Original Ref. N° 452/07-432
Amendment 1 Ref. N° 322/09-430
Amendment 2 Ref. N° 21/10-433

MAINTENANCE GUIDELINES FOR AIRCRAFT THE TYPE CERTIFICATE OF WHICH HAS BEEN TRANSFERRED UNDER THE COMPETENCE OF THE AGENCY IN ACCORDANCE WITH THE REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUCIL (EC) N° 216/2008

(MAINTENANCE GUIDELINES FOR TRANSFERRED AIRCRAFT)

CAA-ST-092-2/07

15. 07. 2009

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Approved in Prague on:

Ing. Pavel Matoušek
CAA-TD Director

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AMENDMENTS AND CORRIGENDA

Amendments			Corrigenda		
Amdt. No.	Effective Date	Record Date and Signature	Corr. No.	Effective Date	Record Date and Signature
1	15 July 2009				
2	19 February 2010				

FOREWORD

This document was issued by the Civil Aviation Authority as the CAA-ST-092-2/07 Guideline in order to provide detailed exposition of the Commission Regulation (EC) N° 2042/2003 for the Czech Republic. It is intended for all the personnel involved in civil aviation and performing maintenance activities, technicians, pilots and personnel authorized by CAA CZ to perform professional supervision over transferred aircraft (i.e. aircraft the Type Certificate of which has been transferred under the competence of EASA in accordance with the Regulation (EC) N° 216/2008 of the European Parliament and of the Council). A current list of these aircraft is published at EASA's website (www.easa.europa.eu).

Where conflict may exist in exposition of this Guideline regarding maintenance areas or procedures that are clearly defined by the Commission Regulation (EC) N° 2042/2003, or N° 1702/2003, provisions of this Guideline do not apply.

This Guideline remains valid till all the areas covered by this Guideline are fully covered by regulations.

Individual documents need to be reviewed in accordance with this Guideline at the time of their regular review.

Forms to be used for the development of the Maintenance programmes are available on the CAA CZ website via Technical Division Forms bookmark.

Any proposals and questions are to be answered by representatives of the technical division available at:

- fax number: 220 562 270, or
- phone number: 225 422 709,
- or address:

Civil Aviation Authority
Technical Division
Ruzyně Airport
160 08 Prague 6

Warrantors of this Guideline are:

- DL Section Manager
- ML Section Manager
- ÚDR Section Manager
- Time period for up-to-dateness review of this Guideline is 2 years.

DEFINITIONS FOR THE PURPOSES OF THIS DOCUMENT

DOA (Design Organization Approval)
- an approval to perform design activities.

EASA (European Aviation Safety Agency)
- European Aviation Safety Agency

Overhaul
- highest maintenance level prescribed by the supporting technical documentation of the product

Appliance
- any instrument, mechanism, component, gear, accessory or aggregate used in the aircraft except the engine or propeller

Aircraft Part and Device
- any instrument, equipment, mechanism, part, apparatus, accessory or aggregate including communication equipment, which is being used or is intended to be used while operating or controlling an aircraft at flight and is installed in or fitted to the aircraft
- includes parts of the airframe, engine or propeller

Small Aircraft
- an aircraft different from the Large Aircraft described below

Modification
- for the purposes of this document, modification designates execution of an approved type design change of a product or equipment

Regulation
- Commission Regulation (EC) N° 2042/2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organizations and personnel involved in these tasks
- Commission Regulation (EC) N° 1702/2002, laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organizations

Non-Standard Repair
- a repair, for which no standard procedure is defined in the supporting technical documentation; is performed in accordance with documentation prepared for the purpose by an approved organization

Repair
- a set of activities performed in order to restore airworthiness of products

Person
- a person designates a physical or a legal entity

Aircraft Treatment
- pre-flight inspection, in-between-flights inspection, post-flight inspection

POA (Production Organization Approval)
- an approval to produce

Preventive Maintenance
- means works listed in Appendix A to this document

Progressive Inspection
- an inspection, which is part of the progressive inspections system, which is usually implemented in case of higher annual aircraft usage rates to distribute scheduled maintenance

tasks into less time demanding routine and detailed inspections covering all scheduled maintenance operations within the prescribed 12 months

Inspection
- a set of tasks in accordance with requirements of the supporting technical documentation, eventually other documentation like maintenance regulations or airworthiness directives, where inspections may be prescribed. Inspections include inspections of aircraft, airframes, aircraft engines, propellers, aircraft appliances or aircraft components

Operational-Technical Documentation
- all the documentation used for operation, service, maintenance, preventive maintenance, rebuilding and modification records

Rebuilding
- a set of tasks performed in order to restore the state of a product to new-like-condition; performed in accordance with documentation for this purpose.

Standard Repair
- a repair, for execution of which, there are procedures described in the supporting technical documentation of the product

Type Documentation
- the type documentation means the Type Certificate with its Data Sheet, eventually the Supplemental Type Certificate and related documentation and a technical description of an aircraft, an aircraft engine or a propeller

Maintenance
- designates execution of an overhaul, repair, inspection, replacement, modification or rectification of a defect on an aircraft or an aircraft component or combination of these operations – excluding the pre-flight inspection

Pilot-Owner Maintenance
- can be performed by a person specified in the aircraft registration document as its owner or operator

Large Aircraft
- is an airplane with a maximum take-off mass exceeding 5 700 kg, or a multi-engine helicopter

Equipment
- equipment designates aircraft parts and devices

Product
- a product means an aircraft, aircraft engine, propeller

Basic Regulation
- European Parliament and Council (EC) Regulation N° 216/2008

Change in Type Design (Major, Minor)
- modification of the condition, in which the Type Design obtained its Type Certificate

ABBREVIATIONS AND DEFINITIONS

The following abbreviations may be used in this document:

AMC&GM	Acceptable Means of Compliance and Guidance Material
AD	Airworthiness Directive
APU	Auxiliary Power Unit
ARC	Airworthiness Review Certificate
CDL	Configuration Deviation List
CMR	Certification Maintenance Requirements
DOA	Design Organisation Approval
DL	Transport Aircraft Section
EASA	European Aviation Safety Agency
ETOPS	Extended range operations with two-engined aeroplanes
ICAO	International Civil Aviation Organisation
IFR	Instrument Flight Rules
LP	Flight Manual
LR ČR	Aircraft Register of the Czech Republic
MEL	Minimum Equipment List
ML	Small Aircraft Section
MPD	Maintenance Planning Document (Data)
MRB	Maintenance Review Board
MSG	Maintenance Steering Group
MTOM	Maximum Take-off Mass
OLZ	Certificate of Airworthiness
OZL	Aircraft Continuous Airworthiness Department
POA	Production Organization Approval
SB	Service Bulletin
STC	Supplemental Type Certificate
CAA-TD	Technical Division of the CAA CZ
TCDS	Type Certificate Data Sheet
TN	Type Design
TC	Type Certificate
(E)TSO	(European) Technical Standard Order
CAA CZ	Civil Aviation Authority of the Czech Republic
ÚDR	Maintenance Section
Authority	Civil Aviation Authority of the Czech Republic
VFR	Visual Flight Rules

1. The Temporary Procedure for Releasing of Aircraft Components after Maintenance

Maintenance Organization Approval holder in accordance with Part-M, Subpart F and Part-145 of the Commission Regulation (EC) N° 2042/2003 may approve release of an aircraft component to service in accordance with the requirements of Part-M, Subpart F and Part-145 of the Regulation and in accordance with provisions of this document. Individual aircraft component maintenance licence holder may approve such aircraft component, if he meets requirements of CAA-ZLP-073 AML ICAO For aircraft component.

2. General Performance Rules for Inspections

a) General

Each person performing an inspection required by Appendix A to this document shall:

1. perform the inspection in a way that will enable to assess, if the aircraft or its part being inspected comply with applicable regulatory airworthiness requirements; and
2. if the inspection is a part of an approved maintenance programme, perform the inspection in accordance with instructions and procedures defined in the maintenance programme for the aircraft being inspected.

b) Annual inspections and 100-hour inspections

1. Each person performing the annual or 100-hour inspection shall use the sign-off checklists of tasks (confirmation protocol). This list of tasks may be prepared either by the person performing the inspection, manufacturer of the device being inspected, or may come from a different source. It shall include the scope and details of individual operations that are listed in Appendix B to this document, paragraph (b) of this section and operations listed in the supporting technical documentation of the manufacturer.
2. Each person approving an aircraft powered by one or more piston engines for release to service after an annual or 100-hour inspection shall arrange an engine test prior to issuing the release, in order to assess, if the engine performance corresponds to manufacturer's recommendations, while the following shall be tested:
   i) maximum power (maximum rpm at full throttle and ground idling rpm);
   ii) ignition magnetos functionality;
   iii) oil and fuel pressure; and
   iv) cylinder and oil temperature.

Release of an aircraft to service in not acceptable in case the engine or propeller operating time since new or overhaul exceeds the time between two overhauls – even in case it is listed as manufacturer's recommendation. If an aircraft is not operated in return for remuneration, the provisions regarding recommended time till overhaul do not apply to it, in case it is not contrary to its approved maintenance programme and if it is not operated in the IFR category.

3. Each person approving an aircraft powered by a single jet engine for release to service after an annual, 100-hour or progressive inspection shall arrange an engine test prior to issuing the release, in order to assess, if the engine performance corresponds to manufacturer's or Type Certificate holder's recommendations.

Release of an aircraft to service in not acceptable in case the engine or propeller (if installed) operating time since new or overhaul exceeds the time between two overhauls – even in case it is listed as manufacturer's recommendation. If an aircraft is not operated in return for remuneration, the provisions regarding recommended time till overhaul do not apply to it, in case it is not contrary to its approved maintenance programme and if it is not operated in the IFR category.

c) Progressive inspection system

1. Each person performing a progressive inspection, before starting to apply the progressive inspection system shall perform a transition inspection of the whole aircraft in the scope approved by CAA-TD. After this transition (initial) inspection, all the routine and detailed

inspections shall be performed as described in the time schedule of the progressive inspection system.

Routine inspections are represented by a visual check or testing of aircraft appliances, the aircraft and parts of its aircraft components without disassembly, if possible.

Detailed inspections are represented by more detailed testing of aircraft appliances, the aircraft and parts of its aircraft components with disassembly level as required. For the purposes of this paragraph, an overhaul of a part of an aircraft components or a system is considered to be a detailed inspection.

3. Release of an Aircraft to Service with a Permissible Defect

a) For those defects that are permitted for operation of an aircraft by a document approved for this purpose by the CAA CZ or the TC holder, such as the Minimum Equipment List, the Configuration Deviation List, appropriate part of the Flight Manual or the Operating Manual, the person or organization approved for aircraft maintenance and release to service (hereinafter referred to as the "authorized person" in this section 3) may release the aircraft to service under the conditions listed in paragraph (c) of this section.

b) Small aircraft powered by piston engines and non-powered aircraft, for which no basic document for operation with permissible defects is available, or for which its operator or owner has not developed and the CAA CZ approved Minimum Equipment List, the authorized person may release this aircraft for day VFR operation with non-functional equipment unless this equipment was required for type certification or in the operating regulations as obligatory for VFR day flights – it can be release based on the information listed in the Equipment List, Kinds of Operations Equipment List or the aircraft's Type Certificate under the prerequisite that it is not contrary to the flight operating regulations. Release of the aircraft to service shall be made only under the conditions of paragraphs (c) of this section.

c) Conditions for releasing aircraft to service with permissible defects:

   1. An authorized person shall ensure that a non-airworthy equipment is dismounted from the aircraft or disconnected and secured.

   2. An authorized person shall ensure that each piece of a non-airworthy equipment (instrument or controllers) is labelled by an "Inoperative" sign.

   3. With no regard to the above points (1) and (2) of this paragraph, if a special procedure exists for releasing the aircraft with a permissible defect in a CAA CZ-approved document, in which case the authorized person shall follow this procedure – including definition of a deadline for rectification of the defect.

   4. The authorized person shall make a record on performed tasks into the operational-technical records.

   5. The authorized person releasing the aircraft with a permissible defect shall hand over a signed and dated list of such defects to the operator or owner of the aircraft.

