

NPA/24/28

Title of Proposal: Aerodrome Service and Brake Chute Operations

RA(s) or Manual Chapter(s): RA 3261 and RA 3271

Organizations and / or business sectors affected: ADHs, AM(MF)s, HoEs and AA-Facing Organizations

RFC Serial No: MAA/RFC/2019/184, 2023/132 and 2024/022

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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: Transfer any references to emergency information across into the re-write of RA 3311 – Aircraft Emergency and Crash Procedures. Implement changes requested within the three RFCs and remove duplication of information that was within RA 3271 to facilitate the withdrawal of this RA.

Changes made: The changes requested within the three RFCs have been inserted into paragraphs 38, 50 and all three sub-regulations that now state ‘Head of AA-Facing Organizations and HoEs shall...’. Information relating to emergency procedures have been transferred across in RA 3311 and a new paragraph relating to brake chute recovery has been inserted to facilitate the removal of RA 3271. Paragraph 61 has been removed as it was deemed unsuitable to sit within RA 3261 and the information is already captured within RA 1010(6) and RA 3049.

Impact Assessment: Negligible

Consultation Period Ends: 12 June 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

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RA 3261 - Aerodrome Service

Rationale

The Aerodrome environment may contain a complex mix of ► Aircraft, vehicles, and personnel, ◀ often operating in close proximity ► that require to be safely managed, controlled and, where necessary, assisted in an emergency. Without effective control procedures and management of Aerodrome assets, Aerodrome users may be exposed to increased Risk of harm. It is therefore essential that an Aerodrome Service is correctly provided to enable ◀ the safe separation and effective operation of Aircraft, vehicles, and ► personnel ◀ on the Movement Area and ► ◀ in the vicinity of the Aerodrome ► while also enabling an effective emergency response when required. ◀

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Regulation 3261(1)

Aerodrome Service

3261(1) ► Head of ◀ Aviation Duty Holders-Facing Organizations ► and Accountable Manager (Military Flying)-Facing Organizations (AA-Facing Organizations) and ◀ Heads of Establishment (HoE) shall provide an Aerodrome Service at Aerodromes for which they are responsible ► ◀.

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Aerodrome Service

1. Controllers providing an Aerodrome Service **should** issue information and instructions to Aircraft to achieve a safe, orderly and expeditious flow of air traffic in order to assist in preventing collisions between:
 - a. Aircraft on the Manoeuvring Area.
 - b. Aircraft and obstructions on the Manoeuvring Area.
 - c. Aircraft landing and taking off.
 - d. Aircraft flying within the ► visual ◀ circuit ► and in the vicinity of the Aerodrome Traffic Zone (ATZ). ◀
2. All instructions passed to Aircraft, vehicles and personnel on the Movement Area by ► Air Traffic Control (ATC) personnel, ◀ **should** be considered as mandatory ► ◀.
3. **Aerodrome Service Provision.** Controllers providing an Aerodrome Service **should**, as a minimum:
 - a. Alert and dispatch ► Aerodrome Emergency Services^{1,2}. ◀
 - b. Sequence Visual Flight Rules (VFR) traffic flying in the ► visual ◀ circuit and all movements of Aircraft on the Manoeuvring Area.
 - c. Sequence the mixed arrival and departure of visual and instrument traffic.
 - d. Notify changes to Aerodrome Crash Category.
 - e. Control ► Aircraft, ◀ vehicles and ► personnel ◀ on the Movement Area.
 - f. Provide an Alerting Service.
 - g. Monitor wind speed and direction.
 - h. Notify Aerodrome unserviceability or work in progress.
 - i. Warn Aircraft of other Aircraft conducting ground runs.

¹ ► Aerodrome Emergency Services includes Aerodrome Rescue and Fire Fighting (ARFF) and Aerodrome Emergency Medical Services.

