

Maintenance Programmes - OTAR Part 39 Subpart C

**Issue 6.00
3 March 2023**

Effective: on issue

GENERAL

Overseas Territories Aviation Circulars are issued to provide advice, guidance and information on standards, practices and procedures necessary to support Overseas Territory Aviation requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Overseas Territories) Order or provide practical guidance on meeting a requirement contained in the Overseas Territories Aviation Requirements.

PURPOSE

This Overseas Territories Aviation Circular provides information and guidance on developing a Maintenance Programme required for an aircraft registered in a Territory and granted a Certificate of Airworthiness.

RELATED REQUIREMENTS

This Circular relates to OTAR Part 39 Subpart C.

CHANGE INFORMATION

Issue 6: Section 24 and Appendix A, Item 31 of this OTAC have been amended to change CVR/FDR systems to Flight Recorder Systems which also includes Data Link Recording Systems and Airborne Image Recording Systems in accordance with ICAO Annex 6, Parts I, II and III. It also changed reference to OTAC 39-14 to 39-13 in para 24.4.

ENQUIRIES

Enquiries regarding the content of this Circular should be addressed to Air Safety Support International at the address on the ASSI website www.airsafety.aero or to the appropriate Overseas Territory Aviation Authority.

Contents

Contents	2
1 Introduction.....	3
2 Application for approval.....	3
3 Application liaison.....	3
4 Maintenance Programme presentation	3
5 Maintenance Programme basis	4
6 Applicability	4
7 Maintenance Programme Approval.....	5
8 Maintenance Programme Amendments.....	5
9 Regular and annual reviews	5
10 Human performance factors & critical task controls	6
11 Pre-Flight inspections	6
12 Migrating aircraft between Maintenance Programmes	7
13 Maintenance Programme content	7
14 Inspection standards.....	8
15 Permitted variations to Maintenance periods.....	8
16 Task cards.....	9
17 Environmental.....	10
18 Corrosion of aircraft structure.....	10
19 Mandatory requirements	10
20 Design changes	11
21 Special operations.....	11
22 Equipment carriage	11
23 Safety equipment.....	11
24 Flight Recorder Systems.....	11
25 Battery capacity checks	12
26 Weight and balance	12
27 Low utilisation maintenance programmes.....	12
28 Reliability	14
29 Identification of Critical Parts in Operator’s Maintenance Programmes	16
Appendix A Maintenance Programme template.....	18
Appendix B Application for approval of an aircraft Maintenance Programme	42
Appendix C MP Amendment Application Form.....	43

1 Introduction

- 1.1 The objective of this document is to provide guidance for the development and submission for approval of an aircraft Maintenance Programme to the OTAA.
- 1.2 It is the responsibility of the OTAA to ensure that aircraft on its register are effectively maintained in an airworthy condition. The OTAA approval of the Maintenance Programme provides a mechanism to record minimum standards of airworthiness that the owner/operator must comply with.
- 1.3 An Approved Maintenance Programme (AMP) will be the source of all scheduled inspections, relevant controls and supporting data. The Maintenance Programme should always be active (subject to review and amendment) and utilised which enables effective maintenance to be carried out in a logical, concise, clear and controllable manner.
- 1.4 Some of the subject material in this document may not be 'applicable' to a particular aircraft. This can only be confirmed by carrying out a detailed assessment as the aircraft may be affected by subsections of a larger section. Caution should be exercised before assuming that a subject or a subpart of this guidance is considered 'not applicable'.

2 Application for approval

- 2.1 Initial application for approval of a Maintenance Programme should be made to the OTAA by letter, Fax or E-mail requesting a formal application reference. Details to be provided should include:
- (1) Owner/s or operator/s name, address and contact details
 - (2) Aircraft type and registration number
- 2.2 On receipt and acceptance of the application, the OTAA will record the application and provide a unique reference number. All further correspondence and supporting documentation must make reference to the unique reference number.

3 Application liaison

During the application process, the applicant should provide details to the OTAA of a suitable person/s or organisation who shall be responsible for the initial and subsequent development and control of the programme; this should include ensuring that the programme is suitably amended following regular and annual reviews.

4 Maintenance Programme presentation

- 4.1 The applicant should review this guidance material, complete the application form at Appendix B and submit it together with the following:
- (1) A draft maintenance programme
 - (2) Completed compliance document
 - (3) Additional supporting documentation in support of the application
 - (4) If applicable, payment of the appropriate application fee.

Note: The Maintenance Programme can be submitted in hard copy, or electronic format.

- 4.2 The aircraft Maintenance Programme should contain a preface developed in line with the guidance template at Appendix A. The objective of the preface is to record the process of controls and explanations of the Maintenance Programme contents.

- 4.3 Where the aircraft Maintenance Programme relies on other published documentation, references should be made to this documentation and, if requested, copies of this supporting documentation should be made available to the OTAA.
- 4.4 The person/s or organisation nominated in paragraph 3 should have in place an appropriate subscription service to ensure any revisions made to the Maintenance Planning Document (MPD), Maintenance Review Board Report (MRBR) or Chapter 5 inspection requirements are received for analysis to establish applicability and an effective inspection regime.
- 4.5 The manufacturer's Standard Maintenance Practices (SMP), also referred to as manufacturer's maintenance rules, describe the inspection philosophy of the manufacturer. These must be included and should become part of the introduction section of the Maintenance Programme. Where the manufacturer has not adequately defined an SMP, the applicant should provide for acceptable standards derived from typical and relevant data. This material should be made available to the OTAA.
- 4.6 The Maintenance Programme shall be produced in the English language in a format that is readily understandable to maintenance personnel.

5 Maintenance Programme basis

- 5.1 The Maintenance Programme is usually based upon the Maintenance Review Board Report (MRBR), the Type Certificate holder's maintenance planning document (MPD) or Chapter 5 of the maintenance manual (the manufacturer's recommended maintenance programme).
- 5.2 The structure and format of these maintenance recommendations may be rewritten by the person/s or approved organisation nominated in paragraph 3 to better suit the operation and thereby establish control of the maintenance programme.
- 5.3 For a newly type-certificated aircraft for which no previously approved maintenance programme exists it will be necessary for the owner or nominated approved organisation to comprehensively appraise the manufacturer's recommendations (and the MRB report where applicable), together with other airworthiness information, in order to produce a realistic programme for approval.
- 5.4 For existing aircraft types the operator can make comparisons with previously approved maintenance programmes; however, it should not be assumed that a previously approved maintenance programme for one operator is automatically approved for another.

6 Applicability

- 6.1 It is acceptable to maintain more than one aircraft to the same Maintenance Programme. Typically, one operator responsible for the Maintenance Programme would maintain several aircraft in an airworthy condition. The advantages of this are: fleet optimisation, reliability data gathering and balancing scheduled maintenance tasks such as optimising engine life. In this case each individually registered aircraft would be listed on the programme under nationality and registration markings.
- 6.2 If more than one aircraft of the same type is placed on a programme, a comparison check will be necessary. This will then be recorded in a supplemental section of the Maintenance Programme and utilised to identify the differences. Reference to the supplement must be clearly identified in the contents and introduction sections of the Maintenance Programme.

