SOFEMA
AVIATION SERVICES

Considerations Related to EASA Part 145 Compliance Monitoring System_R1

Sofema Aviation Services (SAS) www.sassofia.com considers best practices related to demonstrating regulatory compliance within the Part 145 CM System.

Definition of the Compliance Monitoring System

The Organisation has an independent Compliance Monitoring System which monitors compliance of the maintenance operations with EASA Part 145, MOE, associated procedures as well as strategies, objectives and policies in order to continuously improve the organisation's operations and efficiency.

The Compliance Monitoring System activities, including audit, are the responsibility of the Compliance Manager who remains independent of any other function within the company. All personnel employed within the Compliance Monitoring Department will also be independent of any other function within the company.

The Accountable Manager is ultimately responsible for Compliance Monitoring System.

The Compliance Monitoring Manager has direct access to the Accountable Manager.

The Compliance Monitoring Management Group consists of the:

1/ Accountable Manager,

2/ Compliance Monitoring Manager,

3/ Technical Manager.

Definition of the “System/Procedure” audit

The primary objectives of the RAS Technic Compliance Monitoring System are:

1/ To enable the organisation to ensure that it can deliver a safe product through its line maintenance services; and

2/ To enable that organisation to remain in compliance with the requirements.

An essential element of the compliance monitoring system is the independent audit.

The independent audit is an objective process of routine sample checks of all aspects of the organisation’s ability to carry out all maintenance to the required standards and includes some product sampling as the end result of the maintenance process.

It represents an objective overview of the complete maintenance-related activities and is intended to complement the 145.A.50(a) requirement for certifying staff to be satisfied that all required maintenance has been properly carried out before issuing of the certificate of release to service.

Independent audits shall include a percentage of random audits carried out on a sample basis when maintenance is being carried out. This includes some audits during the night shifts.

The independent audit shall ensure that all aspects of Part-145 compliance are checked every 12 months. This check may be carried out as a complete single exercise or subdivided over the 12-month period in accordance with the scheduled plan.

The independent audit does not require each procedure to be checked against each process/ activity when it can be shown that the particular procedure is common to more than one process/ activity and the procedure has been checked every 12 months without resultant findings.

Where findings have been identified, the particular procedure shall be rechecked against other processes/ activities until the findings have been rectified after which the independent audit procedure may revert back to 12 months for the particular procedure.

Findings Classification

Findings/ Nonconformity resulting from audits are classified into three levels with the following time limits:

- **Level 1:** is any significant non-compliance with the Part-145 requirements which lowers the safety standard and hazards seriously flight safety. Findings in this level stop the particular process/ activity. The corrective action shall be taken immediately before any operation continues.
- **Level 2:** is any non-compliance with the Part-145 requirements which could lower the safety standard and possibly hazard the flight safety? The time limit for rectification is agreed with the auditee, but in any case, shall not exceed 3 months. If the auditee requests an extension, SCMM may extend the rectification time by 3 months more at most.
- **Level 3:** is an observation and is not any non-compliance with the regulation. It is recommended to accomplish an action to improve the system. No time limit is applicable.

System/Procedure - Audit Programme

The Compliance Monitoring Manager will carry out a complete review of the Compliance Monitoring System annually and will present his findings through the Technical Manager to the Accountable Manager.

Details of recommendations and decisions taken as a result of the review process will be reviewed by the CMM within the time scales agreed at the review meeting.

The Compliance Manager will prepare a Compliance Monitoring Audit Plan on a yearly basis.

This plan will be designed to ensure that all maintenance tasks carried out on the aircraft or aircraft components are in accordance with EASA requirements.

EASA is provided with a copy of this plan on request.

The Compliance Monitoring Audit Plan may be changed during the year, if needed.

The Compliance Manager is responsible to prepare, conduct and follow-up audits in accordance with the Audit Plan.

The maintenance department will be the subject of a formal audit and each aspect of their operation will be included in the audit. These formal audits will be accomplished no less often than once a year unless otherwise directed by the Accountable Manager, or unless the Compliance Manager determines that it is necessary to add additional formal visits.

A percentage of audits will be on a sample basis whenever maintenance is being carried out. At least one product audit of each product will be carried out annually.

The frequency of the audits referred to in the Audit Plan will not be decreased without the agreement of EASA. Decreasing the frequency up to 24 months is provisioned provided that there are no safety-related findings and subject to being satisfied that the organisation has a good record of rectifying findings in a timely manner.

A decreased frequency is reverting back when this track is broken away. It is considered unlikely that a frequency greater than 24 months would be acceptable for any audit subject.

