**Maintenance Control Manual**

**[Name of Manual]**

**[Name and address of Owner / Operator]**

**[Name and address of Technical Coordinator]**

**[Date of Manual]**

***2-REG template rev.3 March 2024***

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**1. List of effective pages**

|  |  |  |  |
| --- | --- | --- | --- |
| MCM  Page | MCM  Issue | MCM  Revision | MCM  Issue/Revision Date |
| 1 | 1 | 0 |  |
| 2 | 1 | 0 |  |
| 3 | 1 | 0 |  |
| 4 | 1 | 0 |  |
| 5 | 1 | 0 |  |
| 6 | 1 | 0 |  |
| 7 | 1 | 0 |  |
| 8 | 1 | 0 |  |
| 9 | 1 | 0 |  |
| 10 | 1 | 0 |  |
| 11 | 1 | 0 |  |
| 12 | 1 | 0 |  |
| 13 | 1 | 0 |  |
| 14 | 1 | 0 |  |
| 15 | 1 | 0 |  |
| 16 | 1 | 0 |  |

Name of Technical Coordinator:

Signature of Technical Coordinator:

Date:

**2. List of Abbreviations**

AD Airworthiness Directive

ADD Acceptable Deferred Defect

AMP Approved Maintenance Programme

AOG Aircraft on Ground

C of A Certificate of Airworthiness

C of C Certificate of Conformance

CAMP Computerized Maintenance Records and planning system

EDTO Extended Diversion Time Operations

EFB Electronic Flight Bag

GAR Guernsey Aviation Requirements MCM Maintenance Control Manual MEL Minimum Equipment List

MMEL Master Minimum Equipment List

MM Maintenance Manual

MPD Maintenance Planning Document

MTOM Maximum Take-Off Mass

RVSM Reduced Vertical Separation Minimum

SB Service Bulletin

TAC Type Acceptance Certificate

**3. Technical Coordinator Statement of Compliance**

The owner or lessee of an aircraft above 2,700 kg MTOM authorized that does not choose to have the continuing airworthiness of its aircraft managed by a Continuing Airworthiness Management Organization as per GAR 39.51(b) shall nominate a Technical Coordinator for acceptance by the Director of Civil Aviation.

This manual defines the procedures upon which the GAR 39 approval of continuing airworthiness management of aircraft, managed by the **[Technical Coordinator]** is based.

These procedures are approved by the undersigned and should be complied with as applicable to ensure all continuing airworthiness tasks of aircraft managed by the **[Technical Coordinator]** are completed on time and to an approved standard, as per GAR 39.55.

It is accepted that these procedures do not override the necessity of complying with any new or amended regulation published from time to time where these new or amended regulations conflict with these procedures.

It is understood that the Bailiwick of Guernsey Aircraft Registry will approve this manual and maintenance management arrangements whilst it is satisfied that the procedures are being followed and the work standard is maintained. It is also understood that Guernsey Aircraft Registry reserves the right to suspend, vary or revoke this approval if the Bailiwick of Guernsey Aircraft Registry has evidence that these procedures are not being followed and the standards not upheld.

Signature of Technical Coordinator:

Date:

**4. Manual Control**

The Technical Coordinator is responsible for ensuring that the MCM is regularly reviewed and that any changes are notified to the Bailiwick of Guernsey Aircraft Registry for approval.

Revisions to this manual may be required as a result of changes emanating from

• Guernsey Aircraft Registry, or

• Correction to errors or omissions, or

• As a result of the Technical Coordinators annual review.

Persons who consider this manual requires revision should bring it to the attention of the Technical

Coordinator. The Technical Coordinator will assess the proposed change ensuring any required revision is

produced, approved by Guernsey Aircraft Registry and distributed to all MCM holders.

