



## MAINTENANCE PROGRAMME COMPLIANCE CHECKLIST

**When completed this form should be returned to the CAOIRI Airworthiness Department.  
Please complete this form in BLOCK CAPITALS using black or dark blue ink.**

The purpose of the Maintenance Programmes Compliance Checklist is to assist owners / operators with a view to ensuring that Maintenance Programmes submitted to the CAOIRI for approval are standardized and include all items that are required by CAOIRI Part M.A.302, AMC M.A. 302 and also other additional CAOIRI nationally required items. This checklist, when completed, should be submitted with the draft maintenance programme in accordance with letter: 29017 date: 27/05/1393.

This document includes all the relevant information as detailed in Appendix 1 to the Acceptable Means of Compliance (AMC), the format of which may be modified to suit the operator's preferred method. In all cases the checklist should clearly show either compliance & location of the compliance in the notes section or not applicable & the reason in the notes section.

The specific tasks and the relevant control procedures shall be included as specified in the Maintenance Programme (MP) or Continuing Airworthiness Management Exposition (CAME) of the operator / subpart G organization managing the aircraft. The relevant cross-references shall be specified in the notes column at the appropriate paragraphs and the correct term MP or CAME shall be used. It is not acceptable simply enter the MP or CAME as the cross-reference.

The checklist is provided to ensure the minimum required items are contained in the Maintenance Programme. It should be enhanced as necessary to suit the aircraft's needs; operational, utilization & environmental.

|  |  |
|--|--|
| CAMOAC/ AOC Number (if applicable):            |  |
| CAOIRI MP/ reference:                          |  |
| CAME Ref (if applicable):                      |  |
| Owner / Operators Name:                        |  |
| Owner / Operators MP/ reference:               |  |
| Amendment Status:                              |  |
| Details of the previous maintenance programme: |  |

| 1. GENERAL REQUIREMENTS |  |                      |  |            |                 |
|-------------------------|--|----------------------|--|------------|-----------------|
| 1.1                     | Maintenance Programme basic information:   | Compliance<br>Yes No |  | Notes/ref. | CAOIRI<br>Check |
| 1.1.1                   | The type/model/ and registration number of the aircraft  |                      |  |            |                 |
|                         | The type/model of the engines  |                      |  |            |                 |
|                         | The type/model of the propellers, where applicable   |                      |  |            |                 |
|                         | The type/model of the auxiliary power units, where applicable  |                      |  |            |                 |
| 1.1.2                   | The name and address of the owner, operator, M.A. (G) organization managing the aircraft airworthiness |                      |  |            |                 |
| 1.1.3                   | The programme reference, the date of issue and issue number.   |                      |  |            |                 |
| 1.1.4                   | Signed statement. (See Appendix 1 to this document.)   |                      |  |            |                 |

| 1. GENERAL REQUIREMENTS (continued) |  |  |  |  |
|-------------------------------------|--|--|--|--|
| 1.1.5                               | Contents list  |  |  |  |
|                                     | List of effective pages  |  |  |  |
|                                     | Revision status of the document  |  |  |  |
| 1.1.6                               | Check periods for anticipated utilization; Include a utilization tolerance of not more than 25%.Where utilization cannot be anticipated, calendar time limits should also be included. |  |  |  |
| 1.1.7                               | Procedures for escalation where applicable & acceptable to the CAOIRI  |  |  |  |
| 1.1.8                               | Date and reference of approved amendments  |  |  |  |
| 1.1.9                               | Pre-flight maintenance tasks   |  |  |  |
| 1.1.10                              | The tasks and the periods (intervals / frequencies) at which inspections should be carried out, including the task affectivity and type and degree of inspection of the:               |  |  |  |
|                                     | a. Aircraft  |  |  |  |
|                                     | b. Engine(s)   |  |  |  |
|                                     | c. APU   |  |  |  |
|                                     | d. Propeller(s)  |  |  |  |
|                                     | e. Components  |  |  |  |
|                                     | f. Accessories   |  |  |  |
|                                     | g. Equipment   |  |  |  |
|                                     | h. Instruments   |  |  |  |
|                                     | i. Electrical and radio apparatus  |  |  |  |
| 1.1.11                              | The periods at which components should be:   |  |  |  |
|                                     | a. Checked   |  |  |  |
|                                     | b. Cleaned   |  |  |  |
|                                     | c. Lubricated  |  |  |  |
|                                     | d. Replenished   |  |  |  |
|                                     | e. Adjusted  |  |  |  |
|                                     | f. Tested  |  |  |  |
| 1.1.12                              | Details of ageing aircraft system requirements with any specified sampling programmes,(if applicable)  |  |  |  |
| 1.1.13                              | Details of specific structural maintenance programmes, (if applicable), including but not limited to:  |  |  |  |
|                                     | a. Damage Tolerance and Supplemental Structural Inspection Programmes (SSID)   |  |  |  |
|                                     | b. SB review performed by the TC holder  |  |  |  |
|                                     | c. Corrosion prevention and control  |  |  |  |
|                                     | d. Repair Assessment   |  |  |  |
|                                     | e. Widespread Fatigue Damage   |  |  |  |
| 1.1.14                              | Statement of the limit of validity for the structural programme in 1.1.13, if applicable   |  |  |  |
| 1.1.15                              | The periods at which overhauls should be made  |  |  |  |
|                                     | The periods at which replacements should be made   |  |  |  |

