



Defence
Safety
Authority

RAF Brize Norton Defence Aerodrome Manual (DAM)

Military Aviation
Authority

Military Aviation Authority
MAA

FOREWORD

RAF Brize Norton (BZN) is a complicated operating environment and is the 24/7 Defence Gateway for air transport. It routinely hosts foreign military and commercial operators and acts as the UK Military Emergency Diversion Aerodrome (MEDA). Operating 3 distinctly different air platforms and Force Protection drones, it must be able to respond to and support military commitments held at extreme high readiness and contains a number of Drop Zones (DZ), a Helicopter Landing Site (HLS) and helicopter trials areas within the airfield boundary.

The Defence Aerodrome Manual (DAM) is available via the RAF Brize Norton Operations Support Wing (OSW) MODNet site and is published on the internet at <https://raf.mod.uk/our-organisation/stations/raf-brize-norton/>. Further information regarding any annex is available on request from RAF Brize Norton Airfield Operations (01993 895315).

The DAM contains detailed information regarding aerodrome operations. However, the Military Aeronautical Information Publication (Mil AIP), other products of No1 Aeronautical Information Documentation Unit (AIDU) and Civilian AIP (Civ AIP), contain up to date aerodrome data and planning documentation.

The primary method for assuring the contents of the DAM reflect the physical characteristics of the Aerodrome is the Aerodrome Safety Case (AdSC). The AdSC acts as the single standardised framework that enables coherent communication within Duty Holder (DH)-Facing organisations and externally to the DH Chain and Commander Air Wing (CAW) at RAF Brize Norton. The purpose of the AdSC is to collate justification and evidence to demonstrate that the Aerodrome is regulatory compliant and provides a 'Safe Operating Environment that enables aviation operations.'

This document will be re-issued periodically, where possible annually, unless significant amendments make a full re-issue more appropriate. Notification of errors contained within this document and its annexes should be sent for the attention of BZN-AirfieldAssurance@MOD.UK.

< *Original signed* >

OC Operations Support Wg (Aerodrome Operator)
RAF Brize Norton
22 Feb 24

DAM Table of Contents

1. Foreword.
2. Table of Contents.

Chapter 1: Technical Administration - Aerodrome Location, Layout and Access

Para	Title	Information Owner / Applicability	Page
1.1	Name and Work Address of Aerodrome Operator	Airfield Operations	1-1
1.2	Aerodrome Operators Authority and Letter of Delegation	Airfield Operations	1-1
1.3	Safety Meeting Structure	Airfield Operations	1-1
1.4	Aerodrome Key Stakeholders	Airfield Operations	1-1
1.5	Aerodrome Operators Hazard Log (AOHL)	Airfield Operations	1-1
1.6	Formal Aerodrome Related Agreements	Airfield Operations	1-1
1.7	Aerodrome Alternative Acceptable Means of Compliance (AAMC), Waivers and Exemptions	Tactical Air Traffic Control Centre (South) Cdr & Air Support Team	1-1
1.8	Aerodrome Location and Control of Entry and Access	Airfield Operations	1-1

Chapter 2: Aerodrome Data, Characteristics and Facilities

Para	Title	Information Owner / Applicability	Page
2.1	Aerodrome Data	Airfield Operations	2-1
2.2	Special Procedures	TATCC (S) Cdr	2-1
2.3	Noise Abatement Procedure Orders	TATCC (S) Cdr	2-1
2.4	Temporary Obstruction Orders	TATCC (S) Cdr	2-1
2.5	Runway Strip Obstructions	Airfield Operations	2-1
2.6	Runway End Safety Area (RESA)	Airfield Operations	2-1
2.7	Light Aggregate (Lytag) Arrestor Beds or Engineered Materials Arrestor Systems (EMAS)	N/A	2-1
2.8	Aerodrome Arresting System Orders	SERCO	2-2
2.9	Manoeuvring Area Safety and Control Orders	Airfield Operations	2-2
2.10	Large Aircraft	Sqn Ldr Ops	2.2

Chapter 3: Emergency and Aerodrome Rescue and Firefighting Orders

Para	Title	Information Owner / Applicability	Page
3.1	Emergency Organization	OC Fire	3-1
3.2	Emergency Orders / Aerodrome Crash Plan	OC Contingency Plans	3-1
3.3	Aerodrome Rescue and Fire Fighting (ARFF) Services and Training Orders	OC Fire	3-1
3.4	Disabled Aircraft Removal	OC Eng Ops Flight	3-1
3.5	Fire Cover for CASEVAC/Aeromed/DG/SCD Aircraft Movements	OC Fire	3-1

Chapter 4: Air Traffic Services and Local Procedures

Para	Title	Information Owner / Applicability	Page
4.1	Air Traffic Control Orders	TATCC (S) Cdr	4-1

Chapter 5: Aerodrome Administration and Operating Procedures

Para	Title	Information Owner / Applicability	Page
5.1	Aerodrome Data Reporting	Airfield Operations	5-1
5.2	Aerodrome Serviceability Inspections	Airfield Operations	5-1
5.3	Aerodrome Technical Inspections	OC EMS	5-1
5.4	Radar, Radio and Navigation Aid Maintenance, Monitoring and Protection	Airfield Support Team	5-1
5.5	Aerodrome Works Safety	Airfield Operations	5-2
5.6	Aerodrome Users - Vehicle and Pedestrian Control	Airfield Operations	5-2
5.7	Foreign Object Damage / Debris (FOD) Prevention - Training and Awareness	Airfield Operations	5-2
5.8	Aerodrome Wildlife Management	Airfield Operations	5-2
5.9	Low Visibility Operations	TATCC (S) Cdr	5-2

UK OFFICIAL

5.10	Snow and Ice Operations	Airfield Operations	5-2
5.11	Thunderstorm and Strong Wind Procedures	Airfield Operations	5-2

Para	Title	Information Owner / Applicability	Page
5.12	Civil Aircraft Aerodrome Usage – Terms and Conditions	Airfield Operations	5-2
5.13	Safeguarding Requirements - Waivers and Exemptions	Airfield Operations	5-2
5.14	Aerodrome Assurance Activity	Airfield Operations	5-2
5.15	Electrical Ground Power Procedures	OC EOF	5-2
5.16	Aviation Fuel Management Procedures	OC Logs Sqn	5-3
5.17	Hazardous Materials Spillage Plan	OC Logs Sqn	5-3
5.18	Jettison and Fuel Dumping Area	Airfield Operations	5-3
5.19	Compass Swing Area	Airfield Operations	5-3
5.20	Explosive Ordnance Disposal Area	XO OSW	5-3
5.21	Dangerous Goods (DG) Procedures	Senior Air Movements Officer	5-3
5.22	Hydrazine (H70) Leak	Airfield Operations	5-3
5.23	Remotely Piloted Air System (RPAS) Orders	Airfield Operations	5-3
5.24	C17 Combat Offload	Airfield Operations	5-3
5.25	Flare Misfire / Hang-up Procedure	Airfield Operations	5-3
5.26	RAF Brize Norton Designated Parachute/Free-fall Drop Zones	Airfield Operations	5-3
5.27	Aircraft Engine Ground Runs	OC EOF	5-3
5.28	RAF Brize Norton Based Air Landed Arming Refuel Point (ALARP), Training and Coordination	Airfield Operations	5-3
5.29	JADTEU Operating Area	TATCC (S) Cdr	5-3

3. Table of Amendments

Amendment No.	Amendment	Date of Incorporation	Name / Role	Signature
AL1	08 Jun 23	08 Jun 23	FS Reynolds	CReynolds
AL2	22 Feb 24	22 Feb 24	WO Reynolds	CReynolds

4. List of Annexes:

- Annex A Aerodrome Operator Letter of Delegation
- Annex B Safety Meeting Structure
- Annex C Structure of Key Stakeholders
- Annex D Aerodrome Operators Hazard Log
- Annex E Formal Aerodrome Related Letters of Agreement
- Annex F Aerodrome Safeguarding Waivers and Exemptions
- Annex G Aerodrome Location and Layout
- Annex H Noise Abatement Procedures
- Annex I Temporary Obstructions
- Annex J Maintenance and Safe Operation of the RHAG
- Annex K Safe parking, Manoeuvring, Refuelling & Servicing of Ac
- Annex L RAF Brize Norton Major Incident Plan
- Annex M Aerodrome Rescue and Fire Fighting Services and Training
- Annex N Disabled Aircraft Removal
- Annex O Tactical Air Traffic Control Centre (South)
- Annex P Aerodrome Serviceability Inspections
- Annex Q Aerodrome Technical Inspections
- Annex R Radar, Radio and Navigation Aid Maintenance, Monitoring and Protection
- Annex S Aerodrome Works Safety
- Annex T Fire Cover for CASEVAC/Aeromed/DG/SCD Aircraft Movements
- Annex U FOD Prevention, Training and Awareness
- Annex V Aerodrome Wildlife Management Plan
- Annex W Low Visibility Procedures
- Annex X Snow and Ice Operations

UK OFFICIAL

Annex Y Thunderstorm and Strong Wind Procedures

Annex Z Use of MOD Aerodromes by Civil Aircraft

Annex AA Large Aircraft

Annex BB Electrical Ground Power Procedures

Annex CC Aviation Fuel Management Procedures

Annex DD Spillage Plan for Hazardous Materials

Annex EE Fuel Jettison /Dumping Area **and Aircraft Landing with Trailing Hose**

Annex FF Compass Calibration Area

Annex GG Dangerous Goods (DG) Procedures

Annex HH Hydrazine (H70) Leak

Annex II RPAS Orders

Annex JJ C17 Combat Offloads

Annex KK Flare Misfire/Hang-up Procedure

Annex LL RAF Brize Norton Designated Parachute/Free-fall Drop Zones

Annex MM Aircraft Engine Ground Runs

Annex NN Engine Running On/Off Loads

Annex OO JADTEU Operating Area

5. All annexes are included within this document. If further permission or support is required, contact Airfield Assurance (BZN-AirfieldAssurance@mod.uk), or out of hours (OOH), contact the Duty Operations Controller (DOC) on (BZN-OSW-Ops-DOC@mod.gov.uk).

