Woerden, 12 mei 2023

Informatie Circulaire 1/2023

Beste zweefvliegers,

Het vliegseizoen is weer in volle gang en dat betekent dat we, ondanks het winteronderhoud, tegen defecten aanlopen tijdens de vliegdag.

Hoe zit het ook alweer met het melden en opvolgen van schades en gebreken? Wanneer mag het vliegtuig wel en niet vliegen en hoe voldoen we aan de wet? Wat doe je als vlieger, technicus en eigenaar als bijvoorbeeld je kapvergrendeling kapot is, je transponder het begeeft of wanneer je schade aan de romp ontdekt bij de dagelijkse inspectie?

Het correct melden van defecten is belangrijk voor de veiligheid, gebruikers van zweefvliegtuigen dienen op de hoogte te zijn van de technische staat van het zweefvliegtuig voordat ze beginnen aan grondoperaties, onderhoud en vluchtuitvoering. Daarnaast zijn we wettelijk verplicht om te voldoen aan de geldende regelgeving omtrent het melden van defecten en de daaropvolgende acties.

De afgelopen jaren zijn er verschillende wijzigingen geweest binnen de wetgeving over de technische zaken kant van zweefvliegen en lichte luchtvaart in het algemeen. Om meer duidelijkheid te scheppen over de juiste werkwijze aangaande het melden van defecten geven we graag de bijgevoegde flowchart met toelichting mee.

Pagina 2 betreft een inleiding, pagina 3 de flowchart met de terminologie uit de EASA-regelgeving en de overige pagina’s bevatten de regelgeving waarop de flowchart is gebaseerd en waarnaar in de flowchart verwijzingen staan.

De CVZ is voor vragen te bereiken op veiligheid.zweefvliegen@knvvl.nl.

Met dank aan Egbert Veldhuizen, Alex Wijffels, Peter van Horssen en de Commissie Technische Zaken (CTZ).

Met vriendelijke groet,

Noah Verhoef
Voorzitter CVZ

Hieronder staat een flow chart waarmee een piloot (SPL-houder) kan beoordelen:

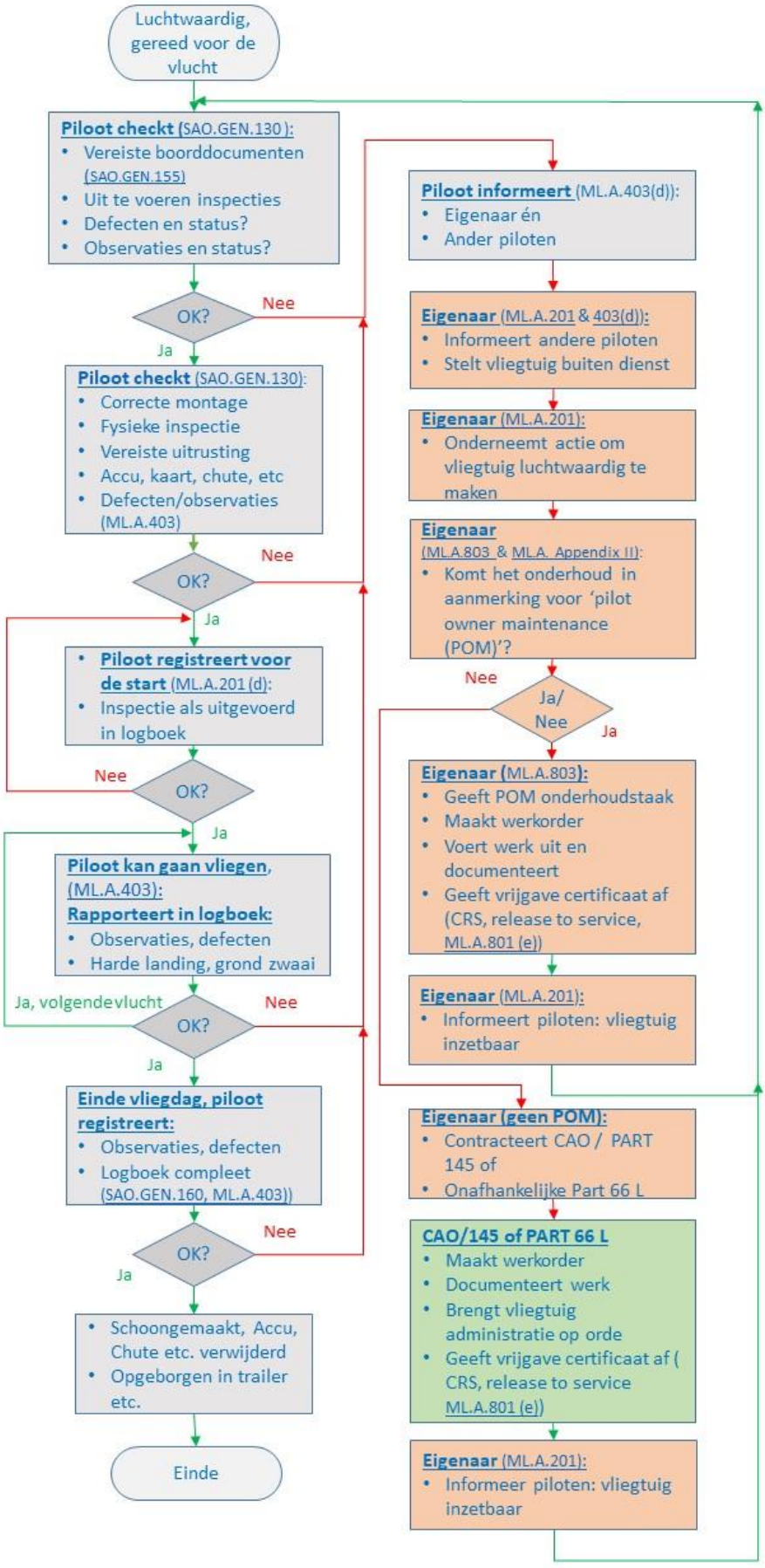
- Of een vliegtuig gebruikt mag worden (luchtwaardig/ airworthy).
- Wat hij/zij als piloot moet doen als hij/zij een "defect" of "observation" (klacht) vaststelt.
- In welke wetsteksten gevonden kan worden wat de overheid voorschrijft:
  - (eu) 1321/2014 Continuing airworthiness (specifiek Part ML.A.)
  - EU Sailplane Rulebook en dan met name appendix II SAO (Sailplane Operations).

- De flow chart:
  - Blauw = activiteiten piloot
  - Roze = activiteiten eigenaar
  - Groen = activiteiten onderhoudsbedrijf of bevoegd technicus

  - Groene lijn = luchtwaardig
  - Rode lijn = NIET luchtwaardig

  - In de flow chart staan links naar paragrafen in ML.A. en Sailplane Operations

  - Bronnen:
    EU 1321/2014 Easy Access Rules Coninuing Airworthiness
    Sailplane rulebook


Luchtwaardig, gereed voor de vlucht
Piloot checkt (SAO.GEN.130):
• Vereiste boorddocumenten (SAO.GEN.155)
• Uit te voeren inspecties
• Defecten en status?
• Observaties en status?
OK?
Nee
Ja
Piloot checkt (SAO.GEN.130):
• Correcte montage
• Fysieke inspectie
• Vereiste uitrusting
• Accu, kaart, chute, etc
• Defecten/observaties (ML.A.403)
OK?
Nee
Ja
• Piloot registreert voor de start (ML.A.201 (d):
• Inspectie als uitgevoerd in logboek
Nee
OK?
Ja
Piloot kan gaan vliegen, (ML.A.403):
Rapporteert in logboek:
• Observaties, defecten
• Harde landing, grond zwaai
Ja, volgendevlucht
Nee
OK?
Ja
Einde vliegdag, piloot registreert:
• Observaties, defecten
• Logboek compleet (SAO.GEN.160, ML.A.403))
Nee
OK?
Ja
• Schoongemaakt, Accu, Chute etc. verwijderd
• Opgeborgen in trailer etc.
Einde
Piloot informeert (ML.A.403(d)):
• Eigenaar én
• Ander piloten
Eigenaar (ML.A.201 & 403(d)):
• Informeert andere piloten
• Stelt vliegtuig buiten dienst
Eigenaar (ML.A.201):
• Onderneemt actie om vliegtuig luchtwaardig te maken
Eigenaar (ML.A.803 & ML.A. Appendix II):
• Komt het onderhoud in aanmerking voor 'pilot owner maintenance (POM)'?
Nee
Ja/ Nee
Ja
Eigenaar (ML.A.803):
• Geeft POM onderhoudstaak
• Maakt werkorder
• Voert werk uit en documenteert
• Geeft vrijgave certificaat af (CRS, release to service, ML.A.801 (e))
Eigenaar (ML.A.201):
• Informeert piloten: vliegtuig inzetbaar
Eigenaar (geen POM):
• Contracteert CAO / PART 145 of
• Onafhankelijke Part 66 L
CAO/145 of PART 66 L
• Maakt werkorder
• Documenteert werk
• Brengt vliegtuig administratie op orde
• Geeft vrijgave certificaat af (CRS, release to service ML.A.801 (e))
Eigenaar (ML.A.201):
• Informeer piloten: vliegtuig inzetbaar

