

NPA/24/35

Title of Proposal: RA 2301 – Responsibility for an Air System

RA(s) or Manual Chapter(s): RA 2301

Organizations and / or business sectors affected: All of the Regulated Community.

RFC Serial No: MAA/RFC/2022/229

MAA Author

Post	Name	Rank	Signature
MAA-Reg-Fly1	Redacted	Redacted	Redacted - Original Signed

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MAA LegAd (if required)

Post	Name	Rank	Signature
N/A	N/A	N/A	N/A

Cross-references to Other Documents or Relevant Sources

Other MRP Amendments: N/A

Service Inquiry Recommendations: N/A

AAIB Recommendations: N/A

Other Investigation Recommendations: N/A

Any Other Document: N/A

Feedback Notes for the Regulated Community

The Regulated Community are invited to offer feedback about the proposed amendment in the following areas:

- Air or Flight Safety impact
- Operational impact
- Errors or omissions
- Timescale for implementation
- Cost of implementation
- Amendment to internal processes/orders
- Resourcing the outcome of change
- (Contract amendments because of the change)

The format for feedback is available within a single Excel Template file on both internal and external MAA websites; it is important to use this format to ensure that your responses are considered and answered correctly.

Summary of Proposed Amendment

Objective: Quinquennial Review.

Changes made: Update to cater for RPAS Ops.

- Air System custody transfer can be via a physical signature or conducted electronically between launch and recovery crews and mission crews when remotely located.
- Introduction of RPAS Ground Operator (RGO), who can conduct acceptance checks on behalf of the Aircraft Commander (Protector Ops).
- Reg amended to more closely reflect Continuous Charge Ops (CCOps), which will include single flight, multiple Aircraft Commander ops. RFCs for definition of CCOps in MAA02 and MAM-P submitted to support.

Impact Assessment: Minimal.

Consultation Period Ends: 4 August 2024

The consultation period for this proposed amendment ends on the stated date. Please send your feedback, using the Response Form, via email to DSA-MAA-MRPEnquiries@mod.gov.uk

MAA Approval

Post	Name	Rank	Signature
MAA-OpAssure-Op-DepHd	Redacted	Redacted	Redacted - Original Signed

RA 2301 - Responsibility for an Air System

Rationale

Responsibility for an Air System ► lies with the individual or organization that holds custody of it. Custody ◀ is transferred between the ► Maintenance Organization¹ ◀ and the Aircrew when ► required for ground runs, taxi checks or ◀ flying operations ► ◀. A failure to correctly record this process could result in a breakdown in Maintenance activity and increase Risk to Life, ► therefore, ◀ it is necessary to record ► each ◀ transfer of custody ► ◀ to ensure that an auditable record exists.

Contents

- 2301(1): Transfer of Custody of Air Systems
- 2301(2): Flying Requirements Post Maintenance
- 2301(3): Air System Acceptance Checks
- 2301(4): Exceeding Parameters and Hazardous Incidents

Regulation 2301(1)

Transfer of Custody of Air Systems

2301(1) Custody of ► ◀ an Air System **shall** transfer to the Aircraft Commander from the time ► it is formally accepted until transferred to the next custodian². ◀

Acceptable Means of Compliance 2301(1)

Transfer of Custody of Air Systems

1. ► Formal acceptance of custody of an Air System **should** be via a physical signature or recorded electronically. A record of acceptance **should** be retained³ for Audit purposes. ◀
2. The Aircraft Commander **should** ensure that they are satisfied with the declared condition of the Air System when ► custody of it is accepted. ◀ If they are not satisfied, they **should** declare the Air System Unserviceable.
3. Once custody of the Air System has been accepted, the Aircraft Commander **should** authorize and monitor any subsequent Maintenance activity that may be required prior to ► transfer of custody back to the Maintenance organization¹. ◀
4. The Aircraft Commander **should** ensure that the ► Air System ◀ technical log (MOD Form 700 or equivalent) has been updated to reflect the condition of the Air System when the after-flight declaration is completed and that the symptoms of any new Air System Faults have been adequately briefed to the ► next custodian². ◀
5. ► During mid-flight transfer of custody, Air System Faults not recorded in the ► Air System ◀ technical log (MOD Form 700 or equivalent) **should** be briefed between Aircraft Commanders. ◀

Guidance Material 2301(1)

Transfer of Custody of Air Systems

6. Unless operating under Continuous Charge⁴, transfer of custody ► of ◀ the Air System is between the Aircraft Commander and the supporting Maintenance organization¹. When operating under Continuous Charge, transfer of custody ► of ◀ the Air System ► or Aircraft ◀ is between Aircraft Commanders.
7. ► Acceptance of custody by an Aircraft Commander ◀ certifies that:
 - a. Any limitations are acceptable to the Aircraft Commander for the intended flight.

¹ ► For the purpose of this Regulation the Maintenance organization means the Military Maintenance Organization / Approved Maintenance Organization which holds custody of an Air System on behalf of the Continuing Airworthiness Management Organization.

² The next custodian could be the Maintenance organization or another Aircraft Commander.

³ Refer to RA 2401 – Documents and Records, RA 4813 – Maintenance Records, and JSP 441 – Defence Records Management Policy and Procedures for guidance on retention of records.

