

RA 4951 - Quality ► Management ◀ System - MRP Part M Subpart G

Rationale

An effective Quality ► Management ◀ System ► (QMS) ◀ is a vital element of the Military Continuing Airworthiness Management Organization (Mil CAMO) and underpins the Continuing Airworthiness of all the Air Systems identified in the Continuing Airworthiness Management Exposition (CAME). Regardless of who or where Subcontracted Airworthiness tasks are being conducted, the purview of the ► QMS needs ◀ to encompass all activities and relevant supporting organizations to ensure the Airworthiness management of its Air Systems is at the required standard. Unmonitored or unassured activity can lead to a loss of configuration, which could significantly increase the Risk to Life ► ◀. This RA provides for the establishment of an independent ► QMS ◀ and Mil CAMO Quality Manager (Mil CAMO QM) which is essential Assurance activity for sustaining Airworthiness of Air Systems and ensuring Air Safety.

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Regulation

4951(1)

Establishing a Quality ► Management ◀ System

4951(1) The Military Continuing Airworthiness Manager (Mil CAM) **shall** establish an independent ► QMS ◀ and designate a Mil CAMO QM to monitor compliance with, and the adequacy of, procedures required to ensure Airworthy Air Systems. Compliance monitoring **shall** include a feedback system to the Delivery Duty Holder (DDH) or Accountable Manager (Military Flying) (AM(MF)) to ensure corrective action is completed as necessary.

Acceptable Means of Compliance

4951(1)

Establishing a Quality ► Management ◀ System

1. The Mil CAM **should** appoint a Mil CAMO QM. The Mil CAMO QM **should**:
 - a. Be able to demonstrate ► ◀ direct access to the DDH or AM(MF) on matters concerning the ► QMS, ◀ with that relationship reflected in the CAME.
 - b. Highlight non-compliances and poor standards to the Mil CAM.
 - c. Be responsible for follow up or closure of any ► QMS ◀ findings.
 - d. Have successfully completed all relevant Air Safety training courses¹. ► If the designated QM is not yet fully qualified, the relevant DDH / AM(MF) **should** consider the additional residual Risk introduced by the appointment and;
 - (1) For persons supporting an Aviation Duty Holder, the relevant Operating Duty Holders' Chief Air Engineer (CAE) **should** authorize non-compliance on a case-by-case basis, informing the MAA².
 - (2) For persons supporting an AM(MF), the applicable AM(MF) **should** endorse non-compliances, and submit them to the MAA for Authorization via a Waiver application³. ◀
 - e. Have a thorough knowledge of the organization's CAME.

¹ Refer to RA 1440 – Air Safety Training.

² DSA-MAA-OA-ACC@mod.gov.uk.

³ ► Refer to MAA03: MAA Regulatory Processes Annex B: Air Safety Alternative Acceptable Means of Compliance, Waivers and Exemptions. ◀

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- f. Where they are non-Crown Servants, have their appointment endorsed by the MAA through the submission and Approval of a MAA MAOS / CAMO Form 4⁴.
2. The scope of the ►QMS◄ **should** cover all Continuing Airworthiness activities including those Subcontracted.
 3. Procedures **should** be subject to periodic review. It is the Responsibility of all personnel to report any difficulties with the procedures via their organization's internal feedback mechanisms.
 4. The feedback part of the system **should** address who is required to rectify any non-compliance in each particular case and the procedure to be followed if rectification is not completed within appropriate timescales; the feedback system **should** be directed to the DDH or AM(MF) through the Mil CAM.
 5. The independent Quality Audit reports **should** be sent to the relevant department for rectification action giving target deadline dates. These dates **should** have been previously discussed with the department. The relevant department is required to rectify findings and inform the Mil CAMO QM or the Quality Auditor of such rectification.
 6. The Mil CAM **should** hold regular meetings with corrective action plan owners to check progress on rectification. Such meetings may be delegated on a routine basis to the Mil CAMO QM, subject to the Mil CAM meeting at least twice per year with the personnel involved to review the overall performance.
 7. ►The Mil CAMO QMS **should** operate as an integrated part of its parent organization's Air Safety Management System (ASMS)⁵, and any necessary implementing arrangements **should** be clearly articulated in the CAME.◄

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Establishing a Quality ►Management◄ System

8. The Mil CAMO ►QMS◄ may be combined with the ►QMS◄ of other Service or MAA-approved organizations if appropriate. Such arrangements ►will◄ be clearly articulated in the CAME.
9. The scope of the Mil CAMO ►QMS◄ will cover all Maintenance activity on Air Systems that the Mil CAMO is responsible for, both on and off platform, including Contracted Depth Maintenance.
10. The term independence in respect of this RA refers to the need of those undertaking Quality activity to be independent from the task rather than from the Mil CAMO.
11. The MAA MAOS / CAMO Form 4 can be found on the MAA Website►4◄.

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Functions of the Quality ►Management◄ System

- 4951(2) The ►QMS◄ **shall** monitor all Mil CAMO activities. It **shall** include the following functions, as a minimum:
- a. Assurance of personnel Competence.
 - b. Assurance of all CAMO tasks, processes, orders and procedures.
 - c. Assurance of CAME compliance with Regulation.
 - d. Assurance of Alternative Acceptable Means of Compliance, Waivers and Exemption (AWE) submissions and subsequent AWE management.