Chapter 1: Technical Administration – Aerodrome Location, Layout and Access

1.1 Name and Work Address of Aerodrome Operator (AO):

OC Operations Support Wing
Royal Air Force
Brize Norton
Carterton
OXON
OX18 3LX

Mil ☐ 95461 + Ext 6500 (Duty Ops Controller)
Civ ☐ 01993 896500 (Duty Ops Controller)
Fax: 01993 897354
Email: BZN-OSW-Ops-DOC@mod.gov.uk

1.2 **Aerodrome Operators Authority and Letter of Delegation.** The AO is appointed by the HoE to be responsible for actively managing an environment that accommodates the safe operation of aircraft in accordance with (iaw) Regulatory Article (RA) 1026¹. A signed copy of the AO Letter of Delegation is contained in the DAM at **Annex A**.

1.3 **Safety Meeting Structure.** The aviation organisational Safety Meeting Structure is at **Annex B**.

1.4 **Aerodrome Key Stakeholders.** A representation of the structure of key stakeholders who have responsibility for, or directly support aerodrome operations, is at **Annex C**. Due to migration to MS Teams and Skype, contact numbers are not included.

1.5 **Aerodrome Operators Hazard Log (AOHL).** The AOHL clearly indicates the active aerodrome operating Hazards and is at **Annex D**.

1.6 **Formal Aerodrome Related Agreements.** All formal aerodrome related agreements are at **Annex E**.

1.7 **Aerodrome Alternative Acceptable Means of Compliance (AAMC), Waivers and Exemptions.** Copies of all aerodrome related AAMC, Waivers and Exemptions are captured at **Annex F**.

1.8 **Aerodrome Location and Control of Entry (CoE) and Access.** An explanation of the aerodrome location and control of access is at **Annex G**.

¹ Refer to RA 1026 – Aerodrome Operator and Aerodrome Supervisor (Recreational Flying) Roles and Responsibilities

Chapter 2: Aerodrome Data, Facilities and Characteristics

2.1. **Aerodrome Data.** The AO ensures all aerodrome data provided is accurate and information contained in the DAM, where applicable, is to mirror the equivalent information published in other military aviation publications.

2.2 SPECIAL PROCEDURES				
Elev	Var	TA	Date	Chart No.
287ft	0-55W	-0-18° decreasing	Oct 19	Ordnance Survey Land Ranger 1:50,000 Charts 163 & 164

2.3. **Noise Abatement Procedure Orders.** Orders at **Annex H** cover all noise abatement procedures, including high power engine ground runs.

2.4. **Temporary Obstruction Orders.** Orders at **Annex I** address the actions involved in dealing with temporary obstructions on or around any manoeuvring area that are considered a hazard to aircraft, vehicles or pedestrians.

2.5. **Runway Strip Obstructions.** All legacy² runway strip obstructions are to be published within the AOHL at Annex D. Any new runway strip obstruction³ will require a waiver and will subsequently be contained at **Annex F**.

2.6. **Runway End Safety Area (RESA).** The RESA is full runway width extending approx. 150m at either end of the runway, providing a cleared and graded aircraft undershoot or overrun area, shown in blue boxes below.



² Legacy is classified as any facility in place prior to the RA 3500 series being released in Sep 2018.

³ Refer to RA 3590(10): Safeguarding – Surface Obstructions.

2.7. Light Aggregate (Lytag) Arrestor Beds or Engineered Materials Arrestor System (EMAS). Not applicable.

2.8. Aerodrome Arresting System Orders. Orders for the safe operation of the Rotary Hydraulic Arrestor Gear (including standard operating configurations (de-rigged)), along with orders for the maintenance and monitoring of the systems are produced iaw extant Support Policy Statements (SPS) and RA 3268⁴ at **Annex J**.

2.9. Manoeuvring Area Safety and Control Orders. The AO ensures that Manoeuvring Area Safety and Control Orders at **Annex K** are maintained for the safe parking, manoeuvring, refuelling, ground running⁵ and servicing of aircraft.

2.10 Orders for Large Aircraft. Guidance on the safe operation of large aircraft (ICAO Code F) around the airfield from landing to departure is at Annex BB.

⁴ Refer to RA 3268 – Aircraft Arresting Systems.

⁵ Noise abatement procedures relating to high power ground runs are to be contained within Annex H – Noise Abatement Procedure Orders.

Chapter 3: Emergency and Aerodrome Rescue and Firefighting Orders

3.1 Emergency Organization. The AO is to be familiar with RA 3261(2), RA 3263 and DSA02 DFRS⁶. RA 3049⁷ stipulates that Defence Contractor Flying Organizations operating MAA-regulated aircraft must meet the requirements detailed in DSA02 DFRS⁸⁹. The relationship between the AO and the Defence Aerodrome Rescue and Fire Fighting (ARFF) Service Provider is defined within DSA02 DFRS⁸ and the Business Agreements between Defence ARFF Service Provider and the TLBs. The Defence ARFF Service Provider is a DH-Facing Organization, and its Fire Stations operate to national good practice providing a service to the AO.

3.2 Emergency Orders / Aerodrome Crash Plan. Emergency Orders / Aerodrome Crash Plans are at **Annex L**, iaw guidance contained within the Manual of Post-Crash Management (MAPCM), RA 1400(1)¹⁰ and DSA02 DFRS⁸. Orders cover the eventuality of an aircraft accident / incident on the aerodrome or within the 1km area assessment from runway 07/25 thresholds. The RAF BZN Major Incident Plan (MIP (CONPLAN1)) is managed by BZN Contingency Plans. Individual sections on station hold hard copies. CONPLAN 1 is to be activated in the event of the following :

- a. Major Accidents or Incidents.
- b. Air System Crash at BZN or within 5nm.
- c. If Lansdowne Chemicals instigate their Major Incident Plan.

For fuel spillages, the Unit Spillage Response Plan (CONPLAN 2) can be activated via the Duty Engineering Ops Controller (DEOC) outside of the MIP. All orders are to be contained at separate Annexes.

3.3 ARFF Services and Training Orders. The Fire Station Manager, iaw DSA02 DFRS⁸ is to ensure ARFF Services and Training Orders are hyperlinked at Annex M.

3.4 Disabled Aircraft Removal¹¹. The AO is to ensure that Disabled Aircraft Removal Orders at **Annex N** are suitable to enable a quick and safe removal of an aircraft that has caused a temporary closure of the runway, taxiway or Aircraft Servicing Platform (ASP), but falls beneath the criteria of an accident that would be dealt with separately under the Aerodrome Aircraft Crash Plan.

3.5 Fire Cover for CASEVAC/Aeromed/DG/SCD Aircraft Movements. Orders pertaining to CASEVAC or Aeromedical flights are detailed as per **Annex U**.

⁶ Refer to RA 3261(2): Aerodrome Emergency Services, RA 3263 – Aerodrome Classification and DSA02 DFRS – Defence ARFF Regulation.

⁷ Refer to RA 3049 – Defence Contractor Flying Organization Responsibilities for UK Military Air System Operating Locations.

⁸ Refer to DSA02 DFRS – Defence ARFF Regulation.

⁹ For Aerodromes operating under RA 3049 - Defence Contractor Flying Organization responsibilities for UK Military Air System Operating Locations, Form 5 will be used.

¹⁰ Refer to RA 1400(1): Flight Safety.

¹¹If the AAIB elect to conduct an on-scene investigation, the disabled aircraft cannot be removed until authorized by the AAIB. AAIB will require Aircraft identification and type; nature of un-serviceability; location; section of the manoeuvring area affected and POB. 2022DIN06-005 contains additional information on when and by what method accidents and serious incidents are to be reported to the DAIB.

Chapter 4: Air Traffic Services and Local Procedures

4.1 **Terminal Air Traffic Control Centre South (TATCC (S)) Orders.** TATCC(S) Orders are produced to cover all ATC procedures involved in the safe and expeditious flow of Air Traffic. The orders take into account any direction and guidance contained within the Manual of Military Air Traffic Management (MMATM) and iaw the RA 3000 Series to ensure compliance and are at **Annex O**.

Chapter 5: Aerodrome Administration and Operating Procedures

5.1 Aerodrome Data Reporting. The AO is responsible for the ownership of the aerodrome data and ensures all data provided is correct. The AO delegates the responsibility of advising No 1 AIDU of any permanent changes to BZN aerodrome information to SLOps. Permanent changes to the BZN aerodrome data will be notified to No 1 AIDU via the web address given in MMATM Ch 5 or via Mil AIP online Request For Change (RFC).

Airfield Ops is the main coordination centre for BZN aerodrome operations. The duty staff are responsible for the allocation and prioritisation of resource to enable flying operations. The primary function of Airfield Ops is to coordinate the stn's flying effort and all inputs are to be channelled through this focal point. To ensure situational awareness, sqns are to report flying programme changes to Airfield Ops as soon as possible. The DOC is to operate iaw OSW Orders and BM Orders and is to maintain a log recording significant events. The DOC is responsible for:

- a. Providing the necessary facilities and information required to support flying and appropriate booking of diversion airfields.
- b. Liaison with stn-based sqns for coordination of the flying programme.
- c. Liaison with ASCOT Ops regarding AT tasking and DSCOM for AT planning.
- d. Monitoring the activation and execution of Op TANSOR when ordered by the National Representative (NatRep) at the National Air and Space Operation Centre (NASOC) or by the Duty Controller at Combined Air Operations Centre (CAOC) Finderup (F) for NATO ops.
- e. The initiation and subsequent coordination of stn support to deploy National Standby assets. Acting as the information hub to draw together internal and external agency communications.