² For the States of Readiness for Aircraft Emergencies refer to Manual of Military Air Traffic Management (MMATM): Chapter 5 – Emergency Procedures. ◀

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- j. Warn of significant changes in meteorological (Met) conditions.
 - k. Notify Runway surface conditions.
 - l. Warn of wildlife Hazards.
 - m. Notify Runway changes.
 - n. Notify configuration of Aerodrome Arresting Systems.
 - o. Oversee the application of Low Visibility Procedures (LVP), where applicable, in accordance with (iaw) RA 3274³.
 - p. Apply Local ►◄ specific Orders, eg, noise abatement procedures.
 - q. ► Take overdue action iaw RA 3312⁴.
 - r. Apply Wake Turbulence separation iaw RA 3277⁵.
4. The Aerodrome Controller (ADC) and relevant radar Controller **should** manage the safe and expeditious flow of VFR / Instrument Flight Rules (IFR) arrivals and departures, and traffic routing in close proximity to the visual circuit, including appropriate clearances as required. Where necessary, local procedures for integrating Aircraft in the vicinity of the Aerodrome **should** be detailed in local orders.
5. The point at which the control of arriving and departing Aircraft is transferred between Controllers **should** be managed in order to maximize Safety and aid expedition, having considered the Met conditions, standard approach and departure procedures, traffic picture and any relevant local procedures. ◄
6. ►◄
- a. ►◄
 - b. ►◄
7. **Traffic Information (TI) and Instructions.** TI and instructions **should** be passed to Aircraft on any occasion that a Controller considers it necessary in the interests of Safety, or when requested by the pilot. In particular, an Aerodrome Service **should** provide:
- a. Generic TI to enable VFR pilots to safely integrate their flight with other Aircraft; (eg number of Aircraft in the visual circuit).
 - b. Specific TI appropriate to the stage of flight and Risk of collision; (eg circuit positions of Aircraft passed to Aircraft calling at Initial).
 - c. Timely instructions as necessary to assist in the prevention of collisions and to enable safe, orderly and expeditious flight within and in the vicinity of the Military Aerodrome Traffic Zone (MATZ).
8. ►◄
9. **Met Information.** Where Met information is required, it **should** include:
- a. Surface wind direction (magnetic) and speed.
 - b. Visibility.
 - c. Present weather.
 - d. Cloud base and amount.
 - e. Altimeter pressure setting (QFE or QNH respectively).
10. Controllers **should** warn pilots of gusts or crosswinds:
- a. When the maximum wind speed ► exceeds ◄ the mean speed ► by 10 knots or more. ◄

³ Refer to RA 3274 – Low Visibility Procedures.

⁴ ► Refer to RA 3312 – Overdue Action by Air Traffic Control.

⁵ Refer to RA 3277 – Wake Turbulence. ◄

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- b. Prior to take-off and landing, reporting the extremes in direction and speed (gust and lull) during the past 10 minutes ►**law**◄ Civil Aviation Publication (CAP) 746⁶.
11. ►◄ **Automatic Terminal Information System (ATIS)**. Where ATIS is required, procedures **should** be established for its provision, delivery and content, ►**prior to its**◄ introduction and ►**when enduring changes are necessary**. **Relevant stakeholders should be engaged**◄ to ensure that any Hazards ►◄ are identified and appropriately mitigated.
12. Procedures **should** cover ►**as a minimum:**◄
- Use ►◄ of equipment employed in the provision of ATIS.
 - Means of delivery eg frequency allocation.
 - Mechanisms of delivery including:
 - Requirements ►**and process**◄ for initiating or updating ATIS messages.
 - ◄
 - Communication of updates to ATIS messages.
 - Responsibility for ATIS provision and delivery, and qualification of relevant personnel.
 - Content of message, including mechanisms for assuring the content of messages.
13. ►◄
14. **Essential Aerodrome Information**. ►**To ensure the safe operation of Aircraft, Controllers should inform the pilot at the earliest opportunity of any defects affecting**◄ the Movement Area ►**or any unserviceability of navigational aids and Aerodrome lighting**◄ that may constitute a Hazard. ►◄
15. ►◄
16. ►**Brake Chute Recovery**⁷. The recovery of a brake chute deployment **should only be carried out by a Suitably Qualified Experienced Person**.◄
17. **Runway Occupied**. When Aircraft, ►◄ vehicles ►**or personnel**◄ have been given permission to cross or occupy a Runway in use, the ADC **should** display a strip(s) or marker(s) on the part of the flight progress board that is used to represent the Runway as a positive reminder that the Runway is occupied.
18. **Traffic Lights**. ►**The ADC is responsible for the operation of traffic lights to**◄ control ►◄ vehicles, ►**cyclists and pedestrians, but may delegate operation of them to appropriate personnel**. Traffic lights **should** be operated to ensure that the◄ red light signal is displayed in ►◄ time ►**for individuals**◄ to observe and obey the instruction.
19. **Jet Blast**⁸ / **Rotor Downwash**. ►**Prior to a Controller**◄ issuing instructions and clearances ►**to an Aircraft, where relevant,**◄ the Hazards of jet blast / rotor downwash ►**should be taken into account**.◄ Particular care ►**should**◄ be taken when multiple line-up instructions are issued and Aircraft ►**could**◄ be subjected to the jet blast / rotor downwash from preceding departures.
20. **Persons On Board (POB)**. The ADC / Ground ►**Controller**◄ **should** ascertain POB, at the earliest of:
- Initial contact.
 - Before issuing a clearance to taxi.
 - Before issuing a clearance to take-off.
 - Other times as ►**specified**◄ in ►◄ Local Orders.