4. Notification of performed major repairs and modifications to the CAA CZ

a) Except as stated in paragraph (b) of this section, each person performing a major repair or a major modification shall send information to CAA CZ on performing such major repair or modification with description of its scope and procedure used.

b) In case of major repairs performed in accordance with the supporting technical documentation of the manufacturer, the person may use a Work Order for recording the repair instead of requirements listed in paragraph (a).

Note: The above mentioned requirements are defined pursuant to the Commission Regulation (EC) N° 2042/2003, M.B.303.

5. Aircraft Operated in the IFR Category

Operators / owners of aircraft operated with approval for instrument flight rules (IFR) are obliged to ensure execution of all the supplementary service instructions designated by the manufacturer / TC holder as mandatory.

6. Records in Documentation of the Aircraft

Making daily records is obligatory only into the Aircraft Logbook, unless CAA CZ decides otherwise. Flight hours records into the Engine Logbook, Propeller Logbook or other Aircraft Component Logbook shall be made only in case of maintenance being performed on the engine, propeller or other component, more frequent records are not obligatory.

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APPENDIX A: Individual Inspection Types and Their Operating Conditions

This Appendix describes the individual inspection types that can be used as the basic parts of the maintenance programmes, which shall be performed on aircraft to ensure their continued airworthiness. This Appendix contains an overview of the operating conditions, under which these inspections may be used as the basic parts of the maintenance programmes.

A) Except as stated in paragraph (C) of the APPENDIX A of this document, no person may operate an aircraft, unless an annual inspection in accordance with this document has been performed during the last 12 calendar months and unless the aircraft has been released to service by an authorized person. No inspection performed in accordance with paragraph (B) of this Appendix may replace meeting the requirements of this paragraph, unless it is recorded in the operational-technical documentation as annual inspection.

B) Except as stated in paragraph (C) to this Appendix, no person may operate an aircraft transporting any person (except crew members) in return for remuneration, no person may provide pilot training in return for remuneration or may perform commercial flights with the aircraft, unless the annual or the 100-hour inspection has been performed on the aircraft within the last 100 hours of operation and unless it has been released to service by an authorized person. The 100-hour limit may be exceeded by the maximum of 5 hours, under the condition that those 5 hours are only used for completing a flight, which had commenced before the 100-hour limit has been exceeded. The flight time after reaching the 100-hour limit may only be used for a direct flight for the purpose of reaching a location, where the aircraft's airworthiness will be renewed, no other activities are permitted. The time flown after reaching the 100-hour time limit has to be included as a time flown into the computation of the next 100-hour inspection term.

Note: Provisions of paragraphs (A) and (B) of this Appendix, if applicable, are minimum requirements to be met. However, if the aircraft manufacturer prescribes inspections corresponding by its scope to APPENDIX B to this document in shorter intervals than 12 calendar months or 100 flight hours, these inspections shall be performed in intervals prescribed by the manufacturer, unless CAA CZ decides otherwise.

C) Paragraphs (A) and (B) of this Appendix do not apply to aircraft with a CAA CZ approved inspection programme as part of a maintenance programme for the specific aircraft with an particular serial number – as mentioned in paragraphs (D) and (E) of this Appendix.

D) Progressive Inspections:

Each aircraft operator or owner, who intends to apply a progressive inspections system, shall present a written application to CAA-TD, where he shall mention the following:

1. a base or other locations, where inspections will be performed;
2. a scope of the progressive inspections including the transition (input) inspection – with references to the related technical documentation;
3. the inspection plan with the specification of intervals in hours, cycles or days, when routine and detailed inspections shall be performed, including instructions allowing the exceeding of these intervals in order to reach the location (instructions for exceeding the interval shall be mentioned in the supporting documentation, otherwise the provisions of paragraph (B) of this Appendix apply);
4. sample lists of tasks included in the proposed inspections;
5. a list of tools and jigs required for performing the inspections;
6. data of the aircraft, on which the progressive inspections should be performed – including its technical parameters and kinds of operation.

The frequency and scope of the progressive inspections shall cover all the items required to be inspected on the aircraft within 12 calendar months that are further mentioned together as a complete inspection and shall correspond to the aircraft manufacturer's recommendations, operational experience and aircraft usage. The Progressive Inspections Programme shall ensure continuous airworthiness of the aircraft and its conformance to the type documentation or eventually other data,

implementation of airworthiness directives and eventually additional mandatory service instructions of the manufacturer, if required.

Should the progressive inspection programme be interrupted, the operator (or owner) of the aircraft shall immediately inform CAA-TD by notification in written form. After interruption of the progressive inspections system, the first annual inspection shall be performed in 12 calendar months since the date of the last complete inspection of the aircraft as recorded in the progressive inspections system records. The 100-hour inspection shall take place within 100-hours of operation since the date of the last complete inspection of the aircraft within the scope of the progressive inspections programme.

For the purpose of defining the term of the annual or 100-hour inspection, the complete inspection means execution of the detailed inspection of the aircraft and all its aircraft components in accordance with the progressive inspections system. A routine or a detailed inspection of several aircraft components is not considered a complete inspection.

E) For large airplanes, multi-engine airplanes with turbine engines (both turbo-jet and turbo-propeller) and turbine-powered helicopters, one of the following three inspection programmes shall be used which shall be subjected to the CAA CZ approval for particular serial number aircraft:

1. an inspection program for continuing airworthiness proposed by an air carrier or an air operator certificate holder as part of a maintenance programme for continuing airworthiness. This programme shall be developed in accordance with Appendix G to this document;
2. an inspection program developed and recommended by the manufacturer of the aircraft or by the TC holder stated in the supporting technical documentation;
3. an individual inspection program developed by the operator or owner of the aircraft, which is not used for passenger or freight transport in return for remuneration.

This programme is subject to the CAA-TD approval based on a presented application. The application shall include:

i) Instructions and procedures for performing inspections including necessary testing. These instructions shall in detail include the airframe, engines, propellers or rotors and aircraft appliances including emergency and life-saving means (equipment) that require regular inspections.

ii) The programme of inspections that need to be performed in prescribed operating times, calendar times, cycles or theirs combination.

F) If the aircraft operator or owner applies for a change of one of the maintenance programmes listed in paragraph (E) of this chapter, the operating times, calendar times or cycles recorded within the scope of the original programme shall be considered while defining inspection times of the new programme.

G) Special inspections that shall be performed independently on the inspection type or inspection programme, unless already included in them, for certain kinds of operation:

1. No person may operate an aircraft in a controlled airspace, unless the altimeter system and the automatic pressure-altitude reporting equipment have been inspected and tested by an appropriately qualified and authorized person:

i) each static pressure system, each altimeter and each automatic pressure-altitude reporting equipment in accordance with APPENDIX C to this document within the last 24 calendar months;

ii) in accordance with paragraph (A) of Appendix C to this document – after any disconnection and re-connection of the static pressure system;

iii) integrated system in accordance with paragraph (C) of APPENDIX C to this document after installation or maintenance of the automatic pressure-altitude reporting system of the ATC transponder, during which a mismatch of altitude values may be introduced.

iv) for aircraft not operated in a controlled airspace, inspections and tests performed in accordance with paragraph (A) of APPENDIX C are applied.

Note: The inspections and tests performed in accordance with (1.) shall be recorded in the aircraft's operational-technical documentation. The aircraft may not be operated in a controlled airspace under the IFR in altitudes exceeding the ones, for which all the altimeters and automatic pressure-altitude reporting equipment of the particular aircraft have been tested.

2. No person may use the airborne ATC transponder during the flight, unless its inspection and test have been performed by an appropriately qualified and authorized person within the last 24 calendar months in accordance with APPENDIX D to this document, and the system integrated with the ATC transponder has been inspected and tested in accordance with paragraph (C) of APPENDIX C to this document after performing the transponder installation or maintenance, during which a mismatch of the altitude values may have been introduced.

Note: The inspections and tests performed in accordance with (2.) shall be recorded in the operational-technical documentation of the aircraft.

3. No person may operate an aircraft under the IFR using the VOR radio-navigation system, if the airborne VOR device of this aircraft:

i) is not maintained and tested in accordance with an approved procedure; or

ii) has not been operationally tested within the last 30 days in accordance with APPENDIX F of this document.

Note: The execution, the way of execution and deviations found during tasting in accordance with (3.)(ii) shall be recorded in the operational-technical documentation of the aircraft.

4. No person may operate an aircraft, unless its weight and centre of gravity have been determined within the last 72 months. An exception is represented by aircraft operated for commercial air transport, where weighting is treated by EU-OPS operating requirements.

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APPENDIX B: Scope and Detail of Items (as Applicable to the Particular Aircraft) To Be Included in Annual and 100-Hour Inspections

A) Each person performing an annual or 100-hour inspection shall, before that inspection, remove or open all necessary inspection plates, access doors, fairing, and cowling. The aircraft and aircraft engine shall be thoroughly cleaned.

B) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the fuselage and hull group:

1. Fabric and skin – for deterioration, distortion, other evidence of failure, and defective or insecure attachment of fittings.
2. Systems and components – for improper installation, apparent defects, and unsatisfactory operation;
3. Envelope, gas bags, ballast tanks, and related parts – for poor condition.

C) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the cabin and cockpit group:

1. Generally – for uncleanness and loose equipment that might foul the controls;
2. Seats and safety belts – for poor condition and apparent defects;
3. Windows and windshields – for deterioration and breakage;
4. Instruments – for poor condition, mounting, marking, and (where practicable) improper operation;
5. Flight and engine controls – for improper installation and improper operation;
6. Batteries – for improper installation capacity and charge;

   Note: These requirements apply also to accumulators located outside the above mentioned compartments;
7. All systems – for improper installation, poor general condition, apparent and obvious defects, and insecurity of attachment.

D) Each person performing an annual or 100-hour inspection shall inspect (where applicable) components of the engine and nacelle group as follows:

1. Engine section – for visual evidence of excessive oil, fuel, or hydraulic leaks, and sources of such leaks;
2. Studs and nuts – for improper torquing and obvious defects;
3. Internal engine – for cylinder compression and for metal particles or foreign matter on screens and sump drain plugs. If there is weak cylinder compression, for improper internal condition and improper internal tolerances;
4. Engine mount – for cracks, looseness of mounting, and looseness of engine to mount;
5. Flexible vibration dampeners – for poor condition and deterioration;
6. Engine controls – for defects, improper travel, and improper securing;
7. Lines, hoses, and clamps – for leaks, improper condition and looseness;
8. Exhaust stacks – for cracks, defects, and improper attachment;
9. Accessories – for apparent defects in security of mounting;
10. All systems – for improper installation, poor general condition, defects, and insecure attachment;

11. Cowling – for cracks, and defects.

E) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the landing gear group:

1. All units – for poor condition and insecurity of attachment;
2. Shock absorbing devices – for improper oleo fluid level;
3. Linkages, trusses, and members – for undue or excessive wear fatigue, and distortion;
4. Retracting and locking mechanism – for improper operation;
5. Hydraulic lines – for leakage;
6. Electrical system – for chafing and improper operation of switches;
7. Wheels – for cracks, defects, and condition of bearings;
8. Tires – for wear and cuts;
9. Brakes – for improper adjustment;
10. Floats and skis – for insecure attachment and obvious or apparent defects.

F) Each person performing an annual or 100-hour inspection shall inspect (where applicable) 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.

G) Each person performing an annual or 100-hour inspection shall inspect (where applicable) 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.

H) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the propeller group:

1. Propeller assembly – for cracks, nicks, binds, and oil leakage;
2. Bolts – for improper torquing and lack of securing;
3. Anti-icing devices – for improper operations and obvious defects;
4. Control mechanisms – for improper operation, insecure mounting, and restricted travel.

I) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the radio group:

1. Radio and electronic equipment – for improper installation and insecure mounting;
2. Wiring and conduits – for improper routing, insecure mounting, and obvious defects;
3. Bonding and shielding – for improper installation and poor condition;
4. Antenna including trailing antenna – for poor condition, insecure mounting, and improper operation.

J) Each person performing an annual or 100-hour inspection shall inspect (where applicable) each installed miscellaneous item that is not otherwise covered by this listing for improper installation and improper operation.

K) Each person performing an annual inspection shall include direction indicator compensation.

