

NPA/25/42

Title of Proposal: Quinquennial Review

RA(s) or Manual Chapter(s): RA 3226

Organizations and / or business sectors affected: RC

RFC Serial No:

MAA Author

Post	Name	Rank	Signature
MAA Reg ATM Ad Infra	Redacted	Redacted	Redacted - Original Signed

MAA Supervisor

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

MAA Independent

Post	Name	Rank	Signature
MAA-Reg-Eng-4900	Redacted	Redacted	Redacted - Original Signed

MAA LegAd (if required)

Post	Name	Rank	Signature
N/A	N/A	N/A	Choose an item.

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: A quinquennial review has been conducted. Amendments have been made to promote best practice and accuracy. This has included some superfluous content being removed to aid conciseness and removing duplication from provenance documentation. Terminology has been replaced by the updated version.

Secondary Surveillance Radar now replaced with Cooperative Surveillance Radar. Footnote 1 describes its applicability to legacy terminology.

Title: Renamed to Cooperative in line with new terminology.

Rationale: Amended to abide by Context Hazard Defence format.

Contents: 3226(3) Amended to include new terminology (cooperative)

Para 2 & 3: indented to be sub paragraphs of Sub-paragraph a. This is to aid in clarity as to what the content is discussing.

Sub Paragraph 1a(2): Removal of superfluous content.

Para 5, 6a: Removal of superfluous content.

Para 9: Removal of superfluous content.

Reg 3226(3): Wording amended to reflect updated terminology.

Reg 3226(3)GM: Removed superfluous content.

Impact Assessment: Training / Equipment / Personnel / Information / Doctrine and Concepts / Organization / Infrastructure / Logistics (TEPIDOIL)

T - N/A

E – N/A

P – N/A

I – N/A

D – N/A

O – N/A

I – N/A

L – N/A

Consultation Period Ends: 23 January 2026

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 Dep Hd Regs	Redacted	Redacted	Redacted - Original Signed

RA 3226 – ► Cooperative ◀ Surveillance Radar

Rationale

► A Cooperative Surveillance Radar¹ provides Controllers with critical information regarding Aircraft identity, position, and Altitude. Without accurate information from the radar, the safe management of Air Traffic would become significantly more complex, potentially increasing the Risk of errors and Incidents. To ensure the efficient and safe execution of Air Traffic Services (ATS), the accuracy of the information provided by the Co-operative Surveillance Radar must be confirmed as accurate. ◀

Contents

3226(1): Validation of Mode 3/A Codes

3226(2): Verification of Mode C Data

3226(3): Level Occupancy using ► Cooperative ◀ Surveillance Radar

Regulation 3226(1)

Validation of Mode 3/A Codes

3226(1) A Controller assigning any Mode 3/A code **shall** validate the code as soon as possible.

Acceptable Means of Compliance 3226(1)

Validation of Mode 3/A Codes

1. Mode 3/A codes **should** be validated as follows:
 - a. A Controller assigning any Mode 3/A code **should** validate the code by checking as soon as possible, either by direct reference to their surveillance display or with the assistance of another controlling agency, that the data displayed corresponds with the code which has been assigned.
 - (1) ► If this is not the case, the pilot **should** be instructed to reset the assigned code. Where this fails to achieve display of the assigned code, then the pilot **should** be instructed to select Secondary Surveillance Radar (SSR) mode A 0000.
 - (2) If a corrupt code still exists, the pilot **should** normally be instructed to switch off the transponder. However, where approved by local procedures and provided the Mode C has been verified, the corrupt code may be retained to assist identification and tracking. Associated ATS units **should** be informed of the retention of corrupt data. ◀
 - b. ► ◀
 - c. ► ◀
 - d. At units where code callsign conversion equipment is in use, procedures to ensure the correct correlation of the callsign with the assigned code **should** be utilized by Controllers and included in Local / Unit Orders.
 - e. Where a Controller can ascertain from the Code Allocation Plan that a discrete Mode 3/A code has been assigned by a unit capable of validating the code and has not been notified that the code is corrupt, then that code **should** be deemed validated.
2. SSR Code assignments mean that codes may be re-used in more than one area and Controllers **should** therefore act with caution in areas where duplicate code allocations may occur.

