ice;	
Internal: cabin, cockpit, cargo;	
Emergency.	
13.10 On-Board Maintenance Systems (ATA 45)	3
Central maintenance computers;	
Data-loading system;	
Electronic-library system;	
Printing system;	
Structure-monitoring system (damage tolerance monitoring).	
13.11 Air Conditioning and Cabin Pressurisation (ATA 21)	
13.11.1 *Air Supply*	2
Sources of air supply including engine bleed, APU and ground cart;	
13.11.2 *Air Conditioning*	
Air-conditioning systems;	2
Air cycle and vapour cycle machines;	3
Distribution systems;	1
Flow, temperature and humidity control system.	3
13.11.3 *Pressurisation*	3

	LEVEL
	B2 B2L
Pressurisation systems; Control and indication including control and safety valves; Cabin pressure controllers.	
13.11.4 *Safety and Warning Devices*	3
Protection and warning devices.	
13.12 Fire Protection (ATA 26)	
(a)	3
Fire and smoke detection and warning systems; Fire-extinguishing systems; System tests.	
(b)	1
Portable fire extinguisher.	
13.13 Fuel Systems (ATA 28)	
System layout;	1
Fuel tanks;	1
Supply systems;	1
Dumping, venting and draining;	1
Cross feed and transfer;	2
Indications and warnings;	3
Refuelling and defuelling;	2
Longitudinal-balance fuel systems.	3
13.14 Hydraulic Power (ATA 29)	
System layout;	1

	LEVEL
	B2 B2L
Hydraulic fluids;	1
Hydraulic reservoirs and accumulators;	1
Pressure generation: electrical, mechanical, pneumatic;	3
Emergency pressure generation;	3
Filters;	1
Pressure control;	3
Power distribution;	1
Indication and warning systems;	3
Interface with other systems.	3
13.15 Ice and Rain Protection (ATA 30)	
Ice formation, classification and detection;	2
Anti-icing systems: electrical, hot-air and chemical;	2
De-icing systems: electrical, hot-air, pneumatic, chemical;	3
Rain-repellent;	1
Probe and drain-heating;	3
Wiper systems.	1
13.16 Landing Gear (ATA 32)	
Construction, shock absorbing;	1
Extension and retraction systems: normal and emergency;	3
Indications and warnings;	3
Wheels, brakes, antiskid and automatic braking systems;	3
Tyres;	1
Steering;	3

	LEVEL
	B2 B2L
Air-ground sensing.	3
13.17 Oxygen (ATA 35)	
System layout: cockpit, cabin;	3
Sources, storage, charging and distribution;	3
Supply regulation;	3
Indications and warnings.	3
13.18 Pneumatic/Vacuum (ATA 36)	
System layout;	2
Sources: engine/APU, compressors, reservoirs, ground supply;	2
Pressure control;	3
Distribution;	1
Indications and warnings;	3
Interfaces with other systems.	3
13.19 Water/Waste (ATA 38)	2
Water system layout, supply, distribution, servicing and draining; Toilet system layout, flushing and servicing.	
13.20 Integrated Modular Avionics (IMA) (ATA 42)	3
Core system; Network components. *Note: Functions that may be typically integrated into the IMA modules are among others:* — *bleed management;* — *air pressure control;*	

	LEVEL
	B2 B2L
— *air ventilation and control;* — *avionics and cockpit ventilation control, temperature control;* — *air traffic communication;* — *avionics communication router;* — *electrical load management;* — *circuit breaker monitoring;* — *electrical system Built-In Test Equipment (BITE);* — *fuel management;* — *braking control;* — *steering control;* — *landing gear extension and retraction;* — *tyre pressure indication;* — *oleo pressure indication;and* — *brake temperature monitoring.*	
13.21 Cabin Systems (ATA 44)	3
The units and components which furnish a means of entertaining the passengers and providing communication within the aircraft (Cabin Intercommunication Data System (CIDS)) and between the aircraft cabin and ground stations (Cabin Network Service (CNS)). They include voice, data, music and video transmissions. CIDS provides an interface between cockpit/cabin crew and cabin systems. These systems support data exchange between the different related Line Replaceable Units (LRUs) and they are typically operated via Flight Attendant Panels (FAPs). CNS typically consists of a server, interfacing with, among others, the following systems: — Data/Radio Communication; — Cabin Core System (CCS); — In-flight Entertainment System (IFES); — External Communication System (ECS); — Cabin Mass Memory System (CMMS);	

	LEVEL
	B2 B2L
— Cabin Monitoring System (CMS); and — Miscellaneous Cabin Systems (MCSs). CNS may host functions such as: — access to pre-departure/departure reports; — e-mail/intranet/internet access; and — passenger database.	
13.22 Information Systems (ATA 46) The units and components which furnish a means of storing, updating and retrieving digital information traditionally provided on paper, microfilm or microfiche. They include units that are dedicated to the information storage and retrieval function such as the electronic library mass storage and controller, but they do not include units or components installed for other uses and shared with other systems, such as flight deck printer or general-use display. Typical examples include: — Air Traffic and Information Management systems and Network Server systems. — Aircraft general information system; — Flight deck information system; — Maintenance information system; — Passenger cabin information system; — Miscellaneous information systems.	3

’

(ai) The title of Appendix II is replaced by the following:

‘Appendix II

Basic Examination Standard

(except for category L licence)’

(aj) In points 2.2.1 to 2.2.10 of Appendix II, ‘Category B2’ is replaced by ‘Category B2 and B2L’.

(ak) Points 2.2.13 and 2.2.14 of Appendix II are replaced by the following:

‘2.13. MODULE 13 — AIRCRAFT AERODYNAMICS, STRUCTURES AND SYSTEMS

Category B2: 180 multiple-choice and 0 essay questions. Time allowed: 225 minutes. Questions and time allowed may be split into two examinations, as appropriate.