| 1. GENERAL REQUIREMENTS (continued)   |  |                      |            |                 |
|---|--|----------------------|------------|-----------------|
| 1.1.16  | A cross-reference to other documents related to:   |                      |            |                 |
|   | a. Mandatory life limitations  |                      |            |                 |
|   | b. Certification Maintenance Requirements (CMR's), (if applicable)   |                      |            |                 |
|   | c. Airworthiness Directives (AD)   |                      |            |                 |
|   | Specific identification of the above items mandatory status  |                      |            |                 |
| 1.1.17  | Reliability programme or statistical methods of continuous Surveillance,(CMPA MA.302(f))   |                      |            |                 |
| 1.1.18  | A statement that practices and procedures should be the standards specified by the TC holder   |                      |            |                 |
| 1.1.19  | Each maintenance task (i.e. inspections - detailed, scan, general) should be defined in a definition section                         |                      |            |                 |
| 1.1.20  | If applicable, details of Critical Design Configuration Control Limitations together with appropriate procedures.                    |                      |            |                 |
| 2. PROGRAMME BASIS  |  |                      |            |                 |
|   |  | Compliance<br>Yes No | Notes/ref. | CAOIRI<br>Check |
| 2.1   | Is the programme based upon the MRB report, the TC holder's maintenance planning document or Chapter 5 of the maintenance manual?    |                      |            |                 |
| 2.2   | For newly type-certificated aircraft / comprehensively appraise the manufacturer's recommendations (and MRB report where applicable) |                      |            |                 |
| 2.3   | For existing aircraft types, comparisons with maintenance programs previously approved   |                      |            |                 |
| 2.4   | If CDCCL have been identified by the TC/STC holder, have maintenance instructions been developed                                     |                      |            |                 |
| 3. AMENDMENTS   |  |                      |            |                 |
|   |  | Compliance<br>Yes No | Notes/ref. | CAOIRI<br>Check |
| 3.1   | Amendments (revisions) to reflect changes:   |                      |            |                 |
|   | a. In the TC holder's recommendations  |                      |            |                 |
|   | b. Introduced by modifications   |                      |            |                 |
|   | c. Introduced by repairs   |                      |            |                 |
|   | d. Discovered by service experience  |                      |            |                 |
|   | e. As required by the CAOIRI   |                      |            |                 |
| 4. PERMITTED VARIATIONS TO MAINTENANCE PERIODS (with the exception of items identified in 1.1.16) |  |                      |            |                 |
|   |  | Compliance<br>Yes No | Notes/ref. | CAOIRI<br>Check |
| 4.1   | Vary the periods through a Procedure approved by the CAOIRI(See Appendix 2 & Circular AID 51 for instruction)?                       |                      |            |                 |
|   | Vary the periods with the approval of the CAOIRI?  |                      |            |                 |
| 5. PERIODIC REVIEW OF MAINTENANCE PROGRAMME CONTENTS  |  |                      |            |                 |
|   |  | Compliance<br>Yes No | Notes/ref. | CAOIRI<br>Check |
| 5.1   | Periodic review to ensure that the program reflects current:   |                      |            |                 |
|   | a. TC holder's recommendations   |                      |            |                 |