L) Each person performing an annual inspection of aircraft certificated for IFR flights shall include inspection of the radio and radio-navigation systems – for operation and sensitivity.

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APPENDIX C: Altimeter System Tests and Inspections

Each person performing the altimeter system tests and inspections required by paragraph (G)(1) of APPENDIX A of this document shall comply with the following:

A) Static pressure system:

1. Ensure freedom from entrapped moisture and restrictions.
2. Determine that leakage is within the permitted tolerances:

   i) Unpressurized Aircraft

   Evacuate the static pressure system to the pressure differential of approximately 36 hPa or to a reading on the altimeter 1 000 ft above the aircraft elevation at the time and location of the test. Without additional pumping for a period of 1 minute, the loss of indicated altitude must not exceed the value of 100 ft on the altimeter.

   ii) Pressurized Aircraft

   Evacuate the static pressure system until a pressure differential equivalent to the maximum cabin pressure differential for which the aircraft is type certificated is achieved. Without additional pumping for a period of 1 minute, the loss of indicated altitude must not exceed the value of 2 % of the equivalent altitude of the maximum cabin pressure differential or 100 ft (whichever is greater).
3. Determine that the static port heater, if installed, is operative.
4. Ensure that no alterations or deformations of the airframe surface have been made that would affect the relationship between air pressure in the static pressure system and true ambient static air pressure for any flight condition.

B) Altimeter:

1. Test by an appropriately rated repair facility in accordance with the following subparagraphs. Unless otherwise specified, each test for performance may be conducted with the instrument subjected to vibration. When tests are conducted with the temperature substantially different from ambient temperature of approximately 25 degrees C., allowance shall be made for the variation from the specified condition.

   i) Scale Error

   With the barometric pressure scale at 1013.25 hPa, the altimeter shall be subjected successively to pressures corresponding to the altitude specified in Table I up to the maximum normally expected operating altitude of the airplane in which the altimeter is to be installed. The reduction in pressure shall be made at a rate not in excess of 20,000 feet per minute to within approximately 2,000 feet of the test point. The test point shall be approached at a rate compatible with the test equipment. The altimeter shall be kept at the pressure corresponding to each test point for at least 1 minute, but not more than 10 minutes, before a reading is taken. The error at all test points must not exceed the tolerances specified in Table I.

   ii) Hysteresis

   The hysteresis test shall begin not more than 15 minutes after the altimeter's initial exposure to the pressure corresponding to the upper limit of the scale error test prescribed in subparagraph (i). Pressure shall be increased at a rate simulating a descent in altitude at the rate of 5,000 to 20,000 feet per minute until within 3,000 feet of the first test point (50 % of the maximum altitude). The test point shall then be approached at the rate as low as possible for the testing device so that the adjusted value is not exceeded. The altimeter shall be kept at this pressure for at least 5 minutes, but not more than 15 minutes, before the test reading is taken. After the reading has been taken, the pressure shall be increased further, in the same manner as before, until the pressure corresponding to the second test point (40 percent of maximum altitude) is reached. The altimeter shall be kept at this

pressure for at least 1 minute, but not more than 10 minutes, before the test reading is taken.

After the reading has been taken, the pressure shall be increased further, in the same manner as before, until the pressure corresponding to the second test point (40 percent of maximum altitude) is reached. The altimeter shall be kept at this pressure for at least 1 minute, but not more than 10 minutes, before the test reading is taken. After the reading has been taken, the pressure shall be increased further, in the same manner as before, until atmospheric pressure is reached. The reading of the altimeter at either of the two test points shall not differ by more than the tolerance specified in Table II from the reading of the altimeter for the corresponding altitude recorded during the scale error test prescribed in paragraph (B)(1)(i).

iii) After-effect

Not more than 5 minutes after the completion of the hysteresis test prescribed in paragraph (B)(1)(ii), the reading of the altimeter (corrected for any change in atmospheric pressure) shall not differ from the original atmospheric pressure reading by more than the tolerance specified in Table II.

iv) Friction

The altimeter shall be subjected to a steady rate of increase of pressure approximating 750 feet per minute. At each altitude listed in Table III, the change in reading of the pointers after vibration shall not exceed the corresponding tolerance listed in Table III.

v) Case Leak

The leakage of the altimeter case, when the pressure within it corresponds to an altitude of 18,000 feet or to the maximum operating altitude of the altimeter, shall not change the altimeter reading by more than the tolerance shown in Table II during an interval of 1 minute.

vi) Barometric Scale Error

At constant atmospheric pressure, the barometric pressure scale shall be set at each of the pressures (falling within its range of adjustment) that are listed in Table IV, and shall cause the pointer to indicate the equivalent altitude difference shown in Table IV with a tolerance of 25 feet.

2. Altimeters which are the air data computer type with associated computing systems, or which incorporate air data correction internally, may be tested in a manner and to specifications developed by the manufacturer which are acceptable to the CAA CZ.

C) Automatic Pressure Altitude Reporting Equipment and ATC Transponder System Integration Test:

The test must be conducted by an appropriately rated person under the conditions specified in paragraph (A). Measure the automatic pressure altitude at the output of the installed ATC transponder when interrogated on Mode C at a sufficient number of test points to ensure that the altitude reporting equipment, altimeters, and ATC transponders perform their intended functions as installed in the aircraft. The difference between the automatic reporting output and the altitude displayed at the altimeter shall not exceed 125 feet.

D) Records:

The person performing the altimeter test shall record the altimeter type and serial number, the date and the maximum altitude to which the altimeter has been tested and the person approving the aircraft release to service shall record that data in the operational-technical documentation of the aircraft.

All above mentioned works may be included directly in the Maintenance Programme developed by the operator and approved by the CAA CZ.

TABLE I

Altitude (feet)	Equivalent pressure (hPa)	Tolerance +/- (feet)
-1 000	1050.43	20
0	1013.25	20
500	995.13	20
1 000	977.22	20
1 500	959.57	25
2 000	942.17	30
3 000	908.17	30
4 000	875.15	35
6 000	812.02	40
8 000	752.66	60
10 000	696.85	80
12 000	644.42	90
14 000	595.25	100
16 000	549.16	110
18 000	506.02	120
20 000	465.65	130
22 000	427.92	140
25 000	376.04	155
30 000	300.89	180
35 000	238.45	205
40 000	187.55	230
45 000	147.48	255
50 000	115.99	280

TABLE II: Test Tolerances

Test		Tolerance (feet)
Case Leak Test		+/- 100
Hysteresis Test:	First Test Point (50 % of max. altitude)	75
	Second Test Point (40 % of max. altitude)	75
After Effect Test		30

TABLE III: Friction

Altitude (feet)	Tolerance (feet)
1 000	+/-70
2 000	70
3 000	70
5 000	70
10 000	80
15 000	90
20 000	100
25 000	120
30 000	140
35 000	160
40 000	180
50 000	250

TABLE IV: Pressure-Altitude Difference

Pressure (hPa)	Altitude difference (feet)
	tolerance +/- 25 feet
951.61	-1 727
965.16	-1 340
982.09	- 863
999.03	- 392
1013.25	0
1032.89	+ 531
1046.44	+ 893
1049.49	+ 974

APPENDIX D: ATC Transponder Tests and Inspections

The ATC transponder tests required by (G)(2) of the APPENDIX A to this document may be conducted using a bench check or portable test equipment and must meet the requirements prescribed in paragraphs (A) through (J) of this APPENDIX D. If portable test equipment with appropriate coupling to the aircraft antenna system is used, operate the test equipment for ATCRBS transponders at a nominal rate of 235 interrogations per second to avoid possible ATCRBS interference. Operate the test equipment at a nominal rate of 50 Mode S interrogations per second for Mode S. An additional 3 dB loss is allowed to compensate for antenna coupling errors during receiver sensitivity measurements conducted in accordance with paragraph (C)(1) when using portable test equipment.

A) Radio Reply Frequency:

1. For all classes of ATCRBS transponders, interrogate the transponder and verify that the reply frequency is 1 090 +/- 3 MHz.
2. For classes 1B, 2B, and 3B Mode S transponders, interrogate the transponder and verify that the reply frequency is 1 090 +/- 3 MHz.
3. For classes 1B, 2B, and 3B Mode S transponders that incorporate the optional 1 090 +/- 1 MHz reply frequency, interrogate the transponder and verify that the reply frequency is correct.
4. For classes 1A, 2A, 3A, and 4 Mode S transponders, interrogate the transponder and verify that the reply frequency is 1 090 +/- 1 MHz.

B) Suppression:

When Classes 1B and 2B ATCRBS Transponders, or Classes 1B, 2B, and 3B Mode S transponders are interrogated Mode 3/A at an interrogation rate between 230 and 1,000 interrogations per second; or when Classes 1A and 2A ATCRBS Transponders, or Classes 1B, 2A, 3A, and 4 Mode S transponders are interrogated at a rate between 230 and 1,200 Mode 3/A interrogations per second:

1. Verify that the transponder does not respond to more than 1 percent of ATCRBS interrogations when the amplitude of P2 pulse is equal to the P1 pulse.
2. Verify that the transponder replies to at least 90 percent of ATCRBS interrogations when the amplitude of the P2 pulse is 9 dB less than the P1 pulse. If the test is conducted with a radiated test signal, the interrogation rate shall be 235 +/- 5 interrogations per second unless a higher rate has been approved for the test equipment used at that location.

C) Receiver Sensitivity:

1. Verify that for any class of ATCRBS Transponder, the receiver minimum triggering level (MTL) of the system is −73 +/- 4 dbm, or that for any class of Mode S transponder the receiver MTL for Mode S format (P6 type) interrogations is −74 +/- 3 dbm by use of a test set either:
   i) Connected to the antenna end of the transmission line;
   ii) Connected to the antenna terminal of the transponder with a correction for transmission line loss; or
   iii) Utilized radiated signal.
2. Verify that the difference in Mode 3/A and Mode C receiver sensitivity does not exceed 1 db for either any class of ATCRBS transponder or any class of Mode S transponder.

D) Radio Frequency (RF) Peak Output Power:

1. Verify that the transponder RF output power is within specifications for the class of transponder. Use the same conditions as described in (C)(1)(i), (ii), and (iii) above.
   i) For Class 1A and 2A ATCRBS Transponders, verify that the minimum RF peak output power is at least 21.0 dbw (125 watts).

ii) For Class 1B and 2B ATCRBS Transponders, verify that the minimum RF peak output power is at least 18.5 dbw (70 watts).

iii) For Class 1A, 2A, 3A and 4 and those Class 1B, 2B and 3B Mode S transponders that include the optional high RF peak output power, verify that the minimum RF peak output power is at least 21.0 dbw (125 watts).

iv) For Class 1B, 2B and 3B Mode S transponders, verify that the minimum RF peak output power is at least 18.5 dbw (70 watts).

v) For any class of ATCRBS or any class of Mode S transponders, verify that the maximum RF peak output power does not exceed 27.0 dbw (500 watts).

Note: The tests (E) through (J) apply only to Mode S transponders.

E) Mode S Diversity Transmission Channel Isolation:

For any class of Mode S transponder that incorporates diversity operation, verify that the RF peak output power transmitted from the selected antenna exceeds the power transmitted from the non-selected antenna by at least 20 db.

F) Mod S Address:

Interrogate the Mode S transponder and verify that it replies only to its assigned address. Use the correct address and at least two incorrect addresses. The interrogations should be made at a nominal rate of 50 interrogations per second.

G) Mode S Formats:

Interrogate the Mode S transponder with uplink formats (UF) for which it is equipped and verify that the replies are made in the correct format. Use the surveillance formats UF=4 and 5. Verify that the altitude reported in the replies to UF=4 are the same as that reported in a valid ATCRBS Mode C reply. Verify that the identity reported in the replies to UF=5 are the same as that reported in a valid ATCRBS Mode 3/A reply. If the transponder is so equipped, use the communication formats UF=20, 21, and 24.

H) Mode S All-Call Interrogations:

Interrogate the Mode S transponder with the Mode S-only all-call format UF=11, and the ATCRBS/Mode S all-call formats (1.6 microsecond P4 pulse) and verify that the correct address and capability are reported in the replies (downlink format DF=11).