Category B2L:

System rating	Number of multiple-choice questions	Time allowed (minutes)
Basic requirements (Submodules 13.1, 13.2, 13.5 and 13.9)	28	35
COM/NAV (Submodule 13.4(a))	24	30
INSTRUMENTS (Submodule 13.8)	20	25
AUTOFLIGHT (Submodules 13.3(a) and 13.7)	28	35
SURVEILLANCE (Submodule 13.4(b))	8	10
AIRFRAME SYSTEMS (Submodules 13.11 to 13.18)	32	40

2.14. MODULE 14 — PROPULSION

Category B2 and B2L: 24 multiple-choice and 0 essay questions. Time allowed: 30 minutes.

NOTE: The B2L examination for module 14 is only applicable to the ‘Instruments’ and ‘Airframe Systems’ ratings.’

(al) The footnotes included in the table of point 3.1(c) of Appendix III are replaced by the following:

‘(1) For non-pressurised piston engine aeroplanes below 2 000 kg MTOM, the minimum duration can be reduced by 50 %.

(2) For helicopters in Group 2 (as defined in point 66.A.5), the minimum duration can be reduced by 30 %.’

(am) The level of training for the airframe system 21A ‘Air Supply’, corresponding to the column ‘Helicopters Turbine’, in point 3.1(e) of Appendix III, is replaced by the following:

‘

3	1

’

(an) The level of training for the airframe system 31A 'Instrument Systems', corresponding to the column 'Helicopters piston', in point 3.1(e) of Appendix III, is replaced by the following:

'

3	1

,

(ao) Appendix IV is replaced by the following:

'Appendix IV

Experience requirements for extending a Part-66 aircraft maintenance licence

The table below shows the experience requirements for adding a new category or subcategory to an existing Part-66 licence.

The experience shall be practical maintenance experience in operating aircraft in the subcategory relevant to the application.

The experience requirement will be reduced by 50 % if the applicant has completed an approved Part-147 course relevant to the subcategory.

To From	A1	A2	A3	A4	B1.1	B1.2	B1.3	B1.4	B2	B2L	B3
A1	—	6 months	6 months	6 months	2 years	6 months	2 years	1 year	2 years	1 year	6 months
A2	6 months	—	6 months	6 months	2 years	6 months	2 years	1 year	2 years	1 year	6 months
A3	6 months	6 months	—	6 months	2 years	1 year	2 years	6 months	2 years	1 year	1 year
A4	6 months	6 months	6 months	—	2 years	1 year	2 years	6 months	2 years	1 year	1 year
B1.1	None	6 months	6 months	6 months	—	6 months	6 months	6 months	1 year	1 year	6 months
B1.2	6 months	None	6 months	6 months	2 years	—	2 years	6 months	2 years	1 year	None
B1.3	6 months	6 months	None	6 months	6 months	6 months	—	6 months	1 year	1 year	6 months
B1.4	6 months	6 months	6 months	None	2 years	6 months	2 years	—	2 years	1 year	6 months
B2	6 months	6 months	6 months	6 months	1 year	1 year	1 year	1 year	—	—	1 year
B2L	6 months	6 months	6 months	6 months	1 year	1 year	1 year	1 year	1 year	—	1 year
B3	6 months	None	6 months	6 months	2 years	6 months	2 years	1 year	2 years	1 year	—

,

(ap) Appendix V is replaced by the following:

'Appendix V

Application Form — EASA Form 19

1. This Appendix contains an example of the form used for applying for the aircraft maintenance licence referred to in Annex III (Part-66).

2. The competent authority of the Member State may modify the EASA Form 19 only to include additional information necessary to support the case where the national requirements permit or require the aircraft maintenance licence issued in accordance with Annex III (Part-66) to be used outside the requirements of Annex I (Part-M) and Annex II (Part-145).

APPLICATION FOR INITIAL/AMENDMENT OF/RENEWAL OF PART-66 AIRCRAFT MAINTENANCE LICENCE (AML)	EASA FORM 19

APPLICANT'S DETAILS:

Name: .....

Address: .....

Tel: . . . . . E-mail:. . . . . .

Nationality: . . . . . Date and Place of Birth:. . . . . .

PART-66 AML DETAILS (if applicable):

Licence No: . . . . . Date of Issue: . . . . . .

EMPLOYER'S DETAILS:

Name: .....

Address: .....

.....

Maintenance Organisation Approval Reference: .....

Tel: . . . . . Fax:. . . . . .

APPLICATION FOR: (Tick relevant boxes)

Initial AML ☐ Amendment of AML ☐ Renewal of AML ☐

(Sub)categories	**A**	**B1**	**B2**	**B2L**	**B3**	**C**	**L (see below)**
Aeroplane Turbine	☐	☐					
Aeroplane Piston	☐	☐					
Helicopter Turbine	☐	☐					
Helicopter Piston	☐	☐					
Avionics			☐	☐ See system ratings below			
Piston engine non-pressurised aeroplanes of MTOM of 2t and below					☐		
Large aircraft						☐	
Aircraft other than large						☐	

System ratings for B2L licence:

3.	autoflight,	☐
4.	instruments	☐
5.	com/nav	☐
6.	surveillance	☐
7.	airframe systems	☐

L-licence subcategories:

L1C: Composite sailplanes	☐
L1: Sailplanes	☐
L2C: Composite powered sailplanes and composite ELA1 aeroplanes	☐
L2: Powered sailplanes and ELA1 aeroplanes	☐
L3H: Hot-air balloons	☐
L3G: Gas balloons	☐

L4H: Hot-air airships ☐ L4G: ELA2 gas airships ☐ L5: Gas airships other than ELA2 ☐ Type endorsement/Rating endorsement/Limitation removal (if applicable): . . . . .
I wish to apply for initial/amendment of/renewal of Part-66 AML, as indicated, and confirm that the information contained in this form was correct at the time of application. I herewith confirm that: 1. I am not holding any Part-66 AML issued in another Member State; 2. I have not applied for any Part-66 AML in another Member State; and 3. I never had a Part-66 AML issued in another Member State which was revoked or suspended in any other Member State. I also understand that any incorrect information could disqualify me from holding a Part-66 AML. Signed: . . . . . Name: . . . . . . Date: . . . . .
I wish to claim the following credits (if applicable): . . . . Experience credits for Part-147 training . . . . Examination credits for equivalent exam certificates . . . . Please enclose all relevant certificates
Recommendation (if applicable): It is hereby certified that the applicant has met the relevant Part-66 maintenance knowledge and experience requirements and it is recommended that the competent authority grants or endorses the Part-66 AML. Signed: ..... Name: ..... Position:..... Date: .....

