

RA 4815 - Maintenance Procedures and Safety and Quality Policy (MRP 145.A.65)

Rationale

Maintenance organizations within the Defence Air Environment (DAE) undertake a wide range of complex Maintenance activity on Air Systems and Air System components in the course of their duty or contract. Without a system of Assurance that such Maintenance is being undertaken to a standard directed by procedures and Technical Information (TI), the validity of any release statement¹ may be undermined. This RA details the requirements for a Maintenance organization to operate with a defined Quality Policy and establish a Quality Management System to deliver Assurance of approved Maintenance procedures.

Contents

Definitions Relevant to this RA

4815(1): Organization Safety and Quality Policy (MRP 145.A.65(a))

4815(2): Procedures for Good Maintenance Practices (MRP 145.A.65(b))

4815(3): Quality Management System (MRP 145.A.65(c))

Definitions

Definitions Relevant to this RA

1. **Tradesperson.** Suitably Competent and authorized staff² responsible for executing Air System Maintenance activities. This role may also be known as Support Staff within Approved Maintenance Organizations (AMOs).
2. **Supervisor.**² Suitably Competent and authorized staff, responsible for carrying out supervision of Tradespersons in the execution of their Maintenance activities. This role may also be known as Support Staff with supervisory responsibilities within AMOs.
3. **Coordinating / Certifying Staff.**³ Staff holding Authorization by the Maintenance organization to endorse the appropriate Certification of Air System Release and / or Component Release (Air System coordination / Work Order coordination).

Regulation 4815(1)

Organization Safety and Quality Policy (MRP 145.A.65(a))

4815(1) Military Maintenance Organizations (MMOs) **shall** operate within the Air Safety Management System (ASMS) developed by the relevant Duty Holder and the applicable single-Service Quality Policy⁴.
AMOs **shall** establish a Safety and Quality Policy for the organization, to be included in the Maintenance Organization Exposition (MOE)⁵.

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Organization Safety and Quality Policy (MRP 145.A.65(a))

Common AMC

4. Nil.

Additional AMC - MMOs only

5. Nil.

Additional AMC - AMOs only

6. The Safety and Quality Policy **should**, as a minimum, include a statement committing the organization to:

¹ Refer to RA 4812 – Certification of Air System Release and Component Release (MRP 145.A.50).

² Refer to RA 4807 – Certifying Staff and Support Staff (MRP 145.A.35).

³ Refer to RA 4801(1): Certifying Staff.

⁴ Refer to RA 1200 – Air Safety Management.

⁵ Refer to RA 4816 – Maintenance Organization Exposition (MRP 145.A.70) - Approved Maintenance Organizations Only.

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- a. Recognize Safety as a prime consideration at all times.
- b. Apply Human Factors principles.
- c. Encourage personnel to report Maintenance related errors / Incidents.
- d. Recognize that compliance with procedures, Quality standards, Safety standards and Regulations is the duty of all personnel.
- e. Recognize the need for all personnel to co-operate with the Quality auditors.

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Organization Safety and Quality Policy (MRP 145.A.65(a))

Common GM

7. All Defence Aviation organizations are required⁴ to establish an ASMS in order to achieve the Secretary of State's Safety Policy⁶ and the ASMS requirements⁴ must be read in conjunction with this Regulation.

Additional GM - MMOs only

8. Nil.

Additional GM - AMOs only

9. The Safety and Quality Policy required by this Regulation will be coherent with the organization's ASMS.

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Procedures for Good Maintenance Practices (MRP 145.A.65(b))

4815(2) The organization **shall** follow approved procedures, taking into account Human Factors, to ensure good Maintenance practices and compliance with MRP Part 145. Procedures **shall** include a clear process, work order or contract⁷ such that Air Systems and components may be released for use¹. AMOs **shall** detail such procedures in their MOE.

a. The Maintenance procedures established or to be established by the organization under this Regulation **shall** cover all aspects of carrying out the Maintenance activity, including the provision and control of specialized services and lay down the standards to which the organization intends to work.

b. With regard to Air System Maintenance, the organization **shall** establish procedures to minimize the Risk of multiple errors and capture errors on critical Systems. In particular, the organization **shall** have procedures to ensure that no one person is required to self-supervise a Maintenance task that involves some element of disassembly / reassembly and then repeat that same Maintenance task on identical or similar Systems on the same Air System. However, when only one person is available to carry out these tasks, then the organization's work card or work sheet **shall** include an additional stage for re-inspection of the work by this person after completion of all the same tasks.