I) ATCRBS-Only All-Call Interrogations:

Interrogate the Mode S transponder with the ATCRBS-only all-call interrogation (0.8 microsecond P4 pulse) and verify that no reply is generated.

J) “Squitter”:

Verify that the Mode S transponder generates a correct squitter approximately once per second.

K) Records:

The person performing the transponder tests shall record the transponder type and serial number, the date and tests performed and the person approving the aircraft release to service shall record these data in the operational-technical documentation of the aircraft.

APPENDIX E: Issuing of the Maintenance Statement Form

The Maintenance Statement and Certificate of Release to Service form is issued for aircraft not used for commercial air transport.

It does not have to be issued for small aircraft used for commercial air transport. It is not issued for large aircraft used for commercial air transport. For these aircraft, the release to service is performed using a different CAA CZ approved form (e.g. a technical log system).

The Maintenance Statement and Certificate of Release to Service is issued for the performed scope and type of maintenance works by authorized person and signed by the certifying staff with appropriate authorization. The original of the Maintenance Statement shall be always kept onboard the aircraft together with other required documents.

Records necessary to verify compliance with all the requirements necessary for issue of the Certificate of Release to Service, including releasing documents from subcontractors, shall be archived. The approved maintenance organization shall archive copies of all the maintenance records and any related maintenance data for 3 years since the aircraft or aircraft component subjected to this work have been released.

The Maintenance Statement and Release to Service form is available on the website of the CAA CZ, in the Technical Division Forms folder. The release to service record on this form shall correspond to the sample record presented in the Commission Regulation (EC) N° 2042/2003 for specific approved Part-145 or Part-M, Subpart F organizations.

If maintenance is not carried out and aircraft is not released to service by the approved maintenance organization but by an independent certifying staff with appropriate qualification for maintenance of the subject aircraft type / category, the record on the form shall correspond to the sample record for Part-M, and the blocks for data of the specific maintenance organization shall be crossed out. The CAA/F-TI-148-n/08 form is to be used for these purposes - see CAA CZ website.

If maintenance is not carried out and aircraft is not released to service by the approved maintenance organization but by the pilot-owner without appropriate aircraft maintenance qualification the CAA/F-TI-149-n/08 form shall be used for this purpose (without the blocks for data of the specific maintenance organization) - see CAA CZ website. Record on the form shall correspond to the sample record for the Part M.

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APPENDIX F: Airborne VOR Device Operational Test

A) With the exception mentioned in paragraph (B), everyone performing the airborne VOR device operational test shall:

1. at scheduled departure airports - use a testing signal operated or approved by a competent authority or a testing signal transmitted by a certified and approved testing device / maximum permissible indicated bearing error is +/- 4°, or
2. in case the testing signal is not available at the scheduled departure airport, use a location at the airport on the ground, designated by a competent authority as the VOR system checkpoint / the maximum permissible error is +/- 4°, or
3. in case neither the testing signal, nor the ground checkpoint are available, use a flight checkpoint designated by a competent authority P maximum permissible bearing error is +/- 6°, or
4. in case neither the testing check-signal, nor the checkpoint are available, perform the following in flight:

   i) select a VOR radial in the centre of the established VOR track;

   ii) select a prominent ground point on the selected radial, located more than 20 nm from the VOR beacon and fly directly over this point in a suitable height;

   iii) record the VOR bearing indicated by the receiver while just over this ground point.

   Note: the maximum permissible deviation of the published radial and the indicated bearing is 6°.

B) In case a redundant VOR system is installed in the aircraft (two independent systems - excluding common antennas), the person performing the airborne devices test may check one system against the other instead of applying procedures specified in paragraph (a). Both the systems shall be tuned to the same VOR transmitter and corresponding indicated bearings shall be recorded. The maximum permissible deviation of these two indicated bearings is 4°.

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APPENDIX G: A Maintenance Programme Designed by an Air Carrier Certificate Holder or an Air Operator Certificate Holder

A) Application for the initial approval of a Maintenance Programme

1. The following documents shall be presented to CAA CZ:
   i) Maintenance Programme proposal;
   ii) Reliability Programme proposal in case the Maintenance Programme is based on the MSG method or mainly on condition monitoring;
   iii) Documents used for elaboration of the Maintenance Programme (where the following were used: "TCDS, MRB report, MPD, Maintenance Manual – Chapter 5, Corrosion Prevention Control Programme, Certification Maintenance Requirements, Life Limitations" etc.);
   iv) Aircraft structural condition (type specification, list of implemented STCs, status of ADs implementation, modifications and repairs status for each aircraft included in the Maintenance Programme).
2. In case the Maintenance Programme proposal differs from recommendations of the Type Certificate (TC) holder, an appropriate technical justification of any differences shall be presented to CAA CZ as presented in point 4.
3. With respect to the above mentioned, differences from the original TC holder's recommendation may consist of:
   i) additional works (tasks);
   ii) cancellation of works (tasks);
   iii) modification of these works (tasks);
   iv) changes in frequency of these works (tasks).
4. In case comparison is made with formerly approved Maintenance Programme(s), the following documents shall be presented to CAA CZ:
   i) the formerly approved Maintenance Programme;
   ii) a detailed comparison of both the fleets with regard to the points of the Maintenance Programme being compared - with respect to:
      a. kind of operation (short/long routes, ETOPS/non ETOPS, fleet usage degree, climatic conditions, etc.);
      b. fleet technical condition (standard) (modification standards, customer-requested modifications, TC versions, aircraft structure repairs, etc.);
      c. maintenance factors (aircraft age, applied maintenance practices (experience) and procedures, Reliability Programme, SB implementation procedures, lubrication schedule, etc.).
5. In case differences are presented in compliance with point 4, these differences shall be reflected in the proposed Operator's Maintenance Programme and shall be supported by justification.
6. The Maintenance Programme should include the following information:
   i) type/model and nationality and registration mark of the aircraft, engines and APU and propellers, where applicable;
   ii) name/business name of the owner, operator or organization approved in accordance with Part-M, Subpart G of the Commission Regulation (EC) N° 2042/2003 (hereinafter referred as Part-M, Subpart G) managing aircraft airworthiness.
   iii) approval number, date of issue and number of the approved Maintenance Programme;
   iv) a declaration signed by the owner, operator or approved organization in accordance with Part-M, Subpart G that manages aircraft's airworthiness in that sense that maintenance of

the subject aircraft will be performed in accordance with the programme, and that the programme will be checked and updated as required;

v) contents/list of applicable pages and the revision status of the document;

vi) inspection limitations reflecting expected usage rate of the aircraft. This usage rage should be determined and should include tolerance not exceeding 25 %; if the usage rate is not expected, calendar time limits may be used;

vii) provisions regarding data recording and referencing to approved revisions implemented in the Maintenance Programme;

viii) details on the pre-flight maintenance tasks performed by the maintenance personnel;

ix) tasks and time limitations (intervals/frequencies) at which each part of the aircraft, engines, APU, propellers, aircraft components, accessories, equipments, devices, electrical and radio devices and related systems and installations shall be checked; this shall include required inspection kind and level;

x) limitations for checking, cleaning, lubrication, re-filling, aligning and testing the aircraft components;

xi) applicable details of requirements of the Aircraft Aging Programme with any specified Random Checks Programme;

xii) applicable details of specific Structure Maintenance Programmes that were published by the Type Certificate holder, e.g. the continuing of structural integrity, permissible damage and Supplemental Structure Inspection Programmes, Structure Maintenance, Corrosion Prevention and Control Programme, Repair and Widespread Fatigue Damage Evaluation;

xiii) limitations for overhauls and replacements by new or overhauled aircraft components;

xiv) references to other Agency (EASA) approved documents containing details of maintenance tasks, e.g. Certification and Maintenance Requirements (CMR), Airworthiness Directives (AD), etc.;

xv) details of / references to the Reliability Programme, if elaborated; cases, when the Reliability Programme is elaborated together with recommended methods.

xvi) declaration stating that the methods and procedures used to comply with the Maintenance Programme comply with the standards specified in the Maintenance Guidelines from the Type Certificate holder. In case that approved methods and procedures differ, the declaration shall draw attention to them.

B) Application for an supplement to the approved Maintenance Programme

1. The operator shall appoint a person responsible for maintaining and controlling the Maintenance Programme including proper supplemented of the Programme in case of need based on regular reviews. The owner of the approved organization according to Part-M, Subpart G shall be assured that the programme reflects the aircraft's maintenance needs and that it is operated safely.
2. Revisions (corrections) of the Maintenance Programme must be made by the owner or the approved maintenance organization according to Part-M, Subpart G, in order to reflect changes in Type Certificate holder's recommendations, modification, operational experience or CAA CZ's requirements. A Maintenance Programme revision may include:

   i) additional works (tasks);

   ii) cancellation of works (tasks);

   iii) modification of works (tasks);

   iv) changes in the frequency of these works (tasks).

   v) revisions of the list of aircraft subjected to this Maintenance Programme.

3. The following documents must be presented to CAA CZ:

   i) proposed change of the Maintenance Programme;

ii) justification of every proposed change as:

a. supplements to documents used for elaboration of the Maintenance Programme (where the following were used: "TCDS, MRB report, MPD, Maintenance Manual - Chapter 5, Corrosion Prevention Control Programme, Certification Maintenance Requirements, Life Limitations" etc.); in this case mainly changes proposed by the TC holder are involved, which arise from activities of the Maintenance Review Board (MRB) with application of MSG-3 procedures or data collection from the aircraft fleet operation;

b. modifications, implemented Service Bulletins, Airworthiness Directives (ADs) and performed repairs;

c. data arising from the Reliability Programme or monitoring of efficiency of the Maintenance Programme mostly used by the operator in case he is trying to use his experience with operation and maintenance for escalation of intervals of the individual maintenance tasks. While performing this activity, the following procedure shall be followed. At first he elaborates the technical justification of the findings of the maintenance tasks that he intends to escalate. He proposes new intervals for the individual tasks (maximum increase of 25 % of the current interval is allowed). After this step is approved by CAA CZ, the operator test-applies the "increased" intervals in the maintenance process of operated aircraft and subsequently technically evaluates their impact. Subsequently final approval takes place.

iii) If the supplement of the Maintenance Programme is based on addition of an aircraft to the list of aircraft subject to the Maintenance Programme, CAA CZ shall be presented with the structural condition of the aircraft (type specifications, AD status, status of modifications and repairs).

C) Final provisions

1. The owner or the approved organization according to Part-M, Subpart G may deviate from the time limitations prescribed in the Maintenance Programme only subject to approval by the competent authority or by a procedure defined in the Maintenance Programme and approved by the competent authority.
2. The Maintenance Programme of the owner or the organization approved in accordance with Part-M, Subpart G must be subjected to regular inspections to ensure that it reflects applicable recommendations of the Type Certificate holder, inspections with respect to the MRB report and binding aircraft maintenance requirements and needs.
3. The owner or the organization approved in accordance with Part-M, Subpart G must review detailed requirements at least once every year in order to maintain its validity based on operational experience.
4. If for a longer period CAA CZ is not assured that safe operation is maintained, approval of the Maintenance Programme or its part may be suspended or cancelled, e.g. the operator has changed the kind of usage of the aircraft or is not capable to ensure the Maintenance Programme to reflect aircraft maintenance needs, etc.

APPENDIX H: Approved Change (Modifications and STCs) and Repair Data

Data for implementation of changes (Modifications, STCs) and non-standard repairs approved by CAA CZ or an Authority of another EU member state till 28 September 2003 remain valid for transferred aircraft under the assumption that compliance with conditions and limitations defined in the approval is ensured.

Data published after 28 September 2003 shall be approved in accordance with procedures defined in the Commission Regulation (EC) N° 1702/2003.

Type design changes accepted by CAA CZ during aircraft acceptances till 28 September 2003 (STC, Form 337 and others) are considered as approved.