7 Maintenance Programme Approval

- 7.1 The OTAA will only indicate approval of a Maintenance Programme in writing quoting a unique reference number. This reference will normally be issued following a review and acceptance of the initial application. At this stage the approval is considered pending and is identified by the addition of a suffix 'P' to the allocated reference number.
- 7.2 On satisfactory completion of an investigation, the OTAA will provide a formal approval letter that may include conditions and/or limitations. The OTAA approval reference should be incorporated in the front section of the Maintenance Programme including any correspondence associated with the Maintenance Programme.

8 Maintenance Programme Amendments

- 8.1 Amendments to the approved maintenance programme shall not be incorporated until approved by the OTAA when satisfied with the content and applicability of all amendments. Applicable supporting information should be supplied to the OTAA to assist in this process.
- 8.2 Application for amendment approval should be made using the submission form at Appendix C of this document, or a form available from the respective OTAA. (Note: Forms may also be available on the ASSI website www.airsafety.aero)

9 Regular and annual reviews

- 9.1 The maintenance programme should be reviewed annually. All supporting documents that have been referenced in the Maintenance Programme should be considered during the annual review.
- 9.2 For aircraft subject to reliability analysis, the Maintenance Programme review should be conducted at intervals commensurate with the reliability programme.
- 9.3 In order to meet the requirements of the Air Navigation (Overseas Territories) Order (AN(OT)O), it is the responsibility of the nominated person/organisation identified in Section 3.1 to ensure that instructions for continued airworthiness, with regard to mandatory and non-mandatory requirements, incorporated design changes (modifications and repairs) and any requirements deemed necessary by the OTAA are evaluated for applicability. Once evaluated, suitable amendments to the Maintenance Programme must be developed and approved.
- 9.4 Regular and annual reviews of the maintenance Programme shall as a minimum include the following items:
- (1) Applicable Mandatory Directives
 - (2) Applicable evaluations of reliability analysis
 - (3) Operational issues
 - (4) Maintenance findings
 - (5) Type Certificate holder's recommendations
 - (6) Revisions to the MRB report
 - (7) Revisions the MPD
 - (8) Revisions to Chapter 5 Maintenance Manual
 - (9) Applicable Supplemental Type Certificate Holders' revisions to instructions for continued airworthiness
 - (10) Aircraft utilisation (hours/cycles etc)
 - (11) Changes to aircraft operational utilisation (Type of operation and climatic conditions)
 - (12) Review of aircraft and equipment life limits

- (13) If applicable, a review of the Corrosion Prevention Control Programme (CPCP) tasks and findings.

- 9.5 For aircraft types where the maintenance programme was not derived using the maintenance review board process, condition monitoring and reliability programmes may not apply. In such cases, pilot reports (PIREPS), component removal, Times Between Overhauls, Minimum Equipment List usage, defect worksheets, Mandatory Occurrence Reports, Air Safety Reports, should be reviewed for trends or patterns.
- 9.6 The person or organisation responsible for the Maintenance Programme should maintain records of all applicable continued airworthiness information. Following a review of this information, records should be maintained of technical justification supporting the amendment decisions for both inclusion and non-inclusion in the Maintenance Programme.

10 Human performance factors & critical task controls

Consideration should be given to human factors and Critical Tasks within the maintenance programme such as:

- (1) Maintenance Planning:
Data required to effectively produce maintenance inputs including the arrangement of inspections in a manner that avoids conflict of inspection/maintenance activities, typically known as task orientation.
- (2) Mandatory Inspection Tasks:
Ensuring maintenance planning personnel have clear visibility of such tasks preventing any unauthorised escalation.
- (3) Required Reporting:
Tasks associated with reporting such as the Aging Aircraft Programme Supplemental Structural Inspection Document (SSID) are readily identified.
- (4) Critical Task Controls:
Ensuring tasks that are critical in nature are planned and allocated in a segregated manner that prevents the possibility of multiple error maintenance.
- (5) Maintenance Resource Planning:
Tasks requiring specialised tooling and or techniques are readily identified with reference to required resources.

11 Pre-Flight inspections

- 11.1 The Maintenance Programme should identify inspection tasks requiring a Certificate of Release to Service. Pre-Flight inspection tasks do not require the issue of a Certificate of Release to Service. Extended Diversion Time Operations (EDTO) pre-flight inspections require a Certificate of Release to Service.
- 11.2 Pre-Flight inspection tasks should remain part of the Maintenance Programme in order to control their effectiveness.
- 11.3 Any task which is included in the approved maintenance programme requires a release to service and is normally identified by the Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holders. Where this identity is not clear or is ambiguous, contact should be made with the OTAA to establish if a particular maintenance task requires a Certificate of Release to service.

12 Migrating aircraft between Maintenance Programmes

- 12.1 When transferring an aircraft between maintenance programmes, the transfer should be carried out in a controlled manner which is also approved by the OTAA.
- 12.2 A 'bridging check' should be determined and form the basis of the technical justification required by the OTAA for their approval of the aircraft transfer.
- 12.3 A 'bridging check' is not in itself a maintenance package; it is the result of a detailed analysis of the transfer aircraft maintenance history in relation to the Maintenance Programme the aircraft is to be placed under. Typically, there may be some maintenance activity at the time of transfer; the amount will clearly be influenced by the current maintenance status of the subject aircraft and to the extent the Maintenance Programme has been developed.
- 12.4 The transfer proposal to the OTAA should detail the immediate maintenance activities, the duration of the transition encompassing the scheduled maintenance activities, any variations including escalations to inspection periods.
- 12.5 Consideration should be given to reliability programmes and any significant changes in operation.
- 12.6 Records of any Corrosion Prevention Control Programme (CPCP) or SSID programme should form part of the transfer analysis.
- 12.7 In order to allow an aircraft to change operators in a timely manner it may be necessary to have an aircraft recorded against two maintenance programmes for a limited time. This is allowable, provided the circumstances and controls associated with the duplication and a suitable end date is clearly annotated and agreed by all parties including the OTAA.
- 12.8 Aircraft records should make reference to the approved transfer arrangements quoting the OTAA approval reference.

13 Maintenance Programme content

- 13.1 The Maintenance Programme should be developed from the Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holder's documents which may be Chapter 5 of the maintenance manual or derived from an MSG process.
- 13.2 The Template at Appendix 'A' identifies subject material that should be considered in the schedule and preface sections of the Maintenance Programme. Completion of this Appendix should provide for visibility of compliance to the requirements of OTARs. (Note: the template may also be available from the ASSI website www.airsafety.aero)
- 13.3 Any repetitive instructions of continued airworthiness derived from modifications and repairs should also be incorporated into the approved Maintenance Programme.
- 13.4 For aircraft types where Certification Maintenance Review (CMR) tasks are identified as part of the Type Certification process, these tasks should be subject to separate procedures for escalation.
- 13.5 Visibility of mandatory tasks such as Certificate of Maintenance Requirements (CMR) and Failure Effect Categories (FEC) safety route 5 or 8, found within the MPG-3 logic flow path should be identified in the Maintenance Programme in order that these requirements are not the subject of un-authorised variations to the frequency of inspection (i.e. escalation).

- 13.6 Task frequencies should be clearly identified within the introductory parts of the Maintenance Programme such as Hour, Cycle, Calendar, or letter checks such as 'A' Check or 1st Flight of the day to major inspection periods/intervals.
- 13.7 The Maintenance Programme, where possible, should identify aircraft panel charts and aircraft Zones (Zoning).
- 13.8 Where a Supplemental Type Certificate (e.g. cabin interior) has established the configuration of the aircraft, the appropriate configuration inspection manual should be appropriately referred to for aircraft inspections effected by the configuration changes. These would typically be for gaining access and planning for task orientation.