5.2 Aerodrome Serviceability Inspections. Orders for the inspection of the aerodrome iaw RA 3264¹⁰ are at **Annex Q**.

5.3. Aerodrome Technical Inspections. Inspections are to be conducted iaw aerodrome regulations, Orders are at **Annex R**. A technical inspection of aerodrome lighting is conducted by a qualified SME daily with a more in-depth inspection of the aerodrome infrastructure by airfield Assurance conducted weekly.

5.4 Radar, Radio and Navigation Aid Maintenance, Monitoring and Protection. Produced iaw extant Support Policy Statements and AP 600, orders for the maintenance and monitoring of radar, radio and navigation equipment are at **Annex S**. Orders contain details for the protection and supervision of access to the radar, radio and navigation aids (including the immediate vicinity).

5.5. Aerodrome Works Safety. Orders at **Annex T** detail the requirements of control and supervision of work on the aerodrome.

5.6. Aerodrome Users - Vehicle and Pedestrian Control. iaw RA 3262¹¹ Vehicle and Pedestrian Orders are at **Annex G**.

¹⁰ RA 3264 Aerodrome Inspections

¹¹ RA 3262 – Aerodrome Access.

5.7. **FOD Prevention - Training and Awareness.** FOD Prevention, training and awareness Orders are at **Annex V**.

5.8. **Aerodrome Wildlife Management.** BZN is subject to contracted Aerodrome Wildlife Control Unit (AWCU) provision. Comprehensive orders on bird and wildlife management at **Annex W**. High bird activity is broadcast on DATIS, notified via TATCC(S) and published via NOTAM.

5.9. **Low Visibility Operations (LVO).** IAW RA 3274¹², LVO are at **Annex X**.

5.10. **Snow and Ice Operations.** Snow and Ice Orders are at **Annex Y** and are written, exercised and reviewed annually iaw RA 3278¹³.

5.11. **Thunderstorm and Strong Wind Procedures.** Orders for aircraft operations during thunderstorm (lightning risk) warning periods and periods of forecast strong winds are at **Annex Z**.

5.12. **Civil Registered Aircraft Aerodrome Usage - Terms and Conditions.** Use of BZN by civil registered aircraft must be iaw JSP 360¹⁴ and is at **Annex AA**. Any breach of terms and conditions could constitute grounds for temporary or permanent BZN operating privilege withdrawal. Requests to use BZN are to be addressed to Airfield Operations on 01993 895315 or bzn-airfieldoperations@mod.gov.uk.

5.13. **Safeguarding Requirements - Waivers and Exemptions.** The procedures involved in safeguarding the operational environment of military aerodromes is explained in the RA 3500 Series¹⁵. All safeguarding activities are to be conducted iaw extant regulations. MAA issued waivers or exemptions are promulgated at **Annex F** with a corresponding record of the validity recorded in the Defence Aerodrome Assurance Framework.

5.14. **Aerodrome Assurance Activity.** All reports, surveys and assurance documentation regarding BZN and its facilities are captured within the Defence Aerodrome Assurance Framework (DAAF). The AO will determine which 2nd Party Assurance reports (of those involved in activities on or around the aerodrome) are captured¹⁶. Airfield Assurance provides strategic oversight and management of airside infrastructures and systems. They monitor and ensure safe, compliant airside activity including airfield driving standards. Additionally, they maintain communications with airfield user organisations and administer the Ramp Safety Action Group to collaboratively review and manage airside hazards and issues.

5.15. **Electrical Ground Power Procedures.** Electrical Ground Power Procedure Orders are at **Annex CC** and detail the priorities for using Ground Power. Personnel are trained by sqn Training Cell on how to operate safely.

5.16. **Aviation Fuel Management Procedures.** Order **Annex DD** details Aviation Fuel Management, including policy guidance.

5.17. **Hazardous Materials - Spillage Plan.** Hazardous Materials Spillage Orders are at **Annex EE**.

5.18. **Jettison and Fuel Dumping Area.** BZN does not have a designated fuel jettison and dumping area. Guidance for aircraft landing with a trailing hose is at **Annex FF**.

¹² RA 3274 – Low Visibility Procedures.

¹³ RA 3278 Snow and Ice Operations.

¹⁴ JSP 360 - Use of Military Aerodromes by Civil Aircraft. This will need to be made available to civil operators on request.

¹⁵ RA 3500 Series – Aerodrome Design and Safeguarding.

¹⁶ For example, Air Traffic Control BM STANEVAL (ATM) reports.

- 5.19. **Compass Swing Area.** Orders and site certificate are at **Annex GG**
- 5.20. **Explosive Ordnance Disposal Area.** There is no area for the disposal of Explosive Ordnance at BZN.
- 5.21. **Dangerous Goods (DG) Procedures.** Orders covering the control, loading, unloading and management of DG iaw extant regulations are at **Annex II.**
- 5.22. **Hydrazine (H70) Leak.** Generic guidance is at **Annex JJ** and details the actions for potential Hydrazine (H70) leaks from visiting ac. In the event of an offsite H70 incident, CONPLAN 1 will be initiated.
- 5.23. **RPAS Orders.** RPAS Orders at **Annex KK** outline the authorised operation of RPAS within the Air Traffic Zone (ATZ) Boundary.
- 5.24. **C17 Combat Offload.** Orders detailing procedures for conducting C17 Combat Offloads at BZN aerodrome are at **Annex LL..**
- 5.25. **Flare Misfire / Hang-up Procedure.** Flare Misfire / Hung Flare Orders are at **Annex MM** and outline procedures in the event an ac diverts to BZN with a potential misfired or hung flare.
- 5.26. **RAF Brize Norton Designated Parachute/Free-fall Drop Zones.** Details on the designated areas for parachute and free-fall drop zones at BZN are at **Annex NN.**
- 5.27. **Aircraft Engine Ground Runs (EGRs).** EGRs are a necessary part of ac engineering for all aircraft platforms based at BZN. EGR Orders at **Annex OO** detail EGR information on responsibilities, communications, locations, constraints and visiting ac EGRs.
- 5.28. **RAF Brize Norton Based Air Landed Arming Refuel Point (ALARP), Training and Coordination.** **Removed.**
- 5.29. **JADTEU Operating Area.** JADTEU Operating Areas are annotated at **Annex RR.**

LETTER OF DELEGATION

Sponsor: HoE

1. The LoD can be found [here](#).

SAFETY MEETING STRUCTURE**Sponsor:** Air Safety Manager

1. Air Safety Meeting structure is shown below IAW the RAF Brize Norton ASMP.

Forum	Schedule	Details
RAF Brize Norton		
ASSG	Mar	See Annex A
Platform Review	Oct/Nov	See Annex B
DDH Review Gp	Weekly	
DDH DASOR Rwy	Monthly	
ASC DASOR Triage	Daily	
UFSAG	Monthly	See Annex C
Bow Tie Review	Monthly	See Annex D
DASOR Review	Monthly	See Annex E
Total Safety Meeting	Monthly	
OF4 Aircrew Forum	Monthly	

2. The RAF Brize Norton and Air Wing Air Safety Management Plans can be found [here](#).

STRUCTURE OF KEY STAKEHOLDERS

Sponsor: OC BSW

1. A structure of key stakeholders is available via the stn homepage, [here](#).
2. The ASMP Ch A4 and A5 also provides details organisation, key safety personnel and Air Safety Components to add context to the above.

AERODROME OPERATORS HAZARD LOG (AOHL)

Sponsor: OC OSW

1. The AOHL is available via Airfield Assurance SharePoint, [here](#).

AERODROME RELATED LETTERS OF AGREEMENT

Sponsor: TATCC (S) Cdr

1. A list of all aerodrome related agreements is held by TATCC (S). Contact 01993 897526 for further detail if required.

AERODROME SAFEGUARDING WAIVERS AND EXEMPTIONS

Sponsor: TATCC (S) Cdr

Serial	Issue	Description	Mitigation	Resolution
1	Infringement of Obstacle Free Zone as stipulated in the RA3500 Series	In preparation for an upgrade of TATCC (S) equipment associated with Mode 'S' a Wide Area Multilateration (WAM) Antennae has been installed	MAA Waiver approved and in DAM	MAA Waiver (Fig 2) expires in 2037 which is the expected life of this antennae
2	RAF airfields use QFE as an approach datum	Brize uses QNH as landing pressure datum.	Safety Survey completed. QFE is available on request and controllers routinely practice QFE approaches. Highlighted in the BINA	QFE approaches are available on request. (Fig 1). Civilian standard.
3	Infringement of Obstacle Limitation Surface	The A400M (Atlas) hangar infringes the OLS.	MAA Waiver approved and highlighted in the DAM	N/A. MAA Waiver (Fig 3)
4	Non-MAA Compliant Aerodrome Stand Floodlighting	Aerodrome Stand Floodlighting below the required 20 Lux	Highlighted in DAM. Portable floodlights are available on request from the DEOC. MAA Waiver not required as legacy.	Floodlight replacement programme.