The Audit Plan will consider EASA GM 145.A.65(c) (1) requirements and will cover as minimum:

1/ All EASA Part 145 requirements,

2/ All MOE procedures in all related maintenance operations and departments,

3/ All product lines/ activities in the scope of work defined in Chapter 1.9,

4/ All special processes,

5/ All other requirements arising from other compliance monitoring system requirements,

6/ All subcontractors working under the Organisation Compliance Monitoring System,

7/Suppliers/contractors (if required).

The audit schedule shall include a night shift audit when applicable.

The Audit Report is prepared by the auditor and approved (closed) by the Compliance Manager. The accountable manager shall be informed.

Whenever an audit cannot be performed in accordance with the Audit Plan, either because of operational or workload reasons, it shall be rescheduled and prioritized for accomplishment during the following month.

To postpone an audit for a second time requires a formally documented justification which shall be approved by Compliance Manager containing the following information:

1/ The reason for rescheduling,

2/ The impact of rescheduling,

3/ New time projection for the rescheduling.

The compliance monitoring system itself is periodically subject to audits. In order to keep this activity independent, RAS Technic will use external auditors who must fulfil, as a minimum, the requirements applicable to internal auditors.

Company Audit Policy Including Compliance Audit

Compliance audits, from the perspective of their objectives, are mainly classified as follows:

- Procedure audit
- Product audit of aircraft

The Compliance Monitoring Policy recognises the need for all personnel to cooperate with the compliance monitoring auditors and also recognises that the quality/ compliance and safety standards are the responsibility of each employee (see Chapter 1.2 of this MOE).

Procedure audit:

A Procedure Audit is a compliance monitoring audit of organisation procedures which are documented in the MOE and the associated documents.

Product audit of aircraft.

This audit process will consist of the following phases:

1/ Initiating the audit,

2/ Preparing the audit,

3/ Executing the audit,

4/ Audit completion,

5/ Corrective action & follow-up.

The audit phases are detailed below:

1/ Initiating the audit.

The CMM initiates audits, according to the Audit Plan. When CMM instantiates an audit, he or his assigned auditor informs The Technical Manager and the related department managers with details of the audit such as:

- Audit date and time,
- Audit scope,
- Auditors.

Audit date and time can be established with unit managers to find the best-fit date according to the auditor's and unit manager's schedule. A scheduled audit shall be completed in the calendar month specified in the Audit Plan.

The Compliance Manager can postpone an audit in accordance with the details in Section 3.8.1.

Compliance Manager nominates auditors for each audit with a period of one month before the audit date.

2/ Preparing the audit

Audit preparations include the following items:

- Audit checklist preparation,
- Opening meeting preparation.

Audit checklist preparation

The purpose of an audit checklist is to support the auditor on what is to be reviewed and how to meet the audit objective.

- The auditor will need to be selective in what he investigates. Therefore, the results of the research need to be documented in a manner that can be used during the audit. A checklist may be needed to meet this purpose.
- Auditor may prepare an audit scenario document which may be used to guide the auditor through the audit.

Note: Audit is not a knowledge test, so auditors shall avoid questions about knowledge testing.

Opening meeting preparation

Before the audit, a meeting is held with the related unit manager, to inform concerning the audit. The reason for that is to use this information during the audit to obtain maximum communication and familiarization between auditors and auditees.

Execution of audit

Execution of the audit includes the following items:

- Opening meeting,
- Investigation and collection of evidence,
- Evaluation of the audit results,

- Nonconformity statements,
- Recording of nonconformities,
- End meeting.

Opening meeting

The audit starts with an opening meeting, which is managed by the auditor.

The purpose of an opening meeting is to:

- Introduce the members of the audit team to auditees,
- Provide a short summary of methods and procedures to be used to conduct the audit,
- Review the scope and objective of the audit,
- Establish the official communication links between the audit team and the
- auditees,
- Confirm that the resources and facilities needed by the audit team are available,
- Confirm the estimated time and date for the closing meeting,

Remind and make sure the auditees that the audit is not for finding something, but checking the compliance and helping an organisation in its continuous improvement process,

Clarify any unclear details of the audit.

Auditors will handle opening meetings with a related unit manager(s). All auditors of the audit shall attend the meeting. During the opening meeting, the above items will be covered by the lead auditor.

Investigation and collection of evidence

Going through the audit checklist or requirements. Auditors will use the following methods to reach the best information about the related area. Auditors are free to add and remove questions from the audit checklist during an audit, depending on auditees' performance and personnel attitudes.

During investigation and evidence gathering, the auditor will try to verify that:

- Documentation exists, where necessary,
- People are aware of procedures,
- Procedures are being implemented,
- Controls are effective,
- Records show evidence of implementation.

