


Irish Aviation Authority The Times Building 11–12 D'Olier Street Dublin 2, Ireland www.iaa.ie Safety Regulation Division	Údarás Eitlíochta na hÉireann Foirgneamh na hAmanna 11–12 Sráid D'Olier Baile Átha Cliath 2, Éire Rannán na Rialachán Sábháilteachta	AAM No. 09 Revision: 03 Date: 26.09.22	
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Title: Non-EASA Maintenance Organisations

1. Introduction

This AAM provides information to organisations initially applying for or holding approval to overhaul, modify, repair or maintain aircraft, including their accessories and component parts, which are not subject to European Regulation (EU) No. 2018/1139, i.e. Annex I aircraft or Art. 2(8)(a) aeroplanes, operating on a Flight Permit. It establishes a procedure for the approval of such organisations in accordance with Article 8 (4) (a) (1) of the Irish Aviation Authority (Personnel Licensing) Order, 2000 (SI No. 333 of 2000) and outlines their rights and obligations as approval holders.

The categories of aircraft to which this applies are listed in Annex I Article 2(8)(a) of Regulation (EU) 2018/1139.

2. References

This Advisory Memorandum supersedes and replaces Airworthiness Advisory Memorandum 09 at revision 02.

3. Application

An application for a national maintenance approval may be made by a legal entity. It must be made, in writing, to the IAA. An application must be accompanied by a National Maintenance Organisation Manual (NMOM) and the appropriate Fee (see Irish Aviation Authority (Fees) Order, as amended) in order for it to be processed.

4. Issue of the Approval


An organisation is entitled to have a maintenance organisation approval issued by the IAA when it has demonstrated compliance with this AAM.

5. Terms of Approval

The organisation should specify the scope of work deemed to constitute the approval in a National Maintenance Organisation Manual (NMOM). This may be in the form of a list of aircraft types or categories.

6. National Maintenance Organisation Manual

The maintenance organisation should provide a manual (see sample NMOM in Appendix 1 to this AAM) containing at least the following information:

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- a) a statement signed by the Chairperson¹ to confirm that the organisation will continuously work in accordance with the manual at all times;
- b) the organisation's scope of work;
- c) the title(s) and name(s) of person(s) referred to in paragraph 8.2;
- d) an organisation chart showing associated chains of responsibility between the person(s) referred to in paragraph 8.2;
- e) a list of certifying staff with their scope of approval;
- f) procedures specifying how the maintenance organisation ensures compliance with this AAM; and
- g) the maintenance organisation manual amendment procedure(s).

6.1 The national maintenance organisation manual and its amendments shall be approved by the IAA.

7. Facilities

The organisation should have procedures for ensuring that the facilities used for the purposes of performing the Flight Permit recommendation inspection are suitable.

8. Personnel Requirements

8.1 The organisation should appoint a Chairperson¹, who will ensure that all maintenance required by the customer/member can be carried out to the standard required by the IAA.

8.2 A person or group of persons should be nominated with the responsibility of ensuring that the organisation is always in compliance with this AAM, as amended. Such person(s) shall be ultimately responsible to the Chairperson¹.

8.3 All paragraph 8.2 persons shall be able to demonstrate relevant knowledge, background and appropriate experience related to aircraft and/or component maintenance.


8.4 The qualification/experience of all personnel involved in maintenance shall be demonstrated and recorded.

8.5 The maintenance organisation shall have sufficient designated certifying staff to issue certificates of release to service for aircraft and components, as applicable.

9. Designated Certifying Staff

The organisation approved in accordance with Article 8 (4) (a) (1) of the Irish Aviation Authority (Personnel Licensing) Order, 2000 (SI No. 333 of 2000) may designate persons to certify on its behalf any overhaul, modification, repair or maintenance of aircraft including their

¹ Terms used in this AAM may be varied by the organisation e.g. Chairperson may be Director/ Manager/ President.

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accessories and component parts, in accordance with the procedures in the NMOM. Such persons are termed Certifying Staff and may include pilot-owners.