| 5. PERIODIC REVIEW OF MAINTENANCE PROGRAMME CONTENTS (continued) |   |                      |  |           |                 |
|--|---|----------------------|--|-----------|-----------------|
|  | b. Revisions to the MRB report (if applicable)  |                      |  |           |                 |
|  | c. Mandatory requirements   |                      |  |           |                 |
|  | d. Maintenance needs of the aircraft  |                      |  |           |                 |
| 5.2  | Annual review defined   |                      |  |           |                 |
| 6. RELIABILITY PROGRAMMES  |   |                      |  |           |                 |
|  |   | Compliance<br>Yes No |  | Notes/ref | CAOIRI<br>Check |
| 6.1  | Applicability   |                      |  |           |                 |
| 6.1.1  | Developed in the following cases:   |                      |  |           |                 |
|  | a. Programme is based upon MSG-3 logic  |                      |  |           |                 |
|  | b. Programme includes condition monitored components  |                      |  |           |                 |
|  | c. Programme does not contain overhaul time periods for all significant system components   |                      |  |           |                 |
|  | d. Specified by the Manufacturer's MPD or MRB   |                      |  |           |                 |
| 6.1.2  | Need not be developed in the following cases:   |                      |  |           |                 |
|  | a. Programme is based upon the MSG-1 or 2 logic (only hard times or on condition items)   |                      |  |           |                 |
|  | b. Not a complex motor powered aircraft (CMPA)  |                      |  |           |                 |
|  | c. Programme provides overhaul time periods for all significant system components   |                      |  |           |                 |
| 6.1.3  | Operator may develop own reliability monitoring programme   |                      |  |           |                 |
| 6.2  | Applicability, small fleets   |                      |  |           |                 |
| 6.2.1  | Less than 6 aircraft of the same type   |                      |  |           |                 |
| 6.2.2  | Reliability programme is irrespective of the fleet size   |                      |  |           |                 |
| 6.2.3  | Tailor reliability programmes to suit the size and complexity of operation  |                      |  |           |                 |
| 6.2.4  | Use of "Alert levels" should be used carefully  |                      |  |           |                 |
| 6.2.5  | When establishing a reliability programme, consider the following:  |                      |  |           |                 |
|  | a. Focus on areas where a sufficient amount of data is likely to be processed   |                      |  |           |                 |
|  | b. How is engineering judgment applied?   |                      |  |           |                 |
| 6.2.6  | Pool data and analysis (paragraph 6.6 specifies conditions)   |                      |  |           |                 |
| 6.2.7  | If unable to pool data / additional restrictions on the MRB/MPD tasks intervals specified   |                      |  |           |                 |
| 6.3  | Engineering judgment.   |                      |  |           |                 |
| 6.3.1  | Are there appropriately qualified personnel (with appropriate engineering experience and understanding of reliability concept) for the reliability programme? |                      |  |           |                 |
| 6.4  | Contracted maintenance.   |                      |  |           |                 |
| 6.4.1  | Maintenance programme / may sub-contract certain functions to the Part-145 organization   |                      |  |           |                 |

| 6. RELIABILITY PROGRAMMES (continued) |  |  |  |  |
|---------------------------------------|--|--|--|--|
| 6.4.2                                 | These are:   |  |  |  |
|                                       | a. Developing the maintenance and reliability programmes   |  |  |  |
|                                       | b. Collection and analysis of the reliability data   |  |  |  |
|                                       | c. Providing reliability reports   |  |  |  |
|                                       | d. Proposing corrective actions  |  |  |  |
| 6.4.3                                 | Approval to implement a corrective action / Subpart G prerogative and responsibility                           |  |  |  |
| 6.4.4                                 | Maintenance contract / CAME, and MOE procedures  |  |  |  |
| 6.5                                   | Reliability programme.   |  |  |  |
| 6.5.1                                 | Objectives.  |  |  |  |
| 6.5.1.1                               | Statement summarizing the prime objectives of the programme  |  |  |  |
|                                       | a. Recognize the need for corrective action  |  |  |  |
|                                       | b. Establish what corrective action is needed  |  |  |  |
|                                       | c. Determine the effectiveness of that action  |  |  |  |
| 6.5.1.2                               | The extent of the objectives should be directly related to the scope of the programme                          |  |  |  |
| 6.5.1.3                               | All MSG-3 related tasks are effective and their periodicity is adequate  |  |  |  |
| 6.5.2                                 | Identification of items.   |  |  |  |
|                                       | The items controlled by the programme should be stated   |  |  |  |
| 6.5.3                                 | Terms and definitions.   |  |  |  |
|                                       | Significant terms and definitions should be clearly identified   |  |  |  |
| 6.5.4                                 | Information sources and collection.  |  |  |  |
| 6.5.4.1                               | Sources and procedures in the Exposition   |  |  |  |
| 6.5.4.2                               | Type of information to be collected should be related to the objectives, examples of the normal prime sources: |  |  |  |
|                                       | a. Pilots Reports  |  |  |  |
|                                       | b. Technical Logs  |  |  |  |
|                                       | c. Aircraft Access Terminal / On-board readouts  |  |  |  |
|                                       | d. Maintenance Worksheets  |  |  |  |
|                                       | e. Workshop Reports  |  |  |  |
|                                       | f. Reports on Functional Checks  |  |  |  |
|                                       | g. Reports on Special Inspections  |  |  |  |
|                                       | h. Stores Issues/Reports   |  |  |  |
|                                       | i. Air Safety Reports  |  |  |  |
|                                       | j. Reports on Delays and Incidents   |  |  |  |
|                                       | k. Other sources: i.e. ETOPS/EDTO, RVSM, CAT II/ III   |  |  |  |