⁶ Refer to DSA01.1 – Defence Policy for Health, Safety and Environmental Protection.

⁷ AMOs may contract Maintenance works to other MRP Part 145 organizations whose Approval covers the scope of the required works. Contracted Maintenance Organizations carry out works under their own Approval and Quality System and retain accountability of their actions and outputs. A list of Contracted organizations is to be held within the contracting AMO's MOE, refer to RA 4816 – Maintenance Organization Exposition (MRP 145.A.70) - Approved Maintenance Organizations only.

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c. Maintenance procedures **shall** be established to ensure that damage is assessed and Modifications and Repairs are carried out using approved TI.

d. No person **shall** remove, change, or replace identification information on any Product, Part or Appliance unless detailed as part of a Type Airworthiness Authority (TAA) **▶**⁸**◀** approved Instruction.

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Procedures for Good Maintenance Practices (MRP 145.A.65(b))

Common AMC

10. For Air Systems and Air System structural components that are beyond the Repair capability of the Maintenance organization the Military Continuing Airworthiness Manager (Mil CAM) **should** be informed and **should** direct alternate means to effect a Repair.

11. The Repair categories and definitions at Annex A **should** be used to categorize a Repair in consultation with the Mil CAM.

12. **▶ Specialized services should be:**

a. **Performed by appropriately qualified⁹ personnel.**

b. **Carried out under the control of the Accountable Manager (Maintenance) AM(M) for the Air System or Air System component under Maintenance.**

13. **Organizations should establish aviation engineering orders and / or local procedures that cover the control of any specialized services.**

14. **Surface finish should be conducted in accordance with (iaw) the appropriate Air System or Air System component Technical Information (TI). ◀**

Additional AMC - MMOs only

15. MMOs **should** ensure that all established Maintenance procedures and processes pertaining to good Maintenance practices achieve compliance with MRP Part 145.

16. With respect to RA 4815(2)(b) (MRP 145.A.65(b)(b)), an Independent Inspection **should** be carried out on Air Systems or Air System components on occasions that include, but are not limited to, Maintenance work involving disconnection, replacement, connection, assembly or adjustment of the following systems:

a. Those stipulated by the TAA in the Air System Document Set (ADS).

b. Any element of an Air System control System.

c. Those additionally mandated by an Aviation Duty Holder (ADH) Chief Air Engineer (CAE) or the Mil CAM.

17. An Independent Inspection **should** be sufficient to verify correct assembly and functionality covering the level of disturbance to the System.

18. An Independent Inspection **should** be conducted by an individual suitably Competent and authorized¹⁰ who has had no involvement with the original Maintenance task requiring the Independent Inspection.

19. An organization performing Maintenance work **should** remove, change, or replace identification information only iaw approved procedures.

⁸ Where the Air System is **▶ not UK MOD-owned, Type Airworthiness (TAW) management ◀** regulatory responsibility by either the TAA or Type Airworthiness Manager (TAM) needs to be agreed within the Sponsor's approved model **▶ ◀**; refer to RA 1162 – Air Safety Governance Arrangements for Civilian Operated (Development) and (In-Service) Air Systems, or refer to RA 1163 – Air Safety Governance Arrangements for Special Case Flying Air Systems. Dependent on the agreed delegation of TAW responsibilities TAM may be read in place of TAA as appropriate throughout this RA.

⁹ **▶ Refer to RA 4806(6): Specialized Services (MRP 145.A.30(f)). ◀**

¹⁰ Refer to RA 4806 – Personnel Requirements (MRP 145.A.30) and RA 4807 – Certifying Staff and Support Staff (MRP 145.A.35).

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20. Any removed identification plate **should** be re-installed only on the assembly from which it was removed.

Additional AMC - AMOs only

21. Maintenance Procedures **should** be reviewed and updated at an appropriate periodicity to ensure that they reflect current best practice. It is the Responsibility of all organizations' employees to report any unauthorized deviation from approved procedures via their organization's internal Occurrence reporting mechanisms.

22. All procedures, and changes to those procedures, **should** be verified and validated before use where practical.

23. All Maintenance procedures governing technical activity **should** be designed and presented iaw good Human Factors principles.