EASA FORM 19 Issue 4'

(aq) Points 5 and 13 of Appendix VI are replaced by the following:

'5. The document may have the pages in any order and need not have any divider lines as long as the information contained is positioned in a way that each page layout can be clearly identified with the format of the AML example contained herein. In particular,

under IX. ‘Part-66 CATEGORIES’ of the EASA Form 26, the competent authority may create separate tables for the different licence categories if including each one of them into the same table is not possible.

13. With regard to the rating page, the competent authority of the Member State shall indicate the licence subcategory, when applicable, even in the case of basic licences with no aircraft ratings. If no subcategory is applicable, the competent authority may choose not to issue this page until the first aircraft type rating will have to be endorsed, and it will need to issue more than one aircraft type rating page when there are several ratings to be listed.’

(ar) Form 26 of Appendix VI is replaced by the following:

‘

I.

EUROPEAN UNION (*)

[STATE]

[AUTHORITY NAME & LOGO]

II.

Part-66

AIRCRAFT MAINTENANCE

LICENCE

III.

Licence No [MEMBER STATE

CODE].66.[XXXX]

.

EASA FORM 26 Issue 4

IVa. Full name of holder:
IVb. Date and place of birth:
V. Address of holder:
VI. Nationality of holder:
VII. Signature of holder:
III. Licence No:

VIII. CONDITIONS:

This licence shall be signed by the holder and be accompanied by an identity document containing a photograph of the licence holder.

Endorsement of any categories on the page(s) entitled ‘Part-66 CATEGORIES’ only, does not permit the holder to issue a certificate of release to service for an aircraft.

This licence, when endorsed with an aircraft rating, meets the intent of ICAO Annex 1.

The privileges of this licence holder are prescribed by Regulation (EU) No 1321/2014 and, in particular, Annex III (Part-66) thereto.

This licence remains valid until the date specified on the limitation page unless previously suspended or revoked.

The privileges of this licence may not be exercised unless in the preceding two-year period, the holder had either six months of maintenance experience in accordance with the privileges granted by the licence, or met the provisions for the issue of the appropriate privileges.

III. Licence No:

IX. Part-66 CATEGORIES

VALIDITY	A	B1	B2	B2L	B3	L	C
Aeroplanes Turbine			n/a		n/a	n/a	n/a
Aeroplanes Piston			n/a		n/a	n/a	n/a
Helicopters Turbine			n/a		n/a	n/a	n/a
Helicopters Piston			n/a		n/a	n/a	n/a
Avionics	n/a	n/a			n/a	n/a	n/a
Large Aircraft	n/a	n/a	n/a		n/a	n/a	
Aircraft other than large	n/a	n/a	n/a		n/a	n/a	
Sailplanes, powered sailplanes, ELA1 aeroplanes, balloons and airships	n/a	n/a	n/a		n/a		n/a
Piston engine non pressurised aeroplanes of 2000 kg MTOM and below	n/a	n/a	n/a			n/a	n/a

X. Signature of issuing officer & date:

XI. Seal or stamp of issuing authority:

III. Licence No:

XII. PART-66 RATINGS		
Aircraft rating/ System ratings	Category/Subcategory	Stamp & Date
III. Licence No:		

XIII. PART-66 LIMITATIONS
Valid until:
III. Licence No:

Annex to EASA FORM 26 XIV. NATIONAL PRIVILEGES outside the scope of Part-66, in accordance with [National Legislation] (Valid only in [Member State])
Official Stamp & Date
III. Licence No:

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EASA Form 26 Issue 4’

(as) A new Appendix VII is added as follows:

‘Appendix VII

Basic knowledge requirements for category L aircraft maintenance licence

The definitions of the different levels of knowledge required in this Appendix are the same as those contained in point 1 of Appendix I to Annex IV (Part-66).

Subcategories	Modules required for each subcategory (refer to the syllabus table below)
L1C: composite sailplanes	1L, 2L, 3L, 5L, 7L and 12L
L1: sailplanes	1L, 2L, 3L, 4L, 5L, 6L, 7L and 12L
L2C: composite powered sailplanes and composite ELA1 aeroplanes	1L, 2L, 3L, 5L, 7L, 8L and 12L
L2: powered sailplanes and ELA1 aeroplanes	1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L and 12L
L3H: hot-air balloons	1L, 2L, 3L, 9L and 12L
L3G: gas balloons	1L, 2L, 3L, 10L and 12L
L4H: hot-air airships	1L, 2L, 3L, 8L, 9L, 11L and 12L
L4G: ELA2 gas airships	1L, 2L, 3L, 8L, 10L, 11L and 12L
L5: gas airships above ELA2	Basic knowledge requirements for any B1 subcategory plus 8L (for B1.1 and B1.3), 10L, 11L and 12L

TABLE OF CONTENTS:

MODULE 1L — BASIC KNOWLEDGE

	Level
1L.1 Mathematics Arithmetic — Arithmetical terms and signs; — Methods of multiplication and division; — Fractions and decimals; — Factors and multiples; — Weights, measures and conversion factors; — Ratio and proportion; — Averages and percentages; — Areas and volumes, squares, cubes. Algebra — Evaluating simple algebraic expressions: addition, subtraction, multiplication and division; — Use of brackets; — Simple algebraic fractions. Geometry — Simple geometrical constructions; — Graphical representation: nature and uses of graphs.	1
1L.2 Physics Matter — Nature of matter: the chemical elements; — Chemical compounds; — States: solid, liquid and gaseous; — Changes between states. Mechanics — Forces, moments and couples, representation as vectors; — Centre of gravity; — Tension, compression, shear and torsion; — Nature and properties of solids, fluids and gases.	1