14 Inspection standards

- 14.1 All significant terms and abbreviations used within the Maintenance Programme to define each maintenance task should be relevant to the programme and are those defined in accordance with the Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holder's definitions, current OTARs or, in the absence of formal definitions, those quoted in the airline industry standard World Airlines Technical Operations Glossary.
- 14.2 The inspection standards applied to individual task inspections must meet the requirements of the Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holders recommended standards and practices. In the absence of specific manufacturer's guidance, refer to UK CAA CAP 562 Civil Aircraft Airworthiness Information and Procedures or FAA AC 43-13-1A Aircraft Inspection and Repair or other approved data, as appropriate.
- 14.3 The Maintenance Programme should include a paragraph describing in detail, mandatory items such as independent inspections (either at main base or at third party maintenance organisations that may be unfamiliar with the format of Independent inspection philosophy. In addition, consideration should also be given to assessment of 'vital points and 'critical task inspections'.

15 Permitted variations to Maintenance periods

- 15.1 Periods prescribed by the Maintenance Programme may only be varied with the approval of the OTAA or through a procedure developed in the maintenance programme and approved by the OTAA. The OTAA may approve escalations or de-escalations for maintenance/inspection periods based on sufficient justification, such as supporting data from the Operator's approved reliability programme. Normally, only the variations/tolerances prescribed by the TC/STC Holder should be recognised and applied accordingly. Where the TC/STC Holder does not prescribe any variation interval, the CAMO should first consider engaging with the TC/STC Holder to obtain the required support and then subsequently with the OTAA.
- 15.2 It is the responsibility of the Technical Coordinator (TC) or contracted approved Continued Airworthiness Management organisation to ensure that arrangements are effectively established to maintain the aircraft in accordance with the approved Maintenance Programme.
- 15.3 Unless specifically prohibited by an Airworthiness Directive and subject to approval by the OTAA, inspection periods should only be varied in accordance with the Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holder's instructions for continued airworthiness. In the absence of information from the Type Certificate Holder, or any applicable STC and APU ETSO/TSO holder's instructions for

continued airworthiness and subject to approval by the OTAA for inclusion in the Maintenance Programme, inspection periods may be varied in accordance with the 'Inspection Planning Tolerance – Extensions' (shown in Table 1 below).

Table 1

PERIOD	MAXIMUM VARIATION
Items controlled by flying hours	
5,000 flying hours or less	10%
More than 5,000 flying hours	500 flying hours
Items controlled by calendar time	
One year or less	The lesser of 10% or one month
More than 1 year but less than 3 years	2 months
More than 3 years	3 Months
Items controlled by cycles or landings	
500 cycles/landings or less	The lesser of 10% or 25 cycles/landings
More than 500 cycles/landings	The lesser of 10% or 500 cycles/landings

- 15.4 For items that are controlled by more than one limit i.e. flying hours and calendar time, the more restrictive limit will apply.
- 15.5 The extension periods in Table 1 above should be supported by appropriate technical justification. This should be established from a detailed review of the aircraft records, maintenance and operational history. It should also establish inspection requirements that cannot be subject to variation as per Table 1.
- 15.6 The period to the next required inspection shall be deemed to begin at the point prior to when the task/interval was extended. No extension may be taken towards the next required inspection.

16 Task cards

- 16.1 An important feature of Task cards is recognising their role in achieving the required maintenance standard.
- 16.2 Task Cards should be manageable, offer clear sections for correct certification (i.e. sign and stamp) and give clear instructions to maintenance personnel regarding tasks. This includes ensuring that references to other documents have been previously assessed and, if not applicable, the task is amended.
- 16.3 Where task cards contain actual maintenance instruction data, arrangements must be made to ensure appropriate document controls.
- 16.4 Critical task controls particularly regarding error maintenance can be effectively mitigated. Task cards can be formatted in such a manner that provides production maintenance planners appropriate indicators and data to make provisions for segregation, appropriate resources and task orientation.

17 Environmental

- 17.1 Fuel systems are susceptible to microbiological growth in hot humid conditions and increased water content when the aircraft sits on the ground in hot humid climates. Fuel system water sampling tasks and fuel tank structural inspection may need to take into account the likelihood of microbiological contamination and corrosion.
- 17.2 Consideration should be given to routinely monitoring aircraft utilisation and adverse weather conditions (i.e. salt laden atmosphere, high humidity, extreme heat etc). Consideration should include increasing maintenance inputs for cleaning, lubrication and inspection of protective finishes as an example.
- 17.3 There should be mitigations for the effects of operating aircraft on runways that have been categorised as rough surfaces. Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holder's instructions for continued airworthiness such as service letters and maintenance requirements should be appropriately incorporated into the Maintenance Programme. Typical mitigations are increased lubrication frequencies of undercarriage components and fittings due to the possibility of increase in lubrication migration from bearing surfaces. Where published data is not available, guidance should be sought from the Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holders.

18 Corrosion of aircraft structure

- 18.1 Corrosion Prevention Control programmes (CPCP) require specific controls, procedures and reporting protocols. The Maintenance Programme should provide details of specific requirements including clear instructions regarding the inspection tasks in order that production maintenance planning is able to resource the tasks appropriately.
- 18.2 Where the Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holders make no specific reference to corrosion control programmes, this should be taken into account when inspecting structure for condition. The assessment may require adjustment of maintenance programme periods. The application of corrosion inhibitors during maintenance may significantly improve the duration of the airframe. Note, any MRBR/MPD derived from MSG-3 revision 2 or above will not make any reference to CPCP since the tasks are already considered in the structures and zonal programmes.

19 Mandatory requirements

- 19.1 The inclusion of repetitive Airworthiness Directives (AD) or Service Bulletins (SB) in the Maintenance Programme should be considered to reduce the use of the 'Out of Phase' task management functions.
- 19.2 Fatigue lives and mandatory life limits published by Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holders or by the OTAA should be included in the Maintenance Programme.
- 19.3 Fuel Tank System Safety is now a feature for many aircraft types. Mandatory requirements are now published with compliance times. The rectification actions are complex, involving many disciplines. The Maintenance Programme should be amended accordingly ensuring that the appropriate continued airworthiness instructions are referred to.

20 Design changes

- 20.1 Approved modifications or repairs incorporated on an aircraft may also have 'Instructions for Continued Airworthiness'. These should be assessed and included in the Maintenance Programme.
- 20.2 Significant structural changes may have an effect on structural programmes that may not have been finalised at the time of incorporation. This may be due to a fatigue damage assessment that only affects the fatigue lives from a total cycle/hour amount not yet achieved. In such circumstances it is important to ensure there is a marker in the maintenance programme. This is to ensure that nearer the operation life when the fatigue effects take hold, material required to amend the structural programme is obtained from the Supplemental Type Certificate holder.

21 Special operations

- 21.1 Special operational approvals granted by the OTAA such as EDTO, RVSM, AWOPS, and MNPS etc may involve changes to maintenance inspection requirements, frequencies, or tasks introduced by modification to the aircraft.
- 21.2 In order to satisfy the approval process of special operations, the inspection tasks supporting the aircraft capability should be referenced.