24. With respect to RA 4815(2)(b) (MRP 145.A.65(b)(b)), procedures **should** be established to detect and rectify Maintenance errors that could, as a minimum, result in a failure, malfunction, or Fault endangering the safe operation of the Air System if not performed properly. The procedure **should** identify the method for capturing errors, and the Maintenance tasks or processes concerned. This procedure **should** apply to any Maintenance work that involves disconnection, replacement, connection, assembly or adjustment of any element of an Air System control System, or any additional task that may be generated from, for example:

- a. Previous experiences of Maintenance errors, depending on the consequence of the failure.
- b. Information arising from the 'Occurrence reporting system'¹¹.
- c. TAA and / or Mil CAM requirements to capture errors, if applicable.

25. In order to prevent omissions, every Maintenance task or group of tasks **should** be signed-off. To ensure the task or group of tasks is completed, it **should** only be signed-off after completion. Work by unauthorized personnel (eg temporary staff or a trainee), **should** be checked by authorized personnel before the authorized personnel complete the sign-off. The grouping of tasks for the purpose of signing-off **should** allow critical steps to be clearly identified.

26. The Maintenance organization **should** ensure that when carrying out a Modification, Repair or Maintenance, the limits expressed within the approved TI provided are not compromised; this will require the development of appropriate procedures, where necessary, by the organization. The Maintenance organization **should** pay particular attention to possible adverse effects of any wiring changes.

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Procedures for Good Maintenance Practices (MRP 145.A.65(b))

Common GM

27. For the purpose of RA 4815(2)(b) (MRP 145.A.65(b)(b)), 'to self-supervise a Maintenance task' means to both carry out and inspect / supervise that Maintenance task.

► Specialized Services ◀

28. Specialized services ►are any specialized Maintenance activity, ◀ such as, but not limited to, Non-Destructive Testing (NDT), ►surface finish and welding. Specialized services require particular skills and / or qualification, outside of that normally taught as part of Air System Maintenance training such as Civil Aviation Authority (CAA) Part-66 or military Aerospace engineering trade training.

Surface Finish

29. Surface finish includes the removal and application of paint and polishing. Tasks to prepare for surface finish activities and subsequent checks and tests afterwards, are Maintenance tasks and not surface finish activities.

30. The MAA does not currently have an Approval scheme for surface finish.

¹¹ Refer to RA 4814 – Occurrence Reporting (MRP 145.A.60).

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31. The TAA or Commodity Chief Engineer must provide the Maintenance policy¹² for surface finish activities which details all tasks, application specifications, tooling and equipment and procedures. They must ensure that the surface finish task(s) are carried out in an appropriate facility / environment¹³ which meets the requirements of the specific Air System or Air System component.
32. Inadequate care and control during surface finish activities can cause damage and affect the Structural Integrity or operation of the Air System or Air System component. Care will be exercised to prevent:
- a. Reduction in fastener head size by uncontrolled use of power tools and abrasive media.
 - b. Surface scratching by use of paint scrapers.
 - c. Use of incorrect tools and equipment to remove paint and aerodynamic sealant from lap and butt joints.
 - d. Degrading of composite or plastic surfaces by abuse of particle blasting techniques.
 - e. Aluminium surface contamination by steel wool particles.
 - f. Use of incorrect chemical paint strippers.
 - g. Damage to transparencies, composites and sealants by solvent and paint removers, due to inadequate protection and / or the retention of these products in crevices.
 - h. Inadvertent deletion of placards and markings, failure to renew them, or failure to comply with the required specification for, eg Registration Marks, mandatory door markings and break in zone identification.
 - i. Blockage of vents, drains and other openings by debris, masking tape and residues of paint remover, paint or particle blast material; the possible ingress of water into fuel tanks through vent apertures or past filler cap seals when using high pressure hoses for washing down.
 - j. Loss of correct mass balance moments on flight control surfaces.
33. Following any surface finish activities, the AM(M) will ensure a Maintenance inspection of affected areas is carried out for any damage as detailed above, taking appropriate recording and remedial actions as necessary.
34. Significant surface finish activity can have an appreciable effect on an Aircraft's mass and balance. In such circumstance the requirement for the Aircraft to be measured for weight and Centre of Gravity needs to be considered iaw the applicable ADS.
35. Maintenance organizations may carry out surface finish at forward establishments¹⁴. This is limited to minor removal of paint by hand abrasion or chemicals and touching up of damaged paint finish, for areas up to 0.1m² where the Repairs do not overlap. The Repair will be sufficient to prevent corrosion until the next appropriate surface finish Maintenance.