Guidance Material 3226(1)

Validation of Mode 3/A Codes

3. **Code Allocation Plan.** Controllers assign Mode 3/A codes to Aircraft according to the Code Allocation Plan, which comprises:

¹ Throughout this RA, any reference to ► Cooperative ◀ Surveillance Radar is equally applicable to Wide Area Multilateration, ► Secondary Surveillance Radar (SSR) ◀ and Automatic Dependant Surveillance Broadcast.

Guidance Material 3226(1)

- a. Discrete codes comprising:
 - (1) Domestic codes which are allocated to Aircraft flying within the Areas of Responsibility (AoR) of a unit.
 - (2) Centralised ► **Mode 3/A** ◄ Code Assignment and Management System (CCAMS) codes which are assigned to international flights will normally be retained beyond the AoR of the assigning unit.
- b. Special purpose codes allocated internationally.
- c. Conspicuity codes, allocated nationally, or to specific users / units.

Regulation 3226(2)

Verification of Mode C Data

3226(2) Controllers **shall** verify Mode C data transmitted by Aircraft for accuracy on initial contact once the Aircraft has been positively identified.

Acceptable Means of Compliance 3226(2)

Verification of Mode C Data

4. ► ◄
5. Mode C data **should** be verified by one of the following methods:
 - a. By a visual check of the data readout ► ◄ on receipt of a pilot's report giving their present or passing level.² ► ◄ Care **should** be exercised when assessing the accuracy of the Mode C readout if the Aircraft is climbing or descending.
 - b. By coordination with another unit.
6. There is no requirement to monitor Mode C readouts for possible discrepancies once verification has been effected, nor is it necessary to notify a pilot whose Mode C data is within the permitted limit. However, if a Controller observes a discrepancy of more than 200 ft either during initial verification or during the subsequent provision of an ATS, the Controller **should**:
 - a. Ask the pilot to confirm their altimeter setting and level.
 - b. If the discrepancy remains, the pilot **should** be instructed to switch off Mode C. If independent switching of Mode C is not possible the pilot **should** be instructed to select SSR Code A 0000 to indicate a transponder malfunction.
7. A Mode C readout may be deemed verified if it is associated with a validated, or deemed validated, Mode 3/A code. Codes with which the associated Mode C data **should** be considered unvalidated and unverified are annotated accordingly in the UK SSR Code Allocation Plan.

Guidance Material 3226(2)

Verification of Mode C Data

8. ► Nil. ◄

Regulation 3226(3)

Level Occupancy using ► **Cooperative** ◄ **Surveillance Radar**

3226(3) Controllers **shall** ensure specified criteria are met when utilizing ► **Cooperative Surveillance Radar** ◄ to assess level occupancy.

Acceptable Means of Compliance 3226(3)

Level Occupancy using ► **Cooperative** ◄ **Surveillance Radar**

9. **Criteria for Assessing Level Occupancy.** The assessment of level occupancy by use of verified Mode C **should** be based on the following criteria:

² In this context level may refer to altitude, height or flight level.

**Acceptable
Means of
Compliance
3226(3)**

- a. **In Level Flight.** An Aircraft **should** be considered to be at an assigned level provided that the Mode C readout indicates 200 ft or less from that level.
- b. **Vacating an Assigned Level.** An Aircraft which is known to have been cleared to vacate a level **should** be considered to have done so when the Mode C readout indicates a change of 400 ft or more in the anticipated direction.
- c. **Passing a Level.** An Aircraft climbing or descending **should** be considered to have passed through a level when the Mode C readout indicates that the level has been passed by 400 ft or more in the required direction.
- d. **Reaching a Level.** An Aircraft **should** be considered to have reached an assigned level when three successive Mode C readouts indicate 200 ft or less from that level.

**Guidance
Material
3226(3)****Level Occupancy using ► Cooperative ◄ Surveillance Radar**

10. ► Nil. ◄

Draft for NPA

Intentionally Blank for Print Pagination

Draft for NPA