	Level
Temperature — Thermometers and temperature scales: Celsius, Fahrenheit and Kelvin; — Heat definition.	
1L.3 Electrics DC Circuits — Ohm's law, Kirchoff's voltage and current laws; — Significance of the internal resistance of a supply; — Resistance/resistor; — Resistor colour code, values and tolerances, preferred values, wattage ratings; — Resistors in series and parallel.	1
1L.4 Aerodynamics/Aerostatics International Standard Atmosphere (ISA), application to aerodynamics and aerostatics. Aerodynamics — Airflow around a body; — Boundary layer, laminar and turbulent flow; — Thrust, weight, aerodynamic resultant; — Generation of lift and drag: angle of attack, polar curve, stall. Aerostatics Effect on envelopes, wind effect, altitude and temperature effects.	1
1L.5 Workplace Safety and Environmental Protection — Safe working practices and precautions when working with electricity, gases (especially oxygen), oils and chemicals; — Labelling, storage and disposition of hazardous (to safety and environment) materials; — Remedial action in the event of a fire or another accident with one or more hazards, including knowledge of extinguishing agents.	2

MODULE 2L — HUMAN FACTORS

	Level
2L.1 General — The need to take human factors into account; — Incidents attributable to human factors/human error; — Murphy's Law.	1
2L.2.Human Performance and Limitations Vision, hearing, information processing, attention and perception, memory.	1
2L.3 Social Psychology Responsibility, motivation, peer pressure, teamwork.	1
2L.4 Factors Affecting Performance Fitness/health, stress, sleep, fatigue, alcohol, medication, drug abuse.	1
2L.5 Physical Environment Working environment (climate, noise, illumination).	1

MODULE 3L — AVIATION LEGISLATION

	Level
3L.1 Regulatory Framework — Role of the European Commission, EASA and National Aviation Authorities (NAAs); — Applicable parts of Part-M and Part-66.	1
3L.2 Repairs and Modifications — Approval of changes (repairs and modifications); — Standard changes and standard repairs.	2
3L.3 Maintenance Data — Airworthiness Directives (ADs), Instructions for Continuing Airworthiness (ICA) (AMM, IPC, etc.); — Flight Manual;	2

	Level
— Maintenance records.	

MODULE 4L — AIRFRAME WOODEN/METAL TUBE AND FABRIC

	Level
4L.1 Airframe wooden/combination of metal tube and fabric — Timber, plywood, adhesives, preservation, power line, properties, machining; — Covering (covering materials, adhesives and finishes, natural and synthetic covering materials and adhesives); — Paint assembly and repair processes; — Recognition of damages from overstressing of wooden/metal-tube and fabric structures; — Deterioration of wood components and coverings; — Crack test (optical procedure, e.g., magnifying glass) of metal components. Corrosion and preventive methods Health and fire safety protections.	2
4L.2 Material — Types of wood, stability, and machining properties; — Steel and light alloy tubes and fittings, fracture inspections of welded seams; — Plastics (overview, understanding of the properties); — Colours and paints, paint removal; — Glues, adhesives; — Covering materials and technologies (natural and synthetic polymers).	2
4L.3 Identifying damage — Overstress of wood / metal-tubing and fabric structures; — Load transfers; — Fatigue strength and crack testing.	3
4L.4 Performance of practical activities — Locking of pins, screws, castellated nuts, turnbuckles; — Thimble splice; — Nicopress and Talurit repairs; — Repair of coverings;	2

— Repair of transparencies; — Repair exercises (plywood, stringer, handrails, skins); — Aircraft Rigging. Calculation of control surface mass balance and range of movement of the control surfaces, measurement of operating forces; — Performance of 100-hours/annual inspections on a wood or combination of metal-tube and fabric airframe.	

MODULE 5L — AIRFRAME COMPOSITE

	Level
5L.1 Airframe fibre-reinforced plastic (FRP) — Basic principles of FRP construction; — Resins (Epoxy, polyester, phenolic resins, vinyl ester resins); — Reinforcement materials glass, aramide and carbon fibres, features; — Fillers; — Supporting cores (balsa, honeycombs, foamed plastics); — Constructions, load transfers (solid FRP shell, sandwiches); — Identification of damage during overstressing of components; — Procedure for FRP projects (according to Maintenance Organisation Manual) including storage conditions for material.	2
5L.2 Material — Thermosetting plastics, thermoplastic polymers, catalysts; — Understanding properties, machining technologies, detaching, bonding, welding; — Resins for FRP: epoxy resins, polyester resins, vinyl ester resins, phenolic resins; — Reinforcement materials; — From elementary fibre to filaments (release agent, finish), weaving patterns; — Properties of individual reinforcement materials (E-glass fibre, aramide fibre, carbon fibre); — Problem with multiple-material systems, matrix; — Adhesion/cohesion various behaviours of fibre materials; — Filling materials and pigments;	2

	Level
— Technical requirements for filling materials; — Property change of the resin composition through the use of E-glass, micro balloon, aerosols, cotton, minerals, metal powder, organic substances; — Paint assembly and repair technologies; — Support materials; — Honeycombs (paper, FRP, metal), balsa wood, Divinycell (Contizell), development trends.	
5L.3 Assembly of Fibre-Reinforced Composite-Structure Airframes — Solid shell; — Sandwiches; — Assembly of aerofoils, fuselages, control surfaces.	2
5L.4 Identifying Damage — Behaviour of FRP components in the event of overstressing; — Identifying delaminations, loose bonds; — Bending vibration frequency in aerofoils; — Load transfer; — Frictional connection and positive locking; — Fatigue strength and corrosion of metal parts; — Metal bonding, surface finishing of steel and aluminium components during bonding with FRP.	3
5L.5 Mold Making — Plaster molds, mold ceramics; — GFK molds, Gel-coat, reinforcement materials, rigidity problems; — Metal molds; — Male and female molds.	2
5L.6 Performance of Practical Activities — Locking of pin, screws, castellated nuts, turnbuckles; — Thimble splice; — Nicopress and Talurit repairs; — Repair of coverings;	2

	Level
— Repair of solid FRP shells; — Mold fabrication/molding of a component (e.g. fuselage nose, landing gear fairing, wing tip and winglet); — Repair of sandwich shell where interior and exterior layer are damaged; — Repair of sandwich shell by pressing with a vacuum bag; — Transparency repair (PMMA) with one- and two-component adhesive; — Bonding of transparency with the canopy frame; — Tempering of transparencies and other components; — Performance of a repair on a sandwich shell (minor repair less than 20 cm); — Aircraft Rigging. Calculation of control surface mass balance and range of movement of the control surfaces, measurement of operating forces; — Performance of 100-hour/annual inspections on an FRP airframe.	