⁶ Refer to CAP 746 - Requirements for Meteorological Observations At Aerodromes.

⁷ ►Refer to MMATM Chapter 5: Emergency Actions and Procedures – Brake Chute Operations.

⁸ Additional information on 'Heavy Aircraft Jet Exhaust' is contained in MMATM Chapter 2: Air Traffic Control Procedures.◄

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21. **Taxiing Aircraft.** When the pilot of an Aircraft requires start-up or taxi clearance, the following information **should** be given ▶◀:
- Runway in use.
 - Surface wind direction and speed, including significant variations.
 - Aerodrome QFE or QNH, as appropriate.
 - Outside air temperature.
 - Significant Met conditions ▶◀.
22. **Taxi instructions.** ▶◀ Taxi instructions ▶ **should be issued to** ◀ a ▶ **specific** ◀ point ▶ **on the Manoeuvring Area or Apron** ◀ at which the Aircraft **should** stop, unless further permission to proceed is given. ▶◀
23. When clearing an Aircraft to the holding point of the Runway in use ▶ **and the intention is to permit the Aircraft to cross an additional Runway, whether active or not, the taxi clearance** ◀ **should** contain an explicit clearance to cross that Runway. If such a clearance cannot be given, the clearance limit, ▶ **with instructions to hold at a specific point, should exclude reference to a runway or route beyond it.** ◀
24. **Runway Clearance.** Prior to issuing any permission / clearance to use the Runway, the ADC **should** perform a final check ▶ **to confirm that the Runway is clear of obstructions, traffic** ◀ lights and ▶ **arrestor** ◀ barriers ▶ **are correctly configured and that any other required conditions are met** ◀ iaw Local ▶◀ Orders and instructions.
25. When multiple Runways are in use and possibility of confusion exists, the clearance **should** include the ▶ **applicable Runway** ◀ designator ▶◀.
26. **Line-Up Instruction.** Local ▶◀ Orders **should** define situations in which more than one Aircraft may be permitted to line-up.
27. **Departure Clearance.** If an ATC clearance could be confused with a taxi instruction, to avoid pilots taking-off without a take-off clearance, it **should** commence with the phrase 'after departure' to ensure clarity.
28. An Aircraft on an IFR flight **should not** be given take-off clearance until:
- The ATC clearance, if required, has been passed and acknowledged by the pilot, and;
 - The ▶ **relevant radar** ◀ Controller has authorized departure and any specific instructions have been passed to the Aircraft.
29. **Take-off Clearance.** The ADC **should** issue take-off clearances and advise pilots of the surface wind or other significant Met conditions.
30. A take-off clearance **should** be issued separately from any other clearance message.
31. If an Aircraft is lined up on the Runway and a revised clearance or post departure instructions need to be passed, the revised clearance or post departure instructions **should** be prefixed with an instruction to 'hold position'.
32. An Aircraft ▶ **or Aircraft formation** ◀ **should not** be permitted to begin take-off until the preceding ▶ **departing** ◀ Aircraft is observed to be airborne or has reported 'airborne' by radiotelephony (RTF) and all preceding landing Aircraft have vacated the Runway in use, ▶ **ensuring the appropriate wake turbulence⁵ separation is applied.** ◀
33. A departing Aircraft **should not** be given control instructions which would require it to make a turn before it has reached a height / altitude that places it above the Radar Vector Chart (RVC) / Surveillance Minimum Altitude Area (SMAA) if using a Military Surveillance Minimum Altitude Chart (Mil SMAC) unless remaining below the Unit Terrain Safe Level iaw RA 3231⁹ ▶◀.
34. ▶ **Expedition.** Where there is a requirement for the ADC to be expeditious the following instruction 'cleared for immediate take-off, iaw CAP 413'¹⁰, **should** be issued to the pilot who will respond accordingly:

⁹ Refer to RA 3231 – Terrain Safe Level and Terrain Clearance.

¹⁰ ▶ Refer to CAP 413 - Radiotelephony Manual, Chapter 4 – Aerodrome Phraseology. ◀

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- a. At the holding point, taxi immediately to the Runway and commence take-off without stopping the Aircraft.
 - b. If already lined-up on the Runway, take-off without delay.
 - c. If an immediate take-off is not possible, they will advise the ADC. ◀
35. **Cancelling take-off Clearances.** If a take-off clearance has to be cancelled before the take-off run has commenced, the pilot **should** be instructed to 'hold position' and to acknowledge the instruction. If, after the Aircraft has commenced take-off, an issue is identified the ADC **should** notify the pilot, ▶ **aw** ◀ CAP 413¹⁰.
36. **Landing.** When Aircraft are using the same Runway, a landing Aircraft **should** only be permitted to touch down before the preceding landing Aircraft has vacated the Runway if this is ▶ **authorized** ◀ in Local ▶ ◀ Orders.
37. **Instructions to Aircraft in the Final Stages of Approaching to Land.** With the exception of instructions to go-around, the ADC **should not** issue instructions to Aircraft in the final stages of approaching to land that would require it to deviate from its expected flight path unless exceptional and overriding Safety considerations apply.
38. ▶ **Gear Checks.** Clearance to use a Runway, for Aircraft with retractable landing gear, **should** only be issued after a positive gear check has been received from the pilot. The only exception to this is for Tilt Rotor Aircraft operating in the visual circuit who **should** be issued the clearance, 'with your gear down' as they are unable to lower their gear until short finals. ◀
39. **Low Approach Restrictions.** If the Runway in use is occupied by an Aircraft, ▶ **vehicles or personnel**, ◀ an approaching Aircraft that has requested a low approach or a touch and go, **should** only be cleared to carry out a low approach, restricted to a height not below that ▶ **specified** ◀ in Local ▶ ◀ Orders. In such circumstances, the pilot **should** be informed of the Aircraft, ▶ **vehicles or personnel** ◀ on the Runway. Additionally, the Aircraft, ▶ **vehicle or personnel** ◀ on the Runway **should** be informed of the Aircraft carrying out the low approach.
40. ▶ ◀
- a. ▶ ◀
 - b. ▶ ◀
 - c. ▶ ◀
41. ▶ **Light** ◀ and **Pyrotechnic Signals.** The standard ▶ **light** ◀ and pyrotechnic signals in Table 1 **should** be used in the control of Aircraft, where necessary.

Table 1. ▶ **Light** ◀ and **Pyrotechnic Signals**

Characteristic and Colour of Light Beam or Pyrotechnic	From ATC to an Aircraft in flight	From ATC to an Aircraft on the ground
Steady Red Light ▶ or Red flare ◀	Go Around	Stop
Red Flashes ▶ ¹¹ ◀	Total refusal of permission to land	Move clear of landing area
Steady Green Light ▶ or Green flare ◀	You may land	You may take-off
White Flashes ▶ ¹¹ ◀	Land at this Aerodrome after receiving steady green light	Return to starting point

42. ▶ The type of light and / or pyrotechnic signal in use at the Aerodrome, and where it is operated from¹², **should** be annotated in the Military Air Information Publication (AIP) or UK AIP, where applicable, to ensure that Aircrew know what type and where to expect the light and / or pyrotechnic signal to come from. ◀

¹¹ ▶ Only applicable to light signals.

