Important terms

Avionics System

Avionics system means an aircraft system that transfers, processes, displays or stores analogue or digital data using data lines, data buses, coaxial cables, wireless or other data transmission medium, and includes the system's components and connectors. Examples of avionics systems include the following:

- Autoflight
- Communication, Radar and Navigation
- Instruments (see note below)
- In Flight Entertainment Systems
- Integrated Modular Avionics (IMA)
- On-Board Maintenance Systems
- Information Systems
- Fly by Wire Systems (related to ATA27 'Flight Controls')
- Fibre Optic Control Systems

Note:
Instruments are formally included within the privileges of the B2 and B2L with system rating 'instruments'. However, maintenance on electromechanical and pitot-static components may also be released by a B1, B3 or L license holder.

Component

A component means by its definition any engine, propeller, part or device.
Aircraft components have defined service lives and, like all other parts, are regularly inspected. For maintenance and repair, components are usually removed, refurbished and reinstalled or replaced with new ones. Each component installed in an aircraft requires an appropriate certificate for this, e.g. an EASA «Form 1».

Line Maintenance

Line maintenance means any maintenance that is carried out before flight to ensure that the aircraft is fit for the intended flight. It may include:

- Trouble shooting & Defect rectification
- Component replacement with use of external test equipment, if required. Component replacement may include components such as engines and propellers
- Scheduled maintenance and/or checks including visual inspections that will detect obvious unsatisfactory conditions/discrepancies but do not require extensive in-depth inspection. It may also include internal structure, systems and powerplant items which are visible through quick opening access panels/doors
- Minor repairs and modifications which do not require extensive disassembly and can be accomplished by simple means
- For temporary or occasional cases (Airworthiness Directives, hereinafter AD; service bulletins, hereinafter SB) the quality manager may accept base maintenance tasks to be performed by a line maintenance organisation provided all requirements are fulfilled. The Member State will prescribe the conditions under which these tasks may be performed.

The work, e.g. during a preflight-check, usually takes place outside the hangar on the apron («Tarmac»).

Base Maintenance

Base Maintenance means any task falling outside the criteria that are given below for Line Maintenance.

Note:
Aircraft maintained in accordance with 'progressive' type programmes need to be individually assessed in relation to this paragraph. In principle, the decision to allow some 'progressive' checks to be carried out is determined by the assessment that all tasks within the particular check can be carried out safely to the required standards at the designated line maintenance station.

The work, e.g. during a A- or C-check, always takes place in a hangar.

Heavy Maintenance

Heavy maintenance is even more extensive and complex than line and base maintenance. The work, e.g. during a D-check, also takes place in a hangar. An aircraft is disassembled down to its structure, inspected, repaired and reassembled.

Simple test

Simple test means a test described in approved maintenance data and meeting all the following criteria:

- The serviceability of the system can be verified using aircraft controls, switches, Built-in Test Equipment (BITE), Central Maintenance Computer (CMC) or external test equipment not involving special training.
- The outcome of the test is a unique go – no go indication or parameter, which can be a single value or a value within an interval tolerance. No interpretation of the test result or interdependence of different values is allowed.
- The test does not involve more than 10 actions as described in the approved maintenance data (not including those required to configure the aircraft prior to the test, i.e. jacking, flaps down, etc, or to return the aircraft to its initial configuration). Pushing a control, switch or button, and reading the corresponding outcome may be considered as a single step even if the maintenance data shows them separated.

Continuing airworthiness

Continuing airworthiness means all of the processes ensuring that, at any time in its operating life, the aircraft complies with the airworthiness requirements in force and is in a condition for safe operation.

Certifying staff

Certifying staff means the personnel which is responsible for the release of an aircraft or a component after maintenance. In order to become a certifying staff, you have to complete the EASA Part-66 license training (valid in Europe). The training programme consists of theoretical modules and practical work.

ELA1 aircraft

«ELA1» aircraft means the following manned European Light Aircraft:

1. An aeroplane with a certified maximum take-off mass of 1'200 kg or less that is not classified as complex motor-powered aircraft
2. A sailplane or powered sailplane with a certified maximum take-off mass of 1'200 kg MTOM or less
3. A balloon with a maximum design lifting gas or hot air volume of not more than 3'400 m^3 for hot air balloons, 1'050 m^3 for gas balloons, 300 m^3 for tethered gas balloons.

ELA2 aircraft

«ELA2» aircraft means the following manned European Light Aircraft:

1. An aeroplane with a certified maximum take-off mass of 2'000 kg or less that is not classified as complex motor-powered aircraft
2. A sailplane or powered sailplane with a cert ified maximum take-off mass of 2'000 kg MTOM or less
3. A balloon
4. A very light rotorcraft with a certified maximum take-off mass not exceeding 600 kg which is of a simple design, designed to carry not more than two occupants, not powered by turbine and/or rocket engines; restricted to VFR day operations.

Complex motor-powered aircraft

a) Is an aeroplane

1. with a certified maximum take-off mass exceeding 5'700 kg, or
2. for a certified maximum passenger seating configuration of more than 19, or
3. for operation with a certified minimum crew of at least 2 pilots, or
4. equipped with (a) turbojet engine(s) or more than one turboprop engine, or

b) a helicopter

1. with a certified maximum take-off mass exceeding 3'175 kg, or
2. for a certified maximum passenger seating configuration of more than 9, or
3. for operation with a certified minimum crew of at least 2 pilots, or

c) a tilt rotor aircraft

1. Different from this definition, ICAO defines a large aeroplane (in Annex 6, Part II) as «an aeroplane of a maximum certificated take-off mass of over 5'700 kg».