9.1 Certifying staff can only exercise their privileges, if the organisation has ensured:

- a) that Certifying Staff can demonstrate that they are in compliance with the NMOM; and
- b) that Certifying Staff have an adequate understanding of the relevant aircraft and/or aircraft component(s) to be maintained, together with the associated organisation procedures.

9.2 The approved maintenance organisation should record all details concerning Certifying Staff and maintain a current list of all Certifying Staff together with their scope of approval, as part of the organisation's manual.

9.3 Certifying Staff may only be designated to perform Flight Permit inspections on aircraft used in pilot training and Art. 2(8)(a) aeroplanes if they are a qualified aircraft maintenance engineer holding an EASA Part 66 licence or ICAO compliant equivalent.

9.3 All certifying staff should be assessed for competence by the organisation at intervals not exceeding 24 months.

10. Components, Equipment and Tools

10.1 The organisation should demonstrate that it has access to all equipment and tools required.

10.2 Tools and equipment should be controlled and calibrated, where necessary.

11. Maintenance Data


11.1 The organisation should have access to and use only applicable maintenance data in the performance of maintenance, including alterations and repairs. In the case of customer provided maintenance data, it is only necessary to have such data when the work is in progress.

11.2 For the purposes of this AAM, applicable maintenance data is:

- a) any applicable requirement, procedure, standard or information issued by the IAA;
- b) any applicable Airworthiness Directive (AD) or Mandatory Permit Directive (MPD);
- c) applicable maintenance data may be the latest edition of historical data;
- d) standard changes and standard repairs listed in CS-STAN, and
- d) standard practices e.g. FAA Advisory Circular 43.13-1B

11.3 The organisation should ensure that all applicable maintenance data is current and readily available for use when required.

11.4 The organisation should ensure that all Aeronautical Notices and Airworthiness Advisory Memoranda are reviewed periodically.

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12. Maintenance Work Orders

12.1 Before the commencement of maintenance a written work order shall be agreed between the organisation and the registered owner requesting maintenance to clearly establish the maintenance to be carried out.

13. Performance of Maintenance

13.1 All maintenance shall be performed following the methods, techniques, standards and instructions specified in the maintenance data.

13.2 An independent inspection or reinspection shall be carried out after any flight safety sensitive maintenance task on an aircraft used for Flight Training. Flight Safety sensitive maintenance tasks include, but are not limited to, installation or disturbance of propeller, engine controls, and/or primary flight controls.

13.2.1 Independent inspection should ensure for example correct assembly, locking and sense of operation. This is an independent inspection carried out by an independent qualified person e.g. another certifying staff or a pilot, in addition to the person performing the task. The independent qualified person should make an entry in the aircraft record system for this inspection.

13.2.2 Reinspection is subject to the same conditions as the independent inspection is, except that the person performing the maintenance task is also acting as 'independent qualified person' and performs the inspection.


13.4 This does not include any task described in the aircraft flight manual (or other operational manuals) for example preparing the aircraft for flight (assembling the flexwing aircraft wings or performing a preflight inspection etc). Nevertheless, the person assembling those parts is responsible for ensuring that those parts are eligible for installation and in a serviceable condition. 13.4 All maintenance should be performed using the tools, equipment and material specified in the maintenance data unless otherwise specified by the IAA.

13.5 All maintenance should be performed within any environmental limitations specified in the maintenance data.

13.6 In case of inclement weather or lengthy maintenance, facilities shall be used to protect the aircraft from the weather elements.

13.7 After completion of all maintenance a general verification must be carried out to ensure the aircraft or component is clear of all tools, equipment and any other extraneous parts and material, and that all access panels removed have been refitted.

13.8 The Registered Owner(s) is responsible for the aircraft's proper maintenance. Where the airframe/engine/propeller manufacturer(s) recommend additional maintenance to the Flight Permit or Validity Certificate renewal inspections, the owner(s) is responsible for complying with such recommendations or, for an aircraft not used in training, for any deviation from them.

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14. Certificate of Release to Service

14.1 At the completion of all required aircraft maintenance in accordance with the NMOM an aircraft certificate of release to service shall be issued by appropriate certifying staff on behalf of the maintenance organisation.