Evidence can be obtained in different ways, using various techniques, appropriate to the situation.

Evaluation of the audit results

The checklist, with any additional notes, is a record of what was examined and found during the audit against applicable requirements, procedures and products. When analyzed, it enables the auditor to verify that:

- Audit objectives were met,
- There is no inadequate or conflicting information,
- Control was satisfactory,
- Nonconformity was found.

The auditor shall carefully review each note on the checklist.

Nonconformity statements

Where analysis of audit findings reveals a nonconformity, a nonconformity statement is raised. A nonconformity identified during an audit will also be seen as an opportunity for organisation’s continuous improvement process. However, nonconformity statements can be taken as a criticism.

Considering nobody likes to be criticized, it is important that any nonconformity statement is de-personalized. The statement also needs to be accurate.

The requirement shall be stated clearly, with evidence of how the requirement has not been met. Often the requirement and evidence alone make an unsatisfactory situation clear. It is sometimes necessary, however, to add an additional statement to indicate what is wrong.

This makes clear the nature of the nonconformity.

There is no place for unsubstantiated statements in an audit. If the auditor does not have evidence that the requirement has not been met, then there is no nonconformity. Also, the corrective action period must be discussed with the auditee before the auditor issues the audit report.

Nonconformity statements shall provide:

- A record of the non-conformity,
- The auditee with an understanding of the non-conformity,
- Level of nonconformity and agreed timeframe for rectification.

Recording of non-conformities

After completing the audit, an auditor will enter the raised nonconformities into a nonconformity database. Nonconformity reports classified as Level 1 will be sent to the Accountable Manager immediately. Nonconformity reports regardless of their Level will be sent to the unit manager.

End meeting

At the end of the audit, prior to preparing the audit report, the audit team will hold a meeting with the auditees. The main purpose of this meeting is to present audit observations to the auditee in such a manner to ensure that auditees clearly understand the results of the audit.

Audit completion

Each audit will be completed with an Audit Report. The Unit/ Department managers will receive a notification informing them the Audit Report is complete. The accountable Manager will also be informed.

Audit report content

The audit report provides the auditee management with an overall assessment obtained through the audit. It shall reflect accurately the verbal report given at the closing meeting, including audit findings and a summary statement. The report will be developed to include:

- Supporting evidence,
- Observations made,
- List of findings and their reasons.

Also, recommendations for remedial action or further audits of specific topics may be concluded within the report.

Audit report distribution

The Audit Report will be prepared and distributed by Compliance Monitoring Department to the related unit managers in 10 working days from the last day when the audit took place.

Corrective action & follow-up.

Cross refers to Chapter 3.8.3 of this MOE for details on corrective action and follow-up.

Compliance Monitoring Audit Reports Retention

The audit reports records are managed as technical records i.a.w. Chapter 2.14 - Technical Records Control procedure. Reports include all associated documents and references including audit plans, corrective action requests, closure proofs etc. and are kept either in paper or electronic format.

Product Audit and Inspections

An aircraft audit can be considered a Product Quality Audit. The aim of this audit is to determine whether all maintenance activities and related documents comply with the maintenance procedures and plans and whether maintenance activities are implemented effectively in the maintenance of selected aircraft types.

The program of aircraft audits is prepared annually and it covers all aspects of maintenance procedures such as inspection, repair, restoration test, and release to service. This audit will be included in the annual internal audit plan.

The following subjects are covered as a minimum during this type of audit:

- Handling of operator's work package,
- Maintenance planning,
- Maintenance performance,
- Inspection,
- Performance of SBs and ADs,
- Utilisation of aircraft components, tools and equipment,
- Utilisation and understanding of maintenance-related documents,
- Repairs,
- Tests,
- Aircraft cleaning process,
- Maintenance documentation,
- Release to service of aircraft,
- Reporting of events,
- Recording of deferred defects,
- Certifying staff qualification.

Note: The auditing of aircraft by the Compliance Monitoring Department will be limited to the extent of the task which is contracted by the operator. Where an aircraft audit shows the remedial action to be with the contracted airline, the non-conformity will be reported to him for remedial action.

Note: Aircraft found to be out of compliance with airworthiness requirements will not be issued a CRS.

Where an aircraft audit shows the remedial action to be with the organisation, remedial action will be scheduled for action within a defined time scale.

Audit Findings – Corrective Action Procedure

The compliance monitoring audit report feedback system has two components:

- Feedback to the affected department
- Follow-up of corrective actions process

Feedback to the affected department

To achieve the maximum value from the auditing process, all the affected persons will be made aware of the findings and actions taken to remedy nonconformities. It is also essential that the auditing process is not seen by staff as a criticism of a department or an individual but as a tool to assist them with continual quality improvement and the benefits accruing from it.