Independent Inspections ◀

36. The integrity of Air System control systems is vital to Air Safety. The AM(M), the ADH CAE and the Mil CAM may mandate the requirement for an Independent Inspection on any System. Additionally, a Tradesperson or Supervisor may require an Independent Inspection of a System if they consider it justified by the nature or circumstances of the Maintenance work being undertaken.
37. For the purpose of this Regulation, 'Air System control system' means any System, whether electrical, mechanical or optical, operated by user input or automation, by which an Aircraft's speed, direction, flight attitude or propulsive force are changed in the air or on the ground or by which the undercarriage is retracted or

¹² ▶ Refer to RA 5407 – Support Policy Statement.

¹³ Refer to RA 4805 – Facility Requirements (MRP 145.A.25).

¹⁴ MMOs are to refer to Manual of Airworthiness Maintenance – Processes (MAM-P) – Chapter 5.2 – Surface Finish of Defence Air Environment Equipment. ◀

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lowered. The term includes power operated and assisted controls, including the immediate connections between those controls and their power Systems, and may further extend to the Systems that provide power to such controls. Automatic Systems that can be instantly overridden by the pilot are not considered to be Air System control Systems within the meaning of this Regulation, unless their failure, either in the air or on the ground, would place life or the Air System at Risk. Any elements of a System, including attachment points to the Aircraft structure, linking the appropriate pilot's control to any of the following, ►will◄ be considered as Air System control Systems. Although the list is not exhaustive, examples of Air System control systems are:

- a. Primary flying controls and reaction control Systems.
- b. Tabs, flaps, slats and airbrakes.
- c. Wing sweep control actuators.
- d. Primary power unit control mechanisms, including those for throttles, variable intakes, reverse thrust, high-pressure fuel cocks, propeller constant speed units and rotating nozzles.
- e. Helicopter rotor blade transmission and tail rotor transmission and pitch change mechanisms, including automatic blade fold systems.

Note:

The functioning of a blade folding and / or spreading System may not necessarily constitute 'disturbance' of that particular system or of the associated flying control / transmission systems.

- f. Undercarriage retraction and lowering and undercarriage steering mechanisms.
- g. Aircraft wheel brakes.
- h. Automatic flight control Systems.

38. A list of those Systems subject to Independent Inspections for a particular Air System will be detailed in the relevant TI.

39. One purpose of RA 4815(2)(b) (MRP 145.A.65(b)) is to minimize the possibility of an error being repeated whereby the identical Air System components are not reassembled correctly thereby compromising more than one system. An example is the remote possibility of failure to reinstall engine gearbox access covers or oil filler caps on all engines of a multi-engine Aircraft resulting in major oil loss from all engines.

40. A 'sign-off' is a statement or signature by the Competent Person performing or supervising the work, that the task or group of tasks has been correctly performed. A sign-off relates to one step in the Maintenance process and is therefore different from the Certification of Air System Release. 'Authorized personnel' means personnel formally authorized by the Maintenance organization approved under MRP Part 145 to sign-off tasks. Authorized personnel are not necessarily staff with certification authorization¹⁵.

41. When approved by the Commands, Expedient Repair (ER) may be used¹⁶.

Additional GM - MMOs only

42. Nil.

Additional GM - AMOs only

43. Nil.

¹⁵ Refer to RA 4807(7): Issue of Certification Authorization (MRP 145.A.35(g)).

¹⁶ ER may include the application of Aircraft Battle Damage Repair Techniques. Refer to AP101A-1500-0 – Joint Service Aircraft Battle Damage Repair Manual.