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APPENDIX I: Maintenance Programme Form for Small Aircraft Operated in Accordance with § 77 of the Act. N°49/1997. (Form N°CAA/F-ST-177-0/09)

Maintenance Programme

for aircraft operated in accordance with § 77 of the Act N°49/1997 (only for sports and recreational purposes)

N°: **MP-xxxxxxx-zzzzzz-čč** **Printout Number:**

The maintenance programme is developed in accordance with Annex I of the Commission Regulation (EC) N° 2042/2003 (Part-M), Section A, Subpart C, point M.A.302 with consideration of the requirements of the Guideline N° CAA-ST-092-n/07

Confirmation of Approval by the Civil Aviation Authority

Approved by: Name:
Location: Date of Approval:
Approval Reference: Signature, Stamp:

Distribution List

Original N°1 Operator / Owner
Original N°2 CAA-TD – Aircraft Continuous Airworthiness Department, Small Aircraft Section

1. Aircraft Data:

_____
Type / Model

_____
Aircraft Manufacturer / TC Holder

_____ _____
Production Date Serial Number

_____ _____
Identification Mark Max. Take-Off Mass

Left Right
_____ _____
Engine Type Engine Type

Left Right
_____ _____
Propeller Type Propeller Type

2. Operator / Owner:

Operator / Owner: _____

Contact Address: _____
_____(tel., fax., e-mail)

3. Kinds of Operation:

☐ Day ☐ Night ☐ VFR ☐ IFR

4. Inspections will be performed in accordance with the bellow mentioned manuals in updated versions:

Airframe:
_____

Engine:
_____

Propeller:
_____

5. Additional inspections will be performed on the aircraft resulting from the type design modifications and repairs performed:
(if yes, list all the maintenance documentation requiring and describing these works in Table 1)

☐ Yes ☐ No

6. Additional inspections will be performed on the aircraft for continuing its airworthiness:

☐ Airworthiness Directives (in case of aircraft designed in the Czech Republic, also all the binding Service Instruction published by the TC holder before 1 January 1996)

☐ Binding instruction published by aircraft, engine, propeller or other aircraft component manufacturer

7. Maintenance intervals for maintenance performed in accordance with service manuals and other documents mentioned above, if such maintenance is performed:

☐ Annual
☐ at hours flown
☐ at hours flown
☐ at hours flown
☐ at hours flown
☐ at hours flown
_____
_____
(it is possible to specify or add other intervals here)

8. The following aircraft units replacements and maintenance will be performed:

☐ In fixed time limits defined in the manufacturer's / TC holder's documentation

☐ In recommended limits defined in the manufacturer's / TC holder's documentation
(In case of operation in the IFR category, complying with recommended limits is obligatory)

List documents:
_____
_____

9. Further the following special inspections will be performed *(CAA-ST-092-n/07)*:

☐ Static pressure system inspection including every altimeter and every automatic altitude transmitter every 24 months.

☐ Airborne ATC transponder inspection every 24 months.

☐ Functionality and sensitivity check on radio-communication and radio-navigation systems (for IFR aircraft) every 12 months.

☐ Compass compensation every 12 months.

☐ VOR operational test every 30 days.

☐ Airplane weighting every 72 months.

10. Operator's / Owner's Declaration:

I hereby declare that the above mentioned aircraft will be maintained in accordance with this Maintenance Programme proposal and related maintenance regulations.

Maintenance Programme revisions may only take place in accordance with applicable regulation. Deviations from this Maintenance Programme, explanations and approvals, changes in the kind or mode of operation require a Maintenance Programme revision and shall be approved by CAA, unless CAA decides otherwise.

_____	_____
Originated by	Signature and Stamp (Originator)
_____	_____
Place	Signature and Stamp (Operator / Owner)

Appendix to the Maintenance Programme N°: MP-xxxxxx-zzzzzz-čč

Maintenance Based on Aircraft Type Design Modifications and Repairs

Table N°1

Aircraft: Nationality and Registration Mark: Serial Number:

Document Type	Maintenance Description	Interval

Form CAA/F-ST-177-0/09

Filling-Out Guide for the Maintenance Programme Document

Header:
Reference Number to be assigned by CAA in accordance with its internal rules and to be confirmed by the responsible CAA officer's stamp and signature. The Document Number is to be composed in the following way:

The Applicant in to create the Maintenance Programme Number in the following way:
MP-xxxxxxx-zzzzzz-čč

xxxxxxx – Aircraft Type Code, e.g. C172RG
zzzzzz – Nationality and Registration Mark, e.g. OKPSA
čč – Sequence Number
in total max. of 20 characters incl. dashes

The Printout Number shall be added to the individual printouts in accordance with the Distribution List.

Distribution List:
List of all the controlled printouts with a list of all the responsible holders:
Original N°1 – operator / owner, which is responsible for preparation and control of the Maintenance Programme
Original N°2 – CAA-TD – Aircraft Continuous Airworthiness Department, Small Aircraft Section
Eventual other printouts (copies) – as required (e.g. contracted maintenance organizations)

1. Aircraft Data:
Data shall correspond with the exact model designation as listed in the TC holder's Data Sheet.

2. Operator / Owner:
Data shall correspond with the records in the Aircraft Register of the Czech Republic. It is always necessary to mention relevant operator's / owner's contact data (Tel., Fax. and email address).

3. Kinds of Operation:
Tick-off appropriate fields. For example, if in a Certificate of Airworthiness of the airplane has VFR/day, tick off the Day and VFR fields.

4. Inspections to be performed in accordance with the following manuals:
Mention exact titles of all the manuals that need to be in accordance with the documents published by the TC holder in their latest version.

5. Inspections will be performed on the aircraft as resulting from type design modifications and repairs made on the aircraft:
Mention exact titles of all the documents published in relation to type design modifications (e.g. in the form of STC).
List exact document titles in **Table n° 1**.

6. The following additional service instructions for continued airworthiness will apply to the aircraft:
Field 1 shall always be ticked-off.
Field 2 shall be ticked-off if it is related to the given aircraft.

7. Maintenance intervals for maintenance performed in accordance with service manuals and other documents:
Tick-off appropriate fields and mark prescribed maintenance intervals. Always describe the scope of the annual inspection; e.g. Annual inspection in the scope of 200-hour inspection in accordance with the MM with the addition of requirements of CAA-ST-092-n/07 (direction indicator compensation …).

8. The following aircraft component replacements and repairs will be performed on the aircraft:
Tick-off appropriate fields.
List exact document titles.

9. The following special inspection will be further performed on the aircraft:
Tick-off appropriate field, add more to represent current state.

10. Operator's / Owner's Declaration:
Identification and legible signatures of all the authorized persons; stamp if available.

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Form CAA/F-ST-177-0/09

APPENDIX J: Form of the Maintenance Programme for Aircraft, whose Continued Airworthiness Control is Performed by CAMO (For an Individual Aircraft or a Group of Same Type Aircraft, Except Aircraft Operated for Commercial Air Transport (Form N° CAA/F-ST-178-0/09, CAA/F-ST-179-0/09).

MAINTENANCE PROGRAMME

N° MP-TYP-IMATR-01

for the Aircraft Nationality and Registration Mark OK -

Type .....

Originated By: .....
.....

Approval Number: CZ.MG.xxxx

Address: .....
.....

The Maintenance Programme has been developed in accordance with article M.A.302, Section A, Subpart C of the Annex I of the Commission Regulation (EC) N° 2042/2003 (Part M) and Appendix 1 to AMC M.A.302 and AMC M.B.301(b) with inclusion of national requirements of the Guideline N°CAA-ST-092-n/07.

Place: ..... Date: .....

Position: ..... Name: .....

Signature: ..... Printout Number:

Approved by CAA of the Czech Republic, Prague, ref. .....

Place: ..... Date: .....

Position: ..... Name: .....

Signature: .....

Form CAA/F-ST-178-0/09

Part 0: General

0.1 Contents, Check List of Pages and Appendices

Form CAA/F-ST-178-0/09

0.2 Maintenance Programme Printouts Distribution List

Organization	Specific Holder	Form	Printout Number
CAMO	*Continuing Airworthiness Manager*	Original printout	1
CAA CZ Prague	Technical Division – Small Aircraft Section	Original printout	2
Owner		*File on a CD*	3
AMO	*Maintenance Manager*	*Printout - copy*	4

0.3 Maintenance Programme Revisions Record

Revision	Effective Date	Applies to Pages / Appendices	Revised by /and Date/	Signature

Form CAA/F-ST-178-0/09

0.4 List of Abbreviations Used

Abbreviation	Meaning
AD	Airworthiness Directive, see PZZ
AM	Accountable Manager
AMC	Acceptable Means of Compliance
AML	Aircraft Maintenance License
AMO	Approved Maintenance Organization
ARC	Airworthiness Review Certificate
CAA	Civil Aviation Authority (generally)
CAM	Continuing Airworthiness Manager
CAMO	Continuing Airworthiness Management Organization
CAME	Continuing Airworthiness Management Exposition
CD	Compact Disc
CRS	Certificate of Release to Service
Part M	Annex I to the Commission Regulation (EC) N. 2042/2003
ČR	Czech Republic
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
EC	European Community
ICAO	International Civil Aviation Association
IPC	Illustrated Part Catalogue
LC	Aircraft Component
LZ	Airworthiness
MM	Maintenance Manager
MOM	Maintenance Organization Manual
MP	Maintenance Programme
MTOM	Maximum Take-Off Mass
OP	Certifying Officer(s)
PZZ	Airworthiness Directive, mandatory document issued by the Authority
QM	Quality Manager
SB	Service Bulletin
SL	Service Letter
SRM	Structure Repair Manual
TD	Technical Division
STC	Supplementary Type Certificate
TC	Type Certificate
CAA CZ	Civil Aviation Authority (of the Czech Republic)

Form CAA/F-ST-178-0/09

Part 1: Aircraft Data

1.1 Aircraft Type Data

Manufacturer / TC Holder …… Production Year ……

Aircraft Type ……Serial N°

……

Nationality and Registration Mark …… MTOM

……

Engine Manufacturer and Type(s) ……

Propeller Manufacturer and Type(s) ……

APU Manufacturer and Type(s) ……

1.2 Installed Life-limited Parts and Components

The following life-limited parts and components are installed in the aircraft.

Part / Component: Description		Prescribed Time Limit incl. Tolerance	Prescribed Maintenance
Designation (P/N)	Number of Pcs./Air.		

1.3 Mode and Kind of Operation

The above mentioned aircraft is operated in accordance with Act N° 49/1997 for the following purpose:

aerial works in the sense of § 73: ☐ for personal purposes in the sense of § 76: ☐

for recreational and sport purposes in the sense of § 77: ☐

Approved kind of operation: Day: ☒ Night: ☐ VFR: ☒ IFR: ☐

Form CAA/F-ST-178-0/09

1.4 Performed Changes with Impact on the Maintenance System

The following type design changes, repairs and STC have impacted the aircraft's maintenance:

N°	Designation	Name	Issued By
1			
2			
3			
4			
5			
6			
7			
8			

1.5 Owner's / Operators Declaration

The aircraft is owned and operated by

Address:

Tel./ Fax: +

E-mail:

I hereby declare, that the aircraft listed in point 1.1 will be maintained in accordance with this Maintenance Programme, which complies with the EC Regulation N° 2042/2003 as amended, TC holder's maintenance data and other regulations regarding maintenance issued by EASA or CAA CZ. All the Airworthiness Directives shall be performed on the aircraft in order to ensure all the maintenance required to ensure its safe operation with regard to its kind of operation and operating conditions.

This Maintenance Programme (MP) is controlled by CAMO..... under CAA CZ's supervision in accordance with Part 3 of the MP, it undergoes regular reviews in accordance to Part 5 of the MP and its revisions are prepared if necessary in accordance with article 3.3 of the MP and article M.A.302(g) of Part-M.

Eventual exceptions or deviations of maintenance from MP or maintenance data presented in it shall be proposed, approved and recorded in accordance with Part 4 of the MP.

On behalf of

Place: ..... Date: .....

Position: ..... Name: .....

Signature: .....

Form CAA/F-ST-178-0/09

Part 2: Maintenance Programme Basis

2.1 Operational Maintenance

Takes place every flight day in the form of a Daily Inspection (pre-flight / post-flight),

its scope is described in .....

required qualification .....