| 6. RELIABILITY PROGRAMMES (continued) |   |  |  |  |
|---------------------------------------|---|--|--|--|
| 6.5.4.3                               | Due account of Continuing Airworthiness information promulgated under Part-21   |  |  |  |
| 6.5.5                                 | Display of information  |  |  |  |
|                                       | Information displayed graphically or tabular or a combination   |  |  |  |
| 6.5.5.1                               | Provisions for "nil returns"  |  |  |  |
| 6.5.5.2                               | Where "standards" or "alert levels", information oriented accordingly   |  |  |  |
| 6.5.6                                 | Examination, analysis and interpretation of the information.  |  |  |  |
|                                       | Method for examining, analyzing and interpreting the information should be explained  |  |  |  |
| 6.5.6.1                               | Methods of examination may be varied - content & quantity   |  |  |  |
| 6.5.6.2                               | The whole process should enable a critical assessment of the effectiveness of the program as a total activity. May involve: |  |  |  |
|                                       | a. Comparisons of operational reliability with established or allocated standards   |  |  |  |
|                                       | b. Analysis and interpretation of trends  |  |  |  |
|                                       | c. Evaluation of repetitive defects   |  |  |  |
|                                       | d. Confidence testing of expected and achieved results  |  |  |  |
|                                       | e. Studies of life-bands and survival characteristics   |  |  |  |
|                                       | f. Reliability predictions  |  |  |  |
|                                       | g. Other methods of assessment  |  |  |  |
|                                       | h. Stores Issues/Reports  |  |  |  |
|                                       | i. Air Safety Reports   |  |  |  |
|                                       | j. Reports on Delays and Incidents  |  |  |  |
|                                       | k. Other sources: i.e. ETOPS/EDTO, RVSM, CAT II/ III  |  |  |  |
| 6.5.6.3                               | Range and depth of analysis should be related to the particular programme:  |  |  |  |
|                                       | a. Flight defects and reductions in reliability   |  |  |  |
|                                       | b. Defects – line and main base   |  |  |  |
|                                       | c. Deterioration observed - routine maintenance   |  |  |  |
|                                       | d. Workshop and overhaul findings   |  |  |  |
|                                       | e. Modification evaluations   |  |  |  |
|                                       | f. Sampling programmes  |  |  |  |
|                                       | g. Adequacy of maintenance equipment and publications   |  |  |  |
|                                       | h. Effectiveness of maintenance procedures  |  |  |  |
|                                       | i. Staff training   |  |  |  |
|                                       | j. Service bulletins, technical instructions, etc.  |  |  |  |

| 6. RELIABILITY PROGRAMMES (continued) |  |  |  |  |
|---------------------------------------|--|--|--|--|
| 6.5.6.4                               | Contracted maintenance - arrangements established and details for information input included                           |  |  |  |
| 6.5.7                                 | Corrective Actions   |  |  |  |
| 6.5.7.1                               | Procedures / time scales for implementing corrective actions / monitoring – should be fully described & could include: |  |  |  |
|                                       | a. Changes to maintenance, operational procedures or techniques  |  |  |  |
|                                       | b. Changes requiring amendment of the approved maintenance programme?  |  |  |  |
|                                       | c. Amendments to approved manuals  |  |  |  |
|                                       | d. Initiation of modifications   |  |  |  |
|                                       | e. Special inspections / fleet campaigns   |  |  |  |
|                                       | f. Spares provisioning   |  |  |  |
|                                       | g. Staff training  |  |  |  |
|                                       | h. Manpower and equipment planning   |  |  |  |
| 6.5.7.2                               | Procedures for effecting changes should be described   |  |  |  |
| 6.5.8                                 | Organizational Responsibilities.   |  |  |  |
|                                       | Organizational structure – chains of responsibility should be defined  |  |  |  |
| 6.5.9                                 | Presentation of information to the competent authority.  |  |  |  |
|                                       | Information submitted to the CAO for approval of the reliability programme:  |  |  |  |
|                                       | a. Format and content of routine reports   |  |  |  |
|                                       | b. Time scales for reports / distribution  |  |  |  |
|                                       | c. Format and content of reports requesting amendments   |  |  |  |
| 6.5.10                                | Evaluation and review.   |  |  |  |
|                                       | Describe procedures and individual responsibilities - continuous monitoring of the effectiveness of the programme      |  |  |  |
| 6.5.10.1                              | Procedures for revising the "standards" or "Alert levels".   |  |  |  |
| 6.5.10.2                              | Criteria to be taken into account during the review includes:  |  |  |  |
|                                       | a. Utilization (high / low / seasonal)   |  |  |  |
|                                       | b. Fleet commonality   |  |  |  |
|                                       | c. Alert Level adjustment criteria   |  |  |  |
|                                       | d. Adequacy of data  |  |  |  |
|                                       | e. Reliability procedure audit   |  |  |  |
|                                       | f. Staff training  |  |  |  |
|                                       | g. Operational and maintenance procedures  |  |  |  |