¹² For example, from the ATC Tower, a remote light signal location or a Truck Runway Control (TRC) vehicle. ◀

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43. **Runway and Aerodrome Movement Area (AMA) Incursion**¹³. Controllers **should** remain vigilant to the possibility of a Runway and AMA Incursion by Aircraft, vehicle, person, animal or object. All Runway and AMA Incursions **should** be reported iaw RA 1410¹⁴, with the relevant boxes selected and specific mention of Runway or AMA Incursion in the title to aid analysis.

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44. **▶AA-Facing Organizations◀** and HoEs may elect to delegate some responsibilities incumbent of an ADC in the provision of an Aerodrome Service to the Ground Controller or other positions (such as the alerting and dispatch of ARFF and control of vehicles and **▶personnel◀** on the Movement Area) **▶◀**.

45. Essential Aerodrome Information (detailed in para 14) may include **▶but not be limited to:◀**

- a. Construction work or maintenance on the Movement Area.
- b. Rough portions of the Movement Area and whether marked or not.
- c. Failure or irregular functioning of the Aerodrome lighting system.
- d. Failure or irregular functioning of approach aids.
- e. Aircraft parked close to Runways or taxiways and Aircraft engaged in ground running of engines.
- f. **▶Runway surface condition iaw RA 3272¹⁵.◀**
- g. In snow and ice conditions; information concerning sweeping and / or sanding of Runways and taxiways **▶iaw the Snow and Ice Control Plan¹⁶.◀**
- h. Bird formations or large birds reported or observed on or above the Movement Area or in the immediate vicinity of the Aerodrome and the extent of any bird dispersal action being carried out iaw RA 3270¹⁷.
- i. **▶◀**

46. **ATIS**. Guidance on the provision of ATIS can be found as follows:

- a. International Convention on Civil Aviation (ICAO) Annex 11 Air Traffic Services contains requirements for the provision and delivery of ATIS.
- b. Guidance material relating to Data link-ATIS (D-ATIS) is contained in ICAO Doc 9694 Manual of Air Traffic Services Data Link Applications. The technical requirements for the D-ATIS application are contained in ICAO Annex 10 Aeronautical Telecommunications, Volume III, Part I, Chapter 3.
- c. CAA CAP 413¹⁰ contains requirements for the content of ATIS messages and guidance on transmitting technique.
- d. ICAO Annex 3 Meteorological Service for International Air Navigation contains guidance on the use of Met information.
- e. RA 3130¹⁸ regulates the use and Maintenance of ATM Equipment.

47. **Landing Direction and Runway in use**. **▶These terms refer to◀** the most suitable **▶Runway or landing direction selected by a Controller◀** at any particular time. **▶Typically they are◀** aligned to the surface wind direction, **▶but other factors such as traffic patterns, availability of approach aids and the length of Runway or landing run available may also be taken into consideration.◀**

48. Where the surface wind conditions are light and variable the 2000 ft wind will be taken into account before selecting the Runway in use. **▶◀** At certain Aerodromes more than one Runway may be in use at any one time.

¹³ Refer to MAA 02: MAA Master Glossary.

¹⁴ Refer to RA 1410 – Occurrence Reporting and Management.

¹⁵ **▶Refer to RA 3272 – Evaluation of Runway Surface Conditions.**

¹⁶ **Refer to RA 3278 – Snow and Ice Operations.◀**

¹⁷ Refer to RA 3270 – Aerodrome Wildlife Control.

¹⁸ Refer to RA 3130 – Air Traffic Management Equipment Safety Management.

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49. **Traffic Patterns.** Details of Aerodrome traffic patterns may be found in North Atlantic Treaty Organization (NATO) Standardization Agreement (STANAG) 3297, NATO Standard Aerodrome and Heliport Air Traffic Service (ATS) Procedures¹⁹.