**Distribution List**

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| **Copy Number** | **Held By** |
| Master |  |
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**5. Facilities**

**[Enter a description of facilities and IT etc that is used to discharge the responsibilities of Technical Coordinator]**

**6. Personnel and duties / responsibilities**

**[Technical Coordinator]** – Technical Coordinator

The Technical Coordinator is responsible for:

1. Maintenance activities detailed in the Maintenance Control Manual (MCM) are met

**2.** Ensuring that all maintenance personnel have the appropriate knowledge, qualifications and skills

3. Ensuring all maintenance personnel comply with the requirements of the MCM

4. Ensuring mandatory inspections and other legal requirements are achieved on time

5. Ensuring the aircraft is released for service only when maintenance is recorded & certification is complete.

6. Ensuring that the aircraft has a valid Certificate of Airworthiness

7. Ensuring time to next maintenance adequately covers the next planned flight duration.

8. Ensuring the operator remains compliant with maintenance regulations.

9. Proactive involvement with the Safety and Compliance Monitoring System.

A Technical Coordinator will use the resources (i.e. Maintenance and Component Manuals etc.) and information available (i.e. Airworthiness Directives, Service Bulletins and Letters etc.) to them to achieve the following in this vital role. The resources and information will be gathered from online sources and the approved aircraft management software.

1. The establishment and development of continuing airworthiness policy, including the acceptance of the

maintenance programme required by the DCA;

2. The aircraft, including its airframe, engines, appliances, emergency equipment and operational equipment, is maintained in an airworthy condition; and

3. All scheduled maintenance is performed in accordance with the maintenance programme approved by the DCA.

4. Contracted maintenance arrangements made are acceptable to the DCA; and

5. No person certifies maintenance on the aircraft other than appropriately licensed and authorised engineers.

6. That any defects and unserviceable items are rectified or deferred in accordance with approved procedures. The Technical Coordinator will monitor the application of any maintenance related MEL limitations. If any required technical and reliability assessments are made, then such reports are made by arrangements acceptable to the DCA. He will ensure that continuing airworthiness data is reviewed for the determination of any required actions to be taken and records of such reviews are maintained. Analysis of the effectiveness of the accepted Maintenance Programme will be reviewed annually.

7. The Technical Coordinator, through use of reliability data and maintenance records, will identify trends that ensure the effectiveness of the AMP and provide a method of repetitive defect control.

8. Mandatory continuing airworthiness requirements are complied with within the prescribed period;

9. Has arrangements for the receipt of all relevant continuing airworthiness information published by the Design Approval Holders for the aircraft and its components.

10. Repairs will only be carried out using the processes in the Aircraft Maintenance Manual, the Structural Repair Manual (SRM) and other applicable approved OEM maintenance data. The Technical Coordinator will ensure the rectification of all defects, and that

11. Airworthiness Directives are reviewed and complied with.

12. The establishment of a non-mandatory modification embodiment policy.

13. The Technical Coordinator will ensure regular development of the maintenance programme to ensure effective continuing airworthiness of the applicable aircraft; and

14. Any applicable continuing airworthiness data is made available to those involved in the maintenance of the aircraft.

15. He will ensure that the procedures prescribed in this maintenance control manual are complied with.

16. Occurrence reporting is accomplished to the requirements of GAR Part 13 and appropriate investigations are undertaken to safeguard the aircraft and that of any other, records of such investigations any actions taken shall be reported as required by GAR Part 13; and

17. Current mass and balance records are maintained that reflect the approved configuration of the aircraft. 18. Ensuring that all Maintenance Records are kept as required by the DCA.

19.Navigation databases can be uploaded and downloaded via a memory card. This process is subject to controlling procedures and may be performed by appropriately trained technicians or crew. The Field Loadable Software uploads/ downloads are accomplished, controlled and transferred in accordance with the equipment manufacturer’s instructions

**7. Approved Maintenance Programmes**

The Approved Maintenance Programme in accordance with GAR 39.61 consists of the Type Certificate Holders requirements for maintenance and continued airworthiness and inspections as detailed in the MPD, CPCP tasks, Supplemental Structural Inspection Document, Fatigue Life, Electrical Wiring Interconnection Systems and Airworthiness Limitations Sections. All Instructions for Continuing Airworthiness produced by Supplementary Certificate holders and for aircraft equipment is included.