| 6. RELIABILITY PROGRAMMES (continued) |   |                      |  |            |                 |
|---------------------------------------|---|----------------------|--|------------|-----------------|
| 6.5.11                                | Approval of organization to implement maintenance programme changes arising from the reliability program results: |                      |  |            |                 |
|                                       | a. Does the reliability programme monitor the content of the maintenance programme in a comprehensive manner?     |                      |  |            |                 |
|                                       | b. Is appropriate control exercised by the owner / operator over the internal validation of such changes?         |                      |  |            |                 |
| 6.6                                   | Pooling Arrangements.   |                      |  |            |                 |
| 6.6.1                                 | Pooling information – must be substantially the same, including:  |                      |  |            |                 |
|                                       | a. Certification / modification / SB compliance   |                      |  |            |                 |
|                                       | b. Operational Factors  |                      |  |            |                 |
|                                       | c. Maintenance factors  |                      |  |            |                 |
| 6.6.2                                 | Is there a substantial amount of commonality/ has the CAOIRI agreed?  |                      |  |            |                 |
| 6.6.3                                 | Is the aircraft on short-term lease? CAOIRI may grant more flexibility  |                      |  |            |                 |
| 6.6.4                                 | Changes to any M.A. (G) requires assessment in order that the pooling benefits can be maintained                  |                      |  |            |                 |
| 6.6.5                                 | Reliability program managed by the aircraft manufacturer if agreed by the CAOIRI                                  |                      |  |            |                 |
| 7. CAOIRI REQUIRED ITEMS (M.A.302(d)) |   |                      |  |            |                 |
|                                       |   | Compliance<br>Yes No |  | Notes/ref. | CAOIRI<br>Check |
| 7.1                                   | Details of who may issue a CRS  |                      |  |            |                 |
| 7.2                                   | Define which inspections /checks are considered to be base maintenance  |                      |  |            |                 |
| 7.3                                   | CAOIRI Maintenance Requirements, in the absence of specific recommendations. See Appendix 3                       |                      |  |            |                 |
| 7.3.1                                 | Aircraft battery capacity check/deep cycle?   |                      |  |            |                 |
| 7.3.2                                 | Emergency equipment   |                      |  |            |                 |
| 7.3.3                                 | Emergency escape provisions:  |                      |  |            |                 |
|                                       | a. Portable valise type life-rafts  |                      |  |            |                 |
|                                       | b. Door & escape chutes/slides  |                      |  |            |                 |
|                                       | c. Emergency exits / hatches  |                      |  |            |                 |
| 7.3.4                                 | Flexible hoses  |                      |  |            |                 |
| 7.3.5                                 | Fuel / oil system contamination checks  |                      |  |            |                 |
| 7.3.6                                 | Pressure vessels  |                      |  |            |                 |
| 7.3.7                                 | Seat belts and harnesses  |                      |  |            |                 |
| 7.3.8                                 | Reserved  |                      |  |            |                 |



| 7. CAOIRI REQUIRED ITEMS (continued) |  |  |  |  |
|--------------------------------------|--|--|--|--|
| 7.3.9                                | Vital points and control systems                                       |  |  |  |
| 7.3.10                               | Reserved   |  |  |  |
| 7.3.11                               | Maintenance applicable to special operations approvals, if applicable: |  |  |  |
|                                      | AWOPS  |  |  |  |
|                                      | MNPS   |  |  |  |
|                                      | RVSM   |  |  |  |
|                                      | ETOPS/EDTO   |  |  |  |
|                                      | Sea Pilot transfers  |  |  |  |
|                                      | Offshore operations  |  |  |  |
|                                      | HEMS   |  |  |  |
|                                      | Transport of dangerous goods   |  |  |  |
|                                      | Other (Specify) .....  |  |  |  |
| 7.3.12                               | Customer furnished equipment   |  |  |  |
| 7.3.13                               | Engine & APU condition monitored maintenance                           |  |  |  |
| 7.3.14                               | Reserved   |  |  |  |
| 7.3.15                               | Flight data recorder systems   |  |  |  |
| 7.3.16                               | Cockpit voice recorder systems   |  |  |  |
| 7.3.17                               | Mode "S" transponder ICAO 24-bit aircraft addresses                    |  |  |  |
| 7.3.18                               | In-flight entertainment systems (IFE)                                  |  |  |  |

|                                   |       |
|-----------------------------------|-------|
| Completed by CAMO manager: [Name] |       |
| Signature:                        | Date: |

|                     |
|---------------------|
| For CAOIRI use only |
| CAOIRI assessor:    |
| Signature:          |
| Date:               |

# MAINTENANCE PROGRAMME COMPLIANCE CHECKLIST- GUIDANCE NOTES

## Appendix 1

### Suggested certification statement

In the preparation of this Maintenance Programme to meet the requirements of CAOIRI Part M, the recommendations made by the airframe constructors and engine, APU, propeller and equipment manufacturers have been evaluated and, where appropriate, have been incorporated.