14.2 A release as specified in IAA Aeronautical Notice A.8 may only be issued when it has been verified that all maintenance has been properly carried out in accordance with the procedures specified in the manual, taking into account the availability and use of the maintenance data specified in paragraph 11, and that there are no known non-compliances which hazard flight safety.

14.3 A Certificate of Release to Service shall contain as a minimum:

- a) basic details of the maintenance carried out; and
- b) the date such maintenance was completed; and
- c) the hours and cycles accrued on the airframe/engine/propeller/component, as appropriate; and
- d) the identity of the organisation issuing the release to service, including:
 - i) the approval reference of the maintenance organisation and the certifying staff issuing the certificate; or
 - ii) in the case of a certificate of release to service described under paragraph 16.1 (b), the identity and licence number of the certifying staff issuing such a certificate; and
- e) the limitations to airworthiness or operations, if any.

14.4 A Certificate of Release to Service shall not be issued in the case of any known non-compliance that endangers flight safety.

14.5 The Certificate of Release to Service should relate to the task specified in the relevant maintenance data and be made in accordance with IAA Aeronautical Notice A.8.


15. Maintenance Records

15.1 The approved maintenance organisation should record all details of work carried out. Records necessary to prove all requirements have been met for issuance of the certificate of release to service shall be retained.

15.2 The approved maintenance organisation should provide a copy of each certificate of release to service to the aircraft owner, together with a copy of any specific approved repair/modification/alteration data used for repairs/modifications/alterations carried out.

15.3 The approved maintenance organisation should retain a copy of all maintenance records for three years from the date the aircraft, or aircraft component to which the work relates, was released from the approved maintenance organisation, and:

- a) the records should be stored in a manner that ensures protection from damage, alteration and theft;

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b) all computer hardware used to ensure backup should be stored in a different location from that containing the working data in an environment that ensures they remain in good condition; and

c) where an approved maintenance organisation terminates its operation, all retained maintenance records covering the last three years should be distributed to the last owner or customer of the respective aircraft or component, should be stored as specified by the IAA.

16. Privileges of the Organisation

16.1 The maintenance organisation approved in accordance with Article 8 (4) (a) (1) of the Irish Aviation Authority (Personnel Licensing) Order, 2000 (SI No. 333 of 2000) may:

- a) overhaul, modify, repair or maintain any aircraft and/or component for which it is approved;
- b) issue certificates of release to service on completion of maintenance, in accordance with paragraph 13;
- c) make recommendations to the IAA for the issue/renewal of Flight Permits, when it is so approved;
- d) extend twice the validity of a Validity Certificate issued by the Irish Aviation Authority, when it is so approved; and
- e) issue a Certificate of Fitness for Flight for any aircraft for which it is approved.

17. Organisational Review

17.1 To ensure that the approved maintenance organisation continues to meet these requirements, it shall organise, at least once every 12 months, organisational reviews.

17.2 It should review in particular:


- (1) that all those activities are performed in accordance with the approved procedures; and
- (2) that the organisation continues to comply with the requirements of this AAM, as amended.

17.3 The records of that monitoring should be retained for at least the previous 2 years.

18. Changes to the Approved Maintenance Organisation

18.1 In order to enable the IAA to determine continued compliance with this AAM, the approved maintenance organisation should notify it of any proposal to carry out any of the following changes, before such changes take place:

- a) the name of the organisation;
- b) the address of the organisation;
- c) additional locations of the organisation;

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- d) change of Chairperson;
- e) any of the persons specified in paragraph 8.2;

18.2 In the case of proposed changes not known beforehand, these changes shall be notified at the earliest opportunity.

19. Continued Validity of the Approval

19.1 An approval may be issued for 12 months. It shall remain valid subject to:

- a) the organisation remaining in compliance with its NMOM, in accordance with the provisions related to the handling of findings as specified under paragraph 20; and
- b) the approval not being surrendered or revoked.

19.2 Upon surrender or revocation, the approval certificate shall be returned to the IAA.

20. Findings by the IAA


20.1 When objective evidence is found showing non-compliance of the holder of an organisation approval with the applicable requirements, the finding shall be classified as follows:

- a) a level one finding is any non-compliance with the applicable requirements, which lowers the safety standard and hazards flight safety;
- b) a level two finding is any non-compliance with the applicable requirements, which is not classified as level one.