Sailplane rulebook Easy Access Rules for Sailplanes

ANNEX II — SAILPLANE AIR OPERATIONS (PART-SAO)

SAO.GEN.140 Compliance with laws, regulations and procedures

(a) The pilot-in-command and any other crew member shall comply with the laws, regulations and procedures of those States where operations are conducted.
(b) The pilot-in-command shall be familiar with the laws, regulations and procedures, pertinent to the performance of his or her duties, prescribed for the areas to be traversed, the aerodromes or operating sites to be used and the related air navigation facilities.

SAO.GEN.130 Responsibilities of the pilot-in-command

The pilot-in-command shall:
(a) be responsible for the safety of the sailplane and of any person on board during sailplane operations;
(b) be responsible for the initiation, continuation or termination of a flight in the interest of safety;
(c) ensure that all applicable operational procedures and checklists are complied with;
(d) only commence a flight if he or she is satisfied that all operational requirements are complied with, as follows:
(1) the sailplane is airworthy;
(2) the sailplane is duly registered;
(3) instruments and equipment required for the execution of the flight are carried on board the sailplane and are operative;
(4) the mass of the sailplane and the centre of gravity location are such that the flight can be conducted within the limits defined by the aircraft flight manual (AFM);
(5) all equipment and baggage are properly loaded and secured, and an emergency evacuation remains possible; and
(6) the operating limitations of the sailplane, as specified in the AFM, will not be exceeded at any time during the flight;
(e) ensure that the pre-flight inspection has been carried out as specified in the AFM;
(f) not perform duties on a sailplane in one of the following situations:
(1) when he or she is incapacitated from performing duties by any cause, including injury, sickness, medication, fatigue or the effects of any psychoactive substance, or feels otherwise unfit;
(2) if applicable medical requirements are not fulfilled;
(g) refuse carriage of or disembark any person or baggage that may represent a potential hazard to the safety of the sailplane or any person carried therein;
(h) not allow a person to be carried in the sailplane who appears to be under the influence of psychoactive substances to the extent that the safety of the sailplane or the persons therein is likely to be endangered;
(i) ensure that during critical phases of flight or whenever deemed necessary in the interest of safety, all persons on board are seated and have their safety belt fastened;
(j) during flight:
(1) keep his or her safety belt fastened; and
(2) remain at the control of the sailplane at all times except if another pilot is taking the controls;
(k) take any action in an emergency situation that requires immediate decision and action which he or she considers necessary under the circumstances. In such cases, he or she may deviate from rules, operational procedures and methods to the extent necessary in the interest of safety;
(l) not continue a flight beyond the nearest weather-permissible aerodrome or operating site, when his or her capacity to perform his or her duties is significantly reduced because of sickness, fatigue or lack of oxygen or any other cause;
(m) record utilisation data and all known or suspected defects in the sailplane at the termination of the flight, or series of flights, in the aircraft technical log or journey log;
(n) notify the safety investigation authority of the State in the territory of which the occurrence took place and the emergency services of that State without delay by the quickest available means of any accident or serious incident involving the sailplane;
(o) submit a report of an act of unlawful interference without delay to the competent authority and inform the local authority designated by the State in the territory of which the unlawful interference took place; and