22 Equipment carriage

- 22.1 Subpart F of OTAR Parts 91, 121, 125 and 135 detail mandatory equipment requirements for certain types of aircraft operation. With regard to the equipment fitted and in order to conform to OTAR requirements, instructions for continued airworthiness should be incorporated into the Maintenance Programme.
- 22.2 Any other equipment carried should also have continued airworthiness instructions incorporated into the Maintenance Programme.
- 22.3 The 'installation modifications' of additional equipment should identify any required continued airworthiness inspections. These may be in the form of suitable vendor manuals. In the absence of such instructions suitable inspection techniques should be identified per paragraph 14.2.

23 Safety equipment

- 23.1 Where the aircraft is required to carry safety equipment this should be checked for serviceability at regular intervals. The equipment manufacturer should specify overhaul and life limit periods.
- 23.2 The maintenance programme can make provision for fleet sampling of emergency equipment such as slide rafts. When sufficient operating aircraft allow for a fleet sampling programme, OTAA agreement should be established for its introduction in line with information promulgated by the safety equipment manufacturer.

24 Flight Recorder Systems

- 24.1 For each installed CVR, FDR, Data Link Recorder and/or Airborne Image Recorder, arrangements for data acquisition and verification of recorded data should be established with a recognised playback facility.
- 24.2 The type acceptance standards should be applied with regard to periods of testing and recorded data verification for each installed recorder system.

- 24.3 Records should be maintained for a minimum period of 24 months for all testing undertaken.
- 24.4 Instructions from equipment manufacturers and continued airworthiness organisations shall be integrated as scheduled requirements of the Maintenance Programme. See OTAC 39-13 for further guidance or the serviceability of Flight Recorder systems which include CVR, FDR, Data Link Recorder and/or Airborne Image Recorder systems.
- 24.5 A non-commercial Operator, operating complex motor-powered aircraft may also need to recognise and demonstrate compliance with EASA non-commercial with complex motor-powered aircraft regulations (EASA NCC). In which case, consideration should also be given as to how they satisfy NCC.GEN.145(b), including AMC1 NCC.GEN.145(b).

25 Battery capacity checks

Routine capacity checks should be carried out at periods specified in accordance with Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holder's instructions for continued airworthiness. In the event of no published criteria from the Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holders, the following periods shall apply:

- (1) Lead acid Battery – 3 months
- (2) Ni-Cad Battery – 4 months.

26 Weight and balance

- 26.1 An aircraft weighing schedule should be included into the Maintenance Programme.

Note: Any permanent, non-operational role changes to the aircraft either by modification or repair that either adds or reduces weight needs to be assessed, calculated and, if necessary, the aircraft weight records including the Weight and Balance C of G Schedule amended.

- 26.2 The aircraft should be weighed in accordance with the frequency and manner defined in OTAR Part 39.81 and should be included within the approved maintenance programme.

27 Low utilisation maintenance programmes

- 27.1 A maintenance-planning document is produced by the Type Certificate Holder, which is based on an aircraft's "average" annual utilisation based on commercial/marketing criteria. This is applied during type certification.
- 27.2 It is acknowledged that the annual utilisation of certain operators is outside the range, which is termed "average" for that aircraft's operation.
- 27.3 Providing the annual utilisation declared by the operator and included in the front of the maintenance programme is within the definition of the "average" (in other words what the aircraft was designed for) there is no need for a Low Utilisation Maintenance Programme (LUMP).
- 27.4 Where it is determined that the actual aircraft utilisation will be below the Type Certified utilisation, the Type Certificate holder may have developed a Low Utilisation Maintenance Programme that may be suitable for the specific operation and environment.

- 27.5 An operator proposing to use a Low Utilisation Maintenance Programme should have consulted the Type Certificate holder for technical support in developing their Maintenance Programme.
- 27.6 It is possible that 'Hard times' and component overhauls may be additional features.
- 27.7 A reliability programme will be less effective due to lack of statistical data and the MEL may need a review due to changes in the reliability of components.
- 27.8 Generally, the aircraft is assessed for exposure to risk of failures that are heavily dependent on:
- (1) Flight Cycle / Flight Hours ratio
 - (2) Average sector length
 - (3) Operating environment
 - (4) Flight Hours vs. Airframe design life
 - (5) Structures and systems loading
 - (6) Reliability predictions

For an aircraft on a LUMP, normal assessments of the above may prove inadequate. It is important that special consideration is given to these in view of compromises and associated factors of low utilisation.

- 27.9 Recommended lubrication tasks are based on average utilisation predictions therefore lubrication tasks triggered by Flight Cycles or Flight Hours will be less frequent on aircraft with low utilisation, allowing corrosion growth which could be accelerated in a harsh environment.
- 27.10 The operator must consult the Type Certificate holder who may only provide feedback on world fleet reports; therefore, the operator will need to add its own experience from its reliability programme to include its own specific experience.
- 27.11 Low utilisation may lead to accumulation of moisture, reduced distribution of oil/grease and possible chemical breakdown of oil/grease. This could lead to increased internal corrosion of structures, power plants and components.
- 27.12 A LUMP should address the accumulation of moisture in cargo holds, door sills and require drains to be regularly checked. This is even more important in winter conditions. The lack of protective oil/grease on exposed surfaces i.e. landing gear oleos will increase corrosion growth.
- 27.13 Seal leakage is a common fault when aircraft sit around in cold conditions for long periods. Some hydraulic fluids, especially reclaimed fluids, would break down and separate, causing internal leaking of actuators when overheated or left for long periods.
- 27.14 Low distribution rates of oil/grease may lead to an increase in the predicted mechanical wear-out rate and corrosion of control cables and mechanical systems. Corrosion is accelerated in moist ground conditions and slower when aircraft are operating in dry cold atmospheres.
- 27.15 Fuselage insulation blankets will be prone to moisture accumulation requiring additional inspections as they are likely to accumulate large quantities of water on the ground due to humidity or inclement weather. If the insulation blankets are not sealed, they will soak this water up causing corrosion and increase the aircraft's weight.
- 27.16 Structural areas may not be opened up and inspected for long periods of time as they normally would for servicing and therefore corrosion will progress undetected.

- 27.17 When structural areas are opened up inspection standards may need to be modified from General Visual to Detailed in order to identify known vulnerable areas.
- 27.18 Low Utilisation may affect electronic component reliability due to relatively long periods of power down. In a low voltage electronic system, a small amount of resistance due to corrosion build up, possibly due to inactivity, could damage a sensitive system.
- 27.19 BITE functionality may be affected, invalidating the statistical assumptions. Some BITE functions only take place on boot up of an electronic system and if this is not happening regularly there may be dormant failures which also means the systems are not checked and exercised on a regular basis.
- 27.20 Battery reliability may be significantly affected by loading profile changes; this includes implanted cells within equipment.
- 27.21 Exposure to corrosion will affect terminals, bond joints and plug breaks, so terminals and joints such as Engine Fire detection systems, which are particularly susceptible to break down from corrosion, and deposits should be considered.
- 27.22 Avionics systems work and function better when used regularly. If left for long periods of time they are susceptible to spurious interference.
- 27.23 Manometric elements in aircraft instrument systems may require additional maintenance due to moisture ingress and fungi contamination. Most instruments are ventilated on a regular basis during normal operation and predominately remain free from contamination; this may not be the case for a low utilised aircraft.