**Regulation
4815(3)**

Quality Management System (MRP 145.A.65(c))

- 4815(3) The organization¹⁷, ►¹⁸ ◀ **shall** establish a Quality Management System¹⁹ that as a minimum:
- a. Establishes a Quality plan which includes independent ► **Quality** ◀ Audits in order to assure:
- (1) The organization's and its subcontractor's²⁰ compliance with MRP Part 145 Regulations.
 - (2) The organization's Alternative Acceptable Means of Compliance, Waivers and Exemption (AWE) submissions and any subsequent AWE management.
 - (3) The organization's and its subcontractor's compliance with required Air System / Air System component standards and adequacy of the procedures to ensure that such procedures invoke good Maintenance practices and airworthy Air System / Air System components.
 - (4) The accurate recording and retention of all Continuing Airworthiness records.
 - (5) The Competence of all Maintenance personnel, including those of Subcontracted organizations
 - (6) The compliance of Subcontracted²⁰ tasks, processes and procedures to Regulations.
- b. A Quality feedback reporting system to the person or group of persons specified²¹ and ultimately to the AM(M) that ensures proper and timely corrective action is taken in response to reports resulting from the independent Audits established to meet RA 4815(3)(a) (MRP 145.A.65(c)(a)).

**Acceptable
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Quality Management System (MRP 145.A.65(c))

Common AMC

44. ► **The independence of the Quality Audit **should** be established by always ensuring that independent Quality Audits are carried out by personnel not involved in the function, procedure or products being checked.**
45. **Independent Quality Audits **should** be conducted across all working environments and working patterns to ensure that a percentage of independent Quality Audits are reflective of the varied working conditions and shift patterns that Maintenance is carried out.**
46. **The Quality Management System **should** ensure that all aspects of MRP Part 145 compliance and other applicable Regulation is checked every 12 months, either**

¹⁷ Contracted organizations **shall** refer to any further Quality Management System requirements detailed within RA 1005 – Contracting with Competent Organizations.

¹⁸ ► **Refer to RA 4806(3): Quality Manager (MRP 145.A.30(c)).** ◀

¹⁹ The principles of ISO 9001 are recommended best practice for assessing the requirements for process development, Assurance and Continuous Improvement.

²⁰ AMOs may subcontract Maintenance activities to a non-MRP Part 145 organization but in doing so the Subcontracted organization's facilities, personnel and procedures involved with the AMO's Products, Parts and Appliances undergoing Maintenance is effectively subsumed into the AMO in that it works under the contracting AMO's Quality System, and the AMO's MRP Part 145 approval is extended to include the subcontractor. It therefore follows that those parts of the subcontractor's facilities, personnel and procedures **shall** meet MRP Part 145 requirements for the duration of that Maintenance. It remains the contracting AMO's responsibility to ensure such requirements are satisfied, as it retains accountability for all actions and outputs of the Subcontracted organization in the Maintenance of the AMO's Products, Parts and Appliances. All Subcontracted organizations **shall** be listed within the contracting AMO's Maintenance Organization Exposition.

²¹ Refer to RA 4806(2): Personnel Responsible to the Accountable Manager (Maintenance) (MRP 145.A.30(b)).

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as a complete single exercise or subdivided over the 12 month period iaw a scheduled plan.

47. The independent Quality Audit does not require each procedure to be checked against each product line when it can be shown that the particular procedure is common to more than one product line and the procedure has been checked every 12 months without resultant findings. However, where findings have been identified, the particular procedure **should** be rechecked against other product lines until the findings have been rectified, after which the independent Quality Audit procedure may revert back to 12 monthly for the particular procedure.

48. A report **should** be raised each time an independent Quality Audit is carried out, describing what was checked and the resulting findings against applicable requirements, procedures and products.

49. All records pertaining to the independent Quality Audit and the Quality feedback system **should** be retained for at least 2 years after the date of clearance of the finding to which they refer. ◀

Additional AMC - MMOs only

50. ▶ Nil. ◀

Additional AMC - AMOs only

51. ▶◀

52. ▶◀

53. ▶◀

54. ▶◀

55. ▶◀

56. A small organization (one with a maximum of 10 personnel actively engaged in Maintenance) that chooses to contract the independent ▶ Quality ◀ Audit element of the Quality Management System iaw RA 4815(3)(a) (MRP 145.A.65(c)) **should** only do so with agreement from the MAA and under the condition that the ▶ independent Quality ◀ Audit is carried out twice in every 12 month period.

57. Where the organization has line stations listed²², the Quality Management System **should** describe how these are integrated into the System and include a plan to ▶ independently Quality ◀ Audit each listed line station at a frequency consistent with the extent of flight activity at the particular line station. The maximum period between ▶ independent Quality ◀ Audits of a particular line station **should not** exceed 12 months.