The Approved Maintenance Programme and is to be made available to those involved in the maintenance of the aircraft.

The tasks are all loaded onto the project dedicated spreadsheet, which is used to track, record and schedule maintenance. The spreadsheet is used to provide status reports on maintenance status, Airworthiness Directives and repetitive inspections as detailed by STC holders or repairs. **[Amend where applicable]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Aircraft Reg** | **Aircraft Type and Model** | **MSN** | **AMP Number** | **Guernsey TAC** |
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Inspection standards are those published by the Relevant Type Certificate Holder for the Airframe, Engines and Equipment as installed.

All maintenance is to be certified by authorized persons through the Maintenance Release in accordance with GAR 43 Subpart C

The Technical Coordinator monitors the Type Certificate Holders Instructions for Continuing Airworthiness

and any changes are to be adopted immediately. Every three months the Technical Coordinator will review the Maintenance Programme considering feedback from the maintenance provider and continued

monitoring of the performance and effectiveness of the programme and will address any deficiency noted. Approved Maintenance Programme amendments must be submitted to the Bailiwick of Guernsey Aircraft Registry for approval.

Maintenance programme variations periods are to be included in the Approved Maintenance Programme and any variations beyond the scope must be approved by Bailiwick of Guernsey Aircraft Registry.

**8. Aircraft Maintenance Records**

All continued airworthiness records shall be maintained in accordance with GAR 39 Subpart E these include:

a) Aircraft, Engine and Propeller logbooks. b) Maintenance Records

c) Airworthiness records of compliance with airworthiness directives and scheduled maintenance d) requirements

e) Modification repairs

f) Life records for components

All maintenance completed will be certified in the aircraft Technical log in the case of Line Maintenance and in the case of Base Maintenance on Task Cards or non-routine task cards generated by the Approved MRO. All the above documents will be returned to the Technical Coordinator and shall reviewed prior to being archived in suitably identified binders. The records will be stored in a manner that ensures protection from damage or alteration.

**9. Airworthiness Directives**

The technical coordinator is responsible for ensuring that all Airworthiness Directives have been carried out in accordance with GAR 39 Subpart D. The following mandatory requirements must be checked and accomplished where applicable:

a) Airworthiness Directives as issued by the State of Type Certification on which the Bailiwick of

Guernsey Aircraft Registry Type Acceptance Certification is based upon.

b) Airworthiness Directives as issued by the State of Certification of any design change or repair. c) Airworthiness Directives review and implementation oversight by the Technical Coordinator.

The recording of AD compliance is to be recorded in the appropriate logbook. A maintenance release will be issued each time an Airworthiness Directive is carried out. The Technical Coordinator will ensure that the spreadsheet is updated and that a full list statement of compliance is maintained.

**10. Service Bulletins**

The Technical Coordinator will review all manufacturer Service Bulletins for content and will implement these where required.

Should a service bulletin, letter or instruction be received which is applicable to the aircraft, the Technical

Coordinator will review the requirements and raise an appropriate works order instructing the approved maintenance organization to carry out the required works. Following completion of the work an appropriate release will be sent to the Technical Coordinator and the aircraft records will be updated in the logbooks. Should a record of compliance be required by the Design Approval Holder, this will also be completed by the Technical Coordinator and sent as required.

**11. Major and Minor Repairs**

All major and minor repairs will be carried out to the requirements of GAR Part 21 Subpart M and the Technical Coordinator will forward all supporting documents to the Bailiwick of Guernsey Aircraft Registry for approval and issue of a reference number. Incorporation of any repairs will be recorded in the appropriate logbook.