28 Reliability

- 28.1 A reliability programme should feature in a Maintenance Programme under the following circumstances:
- (1) The aircraft maintenance programme is based upon MSG-3 logic.
 - (2) The aircraft maintenance programme includes condition monitored components.
 - (3) The aircraft maintenance programme does not contain overhaul time periods for all significant system components.
 - (4) When specified by the manufacturer's maintenance planning document or MRBR.
- 28.2 A reliability Programme need not be developed in the following cases:
- (1) The maintenance programme is based upon the MSG-1 or -2 logic but only contains hard time or on condition items.
 - (2) The aircraft is not above 5,700kg MTOM or multi engine helicopter.
 - (3) The aircraft maintenance programme provides overhaul time periods for all significant system components.
- Note: for the purpose of this paragraph, a significant system is a system the failure of which could hazard aircraft safety.
- 28.3 For approval the OTAA will require access to all data used to prepare the reliability programme as submitted.

- 28.4 The objective of the reliability programme should be included in the Maintenance Programme detailing the prime elements of the programme. As a minimum it should include a statement to:
- (1) Substantiate that the existing schedule of inspections is appropriate in maintaining the aircraft in an airworthy condition.
 - (2) Identify corrective action to any issues of reliability.
 - (3) Establish that system reliability conforms to applicable performance data promulgated by the aircraft Type Certificate Holder.
 - (4) Determine the optimum level of scheduled inspections.
 - (5) Determine the effectiveness of any amendment to the schedule of inspections.
- 28.5 The extent of the objectives should be directly related to the scope of the programme. Its scope could vary from a component defect monitoring system for a small operator, to an integrated maintenance management programme for a large commercial operator. The Type Certificate Holder's maintenance planning documents may give guidance on the objectives and should be consulted in every case.
- 28.6 The type of information collected for analysis should be related to the objectives of the programme and should be such that it enables both an overall broad based assessment of the information to be made and also allow for assessments to be made as to whether any reaction, both to trends and to individual events, is necessary. The following are examples of the normal prime sources:
- (1) Pilots' Reports
 - (2) Technical Log
 - (3) Aircraft Maintenance Access Terminal / On-board Maintenance System readouts
 - (4) Maintenance Worksheets
 - (5) Workshop Reports
 - (6) Reports on Functional Checks
 - (7) Reports on Special Inspections
 - (8) Stores Issues/Reports
 - (9) Air Safety Reports
 - (10) Reports on Technical Delays and Incidents
 - (11) Other sources: EDTO/ETOPS, RVSM, CAT MIL.
- 28.7 Information and data collection sources of information should be listed and procedures for the transmission of information from the sources, together with the procedure for collecting and receiving it should be referred to. These procedures should reside with the organisation responsible for the continued airworthiness management of the aircraft and be reflected in their Maintenance Control Manual.

28.8 Reliability programmes are dependent on sufficient data sampling. Fleet size is clearly a factor in data gathering. For small fleet sizes of fewer than 6 aircraft of the same type, the following should be considered:

- (1) Complex reliability programmes could be inappropriate for a small fleet. It is recommended that such operators tailor their reliability programmes to suit the size and complexity of operation.
- (2) One difficulty with a small fleet of aircraft consists in the amount of available data that can be processed: when this amount is too low, the calculation of alert level is very coarse. Therefore "alert levels" should be used carefully.
- (3) An operator of a small fleet of aircraft, when establishing a reliability programme, should consider the following:
 - (a) The programme should focus on areas where a sufficient amount of data is likely to be processed.
 - (b) When the amount of available data is very limited, engineering judgement is a vital element. In the following examples, careful engineering analysis should be exercised before taking decisions.
 - (c) A "0" rate in the statistical calculation may possibly simply reveal that statistical data is missing, rather than no potential problem.

28.9 When alert levels are used, a single event may reach the alert level. Engineering judgement is necessary so as to discriminate an isolated incident from an actual need for a corrective action. It is advisable in such circumstances to review other data sources such as other similar operational data to verify decisions made.

28.10 For further information on Reliability Monitoring see OTAC 39-13

29 Identification of Critical Parts in Operator's Maintenance Programmes

29.1 The failure of a critical part(s) has been highlighted as the cause for numerous fatal accidents, particularly in Rotorcraft. Although the Continuing Airworthiness regulations only refer to life limited parts, correctly managing the continuing airworthiness and maintenance of critical parts play an essential role in overall civil aviation safety system.

29.2 Critical parts are listed, as applicable on the basis for certification, within the Instructions for Continued Airworthiness (ICA). Dependent upon the Type Certificate Holder these parts may include, but not limited to, components such as bearings, gearboxes and sub-assemblies, flight controls, and tail rotor drive systems. Continuing Airworthiness Management organisations are advised to review the respective ICA's for their aircraft / helicopter types managed, to ensure there is an understanding of the parts identified as critical and how these should be maintained and managed.

29.3 In order for operators to carry out the appropriate analysis of the effectiveness of their approved aircraft maintenance programmes (AMP) under OTAR 39.55(j), in relation to critical parts and report any defects in life-controlled critical parts causing retirement before completion of its full life, operators and continuing airworthiness management are recommended to identify in the respective maintenance programmes, which parts are classified as Critical Parts. For the identification of Critical Parts, refer to the information published by the respective design approval holders (aircraft, engines, propellers). Note this may also include design approval holders of Supplemental Type Certificates (STC) for any major changes.

- 29.4 For those aircraft that are required to have a formal Reliability Programme under OTAR 39.65, operators and continuing airworthiness management organisations are recommended to specifically monitor the reliability of Critical Parts and feed this information back to the applicable design approval holder to enable them to take any necessary actions to improve their reliability.
- 29.5 Where the system allows, operators are requested to identify life controlled critical parts in their computerised maintenance control systems (e.g., Aerotrak, AMOS, SAP, CAMP etc.) to assist with analysing the effectiveness of the maintenance programme and producing the necessary reliability data, if applicable.
- 29.6 In addition to paragraph 29.5 above, identifying Critical Parts within the systems used in the storage facilities under OTAR145 approvals, will assist organisations with meeting their responsibilities for ensuring the correct handling and storage of Critical Parts.
- 29.7 In accordance with OTAC 13-1, paragraph 9 (5) all operators and organisations managing aircraft fitted with Critical Parts should report all occurrences of early removal of life-controlled Critical Parts to the OTAA under the Mandatory Occurrence Reporting system. In addition, there is also a responsibility to report any identified condition of an aircraft or component which endangers or has the potential to endanger flight safety, to the organisation responsible for type design or supplemental type design. Without this important link, the design organisation will not be able to effectively discharge its responsibility in regards of identifying any unsafe conditions.

Appendix A Maintenance Programme template

MAINTENANCE PROGRAMME TEMPLATE COMMERCIAL AND NON-COMMERCIAL AIR TRANSPORT

The purpose of this Maintenance Programme Guidance Document is to assist applicants with a view to ensuring that Maintenance Programmes submitted to the [OTAA] for approval have been developed in a standardised fashion, have visibility of compliance to OTARs and include the elements required to ensure that the subject aircraft can be effectively maintained in an airworthy condition.

The front sections of the maintenance programme and where applicable the schedule sections should be developed in consideration of this guidance document.