This Maintenance Programme lists the tasks and identifies the practices and procedures, which form the basis for the scheduled maintenance of the aeroplane(s) / helicopter(s). The Part M Subpart G organisation / owner\* undertakes to ensure that the aeroplane(s) / helicopter(s) will continue to be maintained in accordance with this programme.

The data contained in this programme will be reviewed for continued validity at least annually in the light of operating experience and instructions from the CAOIRI whilst taking into account new and / or modified maintenance instructions promulgated by the type certificate and supplementary type certificate holders and any other organisation that publishes such data in accordance with CAOIRI Part 21.

It is accepted that this programme does not prevent the necessity for complying with any new or amended regulation published by CAOIRI from time to time where these new or amended regulations 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 aeroplane, such that continuing safe operation can be assured. It is further understood that the CAOIRI reserves the right to suspend, vary or cancel approval of the Maintenance Programme if the CAOIRI has evidence that the requirements of the Maintenance Programme are not being followed or that the required standards of airworthiness are not being maintained.

Name:

Position:

Sign:

Date:

NOTE: The post holder identified above is either the Accountable Manager / Continuing Airworthiness Manager for an AOC operator's Part M subpart G organisation, a nominated post holder within the Part M subpart G organisation when the aircraft's continuing airworthiness is contracted to an approved organization.

## Appendix 2

### Procedure for variation to frequencies prescribed in Approved Aircraft Maintenance Programme

#### 1. Introduction, Reason and Scope

This Appendix is to assist an operator in establishing an acceptable means of varying the frequencies prescribed in an Approved Maintenance Programme (AMP). The AMP contains the maintenance tasks and the periods (intervals/frequencies) at which each part of the aircraft should be inspected.

These frequencies may be defined in:

- a) Flight Hours (FH);
- b) Flight Cycles (FC);
- c) Calendar Time;
- d) Any combination of the above.

The above frequencies may apply to individual tasks or groups of tasks (e.g. A, C checks).

In certain exceptional circumstances it may not be possible for an operator to accomplish scheduled maintenance on a unique aircraft within the frequencies prescribed in the AMP. These frequencies may only be varied with the approval of or through an approved procedure in the AMP approved by the CAO.IRI.

This Appendix is issued in order to:

1. Provide criteria for extensions, on aircrafts involved in Commercial operations;
2. Improve alignment of the CAOIRI requirements for extensions with CAOIRI Part-21;
3. Provide criteria for an accepted procedure as referred to in AMC M.A.301-3.

#### 2. Permitted Variations To Maintenance Programme Frequencies

2.1 Permitted variations do not apply to:

- a) Life limitations;
- b) Airworthiness directives (AD's);
- c) Maintenance Programme tasks which have been classified as mandatory by the Type Certificate Holder or by CAOIRI;
- d) Certification Maintenance Requirements (CMR's);
- e) Airworthiness limitation Items (ALI's)
- f) ETOPs/EDTO related tasks
- g) Tasks derived from a MRB/MPD based on MSG-3 analysis and with a Failure Effect Category (FEC) of 8 – 'Hidden Safety Effect'.

2.2 A permitted variation to a period required by the Maintenance Programme may be granted either by the Authority or through an approved procedure on a case by case basis on occasions where the operator does not have the ability to perform the required maintenance within the prescribed limits.

Acceptable reasons for applying a variation may include an unforeseen workload peak in the maintenance organisation, an unforeseen unavailability of staff, an unforeseen delay in the parts provisioning, an unforeseen unavailability or unserviceability of a required tool or equipment, or the aircraft not being able to arrive at the maintenance location.

2.3 A permitted variation applies to a unique aircraft, for a unique occasion.

2.4 A permitted variation should not be understood to be a maintenance planning tool, but as an exceptional means to allow the operator to fly for a limited period of time until the required maintenance is performed.

2.5 The instructions for continuing airworthiness from the design holders prevail over this appendix. Only if the design holder does not specify any limitations on variations for a specific task, the limitations in this appendix apply.

2.6 A variation shall not be applied if there is evidence or reason to believe that this could endanger flight safety.

2.7 For a task whose interval has been reduced by the operator for planning purposes only (e.g. to coincide with an inspection), the Aircraft Maintenance Programme may specify a maximum variation up to the design holder's interval plus the maximum permitted variation as specified in 3.12.