2.2 Periodic Maintenance System Overview

Periodic Inspections System Including Overhauls: ☐ / Excluding Overhauls: ☐

with Fixed Time Limits and Scope: ☐ / Progressive Time-Limits: ☐

2.2.1 Overview of Regular Airframe Inspections

Airframe Maintenance type	Prescribed Time Limit	Max. Permissible Tolerance

2.2.2 Overview of Regular Power-unit Inspection

Engine / Propeller Maintenance Type	Prescribed Time Limit	Max. Permissible Tolerance

2.2.3 Overview of APU / Special Equipment Inspections

Equipment Maintenance Type	Prescribed Time Limit	Max. Permissible Tolerance

Form CAA/F-ST-178-0/09

2.2.4 Performing Inspections

If maintenance works are supposed to be performed by the pilot-owner, what is the highest level for the

airframe	power-unit	other equipment
.....	.....	.....

2.3 Special Maintenance

Other maintenance works over the scope of service and maintenance data published by the TC holder are to be included into the maintenance system base on requirements of EASA or the competent authority, or as a result of change of the type design, major repair or STC.

2.3.1 Special Maintenance in Accordance with CAA CZ's Requirements

The following special tasks are performed on the aircraft in accordance with the Guideline N°CAA-ST-092-n/07:

Task	Prescribed Time Limit	Note
VOR system operational testing	days .	
Magnetic direction indicators compensations	12 months	within the scope of the Annual Inspection
Radio-communication and radio-navigation systems functionality and sensitivity check (for IFR airplanes)	12 months	within the scope of the Annual Inspection
Checks and testing of the Pitot-static system every altimeter and automatic altitude transducer	months	
ATC transponder check and testing	months	
Aircraft weighting	months	

2.3.2 Special Maintenance in Accordance with Service Bulletins / Instructions / AD

Document numbers are references to the table in article 2.4.4.

Task	Prescribed Limit - Notes	Document N°

2.3.3 Special Maintenance Induced by Type Design Modifications / Repairs / STCs

Document numbers are references to the table in article 1.4.

Task	Prescribed Limit - Notes	Document N°

2.3.4 Other Special Maintenance

Form CAA/F-ST-178-0/09

2.4 Used Maintenance Data

Within the scope of this MP, the following approved maintenance data shall be used:

2.4.1 Aircraft Scheduled Maintenance Manuals

N°	Designation	Name	Issued By
1			
2			
3			
4			
5			
6			
7			
8			

2.4.2 Power-unit Scheduled Maintenance Manuals

N°	Designation	Name	Issued By
1			
2			
3			
4			
5			
6			
7			
8			

2.4.3 Other Equipment Scheduled Maintenance Manuals

N°	Designation	Name	Issued By
1			
2			
3			
4			
5			
6			
7			
8			

2.4.4 Service Bulletins / Instructions / AD

The following repeated works in accordance with TC/STC holder's instructions are included into regular inspections:

N°	Designation	Name	Issued By
1			
2			
3			
4			
5			
6			
7			
8			

Form CAA/F-ST-178-0/09

Part 3: Maintenance Programme Management

3.1 Maintenance Programme Preparation and Application

This Type Maintenance Programme has been elaborated in accordance with article M.A.302 of the Part-M and Appendix 1 to AMC M.A.302 and AMC M.B.301(b) with consideration of Guideline N°CAA-ST-092-n/07, and approved by the CAA CZ which is a competent authority for this MP. It is intended for continuing airworthiness management of the stated aircraft and for scheduling, managing and performing its maintenance. Its controlled copy is permanently available to the aircraft operator, the CAMO personnel and contractual AMOs in case maintenance is performed out of a contractual AMO, a current version of the MP in required scope is handed over to the external AMO.

3.2 Maintenance Programme Management

MP is maintained and updated within the CAMO controlled documentation system. Preparation, administration and implementation of eventual revisions and supplements of the MP are in the responsibility of the CAM. The MP contains the following chapters: Contents, Check List of Pages, Revisions Record and Distribution List. Every page is marked by a change index and its validity date that enables to check, whether the document is up-to-date. Every controlled printout is marked on its title page by the printout number in colour and every holder of a controlled printout is responsible for its updating base of revisions sent out in accordance with article 3.3. It is prohibited to use uncontrolled or not up-to-date copies of the MP in practice.

3.3 Maintenance Programme Revisions

The MP is a core document for aircraft's continuing airworthiness management, whose revision process may be either direct for major revisions that are subject to CAA-TD approval, or indirect for all other revisions that are subject to AM's approval within CAMO and only reported to CAA-TD. The MP revision / supplement procedure is described in article 1.2.4 CAME.

Indirect revision implementation is the moment of its approval by the AM; in the direct case, it is the moment of approval of its Proposal by CAA-TD. QM subsequently ensures implementation of revisions into the referential original of the document and distribution of revision announcements and revisions of pages (or a CD with a revised data file) to all the registered printout holders, who shall correct / replace their printouts. Integration of revisions into each registered printout shall be confirmed by an appointed officer of the holder by his signature and date in the Revisions Record.

Part 4: Exceptions and Deviations

In case a onetime need arises to deviate from the maintenance programme or the approved maintenance data / requirements by the TC / STC holder, EASA or the competent authority (see article 1.2 CAME), there shall be a written proposal made of a procedure to apply, which shall evaluate its effects on the airworthiness and operational safety of the subject aircraft, and which is subject to approval in accordance with procedures of the AMO or CAMO that presented the proposal. Records on the proposal and approved exceptions or deviations need to be kept with quality system records of the particular AMO / CAMO.

4.1 Exceptions to the Maintenance Programme

If the selected solution could influence safety of operation of the subject aircraft, it is necessary to apply for an approval of the exception from the competent authority supervising the AMO / CAMO and the exception may be implemented only after the appropriate authority's written approval. Information on the exception also need to be handed over to the owner / operator / CAMO managing airworthiness of the subject aircraft and recorded in its maintenance records and release to service.

4.2 Deviations from the Maintenance Programme

In case the solution selected has no impact on the safety of operation of the subject aircraft, the written proposal only needs to be approved within the scope of the quality system of the AMO / CAMO in the form of a deviation. Information on the deviation also need to be handed over to the owner / operator / CAMO managing airworthiness of the subject aircraft and recorded in its maintenance records and release to service.

Part 5: Maintenance Programme Review

5.1 Maintenance System Efficiency Assessment

The maintenance system undergoes efficiency assessment at least once a year based on evaluation of reliability, number of defects and their severity – as described in article 1.5 CAME. In case conclusions of this assessment indicate reliability deficiencies, CAM and QM shall consider probable causes and solutions – among others also the possibility to modify the maintenance system – and in case it is considered necessary, a Maintenance Programme shall take place in accordance with article 3.3.

5.2 Maintenance Programme Review

Content review of the MP is to be performed by CAM at every revision or issue of new approved maintenance data / requirements by the TC / STC holder, EASA, CAA CZ or other competent authority. Then also in case of any change in conditions, as e.g.:

- implementation of a modification / repair / STC that could influence the maintenance system of the subject aircraft,
- change in the kind or intensity of operation of the aircraft.

In case no changes take place, review shall be performed at least once a year – subsequently to the Maintenance System Assessment according to article 5.1. Should the review provide an impulse for a MP revision, the revision process in accordance with article 3.3 shall be followed.

Form CAA/F-ST-178-0/09

Maintenance Programme Explanation

The Maintenance Program (MP) may exist in the following version:

- Individual MP - for 1 aircraft - linked to its nationality and registration mark.
- Generic MP - for a group of aircraft of the same category (even different type series) of 1 or more operators. The structure corresponds to the Individual MP, but the specific aircraft and operator data, nor the operator's declaration are filled in. Based on the Generic MP, an Individual MP is generated for each operator, where the specific data and operator's declaration are added, it is also listed, based on which Generic MP the Individual MP was generated MP. The Generic MP than has an appendix with a list of all the issued Individual MP and managed aircraft.
- Type MP - for a group of aircraft of the same type (type series) with an identical maintenance system of 1 or more operators. The MP itself presents only data common for all the subject aircraft, description of their common maintenance system, list of all the document with data required for the scheduled maintenance - incl. AD / bulletins - used for performing repeated tasks. A special appendix is issued for every operator, where all the operator-specific data, kinds and modes of operation, managed aircraft and operator's declaration are included. The next appendix contains a list of operators and their managed aircraft with corresponding appendix numbers.

The MP is prepared and managed by CAMO based on a contract concluded with owners / operators (either a complex contract for managing continuing airworthiness of the subject aircraft or limited contracts for preparation and approval, eventually further control and reviewing the MP), only the Individual MP may be prepared and controlled even outside CAMO.

The document number is to be created in the following way (limited to max. of 20 characters incl. dashes):

- Individual: **MP-xxxxxx-zzzzzz-ččč**

where : MP- individual MP
xxxxxx – Aircraft Type Code, e.g. L13SLH
zzzzzz – Nationality and Registration Mark, e.g. OK2112 (event. code of the organization issuing the MP for more aircraft)
ččč – Sequence Number

- Generic MP: **GMP-xxxxxx-yyyyyy-čč**

where : GMP- generic MP
xxxxxx – Aircraft Type / Type Series Code, e.g. C172RG or Z42ser
yyyyyy – Code of the Organization Issuing the MP
čč – Sequence Number

- Type MP: **TMP-xxxxxx-yyyyyy-čč**

where : TMP- Type MP
xxxxxx – Aircraft Type / Type Series Code, e.g. C172RG or Z42ser
yyyyyy – Code of the Organization Issuing the MP
čč – Sequence Number

The above sample corresponds to an individual MP, red text corresponds to a situation, when the MP is prepared and further managed by a CAMO organization according to procedures approved within CAME. In case the MP is controlled out of the CAMO organization, it is necessary to adapt the procedures.

Form CAA/F-ST-178-0/09

Part 0 General:

0.1 Contents, Check List of Pages and Appendices - the contents shall present applicable revision numbers and dates of issue of the individual pages and appendices. Shall be elaborated base on the actual state and number of pages, each page shall be listed just once!

0.2 The Distribution List shall be prepared in a form selected by the person preparing it. In general, the original printout is maintained by its author, one original is sent to CAA CZ and the owner a/or operator receive one copy each, eventually one copy for contractual organization (e.g. maintenance). The physical form of those copies (printed / data CD / ...) is subject to practical consideration - agreement with holders.

0.3 A record shall be added with every revision, for the validity date, see article 3.3. In the field "Revised by on /date/" and "Signature", the authorized person of the printout holder lists the date and adds his signature to confirm that he properly implemented the revision.

0.4 List of Abbreviations – sample included – choose based on abbreviations used in the document.

Part 1 Aircraft Data:

1.1 Modify the field to represent actual conditions - airplane, helicopter, sailplane, balloon, if some parts are not applicable - may be omitted. Copy MTOM from the Type / Version Data Sheet.

1.2 Fill-in to represent actual conditions (e.g. as described in the manual, with the information, if it relates to the subject aircraft). If the list is too long and maintained elsewhere, it is possible only to reference the appropriate controlled document.

1.3 Tick-off to represent actual conditions, i.e. kinds of operation of the aircraft.

1.4 Fill-in performed Modifications / Repairs /STCs affecting aircraft maintenance.

1.5 Fill-in data and sign separately by the owner and operator - unless identical.

Part 2 Maintenance Programme Basis:

2.1 Fill-in to represent actual condition - based on which documents and by whom it is performed.

2.2 Tick-off to represent actual conditions. A single MP may describe only one maintenance system (with overhauls / without overhauls, with fixed time limits and scope of works / progressive).

2.2.1 – 2.2.3 Record inspection types and time limits that are actually used for maintenance. If some parts are not used / do not require maintenance, they may be omitted.

2.2.4 Maintenance performed by the pilot / owner - if applicable, list up to which level, if not, mark N/A.

2.3.1 – 2.3.4 Fill-in to represent actual conditions. If some maintenance parts / type are not used - may be omitted.

2.4 Fill-in to represent actual conditions. If the engine, propeller, avionics or other aircraft component maintenance is included in one manual for the aircraft, fill in-only the Table 2.4.1 - in the others, mark only special documents, otherwise can be omitted. It is sufficient to list those documents that are used for regular maintenance, manuals for repairs, parts catalogues, wiring manual, etc.

Part 3 Maintenance Programme Control:

3.2 Modify the description to represent the actual system used for creating and controlling the MP - references to CAME may be used.