20.2 After receipt of notification of findings:

- a) the holder of the approval shall define the corrective action plan and demonstrate corrective action to the satisfaction of the IAA, and within a period agreed with the IAA;
- b) for level one findings, immediate action shall be taken by the IAA to revoke, limit or suspend in whole or in part, the organisation approval, until successful corrective action has been taken by the organisation;
- c) for level two findings, the corrective action period granted by the IAA will be appropriate to the nature of the finding and initially will not be more than 3 months. In certain circumstances, the IAA may extend the 3-month period, subject to the nature of the finding and the demonstration of a satisfactory corrective action plan; and
- d) action will be taken by the IAA to suspend in whole or in part the organisation approval in case of failure to comply within the agreed timescales.

20.3 In the case of level one or level two findings, the organisation approval may be subject to a partial or full suspension or revocation. The Chairperson of the organisation approval shall provide confirmation of receipt of the notice of suspension or revocation of the organisation approval in a timely manner.

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21. Flight Permit Recommendations

Certain aircraft, which may not qualify for a Certificate of Airworthiness, are issued a Flight Permit under Article 7 (b) of the Irish Aviation Authority (Airworthiness of Aircraft) Order, 1996. This allows the aircraft to fly or attempt to fly, when the terms and conditions on the Flight Permit are complied with.

Flight Permits are issued by the Irish Aviation Authority.

21.1 Flight Permit Recommendations


The organisation may be permitted to make recommendations for the issue of Flight Permits to the Irish Aviation Authority. This organisation shall have procedures in place to ensure that a Flight Permit inspection is performed by suitably designated persons and, if satisfactory, a recommendation is made in writing to the IAA.

21.2 3 Year Flight Permits

For organisations making in excess of 30 Flight Permit recommendations per year, the Irish Aviation Authority may augment the Flight Permit with a Validity Certificate. In such cases, aircraft maintained by the organisation will be issued a non-expiring Flight Permit and a Validity Certificate, valid for 1 year. The organisation may then extend the validity of the Validity Certificate, if so approved. This organisation shall have procedures in place to ensure that the 3 Year Flight Permit Scheme is correctly managed.

21.3 Flight Permit Recommendation Inspection

Prior to the issue of a Flight Permit recommendation, the organisation shall ensure that the aircraft is inspected in accordance with each element contained in Appendix II – National Minimum Inspection Programme or equivalent as approved in the NMOM.

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Appendix I - Sample National Maintenance Organisation Manual

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 - B. HEAD OF MAINTENANCE
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- A. TIMEFRAME FOR REPORTING
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PART E

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APPENDIX 1 – APPROVED FORMS

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Appendix II – National Minimum Inspection Programme

MIP for aeroplanes of 2,730 kg MTOM and below


This MIP for aeroplanes of 2 730 kg maximum take-off mass (MTOM) and below,:

To be performed at every Flight Permit renewal or Validity Certificate extension, whichever occurs first.


Note 1: Use the manufacturer's maintenance manual to accomplish each task/inspection, where available.

Note 2: Proper operation of backup or secondary systems and components should be performed wherever a check for improper installation/operation is carried out.


Aeroplanes of 2 730 kg MTOM and below	
System/component/area	Task and inspection detail
GENERAL	
General	Remove or open all necessary inspection plates, access doors, fairings, and cowlings. Clean the aircraft and aircraft engine as required.
Lubrication/servicing	Lubricate and replenish fluids in accordance with the manufacturer's requirements.
Markings	Check that side and underwing registration markings are correct. If applicable, check that an exemption for alternate display is approved. Identification plate for national aviation authority (NAA)-registered aircraft is present, as well as other identification markings on fuselage in accordance with local (national) rules.
Placards	Check that a placard is permanently affixed to the aircraft in full view of the occupants which matches the wording given in Appendix III.
Weighing	Review weighing record to establish accuracy against installed equipment. Weigh the aircraft as required by Part-NCO or Part-SPO, as applicable.
Service life limits	Check the records that the service life limits and airworthiness limits are within the life time limits of the maintenance programme.
Software	Check for updated software/firmware status and databases for engine and equipment.
AIRFRAME	