2.8 It therefore follows that acceptable reason for requesting a permitted variation may include unforeseen workload peak in the maintenance organisation, so that it is not physically possible to perform the required maintenance on time.

2.9 When applying a variation, the following information shall be kept in the aircraft technical records (status of compliance to MP):

- a. the interval as provided in the approved maintenance programme;
- b. the variation applied, including the revised task due information.

2.10 The person or organisation responsible for the continuing airworthiness of the aircraft may apply variations when complying with the above, without specific authority approval provided that, has a CAMO approval with a procedure for applying variations, acceptable to CAO.IRI, in their Continuing Airworthiness Management Expositions.

2.11 When the person or organisation responsible for the continuing airworthiness of the aircraft doesn't have a CAMO approval should provide an application that at least includes the following information:

- a) Aircraft identification, by registration marks;
- b) Justification of the need for such a variation;
- c) Proposed extension in the appropriate figure (flight hours, cycles, etc);
- d) Current inspection status of the aircraft;
- e) List of aircraft deferred defects which are affected by the variation;
- f) Confirmation that the variation does not affect any mandatory maintenance tasks, life limitation, AD's etc;
- g) Compensation tasks (i.e. additional maintenance tasks undertaken to be performed before the new proposed limit).

2.12 The maximum variation of a prescribed frequency is indicated below:

|   |  |
|---|--|
| <b><u>a) Items controlled by Flight Hours (FH):</u></b>   |  |
| (i) 5000 FH or less:  | 10%.                                     |
| (ii) More than 5000 FH:   | 500 FH.                                  |
| <b><u>(b) Items controlled by calendar time:</u></b>  |  |
| (i) 1 year or less:   | 10% or 1 month, whichever is the lesser. |
| (ii) More than 1 year, but not exceeding 3 years:   | 2 months.                                |
| (iii) More than 3 years:  | 3 months.                                |
| <b><u>(c) Tasks controlled by landings /cycles</u></b>  |  |
| (i) 250 LG or less:   | 10%.                                     |
| (ii) More than 250 landings /cycles:  | 25 landings /cycles                      |
| <b><u>(d) Items controlled by more than one limit:</u></b>  |  |
| - For items controlled by more than one limit, e.g. items controlled by flying hours and calendar time or flying hours and landings/cycles, the more restrictive limit should be applied. |  |

**2.13 "Variations shall not be applied cumulatively."**

The application of variations will not result in the task being performed less often.

After a variation has been applied, the maintenance task next due is calculated as if the last compliance was at the original due date (so without the variation being applied).

Example 1: A 100 hour inspection was originally due at 200 flight hours (hrs) TSN, but performed at 210 hrs TSN, with a variation of 10% applied. Next maintenance is then due at 200+100=300 hrs TSN.

When an aircraft is grounded, maintenance tasks controlled by calendar time other than parking or storage maintenance tasks may be accepted to be overdue. After performance of the maintenance task before flight, the next due may then be calculated from this last performance of the maintenance task.

Example 2: An aircraft is grounded for a major repair for 8 months, from 1 February till 1 October. The Aircraft Maintenance Programme specifies a 3 monthly inspection. This inspection is performed only once during the ground time, on 30 September. The inspection is next due at 30 December.

## Appendix 3

### CAOIRI SPECIFIC MAINTENANCE REQUIREMENTS.

(Reference CAOIRI Part M M.A. 302 (d))

7.3.1 AIRCRAFT BATTERY CAPACITY CHECKS. Aircraft batteries shall be maintained in accordance with the manufacturer's recommendations. In the absence of any manufacturer's instructions the following periods apply.

- a) Lead acid Battery - not exceeding 3 months: capacity check, bench test.
- b) Ni-Cad Battery - not exceeding 4 months: capacity check, bench test.

7.3.2 EMERGENCY EQUIPMENT. The required Emergency Equipment will be maintained to a programme based on the equipment manufacturer's recommendations. In addition, the following requirements are complied with in the Maintenance Programme:

Emergency equipment is to be checked for correct complement, stowage, installation and expiry date(s) at suitable periods.

First Aid Kit(s) contents are checked at periods not exceeding 12 months.

7.3.3 EMERGENCY ESCAPE PROVISIONS (as applicable)

- a) Portable Valise Type Life rafts. At the appropriate Overhaul Period, 10% of all life rafts installed in fleets will be test inflated using system bottle and release mechanisms.
- b) As recommended by manufacturer.
- c) Emergency Exits/Hatches. All emergency exits and hatches are functioned by both internal and external means at periods specified in this Maintenance Programme. In the absence of manufacturer's specific recommendations these occur at suitable periods not exceeding 6 months elapsed time.