3.3 In case of CAMO, list its name and approval number, in case it is not involved, list authorized person's name and address or other identification (job position in the operator's organization).

3.4 Describe who and how performed the revisions, in case CAMO takes control, references to CAME articles may be listed. If the MP is not under CAMO's maintenance, no indirect revisions may be performed!

Part 4 Exceptions and Deviations:

- Fill-in to represent the actual system used for issuing exception / deviations, or mark "Not Being Performed".

Part 5 Maintenance Programme Review:

- Fill-in to represent the actual system used for controlling the MP, it shall correspond to Part 3, shall be performed at least once a year.

Part 6 Reliability Programmes: - Reserved

- Application of these programmes is not supposed for other than large aircraft, but the may be applied in case CAMO has appropriate procedure available.

TYPE MAINTENANCE PROGRAMME

N° TMP-CAMO-TYP-01

For Aircraft Type Series .....

Originated by: Continuing Airworthiness Management Organization .....

Approval Number: CZ.MG.00xx

Address: .....
.....

The Type Maintenance Programme has been developed in accordance with article M.A.302, Section A, Subpart C of Annex I of the Commission Regulation (EC) N° 2042/2003 (Part M) and Appendix 1 to AMC M.A.302 and AMC M.B.301(b) with inclusion of national requirements of the Guideline N°CAA-ST-092-n/07.

Place: ..... Date: .....

Position: ..... Name: .....

Signature: ..... Printout Number:

Approved by CAA of the Czech Republic, Prague, ref. .....

Place: ..... Date: .....

Position: ..... Name: .....

Signature: .....

Form CAA/F-ST-179-0/09

Part 0: General

0.1 Contents, Check List of Pages and Appendices

Form CAA/F-ST-179-0/09

0.2 Maintenance Programme Printouts Distribution List

Organization	Specific Holder	Form	Printout Number	Numbers of Appendices
CAMO	Accountable Manager	Original printout	1	All
CAA CZ Prague	Technical Division – Small Aircraft Section	Original printout	2	S
CAMO	*Continuing Airworthiness Manager*	*Network File*	*3*	*All*
AMO	*Maintenance Manager*	*File on a CD*	*4*	*S*
Operator A		Printout - copy	5	P1
Operator B		*File on a CD*	*6*	*P2*

0.3 Maintenance Programme Revisions Record

Revision	Effective Date	Applies to Pages / Appendices	Revised by /and Date/	Signature

Form CAA/F-ST-179-0/09

0.4 List of Abbreviations Used

Abbreviation	Meaning
AD	Airworthiness Directive, see PZZ
AM	Accountable Manager
AMC	Acceptable Means of Compliance
AML	Aircraft Maintenance License
AMO	Approved Maintenance Organization
ARC	Airworthiness Review Certificate
CAA	Civil Aviation Authority (generally)
CAM	Continuing Airworthiness Manager
CAMO	Continuing Airworthiness Management Organization
CAME	Continuing Airworthiness Management Exposition
CD	Compact Disc
CRS	Certificate of Release to Service
Part M	Annex I to the Commission Regulation (EC) N. 2042/2003
ČR	Czech Republic
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
EC	European Community
ICAO	International Civil Aviation Association
IPC	Illustrated Part Catalogue
LC	Aircraft Component
LZ	Airworthiness
MM	Maintenance Manager
MOM	Maintenance Organization Manual
MP	Maintenance Programme
MTOM	Maximum Take-Off Mass
OP	Certifying Officer(s)
PZZ	Airworthiness Directive, mandatory document issued by the Authority
QM	Quality Manager
SB	Service Bulletin
SL	Service Letter
SRM	Structure Repair Manual
TD	Technical Division
STC	Supplementary Type Certificate
TC	Type Certificate
CAA CZ	Civil Aviation Authority (of the Czech Republic)

Form CAA/F-ST-179-0/09

Part 1: Aircraft Data

1.1 Aircraft Type Data

Manufacturer / TC Holder

……

Aircraft Type …… MTOM ……

Engine(s) Manufacturer and Type(s)……

Propeller(s) Manufacturer and Type(s) ……

APU Manufacturer and Type(s) ……

1.2 Installed Life-limited Parts and Components

The following life-limited parts and components may be installed in the aircraft

Part / Component: Designation (P/N)	Description Number of Pcs./Air.	Prescribed Time Limit Incl. Tolerance	Prescribed Maintenance	Applies to Aircraft: (numbers from appendices)

Note: In the "Applies to Aircraft" columns of this and other table, only aircraft managed by this MP shall be listed, to which the particular line applies, in the form of numbers, by which the aircraft are designated in Appendices S and Px.

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Part 2: Maintenance Programme Basis

2.1 Operative Maintenance

Is performed in the form of Daily Inspection (pre-flight / post-flight) every flight day,

its scope is described in .....

required qualification .....

2.2 Periodic Maintenance System Overview

Periodic Inspections System Including Overhauls: ☐ / Excluding Overhauls: ☐

with Fixed Time Limits and Scope: ☐ / Progressive Time-Limits: ☐

2.2.1 Overview of Regular Airframe Inspections

Airframe Maintenance type	Prescribed Time Limit	Max. Permissible Tolerance

2.2.2 Overview of Regular Power-unit Inspection

Engine / Propeller Maintenance Type	Prescribed Time Limit	Max. Permissible Tolerance

2.2.3 Overview of APU / Special Equipment Inspections

Equipment Maintenance Type	Prescribed Time Limit	Max. Permissible Tolerance	Applies to Aircraft:

Form CAA/F-ST-179-0/09

2.2.4 Performing Inspections

If maintenance works are supposed to be performed by the pilot-owner, what is the highest level for the

airframe	powerplant	other equipment
.....	.....	.....

2.3 Special Maintenance

Other maintenance works over the scope of service and maintenance manuals published by the TC holder are to be included into the maintenance system base on AD, requirements of EASA or the competent authority, or as a result of change of the type design, major repair or STC.

2.3.1 Special Maintenance in Accordance with CAA CZ's Requirements

The following special tasks are performed on the aircraft in accordance with the Guideline N°CAA-ST-092-n/07:

Task	Prescribed Time Limit	Note
VOR System Operational Testing	30 days .	
Magnetic direction indicator compensations	12 months	within the scope of the Annual Inspection
Radio-communication and radio-navigation systems functionality and sensitivity check (for IFR airplanes)	12 months	within the scope of the Annual Inspection
Checks and testing of the Pitot-static system every altimeter and automatic altitude transducer	months	
ATC transponder check and testing	months	
Aircraft weighting	months	

2.3.2 Special Maintenance in Accordance with Service Bulletins / Instructions / AD

Document numbers are references to the table in article 2.4.4.

Task	Prescribed Limit - Notes	Document N°

2.3.3 Special Maintenance Induced by Type Design Changes / Repairs / STCs

Document numbers are references to the table in article 1.4.

Task	Prescribed Limit - Notes	Document N°

2.3.4 Other Special Maintenance

2.4 Used Maintenance Data

Within the scope of this MP, the following approved maintenance data shall be used.

2.4.1 Aircraft Scheduled Maintenance Manuals

Designation	Name	Issued By

2.4.2 Power-unit Scheduled Maintenance Manuals

Designation	Name	Issued By

2.4.3 Other Equipment Scheduled Maintenance Manuals

Designation	Name	Issued By	Applies to Aircraft:

2.4.4 Service Bulletins / Instructions / AD

The following repeated works in accordance with TC/STC holder's instructions are included into regular inspection:

Designation	Name	Issued By	Applies to Aircraft:

Part 3: Maintenance Programme Control

3.1 Maintenance Programme Preparation and Application

The Type Maintenance Programme has been elaborated in accordance with article M.A.302 of Part-M and Appendix 1 to AMC M.A.302 and AMC M.B.301(b) with consideration of Guideline N°CAA-ST-092-n/07, and approved by the CAA CZ which is a competent authority for this MP. It is used to control maintenance and continuing airworthiness of all the aircraft of the particular type series based on contracts with their owners / operators. In case also an aircraft registered in an aircraft register of another state should be maintained, CAMO shall - subject to approval of the state of registry - implement also national requirements published by that state into the aircraft maintenance system.

A list of all the contracted owners / operators and their aircraft controlled by this MP is maintained in Appendix S. Each owner / operator, to whose aircraft the MP applies, holds a controlled MP copy with his individual Appendix Px (see article. U.2), articles Px.2 to Px.4 of this Appendix contain specific data of his aircraft and in article Px.5 he confirms the Operator's Declaration by his authorized representative's signature. All the Appendices of the original MP printout held by CAMO are maintained.

The MP is used for scheduling, controlling and performing maintenance of all the subject aircraft. Its controlled copy is permanently available to the aircraft operator, the CAMO personnel and contractual AMOs; in case maintenance is performed out of a contractual AMO, a current version of the MP in required scope is handed over to the external AMO. If the maintenance system would differ from this MP due to performed major repairs / type design changes / STCs / aircraft age etc., a Supplement shall be issued for specific aircraft serial number, the number of which is then mentioned in a note for the specific aircraft in Appendices S and Px.

3.2 Maintenance Programme Control

MP is maintained and updated within the CAMO controlled documentation system. Preparation, administration and implementation of eventual revisions and supplements of the MP are in the responsibility of CAM. Each implemented MP / Supplement contains the following chapters: Contents, Check List of Pages, Revisions Record and Distribution List. Every page is marked by a change index and its validity date that enables to check, whether the document is up-to-date. Every controlled printout is marked on its title page by the printout number in colour and every holder of a controlled printout is responsible for its updating base of revisions sent out in accordance with article 3.3. It is prohibited to use uncontrolled or not up-to-date copies of the MP / Supplement in practice.

3.3 Maintenance Programme Revisions

The MP is a core document for aircraft's continuing airworthiness management, whose revision process may be either direct for major revisions that are subject to CAA-TD approval, or indirect for all other revisions that are subject to AM's approval within CAMO and only reported to CAA-TD. The MP revision / supplement procedure is describe in article 1.2.4 CAME.

Indirect revision implementation is the moment of its approval by the AM; in the direct case, it is the moment of approval of its Proposal by CAA-TD. QM subsequently ensures implementation of revisions into the referential original of the document and distribution of revision announcements and revisions of pages (or a CD with a revised data file) to all the registered printout holders, who shall correct / replace their printouts. Integration of revisions into each registered printout shall be confirmed by an appointed officer of the holder by his signature and date in the Revisions Record.

Part 4: Exceptions and Deviations

In case a onetime need arises to deviate from the maintenance programme or the approved maintenance data / requirements by the TC / STC holder, EASA or the competent authority (see article 1.2 CAME), there shall be made a written proposal of a procedure to apply, which shall evaluate its effects on the airworthiness and operational safety of the subject aircraft, and which is subject to approval in accordance with procedures of the AMO or CAMO that presented the proposal. Records on the proposal and approved exception or deviation need to be kept with quality system records of the particular AMO / CAMO.

4.1 Exceptions from the Maintenance Programme

If the selected solution could influence safety of operation of the subject aircraft, it is necessary to apply for approval of the exception from the competent authority supervising the AMO / CAMO and the exception may be implemented only after the authority's written approval. Information on the exception also need to be handed over to the owner / operator / CAMO managing airworthiness of the subject aircraft and recorded in its maintenance records and release to service.

4.2 Deviations from the Maintenance Programme

In case the solution selected has no impact on the safety of operation of the subject aircraft, the written proposal only needs to be approved within the scope of the quality system of the appropriate AMO / CAMO in the form of a deviation. Information on the deviation also need to be handed over to the owner / operator / CAMO managing airworthiness of the subject aircraft and recorded in its maintenance records and release to service.

Part 5: Maintenance Programme Review

5.1 Maintenance System Efficiency Assessment

The maintenance system undergoes efficiency assessment at least once a year based on evaluation of reliability, number of defects and their severity - as described in article 1.5 CAME. In case conclusions of this assessment indicate reliability deficiencies, CAM and QM shall consider probable causes and solutions - among others also the possibility to modify the maintenance system - and in case it is considered necessary, a Maintenance Programme shall take place in accordance with article 3.3.