SAO.GEN.155 Documents, manuals and information to be carried

(a) All of the following documents, manuals and information shall be carried on each flight as originals or copies:
(1) the AFM, or equivalent document(s);
(2) details of the filed ATS flight plan, when required in accordance with Section 4 of the Annex to Commission Implementing Regulation (EU) No 923/20121;
(3) current and suitable aeronautical charts for the area of the intended flight;
(4) any other documentation that may be pertinent to the flight or is required by the States concerned with the flight;
(5) procedures and visual signals information for use by intercepting and intercepted aircraft.
(b) In addition, when a declaration is required in accordance with point SAO.DEC.100, a copy of the declaration shall be carried on each flight.
(c) When not carried on board, all of the following documents, manuals and information shall remain available at the aerodrome or operating site as originals or copies:
(1) the certificate of registration;
(2) the certificate of airworthiness, including the annexes;
(3) the airworthiness review certificate;
(4) the noise certificate, if a noise certificate has been issued for a powered sailplane;
(5) the aircraft radio licence, where the sailplane is equipped with radio communication equipment in accordance with point SAO.IDE.130;
(6) the third-party liability insurance certificate(s);
(7) the journey log or equivalent.
(d) By derogation from points (a) and (b), the documents, manuals and information specified therein may be retained at the aerodrome or operating site for flights:
(1) intending to remain within the sight of the aerodrome or operating site; or
(2) remaining within a distance or area determined by the competent authority.
(e) When requested by the competent authority, the pilot-in-command or the operator shall make available to that authority the original documentation in the time period specified by the authority which shall not be less than 24 hours.

AMC1 SAO.GEN.155 Documents, manuals and information to be carried
GENERAL
(a) In case of loss or theft of documents, manuals and information to be carried, the operation may continue until the flight reaches the base or a place where a replacement document can be provided.
(b) The documents, manuals and information may be available in a form other than on printed paper. An electronic storage medium should be acceptable if accessibility, usability and reliability can be assured.

AMC1 SAO.GEN.155(a)(3) Documents, manuals and information to be carried
CURRENT AND SUITABLE AERONAUTICAL CHARTS
(a) The aeronautical charts carried should contain data appropriate to the applicable air traffic regulations, rules of the air, flight altitudes, area, route, and nature of the operation. Due consideration should be given to the carriage of textual and graphic representations of:
(1) aeronautical data, including, as appropriate for the nature of the operation:
(i) airspace structure;
(ii) communication frequencies;
(iii) prohibited, restricted and danger areas; and
(iv) sites of other relevant activities that may hazard the flight; and
(2) topographical data, including terrain and obstacle data.
(b) A combination of different charts and textual data may be used to provide adequate and current data.
(c) The aeronautical data should be appropriate for the current aeronautical information regulation and control (AIRAC) cycle.

SAO.GEN.160 Journey log

For each flight, or series of flights, particulars of the sailplane, its crew and each journey shall be retained in the form of a journey log or an equivalent document.

AMC1 SAO.GEN.160 Journey log

GENERAL
(a) The journey log, or equivalent, should include the following items, where applicable:
(1) sailplane nationality and registration;
(2) date;
(3) name of flight crew member(s);
(4) duty assignments of crew member(s), if applicable;
(5) place of departure;
(6) place of arrival;
(7) time of departure;
(8) time of arrival;
(9) hours of flight;
(10) nature of flight;
(11) incidents and observations, if any; and
(12) signature of the pilot-in-command.

(b) The information or parts thereof may be recorded in a form other than on printed paper. Accessibility, usability and reliability should be assured.

GM1 SAO.GEN.130(m) Responsibilities of the pilot-in-command

RECORDING UTILISATION DATA
Where a sailplane conducts a series of flights of short duration, the utilisation data for the series of flights may be recorded in the aircraft technical log or journey log as a single entry.

ML.A.201 Responsibilities

(a) The owner of the aircraft shall be responsible for the continuing airworthiness of the aircraft and shall ensure that no flight takes place unless all of the following requirements are met:

(1) the aircraft is maintained in an airworthy condition;
(2) any operational and emergency equipment fitted is correctly installed and serviceable or clearly identified as unserviceable;
(3) the airworthiness certificate is valid;
(4) the maintenance of the aircraft is performed in accordance with the Aircraft Maintenance Program ('AMP') specified in point ML.A.302.