7.3.4 FLEXIBLE HOSES. Flexible hoses shall be inspected, overhauled or life limited in accordance with the manufacturer's recommendations.

In the absence of manufacturer's recommendations, hoses shall be subject to a programme of pressure testing at periods not exceeding 6 years from installation and 3 yearly thereafter, or in accordance with an alternative programme as agreed by the CAOIRI.

7.3.5 FUEL/OIL SYSTEM CONTAMINATION CHECKS. Consumable fluids, gases etc. uplifted prior to flight will be of the correct specification, free from contamination, and correctly recorded.

Fuel system water drain checks are to be carried out in accordance with CAME procedures.

The procedures shall be in accordance with the manufacturer's recommendations. In the absence of manufacturer's recommendations, the frequency of the water drain checks shall be approved by the CAOIRI.

7.3.6 PRESSURE VESSELS. Pressure vessels are to be overhauled or tested in accordance with manufacturer's recommendations. In the absence of any such recommendations the appropriate European standards should be applied. (EASA SIB 2015-11)

7.3.7 SEAT BELTS AND HARNESSSES. In the absence of manufacturer's recommendations, all installed seat belts and harnesses shall be subject to a programme of Detailed Visual Inspection at periods not exceeding 6 months.

7.3.8. Reserved for CAOIRI requirements.

7.3.9 VITAL POINTS AND CONTROL SYSTEMS. Whenever inspections are made or work is undertaken on vital points, flying or engine control systems, a detailed investigation must be made on completion of the task to ensure that all tools, rags or any other loose articles which could impede the free movement and safe operation of the system(s) have been removed and that the system(s) and installation in the aircraft zone are clean and unobstructed.

If, as a result of the application of tasks associated with the programme, any part of either the main or any associated system is dismantled, isolated, adjusted, repaired or renewed, that part of the system(s) which has been disturbed shall be subjected to an independent inspection in accordance with point M.A 402.

7.3.10 Reserved for CAOIRI requirements.

7.3.11. MAINTENANCE APPLICABLE TO SPECIFIC AEROPLANE OPERATIONS. The Maintenance Programme contains the necessary tasks required to ensure continued compliance with additional special authorisations/approvals:

- Automatic Approach and Automatic Landing CAT I /CAT II /CAT IIIa / CAT IIIb
- Minimum Navigation Performance Specifications (MNPS) Reduced Vertical Separation Minima (RVSM)
- Extended Range Operations with two-engined aeroplanes (ETOPS)/ Extended Diversion Time Operations(EDTO)
- Sea Pilot transfers
- Offshore operations
- Helicopter Emergency Medical Service (HEMS)
- Transportation of Dangerous Goods
- Other (Specify) .....

7.3.12 CUSTOMER FURNISHED EQUIPMENT (CFE/VFE/BFE). The Maintenance Programme contains the necessary tasks required to ensure continued airworthiness of additional equipment fitted to this aircraft.

7.3.13 ENGINE AND APU MAINTENANCE PROGRAMME. For engine and APU's which are controlled by a Reliability Centered Maintenance and Condition Monitored Maintenance Programme, compliance with Appendix I to AMC M.A.302.

Note: For engines and APU's controlled by a fixed Hot Section Inspection and Overhaul Life, no entry is required.

7.3.14. Reserved for CAOIRI requirements.

#### 7.3.15 FLIGHT RECORDER SYSTEMS

Reference CAOIRI AIR OPS, EASA SIB 2009-28R1

Approval, Operational Serviceability and Readout of Flight Recorder Systems.

The Maintenance Programme should contain the necessary tasks required to ensure that the Flight Data Recorder System(s) remain serviceable with regard to the parameters to be recorded and the duration of recording.

#### 7.3.16 COCKPIT VOICE RECORDER SYSTEMS

Reference CAOIRI AIR OPS, EASA SIB 2009-28R1

The maintenance programme should contain tasks required to ensure the Cockpit Voice Recorder (CVR) system remains serviceable. In the absence of maintenance tasks being prescribed by the TC / STC holders or original equipment manufacturer, the guidance provided in the referenced leaflet should be followed.

#### 7.3.17 MODE "S", "C" TRANSPONDER ICAO 24-BIT AIRCRAFT ADDRESSES

The correct Mode S address should be periodically confirmed for each transponder installed on the aircraft, via a field test set at an appropriate maintenance opportunity (not to exceed a 2 year periodicity). This task should be incorporated into the Approved Maintenance Programme.

#### 7.3.18 IN-FLIGHT ENTERTAINMENT SYSTEMS (IFE)

Continuing Airworthiness and Safety Standards of Passenger Service and In-Flight Entertainment Systems.

With regard to M.A.302 (d), which should be addressed and form part of the periodic programme review.