5.2 Maintenance Programme Review

Content review of the MP is to be performed by CAM at every revision or issue of new approved maintenance data / requirements by the TC / STC holder, EASA, CAA CZ or other competent authority. Then also in case of any change in conditions, as e.g.:

- addition of another aircraft / operator into the subject MP;
- implementation of a modification / repair / STC that could influence the maintenance system of the subject aircraft;
- reaching the prescribed operating time limit / lifetime of some of the controlled aircraft that influences the system of further maintenance of the subject aircraft;
- change in the kind or intensity of operational usage of the controlled aircraft.

In case no changes take place, review shall be performed at least once a year - subsequently to the Maintenance System Assessment according to article 5.1. Should the review provide an impulse for MP revision, the revision process in accordance with article 3.3 shall be followed.

Form CAA/F-ST-179-0/09

Part P: Maintenance Programme Appendices

Appendix S List of All Controlled Aircraft

S.1 Operator *Operator A* – see Appendix 1

Address:
Tel./ Fax: + E-mail:

Aircraft Number	Type / Version	Nationality and Registration Mark	Serial Number	Production Year	Notes
1-1					
1-2					
1-3					
1-4					
1-5					
1-6					
1-7					
1-8					
1-9					
1-10					

Legend:

S.2 Operator *Operator B* – see Appendix 2

Address:
Tel./ Fax: + E-mail:

Aircraft Number	Type / Version	Nationality and Registration Mark	Serial Number	Production Year	Notes
2-1					
2-2					
2-3					
2-4					
2-5					
2-6					

Legend:

Appendix 1 *Operator A*

P1.1 Owner / Operator

Address:
Tel./ Fax: +
E-mail:

P1.2 Specific Data for Particular Aircraft

1-1	Type / Version	Nationality and Registration Mark	Serial Number	Production Year	Notes
Engine(s) Manufacturer / Type / Version					
Propeller Manufacturer / Type / Version					
APU Manufacturer / Type / Version					
Special Equipment					

Special maintenance requirements - alternatively references to P1.4

1-2	Type / Version	Nationality and Registration Mark	Serial Number	Production Year	Notes
Engine(s) Manufacturer / Type / Version					
Propeller Manufacturer / Type / Version					
APU Manufacturer / Type / Version					
Special Equipment					

Special maintenance requirements - alternatively references to P1.4

P1.3 Mode and Kind of Operation

Aircraft of numbers listed in P1.2 are operated for the following purposes in the sense of Act N° 49/1997 for the following purpose:

for aerial works in the sense of § 73:	
for personal needs in the sense of § 76:	
for recreation and sport purposes in the sense of § 77:	

Approved type of operation for aircraft number, see P1.2:

Day:	All	Night:	
VFR:	All	IFR:	

Form CAA/F-ST-179-0/09

P1.4 Performed Changes with Impact on the Maintenance System

The following type design changes, repairs and STC have impacted the aircraft' maintenance:

N°	Designation	Name	Issued By	Applies to Aircraft:
1				
2				
3				
4				
5				
6				
7				
8				

P1.5 Owner's / Operator's Declaration

I hereby declare, that the aircraft listed in point P1.2 will be maintained in accordance with this maintenance programme, which complies with the Regulation (EC) N° 2042/2003 as amended, TC holder's maintenance data and other regulations regarding maintenance issued by EASA or CAA CZ. All the Airworthiness Directives shall be performed on the aircraft in order to ensure all the maintenance required to ensure its safe operation with regard to its kind of operation and operating conditions.

This Maintenance Programme is (MP) is controlled by CAMO..... under CAA CZ's supervision in accordance with Part 3 of the MP, it undergoes regular reviews in accordance to Part 5 of the MP and its revisions are prepared if necessary in accordance with article 3.3 of the MP and article. M.A.302(g) of Part-M.

Eventual exception or deviations of maintenance from MP or maintenance data presented in it shall be proposed, approved and recorded in accordance with Part 4 of the MP.

On behalf of

Place: ..... Date: .....

Position: ..... Name: .....

Signature: .....

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Maintenance Programme Explanation

The Maintenance Program (MP) may exist in the following version:

- Individual MP - for 1 aircraft - linked to its nationality and registration mark.
- Generic MP - for a group of aircraft of the same category (even different type series) of 1 or more operators. The structure corresponds to the Individual MP, but neither the specific aircraft and operator data, nor the operator's declaration is filled in. Based on the Generic MP, an Individual MP is generated for each operator, where the specific data and operator's declaration are added, it is also listed, based on which Generic MP the Individual MP was generated MP. The Generic MP than has an appendix with a list of all the issued Individual MP and controlled aircraft.
- Type MP - for a group of aircraft of the same type (type series) with the identical maintenance system of 1 or more operators - see enclosed sample.

The MP is prepared and controlled by CAMO based on a contract concluded with owners / operators (either a complex aircraft for managing continuing airworthiness of subject aircraft or limited contracts for preparation and approval, eventually further control and reviewing the MP), only the Individual MP may be prepared and controlled even outside CAMO.

The document number is to be created in the following way (limited to max. of 20 characters incl. dashes):

- Individual: **MP-xxxxxx-zzzzzz-ččč**

where : MP- individual MP
xxxxxx – Aircraft Type Code, e.g. L13SLH
zzzzzz – Nationality and Registration Mark, e.g. OK2112 (event. code of the organization issuing the MP for more aircraft)
ččč – Sequence Number

- Generic MP: **GMP-xxxxxx-yyyyyy-čč**

where : GMP- generic MP
xxxxxx – Aircraft Type / Type Series Code, e.g. C172RG or Z42ser
yyyyyy – Code of the Organization Issuing the MP
čč – Sequence Number

- Type MP: **TMP-xxxxxx-yyyyyy-čč**

where : TMP- Type MP
xxxxxx – Aircraft Type / Type Series Code, e.g. C172RG or Z42ser
yyyyyy – Code of the Organization Issuing the MP
čč – Sequence Number

The presented sample corresponds to a Type MP. The Type MP is such that the MP program presents only general data applicable to all the aircraft, description of their common maintenance system (an overview of the airframe / engine / .... maintenance levels with listed time limits and eventual tolerances) and a summation of all the relevant documents for the scheduled maintenance of the airframe / engine / ... / avionics / .... - manuals, but also ADs / bulletins for execution of repeated tasks. For the basic Type MP a special appendix is prepared with specific data on the operator, kind and mode of operation, all controlled aircraft of the subject type series incl. their differences (type design changes, STCs, repairs, specific requirements) and finally with Operator's Declaration signed by its authorized person. Next to that, there is the Appendix "S" with the list of operators and their controlled aircraft with numbers of corresponding appendices. The appendices for the individual operators and aircraft have a number assigned to every aircraft, which can be used for referencing in the Type MP (see the explanation of the Appendix S).

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Part 0 General:

0.1 Contents, Check List of Pages and Appendices - the contents shall present applicable revision numbers and dates of issue of the individual pages and appendices. Shall be elaborated based on the actual state and number of pages, each page shall be listed just once!

0.2 The Distribution List shall be prepared in a form selected by the person preparing it. In general, the original printout is maintained by its author, one original is sent to CAA CZ and the owner a/or operator receive one copy each, eventually one copy for contractual organization (e.g. maintenance). In the printouts Distribution List, there is also a description of distribution of the appendices: CAMO has all the Type MP appendices in its controlled printout; each operator has only his appendices, all the other holders of controlled printouts (incl. CAA-TD) have only their list. The physical form of those copies (printed / data CD / ...) is subject to practical consideration - agreement with holders.

0.3 The record shall be added with every revision, for the validity date, see article 3.3. In the field "Revised by on /date/" and "Signature", the authorized person of the printout holder confirms that he properly implemented the revision.

0.4 List of Abbreviations – sample included – choose based on abbreviations used in the document.

Part 1 Aircraft Data:

1.1 Modify the field to represent actual state - airplane, helicopter, sailplane, balloon, if some parts are not applicable - may be omitted. Copy MTOM from the Type / Version Data Sheet.

1.2 Fill-in to represent actual conditions, in "Applies to Aircraft"; list the numbers from the list in Appendix S (or "all"). If the aircraft is maintained elsewhere, it is possible to only reference the controlled document in the MP.

Part 2 Maintenance Programme Basis:

2.1 Fill-in to represent actual conditions - based on which documents and by whom it is performed.

2.2 Tick-off to represent actual conditions. A single MP may describe only one maintenance system (with overhauls / without overhauls, with fixed time limits and scope of works / progressive). For two aircraft of the same type with different maintenance systems, two separate MPs shall be elaborated.

2.2.1 – 2.2.3 Record inspection types and time limits that are actually used for maintenance. If some parts are not used / do not require maintenance, they may be omitted. In "Apply to Aircraft", mark the numbers from the list in Appendix S (or: "All"), if every maintenance task is performed on all aircraft, the column can be omitted.

2.2.4 Maintenance performed by the pilot / owner - if applicable, list up to which level, if not, mark N/A.

2.3.1 – 2.3.4 Fill-in to represent actual conditions. If some maintenance parts / type are not used - may be omitted.

2.4 Fill-in to represent actual conditions. If the engine, propeller, avionics or other aircraft component maintenance is included in one manual for the aircraft, fill in-only the Table 2.4.1 - in the others, mark only special documents, otherwise can be omitted. It is sufficient to list those documents that are used for regular maintenance, listing manuals for repairs, parts catalogues, wiring manual, etc. In "Apply to Aircraft", mark the numbers from the list in Appendix S (or: "All"), if every maintenance task is performed on all the aircraft, the column can be omitted.

Part 3 Maintenance Programme Control

3.1 Modify the description to represent the actual system used for creating and controlling the MP - references to CAME may be used. The initial approval of the Type MP (and the Gen. MP) shall always be performed by CAA CZ.

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3.2 In case of CAMO, list its name and approval number, in case it is not involved, list authorized person's name and address or other identification (job position in the operator's organization).

3.3 Describe who and how performed revisions, in case CAMO takes control, references to CAME articles may be listed. If the MP is not under CAMO's maintenance, no indirect revisions may be performed!

Part 4 Exceptions and Deviations:

- Fill-in to represent the actual system used for issuing exception / deviations, or mark "Not Being Performed".

Part 5 Maintenance Programme Review:

- Fill-in to represent the actual system used for controlling the MP, it shall correspond to Part 3, shall be performed at least once a year.

Part 6 Reliability Programmes: - Reserved

- Application of these programmes is not supposed for other than large aircraft, but they may be applied in case CAMO has appropriate procedure available.

Appendix S List of All Controlled Aircraft

There is a special section for every contracted owner / operator.
In the header, fill-in the basic data separately for every owner and operated, unless identical.
A numbered list of aircraft of the owner / operator shall present only the basic aircraft data, list eventual differences of individual aircraft in the notes (implemented modifications / repairs / STCs - references to articles / tables containing related documents or descriptions - with a legend under the table).
The numbering system for aircraft controlled by the Type or Generic MP:
Operator A – Appendix 1 – numbers of operator's aircraft, e.g. 1-1, 1-2, ..., (or 0101, 0102, …);
Operator B – Appendix 2 – numbers of operator's aircraft, e.g. 2-1, 2-2, ..., etc.,
are used for referencing to data in tables that relate only to specific aircraft, e.g. aerial works according to § 73 are performed only by aircraft n° 1-1, 1-3, 2-5, ... , AD n° XYZ applies to aircraft n° 1-6, 1-7, 2-2, 2-5, 2-8, ….

Appendix P1 Operator A:

P1.1 Fill-in owner and operator data, unless identical.

P1.2 Aircraft numbers correspond to the list in Appendix S, list specific data for each aircraft; use the notes to list eventual differences of the individual aircraft (implemented modifications / repairs / STCs - references to articles / tables, where related documents are listed or detailed description / legend under the table).

P1.3 In the field for kinds and modes of operation, mark numbers of the individual aircraft in accordance with Appendix S.

P1.4 Fill-in all implemented modifications / repairs / STCs with impact to maintenance of some of the aircraft - in "Applies to Aircraft" mark numbers of involved aircraft according to the list in Appendix S (or "All"), if each change relates to all the aircraft, this column may be omitted.

P1.5 Fill-in and have signed by the owner and operator - unless identical.

Prepare analogical appendices for every contracted operator.

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