MODULE 6L — AIRFRAME METAL

	Level
6L.1 Airframe metal — Metallic materials and semi-finished products, machining methods; — Fatigue strength and crack test; — Assembly of metal-construction components, riveted joints, adhesive joints; — Identification of damage to overstressed components, effects of corrosion; — Health and fire protection.	2
6L.2 Material — Steel and its alloys; — Light metals and their light alloys; — Rivet materials; — Plastics; — Colours and paints; — Metal adhesives; — Types of corrosion; — Covering materials and technologies (natural and synthetic).	2

	Level
6L.3 Identifying Damage — Overstressed metal airframes, levelling, measurement of symmetry; — Load transfers; — Fatigue strength and crack test; — Identifying loose riveted joints.	3
6L.4 Assembly of Metal- and Composite-Construction Airframes — Skins; — Frames; — Stringers and longerons; — Frame construction; — Problems in multiple-material systems.	2
6L.5 Fasteners — Classifications of fits and clearances; — Metric and imperial measuring systems; — Oversize bolt.	2
6L.6 Performance of Practical Activities — Locking of pins, screws, castellated nuts, turnbuckles; — Thimble splice; — Nicopress and Talurit repairs; — Repair of coverings, surface damage, stop drilling cracks; — Repair of transparencies; — Cutting out sheet metals (aluminiums and light alloys, steel and alloys); — Folding bending, edging, beating, smoothening, beading; — Repair riveting of metal airframes according to repair instruction or drawings; — Evaluation of rivet errors; — Aircraft Rigging. Calculation of control surface mass balance and range of movement of the control surfaces, measurement of operating forces; — Performance of 100-hour/annual inspections on a metal airframe.	2

MODULE 7L — AIRFRAME GENERAL

	Level
7L.1 Flight Control System — Cockpit controls: controls in cockpit, colour markings, knob shapes; — Flight controls surfaces, flaps, air brakes surfaces, controls, hinges, bearings, brackets, push-pull rods, bell cranks, horns, pulleys, cables, chains, tubes, rollers, tracks, jack screws, surfaces, movements, lubrication, stabilisers, balancing of controls; — Combination of controls: flap ailerons, flap air brakes; — Trim systems.	3
7L.2 Airframe — Landing gear: characteristics of landing gears and shock absorber strut, extension, brakes, drum, disks, wheel, tyre, retraction mechanism, electrical retraction, emergency; — Wing and stabiliser of fuselage connections, wing flap ailerons of fuselage interconnection, stabiliser and elevator of fuselage installation; — Permissible maintenance measures; — Towing: towing/lifting equipment/mechanism; — Cabin: seats and safety harness, cabin arrangement, windshields, windows, placards, baggage compartment, cockpit controls, cabin air system, blower; — Water ballast: water reservoirs, lines, valves, drains, vents, tests; — Fuel system: tanks, lines, filters, vents, drains, filling, selector valve, pumps, indication, tests, bonding; — Hydraulics: system layout, accumulators, pressure and power distribution, indication; — Liquid and gas: hydraulic, other fluids, levels, reservoir, lines, valves, filter; — Protections: firewalls, fire protection, lightning strike bonding, turnbuckles, locking devices, dischargers.	2
7L.3 Fasteners — Reliability of pins, rivets, screws; — Control cables, turnbuckles; — Quick-release couplings (L'Hotellier, SZD, Poland).	2

	Level
7L.4 Locking Equipment — Admissibility of locking methods, locking pins, spring steel pins, locking wire, stop nuts, paint; — Quick-release couplings.	2
7L.5 Weight and Balance Levelling	2
7L.6 Rescue Systems	2
7L.7 On-board Modules — Pitot-static and pressure system, vacuum/dynamic system, hydrostatic test; — Flight instruments: airspeed indicator, altimeter, vertical-speed indicator, connection and functioning, markings; — Arrangement and display, panel, electrical wires; — Gyroscopes, filters, indicating instruments; testing of function; — Magnetic compass: installation and compass swing; — Sailplanes: acoustic vertical-speed indicator, flight recorders, anticollision aid; — Oxygen system.	2
7L.8 On-board Modules Installation and Connections — Flight instruments, mounting requirements (emergency landing conditions as per CS-22); — Electric wiring, power sources, types of storage batteries, electrical parameters, electric generator, circuit breaker, energy balance, earth/ground, connectors, terminals, warnings, fuses, lamps, lightings, switches, voltmeters, ampere meters, electrical gauges.	2
7L.9 Piston Engine Propulsion Interface between power plant and airframe.	2
7L.10 Propeller — Inspection; — Replacement; — Balancing.	2
7L.11 Retraction System — Propeller position control;	2

	Level
— Engine folding system.	
7L.12 Physical Inspection Procedures — Cleaning, use of lighting and mirrors; — Measuring tools; — Measure of controls deflection; — Torque of screws and bolts; — Wear of bearings; — Inspection equipment; — Calibration of measuring tools.	2

MODULE 8L — POWER PLANT

	Level
8L.1 Noise Limits — Explanation of the concept of ‘noise level’; — Noise certificate; — Enhanced sound proofing; — Possible reduction of sound emissions.	1
8L.2 Piston Engines — Four-stroke spark ignition engine, air-cooled engine, fluid-cooled engine; — Two-stroke engine; — Rotary-piston engine; — Efficiency and influencing factors (pressure–volume diagram, power curve); — Noise control devices.	2
8L.3 Propeller — Blade, spinner, backplate, accumulator dome pressure, hub; — Operation of propellers; — Variable-pitch propellers, ground and in-flight adjustable propellers, mechanically, electrically and hydraulically; — Balancing (static, dynamic);	2