**12. Major and Minor Design Changes (Modifications)**

Approval of all major and minor design changes installed on the aircraft, whilst on the Bailiwick of Guernsey Aircraft Register, shall comply with the requirements of GAR Part 21 Subpart C. The Technical Coordinator will forward all supporting documents to the Bailiwick of Guernsey Aircraft Registry for approval and issue of a reference number prior to embodiment. Any continued airworthiness requirements arising from the changes will be incorporated in the aircraft maintenance programme as necessary. The incorporation of all changes will be recorded in the appropriate logbook and amendments of the Approved Maintenance Programme made where required.

**13. Weight and Balance**

The aircraft shall be weighed in accordance with the requirements of GAR 39 Subpart F and records maintained to reflect the approved aircraft configuration.

**14. Certification of Maintenance**

All maintenance is to be carried out in accordance with the Approved Maintenance Programme, and all

Certificates of Release to Service shall be made as prescribed in GAR 43.

**15. Technical Log**

A Technical Log shall be provided which has the provision for recording the requirements of GAR 39.79. to record hours, cycles, defects and rectification. Technical Log pages are reviewed regularly for significant findings that may result in changes to the aircraft maintenance programme.

All MEL/CDL and carried forward defects are recorded on the Technical Log and operating crew are to review the Technical log for all MEL/CDL and carried forward defects prior to flight to ensure that they are aware of any operating conditions of these items that may affect flight planning or operation of the aircraft.

At completion of flight the operating crew will provide a copy of the technical log including details of any

defects, MEL/CDLs and the flight hours and cycles to the Technical Coordinator.

**16. Defects and Discrepancies**

Any discrepancy or defect shall be entered into the Aircraft Technical Log in accordance with GAR 91.345 and rectified or deferred in accordance with GAR 43.109 prior to flight. Any inoperative instruments and equipment shall be identified and carried forward in accordance with an approved Minimum Equipment List (MEL) in accordance with GAR 91.610 and GAR 43.107.

Inoperative equipment or defects must be reported by Flight Crew via an email submission. They will

review the aircraft MEL Manual to determine if the item is deferrable. If it is deferrable, determine if the

procedure to defer the item is Operational or if a Maintenance action is required. If the item is defined as

Maintenance, a Maintenance Technician is required to defer the item.

All defects that have been deferred and are carried forward will be monitored by the Technical Coordinator until they are rectified to ensure that the aircraft does not operate with defects that are overdue.

All defects are monitored by the Technical Coordinator on a monthly basis to ensure that any repetitive defects are identified and assessed against the maintenance program to identify any areas of the maintenance program that may need supplementing.

**17. Reporting Occurrences**

The Technical Coordinator has established a Mandatory Occurrence Reporting system in compliance with GAR 13 and will report to the operator, the Type Certificate holder and 2-REG any condition affecting the safety of aircraft it is managing the continuing airworthiness of.

Every person listed in GAR 13.51(a) shall report to the Director of Civil Aviation as soon as practicable any event which constitutes an occurrence described in GAR 13.53 and which comes to that person’s attention in the exercise of that person’s functions.

An acceptable method of reporting to the Director of Civil Aviation is by completion of the occurrence reporting forms available on the 2-REG website: [http://www.2-reg.com/services/occurrence-reporting](about:blank)

**18. Maintenance Programme Review**

At introduction of new aircraft onto the maintenance program the Technical Coordinator will review the maintenance program to ensure it is appropriate for additional aircraft and taking into account the following:

• Cabin configuration,

• Emergency equipment installed,

• Modification status of the aircraft,

• ICA for the aircraft and any installed modifications or equipment with respect to maintenance

required on a regular basis,

• Age of the aircraft,

• Previous utilisation of the aircraft.

Notwithstanding the requirements for Maintenance Program Review for the introduction of new aircraft, the Maintenance Program will be reviewed as new ICA affecting the aircraft listed in Section 7 are received from OEMs.