(b) By derogation from point (a), where the aircraft is leased, the responsibilities set out in point (a) shall apply to the lessee, if the lessee is identified either in the registration document of the aircraft or in the leasing contract.

(c) Any person or organisation performing maintenance of aircraft and components shall be responsible for the maintenance tasks being performed.

(d) The pilot-in-command of the aircraft shall be responsible for the satisfactory accomplishment of the preflight inspection. That inspection shall be carried out by the pilot or another qualified person but need not be carried out by an approved maintenance organisation or by certifying staff.

ML.A.403 Aircraft defects

(a) Any aircraft defect that seriously endangers the flight safety shall be rectified before further flight.

(b) The following persons may decide that a defect does not seriously endanger flight safety, and may defer it accordingly:
(1) the pilot in respect of defects affecting non-required aircraft equipment;
(2) the pilot, when using the minimum equipment list, in respect of defects affecting required aircraft equipment — otherwise, these defects may only be deferred by authorised certifying staff;
(3) the pilot in respect of defects other than those referred to in points (b)(1) and (b)(2) if all the following conditions are met:
(i) the aircraft is operated under Annex VII to Regulation(EU) No 965/2012 (Part-NCO) or, in the case of balloons or sailplanes, not operated under Subpart-ADD of Annex II (Part-BOP) to Regulation (EU) 2018/395 or not following Subpart DEC of Annex II (Part-SAO) to Regulation (EU) 2018/1976;
(ii) the pilot defers the defect with the agreement of the aircraft owner or, if applicable, of the contracted CAMO or CAO;

(4) the appropriately qualified certifying staff in respect of other defects than those referred to in points (b)(1) and (b)(2), where the conditions referred to in point 3(i) and (ii) are not met.
(c) Any aircraft defect that does not seriously hazard flight safety shall be rectified as soon as practicable from the date on which the defect was first identified and within the limits specified in the maintenance data.
(d) Any defect not rectified before flight shall be recorded in the aircraft continuing airworthiness record system referred to in point ML.A.305 and a record shall be available to the pilot.

AMC1 ML.A.403 Aircraft defects
Aircraft equipment should be declared to be defective if the pilot observed a malfunction during the flight, or if considered as faulty after inspection/test referred to in the maintenance data. This does not prevent the pilot from recording observations and comments on the performance of the aircraft equipment where this is not considered to constitute a defect.

AMC1 ML.A.403(d) Aircraft defects

All deferred defects should be made known to the pilot/flight crew, whenever possible, prior to their arrival at the aircraft.
Deferred defects should be listed on the current list of deferred maintenance (ML.A.305(d)(6)) and rectified at the next appropriate maintenance event and within the limit specified in the maintenance data. Any deferred defect that is not rectified during the next maintenance event, should be re-entered on the list of deferred maintenance and the original date of the defect should be retained.

ML.A.801 Aircraft certificate of release to service

(a) A CRS shall be issued after the required maintenance has been carried out properly on an aircraft.
(b) The CRS shall be issued, alternatively by:
(1) appropriate certifying staff on behalf of the approved maintenance organisation;
(2) independent certifying staff;
(3) the pilot- owner in compliance with point ML.A.803.
(e) A CRS shall contain at least:
(1) basic details of the maintenance carried out;
(2) the date on which the maintenance was completed;
(3) the identity of the organisation or person issuing the release to service, including, alternatively:
(i) the approval reference of the maintenance organisation and certifying staff issuing the CRS;
(ii) in the case of point (b)(2), the identity and, if applicable, the licence number of the independent certifying staff issuing the CRS;
(4) the limitations to airworthiness or operations, if any.

ML.A.803 Pilot-owner authorisation

(a) To qualify as a pilot-owner, the person must:
(1) hold a valid pilot licence or equivalent licence issued or validated by a Member State for the aircraft type or class rating;
(2) own the aircraft, either as a sole or joint owner; that owner must be, alternatively:
(i) one of the natural persons on the registration form;
(ii) a member of a non-profit recreational legal entity, where the legal entity is specified on the registration document as owner or operator; that member must be directly involved in the decision-making process of the legal entity and designated by that legal entity to carry out Pilot-owner maintenance.
(b) For aircraft operated under Annex VII (Part-NCO) to Regulation (EU) No 965/2012 or, in the case of balloons, not operated under Subpart-ADD of Annex II (Part-BOP) to Regulation (EU) 2018/395 or, in the case of sailplanes, not following Subpart DEC of Annex II (Part-SAO) to Regulation (EU) 2018/1976, the pilot-owner may issue a CRS after limited Pilot-owner maintenance as provided for in Appendix II to this Annex.
(c) The CRS shall be entered in the logbooks and contain basic details of the maintenance carried out, the maintenance data used, the date on which that maintenance was completed, as well as the identity, the signature and the pilot licence (or equivalent) number of the pilot-owner issuing such a certificate.