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Fabric and skin	Inspect for deterioration, distortion, other evidence of failure, and defective or insecure attachment of fittings. NOTE: When checking composite structures, check for signs of impact or pressure damage that may indicate underlying damage.
Fuselage structure	Check frames, formers, tubular structure, braces, and attachments. Inspect for signs of corrosion and cracks.
Systems and components	Inspect for improper installation, apparent defects, and unsatisfactory operation.
Pitot-static system	Inspect for security, damage, cleanliness, and condition. Drain any water from condensation drains.
General	Inspect for lack of cleanliness and loose equipment that may foul the controls.
Tow hooks	Inspect for condition of moving parts and wear. Check service life. Carry out operational test.
CABIN AND COCKPIT	
Seats, safety belts and harnesses	Inspect for poor condition and apparent defects. Check for service life.
Windows, canopies and windshields	Inspect for deterioration and damage, and for function of emergency jettison.
Instrument panel assemblies	Inspect for poor condition, mounting, marking, and (where practicable) improper operation. Check markings of instruments in accordance with the flight manual.
Flight and engine controls	Inspect for improper installation and improper operation.
Speed/weight/manoeuvre placard	Check that the placard is correct and legible, and accurately reflects the status of the aircraft.
All systems	Inspect for improper installation, poor general condition, apparent and obvious defects, and insecurity of attachment.
LANDING GEAR	
Shock-absorbing devices	Inspect for improper oleo fluid level. Inspect for wear and deformation of rubber pads, bungees, and springs.
All units	Inspect for poor condition and insecurity of attachment, including the related structure.
Retracting and locking mechanism	Inspect mechanism. Operational check.
Linkages, trusses and members	Inspect for undue or excessive wear fatigue and distortion.
Steering	Inspect the nose/tail wheel steering for proper function and wear.
Hydraulic lines	Inspect for leakage. Check condition and replace if necessary.
Electrical system	Inspect for chafing. Operational check of switches.

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Wheels	Inspect for cracks, defects, and condition of bearings.
Tires	Inspect for wear and cuts.
Brakes	Inspect for improper adjustment and wear. Carry out operational test.
Floats and skis	Inspect for insecure attachment and apparent defects.
WING AND CENTRE SECTION	
All components	Inspect all components of the wing and centre section assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure and insecurity of attachment.
Connections	Inspect main connections (e.g. between wings, fuselage, wing tips) for proper fit, play within tolerances, wear or corrosion on bolts and bushings.
FLIGHT CONTROLS	
Control circuit/stops	Inspect control rods and cables. Check that the control primary stops are secure and make contact.
Control surfaces	Inspect aileron, flap, elevator, air brake and rudder assemblies, hinges, control connections, springs/bungees, tapes and seals. Check full range of motion and free play.
Trim systems	Inspect trim surfaces, controls, and connections. Check full range of motion.
EMPENNAGE	
All components and systems	Inspect all components and systems that make up the complete empennage assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure, insecure attachment, improper component installation, and improper component operation.
AVIONICS AND ELECTRICS	
Batteries	Inspect for improper installation, improper charge, spillage and corrosion.
Radio and electronic equipment	Inspect for improper installation and insecure mounting. Carry out ground function test.
Wiring and conduits	Inspect for improper routing, insecure mounting, and obvious defects.
Bonding and shielding	Inspect for improper installation, poor condition, chafing and wear of insulation.
Antennas	Inspect for poor condition, insecure mounting, and improper operation.
Lights	Operational check of the interior, exterior and instrument lightning
POWER PLANT (OTHER THAN TURBOPROP ENGINE)	