An annual review (12 monthly) of the maintenance program will be completed to review the program’s effectiveness. This will be informed by data analysis. The objective of data analysis is to:

• Recognise the need for corrective action,

• Establish what corrective action is needed,

• Determine the effectiveness of that action.

As a result of the examination and analysis of the data, the Technical Coordinator may recommend that certain actions be implemented. Corrective actions will take the form of;

* Changes to operational procedures or techniques,
* Maintenance changes involving inspection frequency and content, function checks, overhaul,
* requirements and time limits,
* Initiation of modifications,
* Spares provisioning.

**19 Software Control**

Field Loadable Software is to be treated as an aircraft component, it is to be supplied with a C of C or release certificate. This is required to provide an audit trail of the Field Loadable Software.

Field Loadable Software that is supplied by an OEM will normally be supplied with a Service Bulletin detailing how it is to be installed, in this instance completion of the Service Bulletin and certification by an approved engineer is acceptable.

In the instance that Field Loadable Software is required to be completed and does not come with a suitable Service Bulletin or instruction for installation, the Technical Log referencing the appropriate AMM procedure is to be used and a copy of the C of C or release certificate is to be supplied with the Technical Log that the approved engineer uses to certify the installation. The engineer should also record the release certificate or C of C reference number and software serial number (if applicable) on the Technical Log.

The Navigation Database is assessed by the Technical Coordinator to ensure it is suitable for the aircraft and area of operation.

**20 Training**

It is the Technical Coordinators responsibility to notify staff assigned to Guernsey registered aircraft of this Manual and ensure that they have received appropriate training.

**21. Maintenance Managements Contracts**

The continuing airworthiness of the following **[Insert Name of owner /operator],** aircraft is managed under the control of the Technical Coordinator.

|  |  |  |
| --- | --- | --- |
| **Aircraft Type** | **Aircraft Registration** | **MSN** |
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**22. List of maintenance contracts**

Arrangements for maintenance is to be established by suitable contracts GAR 39.57. The following maintenance contracts are in place for line and base maintenance.

When maintenance is required on an aircraft, the Technical Coordinator will contact the relevant Approved MRO to provide details of the maintenance required. A work order will be raised by the Technical Coordinator detailing the maintenance required and the appropriate documentation provided.

|  |  |  |
| --- | --- | --- |
| Maintenance | Contracted Company | GAR 145 Approval No. |
| Line / Base |  |  |
| Line / Base |  |  |

**23. Changes to the Approved Continuing Airworthiness Management**

The Technical Coordinator will notify the Bailiwick of Guernsey Aircraft Registry of any changes of facilities, equipment, material, procedures, work scope and staff that may affect the issued approval. Any amendment to this manual will be submitted to Guernsey Aircraft Registry for notification and approval.

**24. Duration of Approval**

The Bailiwick of Guernsey Aircraft Registry approval is valid from issue date unless suspended or revoked by the Director.

**25. Notification of ceasing Technical Coordinator activity**

If the approved Technical Coordinator ceases to offer continued airworthiness management services, the Director of Civil Aviation shall be immediately notified in writing.

**26. Audits**

The Bailiwick of Guernsey Aircraft Registry auditors have the right to access the Technical Coordinators facility at any reasonable time it is requested in coordination and arrangement with the Technical Coordinator.

Appendix 1 Reduced Vertical Separation Minima (RVSM) Procedures

**[Appendix to be included only when applicable and extended to any additional specific Approval like EDTO and / or EFB if applicable]**

**1A.1.1 Purpose**

To define the procedures and responsibilities for the management of the maintenance programs and maintenance procedures to ensure the continued airworthiness of aeroplanes approved for RVSM operations.

**1A.1.2 Responsibilities**

The TC is responsible for monitoring the RVSM maintenance program and procedures, reviewing data packages, including any maintenance requirements addressed in the AMP. The technical coordinator shall receive RVSM-related operational data from the Flight Operations and maintenance data from the contracted Part 145.