Technical Safeguarding Infringements Register

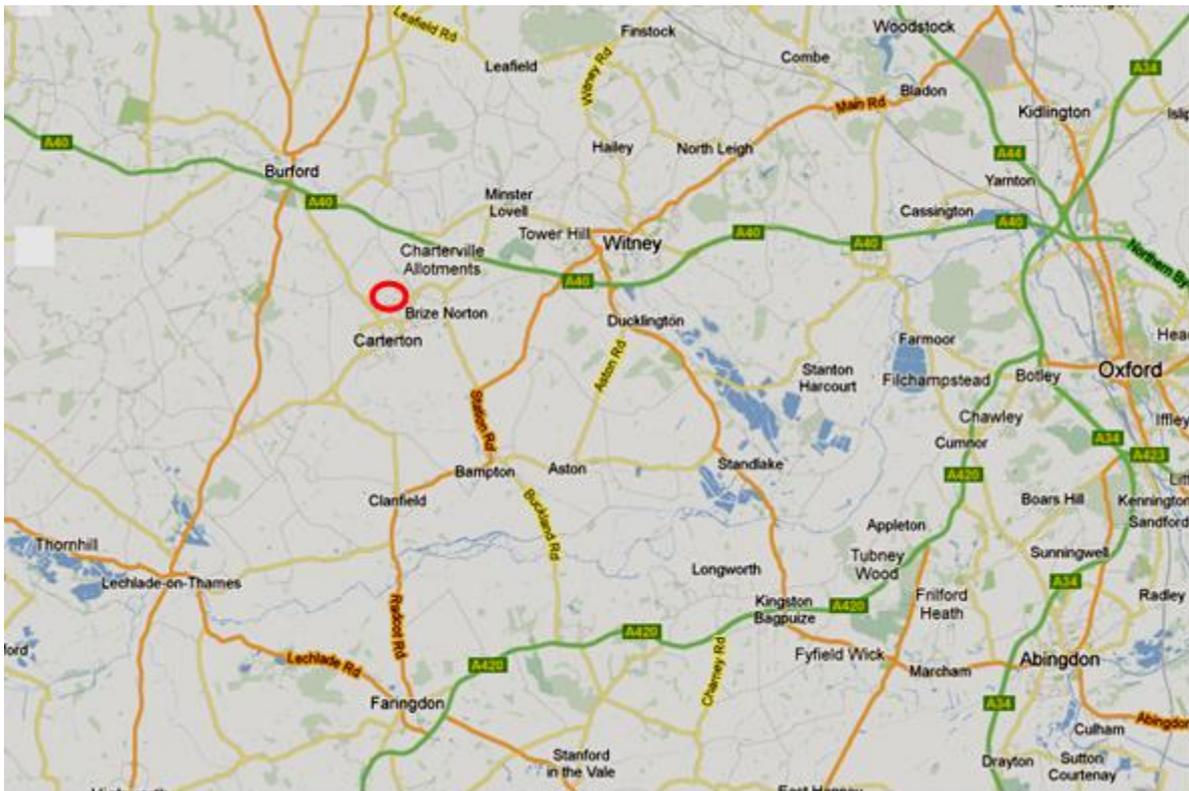
1. Please follow this [link](#)

AERODROME LOCATION & LAYOUT

Sponsor: SLOps

1. **Aerodrome Location.** BZN is located between Brize Norton village and Carterton, south of the M40, about 22 miles west of Oxford. RAF Brize Norton is approx. 30 minutes travelling time to Oxford, and 1 hour 50 minutes to London by road. The nearest railway stations are Oxford and Swindon.

a. **Local Area Map**



3. **Aerodrome Crash Map.** [Aerodrome crash map.](#)

4. Orders for the control of vehicular and pedestrian traffic on the aerodrome are, iaw guidance contained in the RA3262, found at the following link: [Airfield Access Orders.](#)

NOISE ABATEMENT PROCEDURES

Sponsor: SLOps

References:

- A. 20131118-RAF BZN Noise Report Open Letter Dated 18 Nov 13
- B. AESOs Book 1 Part 2 Chapter 1 Order 2
- C. AESOs Book 2 Part 1 Chapter 2 Order 1

All times are LOCAL.

1. Ref A details the reasons why the production of noise at BZN must be treated sensitively. This order details how activity, known to generate significant noise, should be managed. Details of TATCC (S) noise abatement procedures are found within published Terminal Approach Procedures.

Operating Times

2. Circuit hours for BZN based aircraft:

a. **Normal Operating Hours:**

- (1) 0700 – 1900 Monday to Thursday.
- (2) 0700 – 1900 Friday.

b. **Unsociable Hours** – no additional permission required.

- (1) 1900 – 2200 Monday to Thursday

c. **Out of Hours**

- (1) 2200 – 0700 Monday to Thursday.
- (2) 1900 – 0700 Friday to Monday (UK Bank Holidays will be classed as OOH).

3. **Limitations.** The following limitations apply for management of noise disturbance within the Control Zone (CTR) to the local community.

a. **Normal Operating Hours.**

- (1) **Number of aircraft.** Only permitted 3 aircraft in the visual circuits at any one time.
- (2) **Concurrent Circuits.** Stn based aircraft are restricted to a maximum of 6 consecutive visual circuits. After which, aircraft must then either carry out an intermediate landing, go out to Initials or complete an Instrument Approach.

b. **Unsociable Hours Limitations.**

(1) **Number of aircraft.** The maximum number of aircraft concurrently conducting a combination of circuits and training Instrument Approaches will be restricted to 3 (inc returning route aircraft).

(2) **Consecutive Circuits.** Stn based aircraft are restricted to a maximum of 4 consecutive circuits. After which, the aircraft must then either carry out an intermediate landing, go out to Initials or complete an Instrument Approach.

(3) **Aircraft RTB from a task.** Aircraft returning from any task type; a single approach to 'touch and go', a Low Approach into a single circuit, or a further single Instrument Approach to land can be made without OC OSW's authorisation during the following times.

(a) Up to 2300L Monday – Thursday.

(b) Up to 2000L on Fridays.

c. **General Limitations**

(1) The total number of low-level circuits flown at BZN in a 24hr period is 6. Helicopters conducting JADTEU trials work are exempt from this restriction.

(2) There are no restrictions on the number of trg instrument approaches flown in a 24hr period.

4. **Use of the Bzn circuit by visiting Service aircraft.** Through approval of SLOps, aircraft from other MOD units can be accepted for PDs for one approach only:

a. 1700 – 2200 Monday to Thursday.

b. 1700 – 2000 Fridays.

5. **Management of Out of Hours Flying Requirements.**

a. Stn-based aircraft wishing to conduct out of hours circuits must have bespoke approval from SLOps (on behalf of the AO).

b. All AO dispensation requests, staffed through Flt Cdr Ops, must state the operational necessity, including the operational/training impact if not approved. Consideration will be given to the availability of hrs of darkness and recent (or planned) exported trg opportunities supported by enabling functions.

c. Short-notice requests made during the week in progress, including a weekend or Public Holiday, are to be staffed directly through the DOC for approval from SLOps. The Particular attention will be made to operational necessity, recent activity levels and disturbance complaints, potentially approving with flying caveats to reduce noise disturbance.

d. All in-week unsociable flying, and associated approvals, will be tracked via the circuits booking spreadsheet.

6. **RAF Brize Norton Flying Club.** The BZN Flying Club is authorised to operate within the following periods:

UK OFFICIAL

- a. The club may operate 7 days per week including Public Holidays. They must book circuits no later than 48 hours in advance. However, short-notice requests are likely to be declined noting the circuits plan is confirmed one week prior.
- b. Club operated aircraft may operate from 0800 hrs to 1900 hrs except for conditions stipulated in para 6(c) below.
- c. Club operated aircraft may not conduct circuit flying between 1900 hrs and 2200 hrs unless approval has been granted by SLOps. Such requests are to be at least 48 hrs in advance. There is to be no visual circuit flying between 1900 hrs and 2200 hrs on Saturdays and Sundays, or as otherwise directed by the DOC or TATCC (S) ATCO IC.
- d. Club operated aircraft may conduct a take-off to leave the CTR and a single landing, on flights of at least 2 hrs duration, at any time between 2200 hrs and 0800 hrs. A radar service from Brize Norton TATCC (S) may not always be available. The DOC is to be informed of the flight details 24 hrs in advance and pass such details to the TATCC (S) Supervisor.

7. **Avoids in the Circuit Pattern.** Aircraft operating in the BZN circuit must adhere to circuit avoids defined in the BZN Terminal Approach Plates.

8. **Recording of Unsociable Hours Approval Requests.** As per para 5, the DOC is to record all requests, rejections and approvals for unsociable hours activity. The TATCC (S) Cdr is to maintain a record of all flying activity at the airfield.

9. **Unsociable Hours Social Media Notification.** The DOC will forward approved OOH hours requests to the stn MCO for possible notification to the local community through social media and/or the stn Homepage only following direction from SLOps or Flt Cdr Ops in their absence.

Engine Ground Runs (EGRs)

10. Ref B and Ref C contain full details regarding the procedures for EGRs.

11. **General.** To minimise noise disturbance to the local community, EGRs are to be conducted under the following restrictions:

- a. **0700-1900 hrs.** EGRs are only to occur 0700 hrs to 1900 hrs Monday to Saturday and 0830 - 1900 hrs on Sundays/PH.
- b. **1900-0700 hrs.** EGR requests between 1900 - 0700 hrs require the approval of the DOC (who holds delegated approval from OC OSW) and are to be conducted iaw AESOs¹⁷.

12. **EGR Locations.** Full details of authorised EGR, including High Powered Engine Ground Runs (HP EGR) locations are contained within Ref C.

13. **Recording of EGRs.** The DOC is to record all EGR applications (approvals and rejections) in the DOC EGR Log.