	Level
— Noise problems.	
8L.4 Engine Control Devices — Mechanical control devices; — Electrical control devices; — Tank displays; — Functions, characteristics, typical errors and error indications.	2
8L.5 Hosepipes — Material and machining of fuel and oil hoses; — Control of life limit.	2
8L.6 Accessories — Operation of magneto ignition; — Control of maintenance limits; — Operation of carburettors; — Maintenance instructions on characteristic features; — Electric fuel pumps; — Operation of propeller controls; — Electrically operated propeller control; — Hydraulically operated propeller control.	2
8L.7 Ignition System — Constructions: coil ignition, magneto ignition, and thyristor ignition; — Efficiency of the ignition and preheat system; — Modules of the ignition and preheat system; — Inspection and testing of a spark plug.	2
8L.8 Induction and Exhaust Systems — Operation and assembly; — Silencers and heater installations; — Nacelles and cowlings; — Inspection and test; — CO emission test.	2

	Level
8L.9 Fuels and Lubricants — Fuel characteristics; — Labelling, environmentally friendly storage; — Mineral and synthetic lubricating oils and their parameters: labelling and characteristics, application; — Environmentally friendly storage and proper disposal of used oil.	2
8L.10 Documentation — Manufacturer documents for the engine and propeller; — Instructions for Continuing Airworthiness (ICA); — Aircraft Flight Manuals (AFMs) and Aircraft Maintenance Manuals (AMMs); — Time Between Overhaul (TBO); — Airworthiness Directives (ADs), technical notes and service bulletins.	2
8L.11 Illustrative Material — Cylinder unit with valve; — Carburettor; — High-tension magneto; — Differential-compression tester for cylinders; — Overheated/damaged pistons; — Spark plugs of engines that were operated differently.	2
8L.12 Practical Experience — Work safety/accident prevention (handling of fuels and lubricants, start-up of engines); — Rigging-engine control rods and Bowden cables; — Setting of no-load speed; — Checking and setting the ignition point; — Operational test of magnetos; — Checking the ignition system; — Testing and cleaning of spark plugs; — Performance of the engine tasks contained in an aeroplane 100-hour/annual inspection;	2

	Level
— Cylinder compression test; — Static test and evaluation of the engine run; — Documentation of maintenance work including replacement of components.	
8L.13 Gas Exchange in Internal-Combustion Engines — Four-stroke reciprocating engine and control units; — Energy losses; — Ignition timing; — Direct flow behaviour of control units; — Wankel engine and control units; — Two-stroke engine and control units; — Scavenging; — Scavenging blower; — Idle range and power range.	2
8L.14 Ignition, Combustion and Carburation — Ignition; — Spark plugs; — Ignition system; — Combustion process; — Normal combustion; — Efficiency and medium pressure; — Engine knock and octane rating; — Combustion chamber shapes; — Fuel/air mix in the carburettor; — Carburettor principle, carburettor equation; — Simple carburettor; — Problems of the simple carburettor and their solutions; — Carburettor models; — Fuel/air mix during injection; — Mechanically controlled injection; — Electronically controlled injection;	2

	Level
— Continuous injection; — Carburettor-injection comparison.	
8L.15 Flight Instruments in Aircraft with Injection Engines — Special flight instruments (injection engine); — Interpretation of indications in a static test; — Interpretation of indications in flight at various flight levels.	2
8L.16 Maintenance of Aircraft with Injection Engines — Documentation, manufacturer documents, etc.; — General maintenance instructions (hourly inspections); — Functional tests; — Ground test run; — Test flight; — Troubleshooting in the event of faults in the injection system and their correction.	2
8L.17 Workplace Safety and Safety Provisions Work safety and safety provisions for work on injection systems.	2
8L.18 Visual Aids: — Carburettor; — Components of injection system; — Aircraft with injection engine; — Tool for work on injection systems.	2
8L.19 Electrical Propulsion — Energy system, accumulators, installation; — Electrical motor; — Heat, noise and vibration checks; — Testing windings; — Electrical wiring and control systems; — Pylon, extension and retraction systems; — Motor/propeller brake systems;	2

	Level
— Motor ventilation systems; — Practical experience of 100-hour/annual inspections.	
8L.20 Jet Propulsion — Engine installation; — Pylon, extension and retraction systems; — Fire protection; — Fuel systems including lubrication; — Engine starting systems, gas assist; — Engine damage assessment; — Engine servicing; — Engine removal / refit and test; — Practical experience of conditional / run time / annual inspections; — Conditional inspections.	2
8L.21 Full Authority Digital Engine Control (FADEC)	2

MODULE 9L — BALLOON/AIRSHIP HOT AIR

	Level
9L.1 Basic Principles and Assembly of Hot-Air Balloons/Airships — Assembly and individual parts; — Envelopes; — Envelope Materials; — Envelope Systems; — Conventional and special shapes; — Fuel System; — Burner, burner frame and burner support rods; — Compressed-gas cylinders and compressed-gas hoses; — Basket and alternative devices (seats); — Rigging accessories; — Maintenance and servicing tasks;	3

	Level
— Annual/100-hour inspection; — Log Books; — Aircraft Flight Manuals (AFMs) and Aircraft Maintenance Manuals (AMMs); — Rigging and launch preparation (launch restraint); — Launch.	
9L.2 Practical Training Operating controls, maintenance and servicing jobs (according to flight manual).	3
9L.3 Envelope — Fabrics; — Seams; — Load tapes, rip stoppers; — Crown rings; — Parachute valve and fast-deflation systems; — Ripping panel; — Turning vent; — Diaphragms/catenaries (special shapes and airships); — Rollers, pulleys; — Control and shroud lines; — Knots; — Temperature indication label, temperature flag, envelope thermometer; — Flying wires; — Fittings, karabiners.	3
9L.4 Burner and fuel system — Burner coils; — Blast, liquid and pilot valves; — Burners/jets; — Pilot lights/vaporisers/jets; — Burner frame; — Fuel lines/hoses; — Fuel cylinders, valves and fittings.	3