**Regulation
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Aerodrome Emergency Services

3261(2) ▶ **Head of AA-Facing** ◀ Organizations and HoE **shall** provide Emergency Services at Aerodromes for which they are responsible.

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Aerodrome Emergency Services

50. ▶ **Aerodrome Emergency Services¹ should not be reserved solely for flying operations. ARFF and Emergency Medical Services²⁰** ◀ **should** respond to all incidents ▶ ◀ across the MOD estate where local conditions allow, as a priority, when life may be at Risk. Any consequent effect on Aerodrome operations through a reduction or total loss of Crash Category **should** be considered secondary to the saving of life.

51. **Communications.** ATC **should** be connected by adequate ground communications to Safety Services and Station ▶ / Unit ◀ departments concerned with flying. These communications ▶ **should as a minimum be:** ◀

- a. **Direct Line Communication.** Direct line communication to:
 - (1) Station Fire Section (if separate from the crash bay).
 - (2) Station Medical Centre (where applicable).
 - (3) Crash Crew Bay.
 - (4) ▶ ◀ ATC Centre (ATCC).
 - (5) Distress and Diversion Cell (D&D). ▶ ◀
- b. **Indirect Telephone Communication.** Indirect telephone communication to:
 - (1) ▶ **Duty Aircrew.** ◀
 - (2) All flying squadrons and flights.
 - (3) Senior Engineering Officer (SEngO).
 - (4) Station Works Services²¹ representatives.
 - (5) Local civil Emergency Services.
 - (6) Local police.
- c. **RTF Communication.** RTF communication between the ATC Tower and the ▶ **Aerodrome Emergency Service¹** ◀ vehicles, and vehicles employed in Aircraft ▶ **brake** ◀ parachute recovery role.
- d. **Crash Alarm Bells / Telephones.** Crash alarm bells / telephones (operated from the Controller's position) to:
 - (1) Crash Crew Bay.
 - (2) Station Fire Section (if separate from Crash Crew Bay).
 - (3) Station Medical Centre (where applicable).
- e. **Station / Unit Broadcast System.**

52. **Crash Maps.** The Aerodrome Operator (AO) **should** arrange for the production, distribution ▶ **and document control** ◀ of local area and Aerodrome crash maps to enable the rapid location of Aircraft crashes and Aerodrome incidents as follows:

¹⁹ Relevant NATO STANAGs can be accessed via the Defence Standards intranet site.

²⁰ ▶ **Refer to AP1269 Leaflet 12-8: Guidance on the Standards of Medical Cover for Military Aerodromes.** ◀

²¹ Representing Defence Infrastructure Organisation (DIO).

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- a. **Local Area Crash Map.** A local area crash map **should** consist of an Ordnance Survey map to a range of at least a 5 nm radius from the Aerodrome. The map **should** show, as a minimum:
- (1) Areas of overlapping cover with adjacent Aerodromes.
 - (2) Areas of known poor RTF communications.
 - (3) Any other locally required features, eg rendezvous points.
- b. **Aerodrome Crash Map.** An Aerodrome crash map **should** be produced covering the Aerodrome and its surrounds within reasonable visual range of the ADC. The map, which may be orientated to meet local requirements, eg as the ADC sees the Aerodrome from their control position, will be overlaid with a simple ►◄ grid system. The grid **should** be of reasonable size (not too small), ideally aligned along the main instrument Runway, and arranged that significant areas are not divided by grid lines. In addition the following features **should** be clearly depicted:
- (1) North orientation.
 - (2) Runway magnetic headings.
 - (3) Taxiways and dispersals.
 - (4) All roads and tracks fit to take ► Aerodrome Emergency Service¹ ◄ vehicles.
 - (5) Main road junctions and crossings.
 - (6) Hazards such as ditches and narrow or difficult areas.
 - (7) Areas which are not negotiable by ► Aerodrome Emergency Service¹ ◄ vehicles:
 - (a) At all times.
 - (b) At certain times of the year owing to weather and / or tides.
 - (8) All points of exit from the Aerodrome, eg hedge gaps, bridges over ditches, gateways, etc.
 - (9) Areas of known poor RTF cover.
 - (10) Crash exits, which will be numbered.
- c. **Crash Map Distribution.** Local area and Aerodrome crash maps **should**, be located in:
- (1) Station / Unit Headquarters;
 - (2) ATC;
 - (3) TRC iaw ► RA 3279(4)²²; ◄
 - (4) ► Station ◄ Fire Section ► / Crash Crew Bay; ◄
 - (5) Station Medical Centre;
 - (6) ►◄
 - (7) ►◄
 - (8) ►◄
 - (9) ►◄
 - (10) ►◄
 - (11) ► All essential Aerodrome and ◄ ATC vehicles;
 - (12) Other locations as defined in ►◄ Local orders; ► with consideration to the following where appropriate:
 - (a) Local civil Emergency Services.