⁴ Refer to RA 2210(2): Continuous Charge Operations, and MAA02 Master Glossary. ◀

**Guidance
Material
2301(1)**

- b. The Aircraft Commander is aware of all Acceptable Deferred Faults.
 - c. The recorded state of the Air System in respect of Role Equipment, fuel, oxygen, etc, is acceptable to the Aircraft Commander for the intended flight.
 - d. The recorded armament state of the Air System is as ordered by the authorizing officer.
 - e. The ► Air System ◀ technical log (MOD Form 700 or equivalent) has been checked and co-ordinated by an appropriately authorized individual.
 - f. Any flying requirement, ► ground run ◀ or taxi checks are acceptable to the Aircraft Commander, and they have been adequately briefed on any special tests required.
 - g. Any Aircrew accepted Faults documented in the Air System technical log are acceptable to the Aircraft Commander.
8. The signature on the after-flight declaration certifies that:
- a. The ► Air System ◀ has ► been ◀ returned ► ◀ to the 'Finally Armed' state in accordance with (iaw) the Air System Document Set (ADS), or that no Explosive Armament Stores are fitted.
 - b. Each Fault that became evident whilst the Aircraft Commander was responsible for the Air System (including pre-flight Faults), has been recorded in the appropriate section of the Air System technical log (eg MOD Form 707A).
 - c. The results of any ► ground run, taxiing or ◀ flying requirements undertaken have been entered in the appropriate section of the Air System technical log (eg MOD Form 707B(AFRC)).
 - d. The flying log and any equipment running logs in the Air System technical log (eg MOD Form 724) have been updated.
 - e. Where applicable, the oil replenishment record in the Air System technical log (eg MOD Form 737) has been completed for any oil replenishments carried out whilst the Aircraft Commander was responsible for the Air System.
 - f. Any record of hours flown, and cumulative hours flown has been updated in the Air System technical log.
 - g. Where applicable, the Aircraft Assisted Escape System has been placed into the 'safe for parking' condition.

**Regulation
2301(2)**

Flying Requirements Post Maintenance

- 2301(2) Aircraft Commanders **shall** familiarize themselves with any ► flying, taxi or ground run requirements ◀ raised as a result of Maintenance ► ◀.

**Acceptable
Means of
Compliance
2301(2)**

Flying Requirements Post Maintenance

9. On completion of the flight, the Responsible Aircrew Member **should** document the result of the ► flying, taxi or ground run ◀ in the appropriate section of the Air System technical log (MOD Form 700 or equivalent).

**Guidance
Material
2301(2)**

Flying Requirements Post Maintenance

10. ► Guidance on the conduct of post-Maintenance test flights can be found in RA 2220⁵. ◀

⁵ ► Refer to RA 2220 – Maintenance Test Flights. ◀

**Regulation
2301(3)**

Air System Acceptance Checks

2301(3) The Aircraft Commander **shall** ensure that all necessary acceptance checks (walk-round) are carried out ► **law the ADS** ◀ before flight.

**Acceptable
Means of
Compliance
2301(3)**

Air System Acceptance Checks

11. The Aircraft Commander ► **should undertake the acceptance checks unless they choose to delegate them to a** ◀ Responsible Aircrew Member ► **or Remotely Piloted Air System Ground Operator (RGO)⁶, in which case the delegated individual** ◀ **should** undertake the acceptance checks personally. ► **Any significant observations made** **should** be reported to the Aircraft Commander before flight. ◀

12. ► ◀

13. ► **The Aviation Duty Holder / Accountable Manager (Military Flying) should** ensure that:

- a. RGO training is Defence Systems Approach to Training compliant.
- b. RGOs attend the pre-sortie Aircrew brief, either virtually or in-person.
- c. The Aircraft Commander is recorded as taking custody of the Aircraft at the same time as the RGO assumes their delegated role. ◀

**Guidance
Material
2301(3)**

Air System Acceptance Checks

14. ► ◀

15. While not part of an Air System's Maintenance schedule, Air System acceptance checks are vital, since it is possible for an Air System to be cleared for flight yet not be in a fit condition for flight due to, for example, wings or rotors being folded, covers and blanks still in position, etc.

16. Air System acceptance checks will be promulgated in the ► **Flight Reference Cards, or equivalent.**

17. **Whenever possible, RGOs will attend the pre-sortie Aircrew brief in-person.** ◀

**Regulation
2301(4)**

Exceeding Parameters and Hazardous Incidents

2301(4) The Aircraft Commander **shall** inform the responsible Maintenance organization¹ when an Air System in their custody has been exposed to an event that might adversely affect its serviceability.

**Acceptable
Means of
Compliance
2301(4)**

Exceeding Parameters and Hazardous Incidents

18. Nil.

**Guidance
Material
2301(4)**

Exceeding Parameters and Hazardous Incidents

19. An 'event' that might be considered as adversely affecting an Air System's serviceability may include, but is not limited to:

- a. Exceeding an Air System, engine or component operating parameter.
- b. Excessively turbulent flight conditions.

⁶ ► **Remotely Piloted Air System Ground Operator – A suitably qualified and experienced Aircraft Ground Technician, approved by the Aviation Duty Holder / Accountable Manager (Military Flying), who acts on behalf of the Aircraft Commander to conduct acceptance checks and ensure the Safe Operating Environment of the Remotely Piloted Aircraft on the ground.** ◀

**Guidance
Material
2301(4)**

- c. High winds or storm conditions whilst parked.
- d. Lightning strike.
- e. Bird or wildlife strike.
- f. Shock loading of an engine or component.
- g. Heavy landing.
- h. Heavy sea spray.
- i. Contamination by fire extinguishant or other potentially Hazardous gas / fluid.
- j. Blast or weapon efflux from an adjacent weapon installation.
- k. Volcanic ash exposure.

20. ▶ A parameter exceedance or Hazardous Incident must be reported iaw RA 1410⁷. ◀

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⁷ ▶ Refer to RA 1410 – Occurrence Reporting and Management. ◀