¹⁷ AESOs link:

<https://modgovuk.sharepoint.com/teams/3231/OSWHQ/WOEngPol%26Trg/AESOs/SitePages/Home.aspx>

TEMPORARY OBSTRUCTIONS

Sponsor: TATCC (S) Cdr

References:

CAP 232 Ch 6 - Aerodrome Survey Information,
CAP 168 Ch 4 Para 4.8 to 4.49 - The assessment and treatment of obstacles and
RA 3518 Permanent Fixed Wing Aerodrome - Visual Aids for Denoting Obstacles

1. **Obstruction within the Airfield Boundary.** In the event of a temporary obstruction on or around any maneuvering area, the individual responsible for the obstruction should provide Airfield Assurance with the following details at least **6 weeks** before the planned date of obstacle erection:

- a. Planned dates and duration of the obstacle's presence.
- b. Location.
- c. Upper limit of the obstacle.
- d. What the obstacle is (crane, MEWP, mast, etc.) and approx. weight (when loaded if a crane).
- e. The dimensions of the obstacle.

2. **They must then await permission to proceed before taking any further action.**

Airfield Assurance are to liaise with the following to ensure safe operating area for those using the obstacle, the other airfield users and aircraft operating at the aerodrome:

- a. **TATCC (S).** To identify any impact to the **flying circuit** and ground taxi pattern.
- b. **Airfield Assurance.** To identify any impact to the **Obstruction Limitation Surface.**
- c. **Airfield Support Team (AST).** To ensure the Safeguarding of ATM equipment via a request for an Engineering Appraisal and Concession from the Approving Officer as required.
- d. **DEOCs.** To identify any impact to parking bays and taxiway usage is highlighted to sqn eng sections and visiting aircraft are considered.

3. Once approval is given by Airfield Assurance, the following is to take place:

- a. Airfield Assurance to publish NOTAM containing details of the obstacle. A further NOTAM is required if the obstacle impacts on any operating surface, changing availability as per the Mil-AIP AD2 RAF Brize Norton.
- b. TATCC (S) to publish NOTAM detailing any impact to ATM equipment during the period of the obstacle being established.

UK OFFICIAL

- c. Airfield Assurance to liaise with airfield users, TATCC (S), DEOCs, DOC and CoC to ensure any impacts to the AOS are understood well in advance of the obstacle being erected.
4. When the obstacle is in place, it is to be marked in accordance with extant regulations using approved high visibility markers, tape or fencing with additional red-light markers at night. Any fencing is to be secured to prevent becoming a hazard in high winds. TATCC (S) will provide progressive taxi instructions to departing/arriving aircraft as appropriate.
5. **Identification Markers.** Markers, fencing or barriers are to be arranged by the agency erecting the obstacle to indicate the full dimensions of the obstructions to ensure a safe area of maneuverability to all airfield users. All airfield obstructions are identified in such a way to ensure they give taxiing aircraft and moving vehicles adequate distance to maneuver safely. Any doubt on the use of the surface during the erection of a temporary obstruction should be addressed to Airfield Assurance in the first instance, and TATCC (S) OOH.
6. **Informing Aircrew.** TATCC (S) is responsible for informing aircraft captains of any unserviceability on the aerodrome that will affect them. Outbound, the aircraft captain will be informed on start. Inbound, the aircraft captain will be informed at an appropriate time.
7. **Obstruction outside of the airfield boundary.** When there is a requirement to utilise a crane or other tall equipment which exceeds **10m in height within 6km of the airfield**, a Crane or Tall Equipment Permit must be submitted and approved by key stakeholders. This is to provide assurance that due diligence has been taken to ensure the height and location of the obstruction does not pose a hazard to the Safe Operating Environment (SoE) of aircraft within the vicinity of the aerodrome. The full process to request and issue a permit, is as follows.
 - a. Applicant and equipment supplier to complete Crane and Tall Equipment Permit at Annex I4-I6 and submit to Airfield Assurance via email to BZN-Airfieldassurance@mod.uk.
 - b. Airfield Assurance will assess if the request is within 6km and above 10m, and if required, will forward on to AST (BZN-OSW-CyOps-AST@mod.gov.uk) and the TATCC (S) Infra Support Team (BZN-TATCCS-ATC-IST@mod.gov.uk).
 - c. AST will submit request for Engineering Appraisal to establish any impact to ATM equipment. A further request for a Concession will be submitted if EA indicates one is required, informing Airfield Assurance of the outcome.
 - d. TATCC (S) IST will establish if the crane/tall equipment position/height infringes on the circuit height of VFR/IFR and any impact to aircraft taxi pattern, informing Airfield Assurance of any impacts.
 - e. Airfield Assurance will establish if the crane/tall equipment infringes on the OLS.
8. On completion of the above elements, TATCC (S), AST and Airfield Assurance to convene via a formal Siting Board on MS Teams to review impacts and ascertain whether the request should be approved or declined.
9. The result of the review should then be discussed with the applicant.
10. Airfield Assurance retain a register of applications, awarded serial numbers, impact and approval/rejected status with any associated NOTAM numbers.



**RAF Brize Norton
Crane and Tall Equipment Permit**

**AUTHORISATION PERMIT FOR THE USE OF CRANES AND OTHER TALL
EQUIPMENT**

*“The appointed person should consult the aerodrome/airfield manager for permission to work if a crane is to be used **within 6 km of the aerodrome/airfield and its height exceeds 10m** or that of surrounding structures or trees, if higher.” (BS7121, Part 1)*

Section 1: To be completed by the applicant.

EQUIPMENT DETAILS			
Crane / Equipment Registration Number		Click or tap here to enter text.	
Hire Company		Click or tap here to enter text.	
Type of Crane or Equipment (e.g. mobile/fixed/tower)		Click or tap here to enter text.	
Maximum Height Crane or Equipment <u>Could</u> Extend to		Click or tap here to enter text.	
Maximum Height Above Ground Level (m) Crane or Equipment Will Extend to <u>During Task</u>		Click or tap here to enter text.	
<u>Minimum</u> Height That Task Can be Completed At		Click or tap here to enter text.	
Radius of Crane Jib		Click or tap here to enter text.	
Location of Crane or Equipment (latitude and longitude)		Click or tap here to enter text.	
Elevation of Site (Above Ordnance Datum, i.e. mean sea level)		Click or tap here to enter text.	
Full Site Address (including postcode)			
Crane Operator/Lifting Supervisor Contact Name		Click or tap here to enter text.	
Crane Operator/Lifting Supervisor Contact Phone Number		Click or tap here to enter text.	
Date(s) of Operation (inclusive)		Click or tap here to enter text.	
Times of Operation (inclusive)		Click or tap here to enter text.	
<p><i>I certify that the information given is accurate and will immediately inform RAF Brize Norton Operations of any changes to the above information. I understand that if any part of the construction equipment infringes the airport's Obstacle Limitation Surfaces (OLS) that there may be additional charges to cover the cost of an impact study and mitigation report.</i></p>			
Applicant's Name	Click or tap here to enter text.	Contact Phone Number	Click or tap here to enter text.
Email Address	Click or tap here to enter text.	Company	Click or tap here to enter text.

UK OFFICIAL

RESPONSIBLE OPERATOR DETAILS	
Company Name	Click or tap here to enter text.
Address	Click or tap here to enter text.
Company Registration Number	Click or tap here to enter text.
Contact Name	Click or tap here to enter text.
Contact Phone Number	Click or tap here to enter text.
Email Address	Click or tap here to enter text.
Permits requiring further assessment by our approved Instrument Flight Procedure Designer this will incur an additional cost, which will be Provided on Application.	

Email completed form to: bnz-airfieldassurance@mod.uk

RAF Brize Norton will endeavour to assess all applications as soon as possible; however, it is recommended that applicant's apply at least 6 weeks prior to the planned start date. This Permit is only valid once Section 2 has been completed and signed by RAF Brize Norton's Aerodrome Operator or nominated representative. Any questions regarding the operation of cranes/tall equipment on or close to RAF Brize Norton, and the completion of this form should be addressed to RAF Brize Norton Airfield Assurance on 01993 897067.

Section 2: To be completed by Airfield Assurance

CONDITIONS PLACED ON OPERATION	
Minimum 32 candela steady red obstacle light(s) (Low-intensity Type B (less than 45m AGL)	YES <input type="checkbox"/> NO <input type="checkbox"/>
2000 candela steady red obstacle light(s) (Medium-intensity Type B or C (45 - 150m AGL)	YES <input type="checkbox"/> NO <input type="checkbox"/>
Airfield Operations to be notified before operations commence	YES <input type="checkbox"/> NO <input type="checkbox"/>
Other conditions placed on operation:	

SAFEGUARDING DETAILS	
Crane permit number	xxx/xxx
Operation subject to low visibility procedures or cloud ceiling	YES <input type="checkbox"/> NO <input type="checkbox"/>
OLS penetration?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Applicable OLS	Outer Horizontal
TATCC (S) Consultation	YES <input type="checkbox"/> NO <input type="checkbox"/>

UK OFFICIAL

TATCC (S) Comments	Click or tap here to enter text.		
AST Consultation	YES	<input type="checkbox"/>	NO <input type="checkbox"/>
AST Comments	Click or tap here to enter text.		
MAA/AIDU Consultation (IFP Safeguarding)	YES	<input type="checkbox"/>	NO <input type="checkbox"/>
NOTAM Required?	YES	<input type="checkbox"/>	NO <input type="checkbox"/>
Times of Operation (Local)			
Schedule	Click or tap here to enter text.		
Max Height AGL m/ft	Click or tap here to enter text.		
Max Height AMSL m/ft	Click or tap here to enter text.		
NOTAM Reference	Click or tap here to enter text.		
Other notes/safeguarding details:			
AUTHORISED BY			
TATCC (S)	Click or tap here to enter text.	Date	Click or tap here to enter text.
AST	Click or tap here to enter text.	Date	Click or tap here to enter text.
AFA	Click or tap here to enter text.	Date	Click or tap here to enter text.