This information will be analyzed by the technical coordinator to monitor any negative trend. Relevant information will be recorded and may be forwarded to the competent authority upon request.

**1A.1.3 Objectives of RVSM maintenance program and maintenance procedures**

The objective of the RVSM maintenance program and procedures is to ensure integrity of on-board guidance system and continued compliance with RVSM approval criteria. To achieve that scope, the technical coordinator will follow the manufacturers’ recommendations specific for the type of aircraft and configuration.

**1A.1.4 RVSM equipment and requirements/Minimum Equipment List**

The list of equipment required to conduct RVSM operations is reported in the **AFM [include AFM details],** page **[include AFM page].** The operator included all limitations and associated procedures related to RVSM equipment into its MEL.

The TC will, as part of his duties:

(1) assess any modification or design change which in any way affects the RVSM approval;

(2) evaluate any repairs that may affect the integrity of the continuing RVSM approval, e.g. those affecting the alignment of pitot/static probes, repairs to dents, or deformation around static plates;

(3) ensure the maintenance of airframe geometry for proper surface contours and the mitigation of altimetry system error, surface measurements or skin waviness as specified in the instructions for continued airworthiness (ICA), to ensure adherence to RVSM tolerances. These checks should be performed following repairs or alterations having an effect on airframe surface and airflow;

(4) verify that periodic height monitoring is carried out as required by the applicable airspace regulation. For aircraft operated in the EUR-RVSM airspace, ref. to RVSM height monitoring groups and minimum monitoring requirements EUROCONTROL.

**1A.1.5 Maintenance programs**

The RVSM maintenance program developed by the technical coordinator will follow the manufacturers’ recommendations specific for the type of aircraft and configuration.

The contracted Part 145 will be advised by the technical coordinator about any RVSM-specific inspection required on the aircraft, by adding the information in the Work Order issued to accomplish the applicable maintenance tasks.

The RVSM maintenance program and maintenance procedures will be provided to the contracted Part 145 by the technical coordinator.

**1A.1.6 Downgrading and Upgrading of RVSM capabilities**

All RVSM defects will be entered into the aircraft tech log. This enables the flight crew to determine if there are any defects currently affecting the RVSM systems. If defects exist, without corrective action before the intended flight, the RVSM status will be downgraded. The reduced RVSM capabilities of the aircraft will be advised to the crew by an appropriate note in the aircraft tech log entered by the maintenance personnel performing the downgrade. In such case the Part 145 shall inform the TC prior to the commencement of the next flight.

After a RVSM system/component failure on previous flights, or, if significant performance/reliability trends are detected, the downgrading/upgrading process precludes a release to service for RVSM operations without appropriate corrective action being undertaken by an approved Part 145.

**1A.1.7 Reporting**

The technical coordinator will report recorded or communicated occurrences of height-keeping errors caused by malfunction of aircraft equipment or of operational nature, equal to or greater than:

(1) a total vertical error (TVE) of ± 90 m (± 300 ft);

(2) an altimetry system error (ASE) of ± 75 m (± 245 ft); and

(3) an assigned altitude deviation (AAD) of ± 90 m (± 300 ft).

Reports of such occurrences shall be sent to the technical coordinator and the 2-REG within 72 hours. Reports shall include an initial analysis of causal factors and measures taken to prevent repeat occurrences.

When height-keeping errors are recorded or received, the technical coordinator shall take immediate action to rectify the conditions that caused the errors and provide follow-up reports, if requested by the 2-REG.

Prior to all flights in RVSM airspace, the operator’s flight crews must visually inspect the RVSM Critical Region for obvious damage or deformation to the skin surface. Should these be detected, the technical coordinator shall be informed before conducting any further RVSM operations, to allow for proper maintenance actions and/or downgrading.