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Engine section	Inspect for visual evidence of oil, fuel or hydraulic leaks and sources of such leaks.
Studs and nuts	Inspect for looseness, signs of rotation and obvious defects.
Internal engine	Inspect for proper cylinder compression (record measures for each cylinder) and for metal particles or foreign matter in oil filter, screens and sump drain plugs.
Engine mounts	Inspect for cracks, looseness of mounting, and looseness of the engine to the engine-mount attachment.
Flexible vibration dampeners	Inspect for poor condition and deterioration.
Engine controls	Inspect for defects, improper travel, and improper safe tying.
Lines, hoses and clamps	Inspect for leaks, improper condition, and looseness.
Exhaust stacks	Inspect for cracks, defects, and improper attachment.
Turbocharger and intercooler	Inspect for leaks, improper condition, and looseness of connections and fittings. Check MP controller or density controller for leakage and free movement of controls. Check waste gate or overpressure relief valve for free movements.
Heating	Inspect cabin heating heat exchanger for improper condition and function. For exhaust heat exchanger, check CO (Carbon Monoxide) concentration.
Liquid cooling systems	Inspect for leaks and proper fluid level.
Electronic engine control	Inspect for signs of chafing, and proper electronics and sensor installation.
Accessories	Inspect for apparent defects in security of mounting.
All systems	Inspect for improper installation, poor general condition, defects and insecure attachment.
Cowling	Inspect for cracks and defects. Check cowling flaps.
Cooling baffles and seals	Inspect for defects, improper attachment, and wear.
FUEL	
Fuel tanks	Inspect for leaks and improper installation and connection. Verify proper sealing and function of tank drains.
CLUTCHES AND GEARBOXES	
Filters, screens, and chip detectors	Inspect for metal particles and foreign matter.
Exterior	Inspect for oil leaks.

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Output shaft	Inspect for excessive bearings' play and condition.
PROPELLER	
Propeller assembly	Inspect for cracks, nicks, binds, and oil leakage.
Propeller bolts	Inspect for proper installation, looseness, signs of rotation, and lack of safe tying.
Propeller control mechanism	Inspect for improper operation, insecure mounting, and restricted travel.
Anti-icing devices	Inspect for improper operation and obvious defects.
MISCELLANEOUS	
Ballistic rescue system	Inspect for proper installation, unbroken activation mechanism, proper securing while on ground, validity of inspection periods of pyrotechnic devices, and parachute-packing intervals.
Other miscellaneous items	Inspect installed miscellaneous items that are not otherwise covered by this listing for improper installation and improper operation.
OPERATIONAL AND FUNCTIONAL CHECKS	
Power and revolutions per minute (rpm)	Check that power output, static and idle rpm are within published limits.
Magnetos	Check for normal function.
Fuel and oil pressure	Check that they are within normal values. Check fuel pumps for proper operation.
Engine temperatures	Check that they are within normal values.
Engine	For engines equipped with automated engine control (e.g. FADEC), perform the published run-up procedure and check for discrepancies.
Engine	For dry-sump engines, engines with turbochargers and liquid-cooled engines, check for signs of disturbed fluid circulation.
Pitot-static system	Perform functional check on aircraft used in Flight Training otherwise, perform operational check
Transponder	Perform operational check.
Ice protection	Perform operational check of ice protection system.
Fuel quantity indication	Check the fuel quantity indication for proper indication.
Caution and warning	Operational check of cautions and warnings lights.

OPERATIONAL TEST AND FUNCTIONAL TEST

An operational test (or operational check) is a task used to determine that an item is operating normally. It does not require quantitative tolerances.

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A functional test (or functional check) is a quantitative check to determine if one or more functions of an item performs within the limits specified in the appropriate maintenance data. The measured parameter should be recorded.

Note 1: Operational Checks may be carried out by the pilot/owner shortly in advance of the Flight Permit renewal inspection. These checks may be performed in flight. In such cases, the owner may make a documented declaration that the checks have been satisfactorily carried out and the maintenance organisation does not have to repeat them.

Note2: Where maintenance data does not specify the limits to be applied for an Operational Check the following may be applied:

Appendix E to Part 43 - Altimeter System Test and Inspection

14 CFR § 25.1323 - Airspeed indicating system.

Appendix III – Occupant Warning Placard

As specified on the Flight Permit a permanent placard shall be affixed to the aircraft in full view of the occupants, and shall be worded as follows:

OCCUPANT WARNING:

**THIS AIRCRAFT IS OPERATING *WITHOUT* A STANDARD
CERTIFICATE OF AIRWORTHINESS RELATING THERETO**