MAINTENANCE AND SAFE OPERATION OF THE RHAG

Sponsor: XO OSW

1. Orders with respect to both the maintenance and safe operation of the RHAG are, in accordance with extant policy guidance, found below:

[DAP119J 1405 5F 202307 D H \(1\) \(1\)2 \(1\) \(1\).pdf \(mil.uk\)](#)

SAFE PARKING, MANOEUVRING, REFUELLING AND SERVICING OF AIRCRAFT

Sponsor: XO OSW

1. Aircraft Parking.
2. Sweeping Plan.
3. Refueling.
4. Specific Orders for Aircraft Servicing (contained within AESOs).
5. Marshalling services are carried out iaw STANAG 3117.
6. Orders for the servicing of aircraft are carried out iaw with the specific Aircraft Publication and can be found via the relevant flying sqn eng.
7. A 'Follow Me' escort vehicle is available to all aircraft upon request to TATCC (S) and will be conducted by Airfield Ops. Progressive taxi instructions or Follow Me will be offered to visitors as standard procedure.

RAF BRIZE NORTON MAJOR INCIDENT PLAN

Sponsor: SLOps

1. Please select the link to access the BZN Major Incident Plan ([CONPLAN 1](#)), managed by Contingency Plans.
2. See DAM Ch 5 for guidance on incidents which may require activation of the MIP.

AERODROME RESCUE AND FIRE FIGHTING SERVICES AND TRAINING

Sponsor: OC Fire

	Link	Notes
Generic Operating Procedures	Captia Operating Instructions Aircraft Quick Reference Cards	Links to Capita OIs folder and all RAF aircraft quick reference cards.
FRS Generic Risk Assessments	Risk Assessments Aircraft GRA's	Link to the Fire sections Risk assessments and Aircraft GRA's.
Tactical information plans (TIPS)	TIPS LAFRS SSRI	LAFRS is a document produced by Oxfordshire Fire Service. It states risk information and PDA with RAF Brize Norton.
Fire Section Orders	Orders	Access is on request x7220
TRA	TRA	Document is password protected. To gain access contact must be made with the S Fire O or TM Via Ext 7220
Response Area assessment	Response Assessment	
1000M Assessment	1000M Assessment	
Water Assessment	Water Assessment	
Category for specific Hazard Assessment		None made for BZN.
Reduction of ARFF Cover	Reduction of ARFF Blank	
ARFF TRG Area Orders	Orders	Access is on request x7220
ARFF Trg Area RA	Aircraft trg facility	

DISABLED AIRCRAFT REMOVAL

Sponsor: DEOC

1. If an aircraft is unable to vacate a portion of the AOS, causing a temporary closure of that area to other aircraft, but falls beneath the criteria of an accident, the DEOC will contact the relevant sqn eng/aircraft operator. Together, they will establish what rectification is required to remove the aircraft safely and expediently to enable the reopening of the affected area.
2. If the incident is caused by a visiting aircraft, the Chief Air Eng will be consulted and may utilise Eng personnel within their AOR to establish how to safely remove the frame.
3. If the incident is deemed an aircraft accident, the Major Incident Plan (CONPLAN 1-MIP) is to be activated, including consultation with the Joint Aircraft Recovery Team (JARTS).
4. If an accident has occurred, aircraft should not be moved until the AAIB have been consulted.

TACTICAL AIR TRAFFIC CONTROL CENTRE (SOUTH)

Sponsor: TATCC (S) Cdr

1. Orders for TATCC (S) procedures in the safe and expeditious flow of Air Traffic are available [here](#).

AERODROME SERVICEABILITY INSPECTIONS

Sponsor: Airfield Operations

Aerodrome Serviceability Inspections. Aerodrome inspections are to be carried out in accordance with the BM Order Book and RA 3264 as follows:

AIRFIELD INSPECTIONS

1. The **Duty Ops Controller** is to ensure airfield surfaces, lighting (including temporary lighting/ducting installations), PAPI and Pre-night flying inspection is carried out each day as soon as light permits, but no later than 1000hrs, to ensure that:
 - a. The surfaces are fit for aircraft and vehicles.
 - b. The markings are not worn or obliterated.
 - c. The SOS telephones either side of the Rwy threshold routes are serviceable (all unserviceabilities are to be reported to **Vinci** and DATO).
 - d. All traffic lights are serviceable.
 - e. Any object found on the airfield is removed and a FOD report is to be completed to accompany the item. If the object could have come from an aircraft it is to be taken to Eng Ops immediately. All other objects are to be removed and have a FOD report raised in accordance with the BZN FOD Prevention Plan¹⁸.
 - f. Work in progress and obstructions are identified and marked.
 - g. Exceptions to the sweeping programme at Annex H are identified (such exceptions are to be notified to ASMT or the sweeper driver).
 - h. The short grass areas are being maintained in accordance with Annex E.
 - i. The JADTEU Helipad/Fire Trg Area is clear of FOD.
2. All information arising from the airfield inspection relevant to operations, is to be passed to the **DOC** and **TATCC (S)** Supervisor/ATCO IC for onward transmission to the appropriate agencies.
3. Any unserviceabilities are to be reported to Airfield Assurance at the earliest opportunity, who are to raise a Works Services Request via the Vinci helpdesk. If the unserviceability is OOH and the matter requires urgent attention, Airfield Operations are to report it to the Vinci helpdesk 0800 0042010 and email details to Airfield Assurance.
4. The Airfield Surface, lighting, PAPI and Pre-night flying inspection is to be logged in the **Airfield Ops** Watch Log (F6658), along with any discrepancies.

¹⁸ FOD Prevention Plan: FOD - BZN Station FOD Plan.

AERODROME TECHNICAL INSPECTIONS**Sponsor:** OC EMS

1. Aquila and C4i AST are responsible for the routine inspections of the technical equipment (transmitters, receivers, ILS etc) with precision navigation aids being calibrated by a flight check air system accordance with AP 600-Royal Air Force Information CIS policy. Aquila service desk is the POC for all equipment other than MRE and IRVR.
2. Runway, taxiway and obstruction lights, along with PAPIs and aerodrome traffic lights are inspected daily by **Airfield Ops** and weekly by the Airfield Electrician.
3. Manoeuvring Areas and drainage are inspected, maintained and repaired in accordance with DIO guidance.
4. All earthing points are checked 11 monthly or yearly by Vinci, depending on the use of the earth points.
5. All aerodrome signs are inspected daily by **Airfield Ops**, weekly by Vinci and routinely by Airfield Assurance.
6. The AGL "B" Centres and "A" Centre (TATCC (S)) are backed by Standby Power Systems. These are checked fortnightly, Monthly, 6 Monthly, Yearly or as required by manufacturers recommendation. The switchover test is carried out on the first Sunday of each month. Stand-by Generators are inspected 1 monthly, 6 monthly, 1 yearly or 8 yearly.
7. Traffic lights, CCTV and road barriers are checked daily by **Airfield Ops**.

**RADAR, RADIO AND NAVIGATION AID MAINTENANCE, MONITORING AND
PROTECTION**

Sponsor: OC EMS

1. These Orders are being drafted and will be included on completion.

AERODROME WORKS SAFETY**Sponsor:** TATCC (S) Cdr

1. Aerodrome Working Parties are briefed in accordance with RA 3266(1).
2. **Work in Progress (WIP).** A plan of the aerodrome is fully maintained and prominently displayed in TATCC (S) for the purpose of identifying all obstacles, nature of obstruction, markings and work in progress. It is the responsibility of the TATCC (S) Supervisor/ATCO IC to ensure the information provided on the plan is accurate.
3. **WIP Briefings.** Supervisors of any working parties are to be fully briefed on their responsibilities. The Aerodrome Controller (ADC) is responsible for ensuring the supervisor of the working party receives a comprehensive brief to consist of the following as a minimum:
 - a. Limits of the work area.
 - b. Direction of Air System movements.
 - c. Route to be taken by works vehicles.
 - d. Parking area for works vehicles and equipment.
 - e. Control to be exercised over works vehicles and workers.
 - f. Lamp and pyrotechnic signals that may be employed.
 - g. Foreign Object Damage prevention.
 - h. Any additional measures to be employed, e.g. If an escort is in attendance.

The WIP Brief can be delegated to the Ground Controller (GC) if required.

4. **WIP Log.** A WIP Logbook is maintained in the Visual Control Room, in which the ADC, enters details of all work in progress. To certify the extent of the work area and TATCC (S) Briefing has been fully understood, each entry is signed by both the ADC and Works Supervisor of the working party. This must be completed before any work commences.
5. **Control Measures.** When work is to be carried out on the airfield, and it is not possible to stop flying, special control measures are enforced to safeguard the working party. The Works Supervisor (WS) is to be issued with an MRE radio at the point of the WIP Briefing. The WS is to maintain radio contact with TATCC (S) via the MRE and ensure the working party moves clear of the manoeuvring area prior to any aircraft movement in their vicinity, as directed by TATCC (S). The TATCC (S) Supervisor/ATCO IC is responsible for issuing orders and instructions to the work party. Aircraft captains are to be informed of any work in progress that may affect aircraft operations via NOTAM and Airfield Ops briefings, including any unique taxi instructions or procedures. All airfield work is to be clearly marked using approved high visibility markers and is to be lit during hours of darkness.

6. **Grass Cutting.** A grass cutting plan is established and is included in the [TATCC \(S\) Order Book Order 522](#), and is maintained in accordance with the aerodrome policy. This is reviewed annually between DIO, Vinci and TATCC (S) IST. Any areas of concern are highlighted in the quarterly Airfield Wildlife Management meeting.