The manager of the unit/ department will be briefed after the audit has been carried out. He will be explained the nonconformities found both through open discussion and also through being provided with a copy of the nonconformity report. It is also important that all staff in the affected unit/ department will be aware of the findings and the corrective actions to be taken.

Follow-up of corrective actions process

Whenever the unit/ department manager completes the corrective action plan, the designated follow-up person responsible starts corrective action confirmation. When the auditee sends the follow-up details, they need to attach all necessary evidence regarding corrective actions taken.

When the evidence indicates that corrective action has been effective, the auditor will close the nonconformity. Upon closure of the nonconformities, the unit/ department manager will be informed.

Corrective Actions and Timescale

Whenever a finding is issued and related corrective action is raised, the Compliance Manager will agree on a realistic period of time with the unit/department manager concerned for the completion of corrective action on the audit report. The corrective action is registered with the date raised.

Notwithstanding the premise that it is the responsibility of the management of the subject area to resolve nonconformities, the Compliance Manager may stipulate investigations or actions to be included in actions taken.

Once corrective action has been completed within the agreed time frame, the unit/ department manager will briefly state the corrective action, sign it, and return the report to the Compliance Manager.

The Compliance Manager on receipt of a satisfactorily concluded report will close it.

Any corrective action report which has not been satisfactorily concluded in the agreed time scale may be subject to a time limitation imposed by the Compliance Manager.

Failure to satisfactorily conclude a corrective action report or in the event of any dispute, will be reported to the Accountable Manager for his action.

Management of finding due dates

Nonconformities that stayed open exceeding the allowed open status period shall be placed in the Accountable Manager feedback report when there remains no extension possibility.

The Accountable Manager has ultimate responsibility for resourcing the corrective action and ensuring through the QA Manager that the corrective action has re-established compliance with the standard required by EASA and any additional requirements defined by the organisation.

These cases are transferred to the Accountable Manager's responsibility with transfer proofs produced and recorded in the system.

Management Responsibilities for Corrective Action and Follow-up

Senior management is responsible for ensuring that their areas of responsibility comply with regulatory requirements. They will ensure that the corrective actions taken prevent a repeat occurrence of the reported nonconformity.

Review of the Compliance Monitoring System Overall Results

Management Review Board (which is an extended form of the Management Compliance Group to include lower levels of management when necessary) is established in order to let management personnel get directly involved in the Compliance Monitoring System which is also headed by the Accountable Manager.

The Management Review Board continuously oversees Compliance Monitoring System to assure consistency and harmony between maintenance operations, Management, Compliance Monitoring System and the requirements. This is conducted under the coordination of the Compliance Manager at least twice a year.

Meetings include in their agenda the progress of the compliance monitoring system. Open findings and overdue actions are taken into consideration and a shared decision is produced.

Root Cause Analysis

For each non-compliance, the responsible Manager will be asked to determine and identify the root cause.

There are many Root Cause Analysis tools widely available, “5 Whys”, “Failure Mode Effects Analysis”, “Mind Mapping”, “Fishbone Diagram”, “Fault Tree Analysis” and others. RAS Technic's preferred method is the “5 Whys”, however other tools, or a combination of them, may be used when considered to be appropriate.

By implementing the practice of root cause analysis, it is believed that problems can best be solved by attempting to correct or eliminate root causes, as opposed to merely addressing immediately obvious symptoms.

By directing corrective action at the root cause as well as at the immediate problem, it is hoped that the likelihood of recurrence of the finding will be minimized. However, it is recognized that complete prevention of a reoccurrence by a single intervention is not always possible.

The general principles of root cause analysis are:

- Aiming performance improvement measures at root causes is more effective than merely treating the symptoms of the problem.
- To be effective, root cause analysis must be systematically performed, with conclusions and causes supported by documentary evidence.
- There is often more than one root cause for any single non-compliance.

To be effective, the analysis needs to identify as many causal relationships as possible between the root cause and the identified non-compliance.

Once corrective action has been completed within the agreed time frame, the unit/ department manager will briefly state the corrective action, sign, and return the report to

the Compliance Manager. The Compliance Manager on receipt of a satisfactorily concluded report will close it.

Root Cause Correction

Following the root cause analysis, the responsible manager shall describe the root cause correction undertaken to ensure that the non-conformity does not reoccur.

The effectiveness of the analysis undertaken, and the amendment of current, or adoption of new processes, is evaluated by the submittal of objective evidence or by follow-up inspection or audit where appropriate.