⁴ Refer to the MAOS / CAMO Form 4 – Details of Nominated Personnel ► <https://www.gov.uk/government/publications/regulatory-article-ra-4806-personnel-requirements-mrp-145a30>.◄

⁵ ►Refer to RA 1200 - Air Safety Management.◄

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- e. Assurance of Maintenance activity conducted by Maintenance Organizations (MO) is adequate for maintaining the Continuing Airworthiness of their Air Systems.
- f. Assurance of all Contracted Maintenance carried out in accordance with (iaw) the Air System Document Set (ADS).
- g. Assurance of continued compliance with the requirements of MAA Approval of the Mil CAMO.
- h. Assurance of all Mil CAMO activities being performed iaw RA 4900 - 4974 (MRP Part M).

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Functions of the Quality ► Management ◀ System

12. The independent Quality Audit **should**:
 - a. Conduct Verification and Validation of all procedures and changes to the procedures within the CAME.
 - b. Use product sampling and sample checks.
 - c. Reach across applicable organizations, including MO(s) (Forward and Depth (or Line and Base)), Delivery Team(s) (DT) and all Mil CAMO activity.
 - d. Ensure that all aspects of compliance are checked annually, including all the Subcontracted activities⁶. This may be carried out as a complete single exercise or subdivided over the annual period iaw a scheduled plan.
13. Where findings have been identified, the relevant procedure **should** be rechecked until the findings have been rectified, after which the independent Audit schedule may revert back to the annual interval for that procedure. Provided that there are no Safety related findings, the Audit time periods specified may be increased by the Mil CAM but this **should not** exceed 100% (ie to a 2 year cycle).
14. Where the organization has more than one location approved, the ► QMS ◀ **should** describe how these are integrated into the system and include a plan to Audit each location every year.
15. A report **should** be raised each time an Audit is carried out describing what was checked and the resulting findings against applicable requirements, procedures and products.
16. The independence of the Audit **should** be established by always ensuring that Audits are carried out by personnel not involved with the function, procedure or products being checked.
17. An organization **should** establish a Quality plan to show when and how often the Mil CAMO activities will be Audited.
18. All non-conformities and non-compliances **should** be investigated and rectified using a Root Cause Analysis (RCA) approach, tool, or techniques⁷. Instructions for the use of RCA **should** be detailed in Part 2 of the CAME.

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Functions of the Quality ► Management ◀ System

19. The independent Audit represents an objective overview of all Mil CAMO related activities. It is intended to complement the Military Airworthiness Review, to ensure that all Air Systems managed by the organization remain Airworthy. The independent Auditor cannot be directly involved with the task being Audited, though may be a part of the organization.

⁶ Refer to RA 4956 – Military Continuing Airworthiness Management Organization Tasks Performed by Other Organizations - MRP Part M Subpart G.

⁷ Further information may be found in Civil Aviation Authority - CAP1760 – Effective Problem Solving and Root Cause Identification Stage 6, refers. Available at: [http://publicapps.caa.co.uk/docs/33/CAP1760 Root Cause Identification Paper \(Issue 02 April 19\).pdf](http://publicapps.caa.co.uk/docs/33/CAP1760%20Root%20Cause%20Identification%20Paper%20(Issue%2002%20April%2019).pdf).

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20. The independent Audit does not require each procedure to be checked against each Air System when it can be shown that the particular procedure is common to more than one Air System and the procedure has been checked every year without resultant findings.

21. In regards to Contracted Maintenance it may not be necessary for the Mil CAMO QM to Audit the supply chain through multiple levels of Subcontractors. ►◀ The Mil CAMO QM ►needs◀ to monitor the directly Contracted organization►8◀ and receive Assurance that Subcontractors are being appropriately monitored if the Contracted organization's own ►QMS◀ extends to cover their activity and the Mil CAM is able to monitor such Audit reports.

22. The Mil CAMO QM ►needs◀ to be mindful of the arrangements for access to Contracted and Subcontracted organizations. Where access for the Mil CAMO is not clearly stipulated in the contract, the Mil CAMO QM ought to pursue the contracting DT to amend the contract accordingly. The Mil CAMO QM may utilize a wide range of sources to monitor such organizations; for example where a DT utilizes a Government Quality Assurance Organization Contract Monitoring Team to conduct Assurance of Contracted Maintenance, evidence from such activity may be acceptable for Assurance purposes. In the event of disputed access to a Contracted organization, the Government Quality Assurance Representative (GQAR) may undertake Assurance activity, or alternatively may apply for GQAR status; further information may be found on the Knowledge in Defence (KiD)⁹ website typing 'Managing Quality' in the search bar.

**Regulation
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Retention of Quality ►Management◀ System Records

4951(3) The records of these activities **shall** be stored for at least two years.

**Acceptable
Means of
Compliance
4951(3)**

Retention of Quality ►Management◀ System Records

23. Mil CAMO Quality System Records **should** be categorized as Continuing Airworthiness Records¹⁰ and retained for at least two years.

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Retention of Quality ►Management◀ System Records

24. RA 4964(2)¹⁰ provides additional details on record keeping requirements.

⁸ ► Refer to RA 1005 – Contracting with Competent Organizations. ◀

⁹ Refer to Knowledge in Defence at website - <https://www.gov.uk/guidance/knowledge-in-defence-kid>.

¹⁰ Refer to RA 4964(2): Continuing Airworthiness Records.