	Level
9L.5 Basket and Basket Suspension (incl. alternative devices) — Types of baskets (incl. alternative devices); — Basket materials: cane and willow, hide, wood, trim materials, suspension cables; — Seats, roller bearings; — Karabiner, shackle and pins; — Burner support rods; — Fuel cylinder straps; — Accessories.	3
9L.6 Equipment — Fire extinguisher, fire blanket; — Instruments (single or combined).	3
9L.7 Minor Repairs — Stitching; — Bonding; — Basket hide/trim repairs.	3
9L.8 Procedures for Physical Inspection — Cleaning, use of lighting and mirrors; — Measuring tools; — Measure of controls deflection (only airships); — Torque of screws and bolts; — Wear of bearings (only airships); — Inspection equipment; — Calibration of measuring tools; — Fabric Grab Test.	2

MODULES 10L — BALLOON/AIRSHIP GAS (FREE/TETHERED)

	Level
10L.1 Basic Principles and Assembly of Gas Balloons/Airships	3

	Level
— Assembly of individual parts; — Envelope and netting material; — Envelope, ripping panel, emergency opening, cords and belts; — Rigid gas valve; — Flexible gas valve (parachute); — Netting; — Load ring; — Basket and accessories (including alternative devices); — Electrostatic discharge paths; — Mooring line and drag rope; — Maintenance and servicing; — Annual inspection; — Flight papers; — Aircraft Flight Manuals (AFMs) and Aircraft Maintenance Manuals (AMMs); — Rigging and launch preparation; — Launch.	
10L.2 Practical Training — Operating controls; — Maintenance and servicing jobs (according to AMM and AFM); — Safety rules when using hydrogen as lifting gas.	3
10L.3 Envelope — Fabrics; — Poles and reinforcement of pole; — Ripping panel and cord; — Parachute and shroud lines; — Valves and cords; — Filler neck, Paschal-ring and cords; — Electrostatic discharge paths.	3
10L.4 Valve — Springs;	3

	Level
— Gaskets; — Screwed joints; — Control lines; — Electrostatic discharge paths.	
10L.5 Netting or Rigging (without net) — Kinds of net and other lines; — Mesh sizes and angles; — Net ring; — Knotting methods; — Electrostatic discharge paths.	3
10L.6 Load Ring	3
10L.7 Basket (incl. alternative devices) — Kinds of baskets (incl. alternative devices); — Strops and toggles; — Ballast system (bags and supports); — Electrostatic discharge paths.	3
10L.8 Ripping Cord and Valve Cords	3
10L.9 Mooring Line and Drag Rope	3
10L.10 Minor Repairs — Bonding; — Splicing hemp ropes.	3
10L.11 Equipment Instruments (single or combined).	3
10L.12 Tether Cable (Tethered Gas Balloons (TGB) only) — Kinds of cables; — Acceptable damage of cable; — Cable swivel; — Cable clamps.	3

	Level
10L.13 Winch (Tethered Gas Balloons only) — Kinds of winches; — Mechanical system; — Electrical system; — Emergency system; — Grounding/ballasting of winch.	3
10L.14 Procedures for Physical Inspection — Cleaning, use of lighting and mirrors; — Measuring tools; — Measure of controls deflection (only airships); — Torque of screws and bolts; — Wear of bearings (only airships); — Inspection equipment; — Calibration of measuring tools; — Fabric grab test.	2

MODULES 11L — AIRSHIPS HOT AIR/GAS

	Level
11L.1 Basic Principles and Assembly of Small Airships — Envelope, ballonnets; — Valves, openings; — Gondola; — Propulsion; — Aircraft Flight Manuals (AFMs) and Aircraft Maintenance Manuals (AMMs); — Rigging and launch preparation.	3
11L.2 Practical Training — Operating controls; — Maintenance and servicing jobs (according to AMM and AFM).	3
11L.3 Envelope	3

— Fabrics; — Ripping panel and cords; — Valves; — Catenary system.	
11L.4 Gondola (incl. alternative devices) — Kinds of gondolas (incl. alternative devices); — Airframe types and materials; — Identification of damage.	3
11L.5 Electrical System — Basics about on-board electrical circuits; — Electrical sources (accumulators, fixation, ventilation, corrosion); — Lead, nickel-cadmium (NiCd) or other accumulators, dry batteries; — Generators; — Wiring, electrical connections; — Fuses; — External power source; — Energy balance.	3
11L.6 Propulsion — Fuel system: tanks, lines, filters, vents, drains, filling, selector valve, pumps, indication, tests, bonding; — Propulsion instruments; — Basics about measuring and instruments; — Revolution measuring; — Pressure measuring; — Temperature measuring; — Available fuel/power measuring.	3
11L.7 Equipment — Fire extinguisher, fire blanket; — Instruments (single or combined).	3

MODULE 12L — RADIO COM/ELT/TRANSPONDER/INSTRUMENTS

	Level
12L.1 Radio Com/ELT — Channel spacing; — Basic functional test; — Batteries; — Testing and maintenance requirements.	2
12L.2 Transponder — Basic operation; — Typical portable configuration including antenna; — Explanation of Modes A, C, S; — Testing and maintenance requirements.	2
12L.3 Instruments — Handheld altimeter/variometers; — Batteries; — Basic functional test.	2

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(at) A new Appendix VIII is added as follows:

‘Appendix VIII

Basic examination standard for category L aircraft maintenance licence

(a) Standardisation basis for examinations related to the Appendix VII basic knowledge requirements:

1. All examinations must be carried out using the multiple-choice question format as specified below. The incorrect alternatives must seem equally plausible to anyone ignorant of the subject. All of the alternatives should be clearly related to the question and of similar vocabulary, grammatical construction and length. In numerical questions, the incorrect answers should correspond to procedural errors such as corrections applied in the wrong sense or incorrect unit conversions: they must not be mere random numbers.
2. Each multiple-choice question must have three alternative answers of which only one must be the correct answer and the candidate must be allowed a time per module which is based upon a nominal average of 75 seconds per question.
3. The pass mark for each module is 75 %.
4. Penalty marking (negative points for failed questions) is not to be used.
5. The level of knowledge required in the questions must be proportionate to the level of technology of the aircraft category.