FIRE COVER FOR CASEVAC/AEROMED/DG/SCD AIRCRAFT MOVEMENTS

Sponsor: OC Fire

1. CASEVAC or Aeromedical flights:

a. Inbound:

- (1) On receipt of notification that a CASEVAC /Aeromedical flight is inbound to BZN, the DOC is to notify TATCC (S) Supervisor/ATCO IC.
- (2) At 20 nm to touchdown, the TATCC (S) Aerodrome Controller is to inform the Crew Cdr.

b. Outbound:

- (1) The DOC is to ensure all CASEVAC /Aeromedical details are notified to TATCC (S).
- (2) The Aerodrome Controller (ADC) is to inform the Crew Cdr when the CASEVAC/Aeromedical aircraft requests start.

2. Fire cover procedures concerning Dangerous Goods (UN Class 1 and UN Classes 2 to 9):

a. Outbound:

- (1) The DG NOTOC for an associated flight number is to be passed to TATCC (S) (this is to be forwarded to the fire section) by the allocated movement team leader.
- (2) The ADC is to ensure via the Crew Cdr that ARFF Services are at Readiness State 3 (in accordance with DFSR Regulation 02: ARFF Response) for air transport movements carrying DG 1.1, 1.2, 1.3 and 1.5, prior to start clearance.
- (3) A fire tender vehicle (with the remainder of the fire section at standby) is to stay in attendance with the aircraft containing UN Class 1 (except 1.4) from before engines start until the aircraft is safely airborne.

Note: An aircrew member or movements team leader should contact the fire section via the ADC if they decide other classes or amounts of DG (other than UN Class 1) require fire cover during engine start (or during loading procedures for specialist tasks).

b. Inbound:

- (1) The inbound aircrafts NOTOC from the originating airfield should be sent to BZN airfield operations (bnz-airfieldoperations@mod.gov.uk) for distribution which is to include notification to the fire section.
- (2) The pilot's inbound operations call is to further confirm the aircrafts load NOTOC details and specify whether ground fire cover is required (UN Class 1 on board except 1.4).

UK OFFICIAL

(3) If UN Class 1 is on board the aircraft, a fire tender vehicle (with the remainder of the fire section at standby) is to escort the AS to its parking bay and is to remain in position until the AS doors are open and unobstructed, and the aircraft has shutdown.

Note: As per the note above, if an inbound crew considers that it is necessary for a particular amount or type of DG (other than UN Class 1), they may request fire cover.

3. **Suspect Communicable Diseases (SCD):**

a. On receipt of notification that an AS carrying a SCD is inbound to BZN, the DOC is to notify TATCC (S).

b. Should TATCC (S) have prior notification of an on board SCD, the Supervisor is to inform the DOC at the earliest opportunity.

c. At 20 nm to touchdown, the ADC is to inform the Crew Cdr of the allocated parking bay.

FOD PREVENTION, TRAINING AND AWARENESS

Sponsor: Stn FOD PO

1. Orders for FOD prevention, training and awareness can be found below:

SSO's FOD

FOD Prevention Plan

AIRFIELD WILDLIFE MANAGEMENT PLAN

Sponsor: SLOps

1. The RAF Brize Norton Airfield Management Wildlife Plan is available [here](#).

LOW VISABILITY PROCEDURES

Sponsor: TATCC (S) Cdr

1. The following Low Visibility Procedures (LVP) are intended to protect aircraft during periods of low visibility by deploying guard vehicles to prevent Rwy incursions and conducting a physical check for obstructions on the Rwy prior to its use.
2. The TATCC (S) Supervisor/ATCO IC is to ensure the Crew Cdr is kept updated on timings of aircraft movements during anticipated periods of LVP.
3. **LVP in Force.** LVP procedures are to be implemented by TATCC (S) under the following conditions:
 - a. **Visibility Condition 1.** Whenever one or both of the Rwy thresholds are not clearly visible, but visibility is equal or greater than 550m and no aircraft are due to use the Rwy. When Visibility Condition 1 is in force, TATCC (S) **shall** ensure, as far as reasonably practicable, that activity on the manoeuvring area is minimised to operationally essential activity only.
 - b. **Visibility Condition 2.** When the Runway Visual Range (RVR) deteriorates to lower than 550m, or the cloud ceiling reduces below 200ft, and there is an Aircraft due to use the Rwy. When Visibility Condition 2 is in force LVP iaw para 4 **shall** be implemented.
4. **LVP Procedures.** The following is to be implemented when LVPs are in force:
 - a. A 'LVP In Force' tannoy **shall** be made by TATCC (S) (except between 2200-0700).
 - b. Only one aircraft shall be permitted to taxi at any one time. Aircraft shall not be permitted to taxi until all blocking vehicles are confirmed in position. When an aircraft has taxied and come to a halt, its location **shall** be positively identified before any other aircraft is permitted to use the Rwy.
 - c. **Inbound Aircraft.**
 - (1) Despatch 4 Fire vehicles, **Airfield Ops** and SAPPHO ensuring they are in position at the allocated Rwy access locations prior to the aircraft reaching the '20-mile' point.
 - (2) At the '20-mile' point, the centre, eastern and western intersection traffic lights are set to red and instruct **Airfield Ops** and SAPPHO (who should have been pre-positioned at the 25 threshold, irrespective of the Rwy in use) to perform a physical check to ensure there are no obstructions, wildlife, or other vehicles on the Rwy.
 - (3) If there is a gap of 15 minutes or more SAPPHO will require to complete a further wildlife check, therefore para 2 will be repeated.
 - (4) The 25/07 MT route traffic lights are to be set to red when the aircraft is at 8nm.

(5) At the 8nm point, the relevant airfield LVP traffic lights are to be selected to red. If the aircraft is going to vacate the Rwy north side, the base hangar lights are to be selected to red. This light can be selected to green once the aircraft has established on a bay or Twy J. If the aircraft is going to vacate south side, the JADTEU, 47 Eng, Hangar 88 and TATCC (S) traffic lights are to be selected to red. These traffic lights can be selected back to green when the aircraft has either crossed the Rwy north side or has established on a bay.

d. **Departing Aircraft.**

(1) Despatch 4 Fire vehicles, **Airfield Ops** and SAPPHO, ensuring they are in position at the allocated Rwy access locations prior to the aircraft calling for taxi².

(2) When the aircraft is taxiing, ensure the centre, eastern and western traffic lights are set to red and instruct **Airfield Ops** and SAPPHO (who should have been pre-positioned at the G1 Hold, irrespective of the Rwy in use) to perform a physical check to ensure there are no obstructions, wildlife or other vehicles on the Rwy. The timing of this check is at the discretion of the TATCC (S) ADC but should be completed before the aircraft is ready for departure.

(3) If there is a gap of 15 minutes or more between movements SAPPHO will require to complete a further wildlife check, therefore para 2 will be repeated.

(4) The 25/07 MT route traffic lights are to be set to red before an aircraft taxiing from northside crosses the Rwy (Echo to Golf for Rwy 25 or Delta to Charlie for Rwy 07) or prior to taxi instruction from south side bays.

(5) When the aircraft taxis, the relevant airfield LVP traffic lights are to be selected to red.

(6) If the aircraft is north side and will use Twy D between Bay 5 and the D/E intersection; prior to the aircraft taxiing the Base Hangar traffic lights are to be selected red. These lights can be selected to green once the aircraft reports at the D/E holding points.

(7) If the aircraft is going to use Twy B or Twy G between JADTEU traffic lights and Bravo/Charlie/Golf intersection, the JADTEU, 47 Eng, Hangar 88 and TATCC (S) LVP traffic lights are to be selected to red prior to the aircraft crossing the Rwy or taxiing from south side bays. These lights can be selected to green once the aircraft reports at Alpha or Foxtrot holding points.

5. Once the Rwy threshold traffic lights are selected to red, they must remain on red until the aircraft has landed/departed. It is acknowledged that putting the lights on red so early is non-expeditious for vehicle traffic, but safety is paramount during low visibility operations.

6. **LVP Terminated.** A tannoy is to be made from by TATCC (S) (except between 2200L-0700L) when LVP are terminated.

7. **Visiting Aircraft.** When a visiting aircraft is taxiing during LVP a 'Follow Me' vehicle **shall** be provided.

8. Vehicle positioning during LVP.



SNOW AND ICE PROCEDURES

Sponsor: SLOps

1. RAF Brize Norton Op BLACKTOP.

THUNDERSTORM AND STRONG WIND PROCEDURES

Sponsor: FLOps

1. Depending on the weather forecast, Op BOREAS may be implemented (Stn Gale Force Wind Response Plan).
2. On receipt of a Gale Force Warning, DEOCs will complete actions as per AESOs.
3. The DOC will ensure the following Gale Force Wind tannoy is broadcast:

Standby for broadcast from Airfield Operations,

*Gale force winds have been forecast at RAF Brize Norton between XXXX and XXXX
There is an increased risk of damage or injury from flying debris,
and a high risk of FOD throughout this period.*

*Personnel are to ensure they pick up FOD and report it to their section FOD
representative.*

*All Building Custodians, Flt Cdrs and Section Warrant Officers are to ensure loose articles,
equipment and bins are secured in accordance with individual section SOPs.*

4. Any subsequent airfield issues consequent to damage caused by the wind/weather will be managed by the DOC if required.

Sponsor: SLOps

5. Orders on the actions to be taken in receipt of a strong wind warning can be found with AESOs Book 2, Part 1, Ch 2 Order 11.

Sponsor: OC AWE

6. IAW MAM-P Ch 3.4.1 para 2, fuelling operations are to cease when a Thunderstorm Risk level High has been issued.

Sponsor: OC ASMT

7. If a Thunderstorm Risk Level High warning has been issued, or thunderstorm activity is apparent in the vicinity of the refuelling operation, all refuelling is to stop immediately iaw AESO's Book 2, Part 1, Ch 3 Order 32.