It is intended that this document establishes a standardised format, however in developing a Maintenance Programme you will inevitably have to take account of the nature of included material, cater for operator related material, be dependent on other documentation with a consequence that this may alter the formatting from this document. Where the applicant has deviated from this guidance format, completing and maintaining this document will assist in establishing continued visibility of compliance to OTARs.

It is not intended that this document should constrain or prevent the applicant from including required information. In all cases where the applicant has included additional data or other means of compliance, the applicant should submit with the Maintenance Programme an explanatory document detailing any such changes.

The columns titled MCM (maintenance control manual) MP (maintenance programme) References should be entered where appropriate. Where it is determined that the subject is not applicable, is covered by a process in another document, or is dealt with in an alternative way, details of the variance including any cross references should be recorded in the 'Compliance Notes' column.

The column titled Section Interpretation is designed to assist the applicant to develop the text in a particular section/paragraph.

Application Details

OPERATOR

TECHNICAL CO-ORDINATOR

AOC NUMBER * where applicable

CONTRACTED PART 39 ORGANISATION

MCM REFERENCE

MP REFERENCE

APPLICATION PERSON TO CONTACT						
Report						
#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
<u>Section One Introduction and Document Control</u>						
1	39.61(a)				Approval statement, document reference and revision status	The MP title page should include both the Operator's MP Reference and the OTAA MP Approval Reference. A section for the inclusion of the [OTAA] approval letter and or its reference, the Maintenance Programme reference, revision status at time of original approval.
<i>Insert developed text here</i>						
2	39.61(b)				Amendment control	This section should identify the document; and <ul style="list-style-type: none"> A list of effective pages ensuring that the LEP list of pages match the numbered pages in the document. Revision highlights/transmittal letter/ the use of side bars to show amended pages/sections. A list of contents The Annual review of the Maintenance Programme amendment control process for securing amendment approval distribution list
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
3	39.61(b)				Amendment introduction analysis to account for environment and suitability	<p>This section should emphasize that such changes will first be subject to formal analysis taking place.</p> <p>This will need to consider the suitability of adopting such data, taking into account the Operating Environment, Utilization and Type of Operation etc.</p> <p>Such an evaluation would obviously need to consider if the change is to a mandatory AWL or just a Recommendation.</p> <p>This would be a similar process as applied to assessing Service Bulletins etc. and the decision process should be recorded.</p> <p>Reference can be made to the process in the CAMO MCM.</p>
				<i>Insert developed text here</i>		

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
4	39.63(b)(7)				Applicability by aircraft designation including engine, propeller, APU and registration	<p>This paragraph should replicate the aircraft listed in an Operations Manual unless the operator utilises separate maintenance programmes for the operating fleet of aircraft.</p> <p>For each maintenance programme this section should identify the aircraft that are required to be maintained to the inspection requirements of the programme and should list the aircraft, engine, propeller and APU with associated Type Certification references for example:</p> <p>'Type Certificate Data Sheet EASA/FAA/TCCA... Airframe' 'Type Certificate Data sheet EASA/FAA/TCCA....Engine' 'Type Certificate Data sheet EASA/FAA/TCCA ... Propeller' 'Type Certificate Data sheet EASA/FAA/TCCA.....APU'</p> <p>A policy should be developed to prevent aircraft from being referenced in this section without an [OTAA] approved plan (transition) for a bridging check.</p>
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
5	39.63(b)(1)				Name address of owner operator and Maintenance Programme developer	This paragraph should detail the responsible operator of the aircraft, any applicable Technical Co-ordinator and any contracted continued airworthiness organisation secured for the management of the maintenance programme.
						<i>Insert developed text here</i>
6	39.53				Name address of OTAR Part 39 organisation	For Commercial Air Transport Operations, this section should record the applicable OTAR Part 39 organisation undertaking CAW management of the applicable aircraft.
						<i>Insert developed text here</i>
7	39.61(h)(5)				Programme development	This paragraph should either reference the operators MCM section or detail the operator's policy on the development of the maintenance programme in light of operational and maintenance experiences.
						<i>Insert developed text here</i>

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
8	39.61(g)				Policy on Continued Airworthiness	<p>SUGGESTED OPERATOR'S CERTIFICATION STATEMENT</p> <p>In the preparation of this Maintenance Programme to meet the requirements of OTAR Part 39, the recommendations made by the Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holders instructions for continued airworthiness have been evaluated and, where appropriate, have been incorporated. It is accepted that any inspection requirements specified by the Director of [OTAA] shall be incorporated.</p> <p>This Maintenance Programme lists the tasks and identifies the practices and procedures specified by the applicable Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holders, which form the basis for the scheduled maintenance of the aircraft(s). The operator undertakes to ensure that these aircraft will continue to be maintained in accordance with this programme.</p> <p>The data contained in this programme will be reviewed for continued validity at least annually in the light of operating experience.</p> <p>It is accepted that this programme does not prevent the necessity for complying with any new or amended OTAR where any new or amended requirements may override elements of this programme. It is understood that compliance with this programme alone does not discharge the operator from ensuring that the programme reflects the maintenance needs of the aircraft, such that continuing safe operation can be assured. It is further understood that the [OTAA] reserves the right to suspend, vary or cancel approval of the Maintenance Programme if the [OTAA] has evidence that the requirements of the Maintenance Programme are not being followed or that the required standards of airworthiness are not being maintained.</p> <p>Name</p> <p>Position.....</p> <p>Signed</p> <p>For and on behalf of operator:Date:.....</p>
				<i>Insert developed text here</i>		

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
9	39.61(h)(11)				Acronyms/Definitions	<p>This section should detail the meaning of any acronyms and definitions used. Acronyms and significant terms used within the Programme should be as defined in accordance with the Type Certificate Holder's definitions and Acronyms.</p>
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
<u>Section Two Programme instructions</u>						
10	39.61(c) 39.63(b)(6)				Document basis and references to source documentation	<p>The Maintenance Programme will be developed from a Maintenance Review Board Report (MRBR), Maintenance Planning Document (MPD), or MPG and/or Chapter 5 Maintenance Manual Time Limits Maintenance Checks.</p> <p>The Programme shall contain references to the Type Certificate Holder's source documentation including any applicable revisions that the maintenance programme is based on such as:</p> <ul style="list-style-type: none"> • Manufacturers Maintenance Planning/Inspection Manuals • Engine Off Wing Maintenance Programmes • Corrosion Control Manuals • Non-Destructive Testing Manuals • Structural Repair Manuals • Standard Wiring Practices Manuals • Supplemental Structural Inspection Documentation • Specific Vendor Service Manuals • Service Bulletins • Continued Airworthiness Instructions relevant to Modifications and Repairs. • Fuel Tank Safety Inspection Programmes • Wide-Spread Fatigue Damage • Cabin Hand-Book • Component Vendor Maintenance Data
				<i>Insert developed text here</i>		

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
11	39.61(c)				Inspection task development	<p>Definitions of inspection standards, standard practices and procedures identified by the TC holder should be included in this section.</p> <p>Definitions should include Detailed Visual Inspection, General Visual Inspection and any other defined methodology of inspection specified by the applicable design authority.</p> <p>The Inspection Schedule should clearly identify the nature and level of the specified inspection in line with these definitions.</p>
				<i>Insert developed text here</i>		
12	39.61 (g)				Special Conditions	This section describes the process and policy of developing amendments in response to conditions imposed by the OTAA.
				<i>Insert developed text here</i>		