AMC1 ML.A.803 Pilot-owner authorisation

(a) A pilot-owner may only issue a CRS for the maintenance he or she has performed (ref. ML.A.201(c), ML.A.801 and ML.A.803).

(b) In the case of jointly-owned aircraft, the AMP should list the names of all pilot-owners that are competent and designated to perform pilot-owner maintenance (ref. ML.A.302(c)(6)). As an alternative, the AMP may contain a procedure to ensure how such a list should be managed and kept current.
(c) An equivalent valid pilot-owner licence may be any document attesting a pilot qualification recognised by the Member State.
(d) Not holding a valid medical examination does not invalidate the pilot licence (or equivalent) required under ML.A.803(a)(1) for the purpose of the pilot-owner authorisation.

AMC1 ML.A.801(e) Aircraft certificate of release to service

(a) The aircraft CRS should contain one of the following statements:
(1) 'certifies that the work specified, except as otherwise specified, was carried out in accordance with Part-ML, and in respect to that work, the aircraft is considered ready for release to service.'; or
(2) for a pilot-owner:
'certifies that the limited pilot-owner maintenance specified, except as otherwise specified, was carried out in accordance with Part-ML, and in respect to that work, the aircraft is considered ready for release to service.'.

Appendix II — Limited Pilot-owner maintenance

In addition to the requirements laid down in this Annex, the pilot-owner shall comply with the following basic principles before it carries out any maintenance task:

(a) **Competence and responsibility**
(1) The pilot-owner shall always be responsible for any maintenance he performs.
(2) The pilot-owner shall hold satisfactory level of competence to perform the task. It is the responsibility of a pilot-owner to familiarise himself with the standard maintenance practices for his aircraft and with the AMP.

(b) **Tasks**
The Pilot-owner may carry out simple visual inspections or operations to check the airframe, engines, systems and components for general condition, obvious damage and normal operation.

A maintenance task shall not be released by the pilot-owner if any of the following conditions occurs:
(1) it is a critical maintenance task; == *all related to controls*
(2) it requires the removal of major components or a major assembly;
(3) it is carried out in compliance with an AD or an airworthiness limitation item (ALI) unless specifically allowed in the AD or the ALI;
(4) it requires the use of special tools or calibrated tools (except for torque wrench and crimping tool);
(5) it requires the use of test equipment or special testing (e.g. non-destructive testing (NDT), system tests or operational checks for avionics equipment);
(6) it is composed of any unscheduled special inspections (e.g. heavy-landing check);
(7) it affects systems essential for the instrumental flight rules (IFR) operations;
(8) it is a complex maintenance task in accordance with Appendix III, or it is a component maintenance task in accordance with point (a) or (b) of point ML.A.502;
(9) it is part of the 100-h/annual check (for those cases the maintenance task is combined with the airworthiness review performed by maintenance organisations or independent certifying staff).

The criteria referred to in points (1) to (9) cannot be overridden by less restrictive instructions issued in accordance with the AMP referred to in point ML.A.302.
Any task described in the aircraft flight manual (or other operational manuals), for example preparing the aircraft for flight (assembling the sailplane wings, or performing a preflight inspection), is not considered a maintenance task and, therefore, does not require a CRS. Nevertheless, the person assembling those parts is responsible for ensuring that those parts are eligible for installation and in a serviceable condition.

(c) **Performance and records of the pilot-owner maintenance tasks**
The maintenance data, as specified in point ML.A.401, must always be available during the conduct of pilot-owner maintenance and must be complied with. Details of the data referred to in the conduct of pilot-owner maintenance must be included in the CRS in accordance with point (d) of point ML.A.803.