²² ► Refer to RA 3279(4): Equipment and Operating Requirements – Truck Runway Control. ◄

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- (b) Station crash / salvage section.
- (c) Search and Rescue (SAR) helicopter.
- (d) Executive vehicles. ◀
53. ▶▶
54. **Crash Exits.** ▶ Crash exits **should** be:
- Numbered iaw the Aerodrome crash map.
 - Kept clear and have appropriate signage displayed to this effect.
 - Signposted where the location of the crash gate is not obvious.
55. On Aerodromes where crash gates are locked for security reasons, crash crews **should** be in possession of crash gate keys that are tagged for quick identification. Duplicate keys **should** be readily available in a known location. ◀
56. **Testing of the Crash Organization.** The AO is responsible for ensuring that the ▶ Aerodrome Emergency Services¹ ◀ are adequately prepared to cover the flying task. The ARFF services **should** be exercised with any lessons identified being recorded and actioned. Full advantage **should** be taken of any planned participation by the civilian emergency services.
57. **Testing of Crash / Rescue Communications.** The ATC Officer in command (ATCO IC) (or other responsible individual ▶ specified ◀ in ▶▶ Local Orders) **should** ascertain the serviceability state of the ARFF ▶ and emergency medical ◀ services, RTF equipment, crash telephone, teletalk, and crash alarm systems at the start of their watch. They **should** take immediate action, in the event of any unserviceability, to have repairs effected, and to make temporary alterations to the disposition of vehicles if this is necessary. Any unserviceability **should** be recorded and reported iaw RA 3204²³ and RA 3206²⁴.
58. ▶▶
59. ▶▶
60. ▶▶
61. ▶▶
62. ▶▶
63. ▶▶
64. ▶▶
65. ▶▶
66. ▶▶

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67. ▶ The use of what3words by civil emergency services is common practice and Units may want to consider annotating key reference points on the Aerodrome to assist such users that are likely to be unfamiliar. ◀

**Regulation
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Aerodrome Service in Class D Airspace

- 3261(3) ▶ Head of AA-Facing ◀ Organizations and HoE at Aerodromes inside Class D airspace **shall** ▶ ensure an ATS is provided iaw the airspace classification. ◀

²³ Refer to RA 3204 – Air Traffic Management Records.

²⁴ Refer to RA 3206 – Air Traffic Management Equipment Checks.

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Aerodrome Service in Class D airspace

68. **Class D Flight Rules.** Whilst there is a requirement for Controllers to monitor the Met conditions, Controllers **should** also establish the flight rules that Aircraft are operating iaw, to ensure the appropriate ATS provision in Class D airspace. The pilot is responsible for determining the flight rules under which they wish to conduct their flight iaw RA 2307²⁵, taking into account the Met conditions, airspace classification and the limitations of their licence / qualifications. Ground visibility **should** be used for Aircraft taking-off from or approaching to land, whereas flight visibility **should** be used for transiting Aircraft (which may require entering an ATZ or Aerodrome traffic circuit); therefore, Controllers **should not** declare Class D Airspace to be 'IFR' or 'IMC'.

69. **Class D ATS Provision.** All flights **should** be provided with an ATS as follows:

- a. All flights **should** be subject to ATC clearance.
- b. IFR flights **should** be separated from other IFR and Special VFR flights.
- c. IFR flights **should** receive TI in respect of VFR flights.
- d. IFR flights **should** receive traffic avoidance advice on request.
- e. VFR flights **should** receive TI in respect of all other flights and traffic avoidance advice on request.