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
13	39.61 (g)				Airworthiness Directives (ADs)	<p>The Maintenance Programme should identify which Airworthiness Directives are applicable. For example: If the aircraft and engines are Type Certificated to EASA, ADs will be those published by EASA.</p> <p>If the aircraft and engines are Type Certificated to FAA, ADs will be those published by the FAA.</p> <p>Other State ADS can also be listed, but the ADs associated with the State of Type Certification will be primary.</p> <p>Where STCs are embodied, ADs will be those published/validated by the STC issuing Authority, as further recognised by the OTAA.</p>
						<i>Insert developed text here</i>
14	39.61(f) 39.61(h)(2)				Supplemental Type Certificates (STCs) and ICAs	<p>This Section should address the instructions for Continued Airworthiness Published by Supplemental Type Certificate holders.</p> <p>There should be a list of STCs which have been embodied on the aircraft</p>
						<i>Insert developed text here</i>

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
15	39.61(h)(9)				Special Operations	<p>Where an operator holds specific operational approvals that have associated continued airworthiness requirements, the maintenance schedule section should contain the applicable CAW inspection requirements. This paragraph should list the special operations that the maintenance programme supports such as:</p> <ul style="list-style-type: none"> • AWOPS • MNPS • RVSM • EDTO/ETOPS • HEMS • DANGEROUS GOODS • OFFSHORE OPERATIONS <p>Where an operator holds an MCM this paragraph may reference any supporting procedures.</p>
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
16	39.61(h)(9)				RVSM	<p>The subject of Height Monitoring Unit (HMU) verification at a 24-month interval could be referenced within the Programme, in particular specifying the source requirement of OTAR Part 91, Section III, SPA. 001.RVSM, paragraph (a)(b) & (c). Which states:</p> <p><i>A minimum of two aeroplanes of each aircraft type grouping of the operator shall have their height-keeping performance monitored, at least once every two years or within intervals of 1,000 flight hours per aeroplane, whichever period is longer. If an operator aircraft type grouping consists of a single aeroplane, monitoring of that aeroplane shall be accomplished within the specified period; and records relating to the requirements above shall be retained by the operator in accordance with OTAR Part 91.1265.</i></p>
						<p><i>Insert developed text here</i></p>
17	39.61(h)(4)				Operational description - utilisation	<p>This paragraph should outline the general nature of the type of operation including any regular unusual operations, the typical environmental conditions and the predicted annual utilisation in terms of hours/Cycles for the aircraft. There should be a statement compatible with the manufacturer's utilisation criteria in respect to variances of actual utilisation be it low or high.</p>
						<p><i>Insert developed text here</i></p>
18	39.61(h)(1)				Programme description	<p>This paragraph should identify the methodology of the inspection requirements be it hard time, MSG2 or MSG3.</p>
						<p><i>Insert developed text here</i></p>

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
19	39.61(h)(8)				Trend analysis procedures reporting	This paragraph should either reference the operators MCM section or detail the procedures for any required reliability trend analysis.
						<i>Insert developed text here</i>
20	39.65(a)				Condition monitoring	This section should detail the nature of the monitoring programme, any reporting requirements and procedures, by cross-reference if applicable.
						<i>Insert developed text here</i>
21	39.61(d)				Amendment introduction	This section should identify introduction controls for significant amendments. Amendments that by example alter the inspection methodology, without appropriate controls for their introduction may have an adverse effect. The controls should cater for introduction, transition and bridging of significant amendments whilst taking account of change management processes of an applicable SMS.
						<i>Insert developed text here</i>

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
22	39.61(e)				Human Factors Critical Task Control and error Capturing Methods	<p>The MP should describe how Human Factor principles and processes are applied in the Maintenance Programme and Production Planning process and as to how Critical Tasks are identified and managed by applying 'Error Capturing Methods'.</p> <p>'Staggering', or 'Segregating' maintenance tasks and applying 'independent inspections' are just 3 methods of applying Error Capturing Methods, but not the only methods.</p> <p>The detail of how the operator applies the concept of Human Factors and manages Critical Tasks under their ongoing continuing airworthiness management may be further defined and cross referenced to the Part 39 MCM.</p> <p>It is suggested that this section contains either a list of any significant critical inspection tasks or a reference to those contained in the schedule section in such a manner that enables maintenance production planning to accommodate them in consideration of human factors and Critical Task Control in maintenance.</p>
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
23	39.61(e)				Independent Inspections	<p>This section should define as to what determines an independent inspection and who carries this out.</p> <p><i>OTAR Part 43.111 states:</i></p> <p><i>(a) A person shall not certify an aircraft or component for release to service after the initial assembly, subsequent disturbance or adjustment of:</i></p> <p><i>(1) an engine control system; or</i></p> <p><i>(2) a flight control system; or</i></p> <p><i>(3) a vital point; or</i></p> <p><i>(4) any task identified in the aircraft maintenance programme requiring such inspections unless an independent maintenance inspection has been performed.</i></p> <p><i>(b) The independent maintenance inspection required by paragraph 43.111(a) shall include:</i></p> <p><i>(1) an inspection first made by an authorised person signing the maintenance release who assumes full responsibility for the satisfactory completion of the work; and</i></p> <p><i>(2) a subsequent inspection by a second, independent, competent person who attests to the satisfactory completion of the work recorded and that no deficiencies have been found.</i></p> <p><i>Note: The second independent competent person is not issuing a maintenance release and therefore is not required to hold certification privileges but shall be suitably qualified to carry out the inspection.</i></p>
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
24	39.61(e)				Bridging Checks/Storage and Maintenance	A paragraph explaining the process in the event of aircraft inactivity, either due to storage or temporary inactivity.
						<i>Insert developed text here</i>
25	39.61(h)(2)				Special maintenance instructions	It is useful to identify any special maintenance instructions particularly where specialised tooling requirements exist, additional access task requirements due modification status, equipment maintenance instructions and special processes including any need for specialised working parties etc. This data should enable the production planning and maintenance provider to resource their facility commensurately for the planned maintenance input.
						<i>Insert developed text here</i>
26	39.57(a)				Maintenance Requirements	This section should detail by cross reference to the Inspection Schedule the nature of facilities required to accomplish the identified inspect tasks such as Line Maintenance, Ramp Inspections, Base Maintenance On-Route Maintenance to be conducted by a Person Authorised by the Director.
						<i>Insert developed text here</i>