58. ▶◀

59. The Quality feedback system **should not** be Contracted to outside persons.

60. On receiving the independent Quality Audit report, the relevant department(s) **should** rectify findings and inform the Quality department or nominated Quality auditor of such rectification.

61. The AM(M) **should** hold regular meetings with staff to check progress on rectification except that, for large organizations (with more than about 500 Maintenance staff), such meetings may be delegated on a day-to-day basis to the Quality manager, subject to the AM(M) meeting at least twice per year with the senior staff involved to review the overall performance and receiving at least a half yearly summary report on findings of non-compliance.

62. ▶◀

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Quality Management System (MRP 145.A.65(c))

Common GM

63. ▶ The primary objective of the Quality Management System is to enable the organization to ensure that it can deliver a safe product and that the organization

²² Refer to RA 4817 – Privileges of the Organization (MRP 145.A.75).

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remains in compliance with applicable Regulation and policy. Essential elements of the Quality Management System are the independent Quality Audit and the Quality feedback system. ◀

Additional GM - MMOs only

64. ▶ Self-Audits, Internal Quality Audits (IQA) and External Quality Audits (EQA) each constitute independent Quality Audits within the scope of this Regulation. ◀

65. This Regulation requires an MMO to have its own Quality Management System¹⁹ that incorporates a schedule of independent ▶ Quality ◀ Audits with a formal reporting mechanism to management. The 'Self Audit' and reporting processes¹⁹ satisfies this requirement, with independence being achieved by using staff independent of the process being ▶ Self ◀ Audited.

Additional GM - AMOs only

66. ▶ Nil ◀

The ▶ Quality ◀ Audit ▶ ◀

▶ Common GM ◀

67. The independent ▶ Quality ◀ Audit is an objective process of routine sample checks, of all aspects of the organization's ability to carry out all Maintenance, to the required standards and includes some product sampling, as this is the end result of the Maintenance process. It represents an objective overview of the complete Maintenance related activities. ▶ It ◀ is intended to complement, ▶ but in no way replace, ◀ the requirement²³ for Coordinating / Certifying Staff to be satisfied that all required Maintenance has been properly carried out, before endorsement of the Certification of Air System Release.

68. Procedures and product ▶ independent Quality ◀ Audits may be combined by selecting a specific product example. ▶ This may be ◀ an Air System, engine or instrument, and sample checking all the procedures and requirements associated with the specific product example. ▶ This ◀ ensures that the end result is an airworthy product.

69. ▶ ◀

70. The sample check of a product means to witness any relevant testing and visually inspect the product and associated documentation. It is not intended for the sample check to involve repeat disassembly or testing, unless the sample check identifies findings requiring such action.

▶ Additional GM - MMOs only

71. Nil.

Additional GM - AMOs only

72. For the purpose of the independent Quality Audit, a product line includes any product under an Approval class rating²⁴, as specified in the Approval schedule issued to the particular organization. It therefore follows, that a Maintenance organization approved under MRP Part 145 with a capability to maintain Air Systems and Repair engines, brakes and autopilots would need to carry out 4 complete independent Quality Audit sample checks each year. This is unless a different interval of Quality Audits has been stipulated by the MAA. ◀

73. In order to ensure the independence of the auditor(s), it follows that:

a. A large Maintenance organization approved under MRP Part 145, being an organization with more than about 500 Maintenance staff, will most likely have a dedicated Quality Audit group. ▶ Their ◀ sole function ▶ would be ◀ to conduct ▶ Quality ◀ Audits, raise finding reports and follow up to check that findings are being rectified.

b. A medium-sized Maintenance organization approved under MRP Part 145, being an organization with less than about 500 Maintenance staff, may use

²³ Refer to RA 4812(1): Certification of Air System Release (MRP 145.A.50(a)).

²⁴ Refer to RA 4804 – Terms of Approval (MRP 145.A.20) – Approved Maintenance Organizations Only.

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Competent personnel from one section / department ► to Quality Audit another ◀ section / department. ► This is on the proviso that the Auditing personnel are not responsible for the production function, procedure or product under Audit and ◀ the overall planning and implementation ► is ◀ under the control of the Quality manager.

c. Small organizations with a maximum of 10 Maintenance staff actively engaged in carrying out Maintenance, may contract the independent ► Quality ◀ Audit element of the Quality Management System, to another organization approved under MRP Part 145, or a suitably qualified and Competent Person.