(b) Number of questions per module:

1. Module 1L ‘Basic knowledge’: 12 multiple-choice questions. Time allowed: 15 minutes.
2. Module 2L ‘Human factors’: 8 questions. Time allowed: 10 minutes.
3. Module 3L ‘Aviation legislation’: 24 questions. Time allowed: 30 minutes.
4. Module 4L ‘Airframe wooden/metal tube and fabric’: 32 questions. Time allowed: 40 minutes.
5. Module 5L ‘Airframe composite’:32 questions. Time allowed: 40 minutes.
6. Module 6L ‘Airframe metal’: 32 questions. Time allowed: 40 minutes.
7. Module 7L ‘Airframe general’: 64 questions. Time allowed: 80 minutes.
8. Module 8L ‘Power plant’: 48 questions. Time allowed: 60 minutes.
9. Module 9L ‘Balloon/Airship hot air’: 36 questions. Time allowed: 45 minutes.
10. Module 10L ‘Balloon/Airship gas (free/tethered)’: 40 questions. Time allowed: 50 minutes.
11. Module 11L ‘Airships hot air/gas’: 36 questions. Time allowed: 45 minutes.
12. Module 12L ‘Radio Com/ELT/transponder/instruments’: 16 questions. Time allowed 20 minutes.’

Annex IV (Part-147) to Commission Regulation (EU) No 1321/2014 is amended as follows:

(a) Appendix I is replaced by the following:

‘Appendix I

Basic training course duration

The minimum duration of a complete basic training course shall be as follows:

Basic Course	Duration (in hours)	Theoretical Training Ratio (in %)
A1	800	30–35
A2	650	30–35
A3	800	30–35
A4	800	30–35
B1.1	2 400	50–60
B1.2	2 000	50–60
B1.3	2 400	50–60
B1.4	2 400	50–60
B2	2 400	50–60
B2L	1 500*	50–60
B3	1 000	50–60

* This number of hours shall be increased as follows, depending on the additional system ratings selected:

System Rating	Duration (in hours)	Theoretical Training Ratio (in %)
COM/NAV	90	50–60
INSTRUMENTS	55	
AUTOFLIGHT	80	
SURVEILLANCE	40	
AIRFRAME SYSTEMS	100	

’

(b) Appendix II is replaced by the following:

‘Appendix II

Maintenance Training Organisation Approval referred to in Annex IV (Part-147) — EASA Form 11

Page 1 of 2

[MEMBER STATE(*)]

A Member of the European Union (**)

MAINTENANCE TRAINING AND EXAMINATION ORGANISATION APPROVAL CERTIFICATE

Reference: [MEMBER STATE CODE(*)].147.[XXXX]

Pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council and to Commission Regulation (EU) No 1321/2014, for the time being in force and subject to the conditions specified below, the [COMPETENT AUTHORITY OF THE MEMBER STATE(*)] hereby certifies:

[COMPANY NAME AND ADDRESS]

as a maintenance training organisation in compliance with Section A of Annex IV (Part-147) of Regulation (EU) No 1321/2014, approved to provide training and conduct examinations listed in the approval schedule attached and to issue related certificates of recognition to students using the above references.

CONDITIONS:

1. This approval is limited to what is specified in the scope of work section of the approved maintenance training organisation exposition as referred to in Section A of Annex IV (Part-147); and
2. this approval requires compliance with the procedures specified in the approved maintenance training organisation exposition; and
3. this approval is valid whilst the approved maintenance training organisation remains in compliance with Annex IV(Part-147) of Regulation (EU) No 1321/2014; and
4. subject to compliance with the foregoing conditions, this approval shall remain valid for an unlimited duration unless the approval has previously been surrendered, superseded, suspended or revoked.

Date of original issue: .....

Date of this revision: .....

Revision No:.....

Signed: .....

For the competent authority: [COMPETENT AUTHORITY OF THE MEMBER STATE(*)]

EASA Form 11 Issue 4

(*) or EASA if EASA is the competent authority

(**) Delete for non-EU Member States or EASA.

MAINTENANCE TRAINING AND EXAMINATION ORGANISATION APPROVAL SCHEDULE

Reference: [MEMBER STATE CODE(*)].147.[XXXX]

Organisation: [COMPANY NAME AND ADDRESS]

CLASS	LICENCE CATEGORY	LIMITATION	
BASIC (**)	B1 (**)	TB1.1 (**) TB1.2 (**) TB1.3 (**) TB1.4 (**)	AEROPLANES TURBINE (**) AEROPLANES PISTON (**) HELICOPTERS TURBINE (**) HELICOPTERS PISTON (**)
	B2 (**)/(****)	TB2 (**)	AVIONICS (**)
	B2L (**)	TB2L (**)	AVIONICS (indicate system ratings) (**)
	B3 (**)	TB3 (**)	PISTON ENGINE NON-PRESSURISED AEROPLANES OF 2000 KG MTOM AND BELOW (**)
	A (**)	TA.1 (**) TA.2 (**) TA.3 (**) TA.4 (**)	AEROPLANES TURBINE (**) AEROPLANES PISTON (**) HELICOPTERS TURBINE (**) HELICOPTERS PISTON (**)
	L (**) (Only examination)	TL (**)	QUOTE THE SPECIFIC LICENCE SUBCATEGORY (**)
TYPE/TASK (**)	C (**)	T4 (**)	[QUOTE AIRCRAFT TYPE] (***)
	B1 (**)	T1 (**)	[QUOTE AIRCRAFT TYPE] (***)
	B2 (**)	T2 (**)	[QUOTE AIRCRAFT TYPE] (***)
	A (**)	T3 (**)	[QUOTE AIRCRAFT TYPE] (***)

This approval schedule is limited to those trainings and examinations specified in the scope of work section of the approved maintenance training organisation exposition.

Maintenance training organisation exposition reference: .....

Date of original issue: .....

Date of last revision approved: ..... Revision No: .....

Signed: .....

For the competent authority: [COMPETENT AUTHORITY OF THE MEMBER STATE(*)]

EASA Form 11 Issue 4

(*) or EASA if EASA is the competent authority.

(**) Delete as appropriate if the organisation is not approved.

(***) Complete with the appropriate rating and limitation.

(****) The approval for the Basic B2 course/examination includes approval for B2L course/examination for all system ratings.'