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
27	39.57(a)				Pre-Flight Inspection	<p>All the applicable Task Intervals should be specified including Pre-Flight where this may be performed by maintenance personnel under the direction/control of the CAMO.</p> <p>It should be clear who will normally perform the Pre-Flight and Post-Flight inspections.</p> <p>The Maintenance Programme should readily identify inspections requiring a Certificate of Release to Service (CRS)- Normally, Pre-Flight inspection tasks do not require the issue of a Certificate of Release to Service.</p> <p>The CRS, as and where required, will be as specified in OTAR 43.105. Where a Line scheduled inspection task(s) may be accomplished by an OTAA "Authorised Person", other than a Part 145 Organisation, this should also be identified accordingly.</p>
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
28	39.57(e)				Certificate of Release to Service	<p>A Section should refer or state the requirements that must be complied with under OTAR Part 43.105 Certificate of Release to Service.</p> <p>OTAR Part 43.105 Certificate of Release to Service states:</p> <p><i>Each person authorised to certify an aircraft or component for release to service after maintenance shall:</i></p> <p><i>(a) enter in the log book or other record required by paragraph 43.57(b)(1) a statement of release to service that states that:</i></p> <p><i>“The work recorded has been carried out in accordance with the Air Navigation (Overseas Territories) Order as amended and in respect of that work the aircraft or component is fit for release to service”.</i></p> <p><i>(b) in all cases enter beside the statement of release to service: their signature; and their OTAR Part 66, licence or validation number or pilot’s licence number and where applicable, the Governor’s authorisation reference; or, AMO approval and authorisation number; and the date of entry.</i></p>
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
29	39.61(h)(6)				Variation instructions policies	<p>This section should detail procedures for varying inspection intervals as defined in Table 1. This section should also detail the procedures that ensure mandatory and technical justification required and that of an application for further extensions that require OTAA approval.</p> <p>It should be recognised that the OTAA does not have any design authority, or competence to vary any TC or STC Holders prescribed inspection periods without the support of the applicable Part 21 DOA, or equivalent. Therefore, only the variations/tolerances prescribed by the TC/STC Holder should be recognised and applied accordingly.</p> <p>Where the TC/STC Holder does not prescribe any variation interval, the CAMO should first engage with the TC/STC Holder to obtain the required support and only then subsequently with the OTAA.</p>
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
<u>Section Three Schedule Content</u>						
30	39.61(h)(3)				Inspection schedule controls	The inspection schedule should identify the method of interval controls; Flight Hours, Calendar Time, Engine Log Hours, Number of System Operations, Cycles, Total Time, Overhaul, Ultimate Lives or any other. Each inspection task should clearly identify what type of inspection is required by reference to a detailed description of the methodology and of any special provisions such as the nature of facilities and tooling requirements.
<i>Insert developed text here</i>						
31	39.61(h)(3) 39.61(h)(2)				Inspection schedule	<p>The Inspection Schedule should detail where applicable inspection requirements for:</p> <ul style="list-style-type: none"> • Aircraft • Engine(s) • APU • Propeller(s) • Rotors • Components • Accessories • Equipment • Instruments • Electrical and Radio Equipment • In Flight Entertainment Systems • Flight Recorder Systems • Role Change equipment • Required Operational Equipment • Mode 'S' 24-bit transponder <p>and periods at which components are required to be:</p> <ul style="list-style-type: none"> • Cleaned

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
						<ul style="list-style-type: none"> • Lubricated • Replenished • Adjusted • Tested <p>As required by the applicable Type Certificate Holders and any applicable STC holders and APU ETSO/TSO holders that may specify any other functional tasks.</p> <p>Continued airworthiness instructions specified by any permanent repair and modification should feature in the inspection schedule.</p>
<i>Insert developed text here</i>						
32	39.61(f)				Special inspections	<p>The Inspection Schedule should readily identify inspection tasks that are derived from special inspection programmes such as:</p> <ul style="list-style-type: none"> • EWIS • EZAP • L/HIRF • Aging aircraft • Aging systems • Fuel tank safety inspection programmes • Supplemental Structural Inspection Programmes.
<i>Insert developed text here</i>						

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
33	39.61(h)(9)				Special Operations	The schedule section should detail by cross-references or other visible means to readily identify the applicable Continued airworthiness inspection tasks required of Special Operation approvals.
						<i>Insert developed text here</i>
34	39.61(f)				Specific task controls	Where there are maintenance inspection tasks that are subject of specific control, such as ; those derived from a mandatory continued airworthiness requirement, certification maintenance requirement etc. This section should identify how these tasks are readily identified.
						<i>Insert developed text here</i>
35	39.61(f)				Corrosion Prevention Control Programme (CPCP)	An explanation of Corrosion Levels 1, 2 and 3 should be included in the Maintenance Programme. Refer to the Type Certificate Holder's definitions.
						<i>Insert developed text here</i>

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
36	39.61(f)				Certification Maintenance Requirements (CMR)	<p>If CMR Tasks are a feature of the Type Certificate Holder's Mandatory Continued Airworthiness requirements, then this section in the Maintenance Programme shall identify the tasks associated with CMR * or CMR ** tasks.</p> <p>Note:</p> <p>One Star CMR (*) - The task and intervals specified are mandatory and cannot be changed, escalated, or deleted without the concurrence of the appropriate Certification Authority.</p> <p>Two Star CMR (**) – The Task “intervals” may be adjusted in accordance with an operators maintenance/Inspection program using the processes, and procedures in accordance with the OTAA.</p>
						<i>Insert developed text here</i>
37	39.61(f)				Maintenance Significant Items (MSI)	<p>If MSI is a feature of the Type Certificate Holders inspection requirements, then there should be a list of MSI items within the Maintenance Programme.</p>
						<i>Insert developed text here</i>
38	39.61(f)				Lightning/High Intensity Radiated Fields (L/HIRF)	<p>If L/HIRF is a feature of the Type Certificate Holder's inspection requirements, then there should be a list of L/HIRF items within the Maintenance Programme.</p>
						<i>Insert developed text here</i>

#	OTAR AN(OT)O Reference	MCM Reference	MP Reference	Compliance Notes	SUBJECT	Section Interpretation
39	39.61(f)				Structural Inspections (SI)	If Structural Inspections are a feature of the Type Certificate Holder's inspection requirements, then there should be a list of Structural Inspection items within the Maintenance Programme.
				<i>Insert developed text here</i>		
40	39.61(e)				Critical Parts	If parts identified as critical are installed on the aircraft they should be identified in the Maintenance Programme. Critical parts should also be identified on the operators computerized maintenance control systems.
				<i>Insert developed text here</i>		
<u>Section Four Forms</u>						
41	39.61(h)(7)				Associated Forms	Copies of any associated Forms such as corrosion reporting, inspection task variation and amendment applications.
				<i>Insert developed text here</i>		

Appendix B Application for approval of an aircraft Maintenance Programme

APPLICATION FOR THE APPROVAL OF AN AIRCRAFT MAINTENANCE PROGRAMME

The application for approval of an aircraft maintenance programme should be submitted along with the maintenance programme to the Director of Civil Aviation.

Owner* / operator's* name

.....

(*delete as applicable)

ADDRESS:
.....
.....
.....

TELEPHONE No:

AIRCRAFT TYPE:

AIRCRAFT REGISTRATIONS:
.....

MAINTENANCE MANUAL/PLANNING DOCUMENT REFERENCE:

OWNER / OPERATOR'S PROGRAMME REFERENCE:

PROGRAMME ISSUE No: ISSUE DATE:

CURRENT MAINTENANCE STATUS:

(Bridging check if required):

APPLICANT NAME: APPLICANT SIGNATURE:

DATE:

[OTAA] USE ONLY:

DATE RECEIVED:
ALLOCATED PROGRAMME REFERENCE NUMBER:

Appendix C MP Amendment Application Form

MAINTENANCE PROGRAMME AMENDMENT APPROVAL SUBMISSION

[OTAA] Programme Ref: _____ Issue No: ____

Aircraft Type:

Operator's Programme Ref:

Issue Date:

Amendment No:

Source Documentation:..... Amendment No:

Amendment Title:.....

Outline details of amendment:.....

Technical justification including details of implementation:.....