74. The table at Annex B provides guidance on one acceptable working outline ► Quality ◀ Audit plan, to meet part of the needs of this Regulation. There are ► many ◀ other acceptable working Audit plans ► which will comply with this Regulation. ◀

The Quality feedback system ► ◀

► Common GM ◀

75. The principal function of the Quality feedback system is to ensure that all findings resulting from the independent Quality Audits of the organization are properly investigated and corrected in a timely manner and to enable the AM(M) to be kept informed of any Safety issues and the extent of compliance with MRP Part 145.

76. A key part of this feedback system is sending the independent Quality Audit reports to the relevant department(s) for rectification action giving target rectification dates. Rectification dates may be discussed with such department(s) before the Quality department or nominated Quality auditor confirms such dates in the report.

ANNEX A

AIR SYSTEM REPAIR CATEGORIES AND DEFINITIONS

Repair Category	Definition
1	The Air System is repairable within the Maintenance organization's capabilities.
2	The Air System is repairable within the Maintenance organization's capabilities, or the Maintenance capabilities of any Forward organization to which it may be allotted.
3 (PROV)	The Air System is repairable on site, but the work is considered by the Maintenance organization to be beyond their Forward Maintenance organization capability.
3 (SER)	The Air System is repairable on site, but the work has been confirmed as beyond the Maintenance organization or their Forward Maintenance organization's capability and will be done by a Service Repair Organization (SRO).
3 (DEPTH)	The Air System is repairable on site, but the work has been confirmed as beyond the capability of the Maintenance organization, their Forward Maintenance organization and the relevant SRO: the work will be done by a Depth Maintenance organization.
3 (FLY)	Post-categorization, the Air System may be flown (or may have temporary Repairs effected so that it can be flown), if necessary under special conditions, either to another site for Repair or until a suitable date can be arranged for Repair at its normal base (See Note 1). In exceptional circumstances, the Air System may be flown post-Repair but prior to final SRO Repair clearance (See Notes 1 and 2).
4 (PROV)	The Air System may be repairable but further strip, assessment and categorization is required. The Repair may be carried out at a MOD facility or Contractors facility upon categorization.
4 (SER)	The Air System is repairable, but it is considered to need special facilities or Products, Parts and Appliances not available on site. The Repair will be carried out by a Repair Organization (RO) at a MOD facility.
4 (WKS)	The Air System is repairable, but it is considered to need special facilities or Products, Parts and Appliances not available on site. The Repair will be carried out at a Contractor's works.
4 (FLY)	The Air System is not fully repairable on site but may have temporary repairs effected so that it can be flown, if necessary under special conditions, to the appropriate RO. This category tends to be a one flight only return to works. A CAT 4 (FLY) recommendation will be made by the SRO but Responsibility for Risk to Life (RtL) will remain with the Maintenance organization.
5 (PROV)	The Air System is considered beyond economic Repair.
5 (COMP)	The Air System is beyond economic Repair, or is surplus, but is recoverable for breakdown to components and spare parts.
5 (GI)	The Air System is beyond economic Repair, or is surplus, but is suitable for ground instructional use.
5 (SCRAP)	The Air System is beyond economic Repair, or is surplus, and is fit for scrap or disposal only.
5 (MISSING)	The ►Aircraft◄ is missing from a flight.

Notes:

- The Maintenance organization will ensure that any deferment or limitations detailed in the SRO's recommendation are recorded in the Air System Limitations Log (MOD Form 703) or Acceptable Deferred Faults Log (MOD Form 704) or Electronic Information System equivalent. The applicable SRO task number ►will◄ be recorded in any such

entry. The SRO can provide Structural Integrity advice, a recommendation and / or proposed limitations, but Responsibility for RtL will remain with the Maintenance organization.

- 2 Applicable to 1710 Naval Air Squadron (NAS) only.

ANNEX B

EXAMPLE OUTLINE AUDIT PLAN (AMOs only)

1. The example outline Audit plan at Table A-1 lists the subject matter that will be covered by the Audit; its applicability to the various types of workshops and Air System facilities will have to be assessed. The list will therefore be tailored for the particular situation and more than one list may be necessary.
2. Each list will need to be shown against a timetable to indicate when the particular item is scheduled for Audit and when the Audit was completed.

Table A-1. Example Outline Audit Plan.