70. **Cancelling IFR.** IFR flights **should** be afforded IFR separation until IFR flight is cancelled. A change **should** be accompanied by a statement from the Aircraft operator that cancels IFR flight iaw RA 2307²⁵, para ▶49.◀ This information is paramount in determining the actions in the event of an Aircraft being instructed to Go Around whilst conducting an IFR approach.

71. **Class D VFR Operations.** Controllers **should** permit Aircraft operating under VFR to operate to or from an Aerodrome in Class D airspace (which may require entering an ATZ or active Aerodrome traffic circuit) iaw with the limitations dictated by the pilot's flight rules and the reported Met conditions as follows:

- a. **Flight Rules.** When the reported Met conditions reduce below the minima at para ▶71b,◀ Controllers **should** request the pilot to specify the type of clearance required, (in order to ascertain the pilot's flight rules iaw RA 2307(1) Table 1 UK VMC Minima for VFR Flight).
- b. **Met Conditions:** Controllers **should not** issue any further VFR clearances to Aircraft wishing to operate iaw VFR when the reported Met conditions fall below the following minima:
 - (1) The cloud ceiling is less than 450 m (1500 ft).
 - (2) Aircraft other than helicopters: ground visibility 5 km.
 - (3) Helicopters: ground visibility 1500 m.

72. **Class D Special VFR Operations.** Controllers **should** issue a Special VFR clearance to Aircraft wishing to operate under Special VFR, during the day or night as follows:

- a. **Special VFR Transits.** Controllers **should** permit Aircraft operating Special VFR to transit to or from an Aerodrome in Class D airspace (which may require entering an ATZ or active Aerodrome traffic circuit) iaw the following criteria:
 - (1) Aircraft is below 140 knots indicated air speed (IAS).
 - (2) Aircraft is clear of cloud with the surface in sight.
 - (3) Aircraft other than helicopters: minimum flight visibility 1500 m.
 - (4) Helicopters: minimum flight visibility 800 m.
- b. **Special VFR Landing and Taking Off.** Except for helicopters using a Rescue call sign²⁶, Controllers **should not** give permission for Aircraft to land or

²⁵ Refer to RA 2307 – Rules of the Air.

²⁶ Police, Helicopter Emergency Medical Services / Helimed, Rescue, including SAR training flights operating iaw a Letter of Agreement with the ATS Provider.

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take off from an Aerodrome within Class D airspace when the reported met conditions fall below the following minima:

- (1) Aircraft other than helicopters: ground visibility 1500 m and / or cloud ceiling 600 ft.
- (2) Helicopters: ground visibility 800 m and / or cloud ceiling 600 ft.

c. **Special VFR Ground Visibility.** When the reported ground visibility consists of two values, the lower of the two values **should** be used when determining if a Special VFR clearance can be issued.

73. **Shared Class D Airspace.** Procedures for operations at MOD Aerodromes located within Class D airspace where the controlling agency is not the control authority **should** be contained within Letters of Agreement and detailed in Local Orders. ▶ ◀

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74. Nil.

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RA 3271 – Brake Parachute Recovery

Rationale ▶ *The content of this RA has been withdrawn and incorporated into RA 3261 – Aerodrome Service and the Manual of Military Air Traffic Management (MMATM).* ◀

Contents 3271(1): ▶ **Withdrawn – Incorporated into RA 3261(1): Aerodrome Service** ◀

Regulation 3271(1) **Brake Parachute Recovery**
3271(1) ▶ **Withdrawn – Incorporated into RA 3261(1): Aerodrome Service.** ◀

Acceptable Means of Compliance 3271(1) **Brake Parachute Recover**
1. ▶ **Withdrawn – Incorporated into RA 3261(1): Aerodrome Service.** ◀
2. ▶ **Withdrawn – Incorporated into the MMATM: Chapter 5: Emergency Actions and Procedures – Brake Chute Operations.** ◀

Guidance Material 3271(1) **Brake Parachute Recovery**
3. ▶ ◀

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