ITEM	Sub-Item	HANGAR	ENGINE WORKSHOP	MECH WORKSHOP	AVIONIC WORKSHOP
RA 4800 (MRP Part-145)	RA 4800(1) RA 4800(2)				
RA 4801 (MRP 145.A.01)	RA 4801(1)				
RA 4802 (MRP 145.A.10)	RA 4802(1)				
RA 4803 (MRP 145.A.15)	RA 4803(1)				
RA 4804 (MRP 145.A.20)	RA 4804(1)				
RA 4805 (MRP 145.A.25)	RA 4805(1) RA 4805(2) RA 4805(3) RA 4805(4)				
RA 4806 (MRP 145.A.30)	RA 4806(1) RA 4806(2) RA 4806(3) RA 4806(4) RA 4806(5) RA 4806(6) RA 4806(7) RA 4806(8) RA 4806(9) RA 4806(10)				
RA 4807 (MRP 145.A.35)	RA 4807(1) RA 4807(2) RA 4807(3) RA 4807(4) RA 4807(5) RA 4807(6) RA 4807(7) RA 4807(8) RA 4807(9) RA 4807(10) RA 4807(11) RA 4807(12)				
RA 4808 (MRP 145.A.40)	RA 4808(1) RA 4808(2) RA 4808(3)				
RA 4809 (MRP 145.A.42)	RA 4809(1) RA 4809(2) RA 4809(3) RA 4809(4)				
RA 4810 (MRP 145.A.45)	RA 4810(1) RA 4810(2) RA 4810(3) RA 4810(4) RA 4810(5) RA 4810(6) RA 4810(7)				
RA 4811 (MRP 145.A.47)	RA 4811(1) RA 4811(2) RA 4811(3)				
RA 4812 (MRP 145.A.50)	RA 4812(1) RA 4812(2) RA 4812(3) RA 4812(4) RA 4812(5) ▶ RA 4812(6) ◀				

ITEM	Sub-Item	HANGAR	ENGINE WORKSHOP	MECH WORKSHOP	AVIONIC WORKSHOP
RA 4813 (MRP 145.A.55)	RA 4813(1) RA 4813(2) RA 4813(3) RA 4813(4)				
RA 4814 (MRP 145.A.60)	RA 4814(1) RA 4814(2) RA 4814(3)				
RA 4815 (MRP 145.A.65)	RA 4815(1) RA 4815(2) RA 4815(3)				
RA 4816 (MRP 145.A.70)	RA 4816(1) RA 4816(2) RA 4816(3) RA 4816(4) RA 4816(5)				
RA 4817 (MRP 145.A.75)	RA 4817(1)				
RA 4818 (MRP 145.A.80)	RA 4818(1)				
RA 4819 (MRP 145.A.85)	RA 4819(1)				
RA 4820 (MRP 145.A.90)	RA 4820(1) RA 4820(2)				
RA 4821 (MRP 145.A.95)	RA 4821(3)				
MOE Part 2.1					
MOE Part 2.2					
MOE Part 2.3					
MOE Part 2.4					
MOE Part 2.5					
MOE Part 2.6					
MOE Part 2.7					
MOE Part 2.8					
MOE Part 2.9					
MOE Part 2.10					
MOE Part 2.11					
MOE Part 2.12					
MOE Part 2.13					
MOE Part 2.14					
MOE Part 2.15					
MOE Part 2.16					
MOE Part 2.17					
MOE Part 2.18					
MOE Part 2.19					
MOE Part 2.20					
MOE Part 2.21					
MOE Part 2.22					
MOE Part 2.23					
MOE Part 2.24					
MOE Part 2.25					
MOE Part 2.26					
MOE Part 2.27					
MOE Part 2.28					
MOE Part L2.1					
MOE Part L2.2					
MOE Part L2.3					
MOE Part L2.4					
MOE Part L2.5					
MOE Part L2.6					
MOE Part L2.7					
MOE Part 3.1					
MOE Part 3.2					
MOE Part 3.3					
MOE Part 3.4					
MOE Part 3.5					
MOE Part 3.6					
MOE Part 3.7					
MOE Part 3.8					
MOE Part 3.9					
MOE Part 3.10					

ITEM	Sub-Item	HANGAR	ENGINE WORKSHOP	MECH WORKSHOP	AVIONIC WORKSHOP
MOE Part 3.11					
MOE Part 3.12					
MOE Part 3.13					
MOE Part 3.14					

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