Sponsor: DSAMO

8. Orders for the transportation and loading of Unit Load Devices (ULDs) onto all aircraft platforms in all weather conditions can be found in AESOs Book 3, Part 1, Ch 18 Work Procedure 304. (permission required for access)

USE OF MOD AERODROMES BY CIVIL AIRCRAFT

Sponsor: Flt Cdr Ops

1. The use of RAF Brize Norton by British and Foreign Civil Aircraft is conducted IAW JSP 360¹⁹ and the MAA guidance for civil use of military aerodromes²⁰.

¹⁹ [JSP 360 Part 1 \(Directive\): Use of Military Aerodromes by Civil Aircraft.](#)

²⁰ [MAA Guidance for the Civil Use of Military Aerodromes.](#)

LARGE AIRCRAFT

Sponsor: SLOps

1. For the purpose of this annex, a Large Aircraft is defined as an aircraft within ICAO designation Code F (wingspan exceeding 65 metres and a main wheel span exceeding 14 metres).

Examples of ICAO Code F (or greater) aircraft are:

Aircraft Type	Length	Wingspan	ICAO Code
Antonov AN124	69.1m	73.3m	F
Boeing 747-8	76.4m	68.5m	F

2. Large aircraft are subject to the same PPR requirements as other aircraft types and Airfield Operations reserve the right to refuse permission to land at BZN. Operators wishing to land large aircraft at BZN must be aware that the airfield infrastructure does not, in some cases, meet the ICAO requirements for Code F and large aircraft types. The specific procedures below facilitate limited frequency of movement by these types, the operators must consider the operating and safety implications to ensure they have approval for such activity at this airfield, from their respective regulatory organisation.

3. **Taxiways.** To minimise the risk of aircraft wheels straying off pavement or wingtip collision with a fixed obstacle, the taxiway routings available to large aircraft are restricted as set out below.

Movement	Routing	Comments
Arrival Rwy 25 parking Southside	Route Twy A loop – Rwy - G	Wing walkers required if on Taxiway G.
Arrival Rwy 25 parking Northside	Route Twy A loop – Rwy – D or E	
Arrival Rwy 07 parking Southside	Route Twy F – G or route Twy G	Wing walkers required on Taxiway G.
Arrival Rwy 07 parking Northside with a wingspan of 60.3m or less	Route Twy F – E – Twy D if required	
Arrival Rwy 07 parking Northside with a wingspan greater than 60.3m	Route Twy F – G – C - D or route Twy G – C – D.	Wing walkers required on Taxiway G.
Depart Rwy 25 from Southside	Route Twy G – F	Wing walkers required on Taxiway G.
Depart Rwy 25 from Northside with a wingspan 60.3m	Route Twy E – F	

UK OFFICIAL

Depart Rwy 25 from Northside with a wingspan greater than 60.3m	Route Twy E - D – G – F	Wing walkers required on Taxiway G.
Depart Rwy 07 from Southside	Route Twy G or C – backtrack on Rwy – Alpha Loop	Wing walkers required if using Taxiway G.
Depart Rwy 07 from Northside	Route Twy D – backtrack on Rwy – Alpha Loop	

4. Should any of the above routings not be available, routings are to be agreed between the DOC and the TATCC (S) Supervisor.

5. There are specific parking slots available for each aircraft type. This is available on request from the DEOC.

ELECTRICAL GROUND POWER PROCEDURES

Sponsor: XO AWE

1. To minimise noise pollution and promote energy efficiency, aircraft on the ground should, whenever practicable, be supplied with electrical power in the following order:
 - a. Fixed mains powered voltage / frequency converter ('Plinth').
 - b. Mobile Ground Power Units ('Power Set').
 - c. Onboard Auxiliary Power Unit (APU). Note: Auxiliary Power Units should only be operated for the minimum time necessary to complete the task.
2. All equipment to be operated IAW the appropriate publications with training carried out by individual platform/sqns training cells.

AVIATION FUEL MANAGEMENT PROCEDURES

Sponsor: OC Logs Sqn

Aviation Fuel Management Procedures		
8.22.1	Management of Bulk Fuel installations.	<u>JSP 317</u>
8.22.2	Fuel storage, quality and delivery.	<u>JSP 317</u>
8.22.3	Safety procedures.	<u>JSP 317</u>
8.22.4	Fuelling zone procedures.	Ramp and Flare Safety Briefs
8.22.5	Bonding and grounding of ac and fuelling equipment.	<u>MAM-P</u> Ch 3.4.1 Para 4
8.22.6	Fuelling with passengers on board.	<u>MAM-P</u> Ch 3.4.1 Para 6.3 Further information is also contained within <u>AESO 2-1-2-6</u>
8.22.7	Fuelling with engines running.	<u>MAM-P</u> Ch 3.4.1 Para 5
8.22.8	Fuelling and de-fuelling in hangers.	<u>MAM-P</u> Ch 3.4.1 Para 6
8.22.9	Fuel spillage procedures.	CONPLAN 2 <u>USRP</u>

Fuelling procedures at RAF Brize Norton are covered in: AESO 2-1-2-6

SPILLAGE PLAN FOR HAZARDOUS MATERIALS

Sponsor: SLOps

1. Please see CONPLAN 1 & CONPLAN 2 [here](#).

FUEL JETTISON/DUMPING AREA AND AIRCRAFT LANDING WITH TRAILING HOSE**Sponsor:** SLOps

1. BZN does not have a designated fuel jettison area. PSB for actions when an aircraft is landing with a trailing hose.
2. When an aircraft is committed to a landing at BZN with a trailing hose, the aircraft captain is to declare a Pan, TATCC (S) are to initiate an Emergency State 2 and the following procedures (iaw [TATCC \(S\) OB Order 509](#) and AESO 2.1.6.1) are to be followed:
 - a. **Touchdown.** The pilot is to plan to touch down 1000-1200 ft past the runway threshold to reduce the risk of possible damage to the threshold lights by the trailed hose. When landing with the center hose trailed, the aim should be to land offset to avoid the basket impacting on the runway center-line lighting.
 - b. **After Landing.** After touchdown, the aircraft is to initially stop on the runway. Landing with a hose trailed will normally result in some fuel spillage where the aircraft stops and there is a faint possibility of sparks from the drogue igniting fuel on the landing run.
 - c. **When Stationary.** The aircraft captain is to inform TATCC (S) and the Crash Crew Cdr on 121.6 MHz when it is safe to approach the aircraft. In the event of an issue communicating on this frequency, messages are to be relayed by TATCC (S) until the Crash Crew Cdr can establish direct communications with the captain using a ground intercom lead. If a pod hose is trailed, the adjacent engine is to also be shut down.
3. **Engineering Support.** Any engineering support personnel dispatched to meet the aircraft are to contact TATCC (S) on management radio, stating they are responding to the incident.
 - a. TATCC (S) should prioritise runway crossing / access clearance for engineering support to expedite their arrival at the aircraft. Ground crew are not to approach the aircraft until given clearance to do so by the aircraft captain or Crash Crew Cdr.
 - b. **Centre Hose Trailed.** If the center hose is trailed the aircraft is to be shut down and towed back to dispersal.
 - c. **Pod Hose Trailed.** If a pod hose is trailed, the aircraft captain, in conjunction with the ground crew, will decide whether the hose is to be jettisoned. If the hose is jettisoned, once complete and all equipment and personnel are clear of the aircraft, the crew may restart the engine and taxi clear of the runway. If the hose is retained, the remaining engine is to be shut down and the aircraft towed clear of the runway at a walking pace.
4. When Runway Vacated, a runway inspection is to take place prior to recommencing flying operations.

COMPASS CALIBRATION AREA

Sponsor: SLOps

1. Bay 25 is the designated Compass-Swing bay for aircraft Compass Calibration at RAF Brize Norton.
2. The Compass Calibration Base should be provided IAW MAA [RA3521](#) for a Class 2 base.
3. The certificate for the calibration of the Compass Bay is available [here](#), or on request to BZN-AirfieldAssurance@mod.uk.

COMPASS BASE ORDERS AT RAF BRIZE NORTON

Sponsor: DSAMO

4. The Loading of Magnetic Material to Aircraft can be found in AESOs [Book 2 Part 2 Ch 18B Order 5](#).

Sponsor: OC ASMT

5. Orders for sweeping the Compass Calibration Base can be found in AESOs [Book 2 Part 1 Ch 3 Order 21](#).

DANGEROUS GOODS PROCEDURES - LOADING/UNLOADING

Sponsor: DSAMO

1. Orders with respect to the control and management of Dangerous Goods (DG), in accordance with extant regulations, can be found within AESO's Book 2, Part 2, Chapter 18B, Order 16.

2. DG are handled in accordance with the Movement and Transport Safety Regulator (MTSR) Dangerous Goods Manual (DGM).

- a. DSA03 DLSR - Movement and Transport Safety Regulations.
- b. DSA03 DLSR – Dangerous Goods Manual (DGM)

Sponsor: OC Fire

3. See **Annex U**.

Hydrazine (H70) Leak

Sponsor: SLOps

1. Generic Guidance H70 for a potential Hydrazine leak can be found at the linked document.

RPAS ORDERS**Sponsor:** SLOps**References:**

- A. RA1600 Remotely Piloted Air Systems
- B. RA1602 RPAS Class 1(B)
- C. RA1603 RPAS Class 1(B) MIL
- D. FP Centre Flying Orders – FP Class 1(B) Mil RPAS

1. No RPAS, of any size, may be operated within BZN airspace (FRZ) without permission being sought via the DOC.
2. **Authorisation Process for Civilian RPAS Activity Within FRZ.** RPAS pilots must obtain prior authorisation from the TATCC (S) Supervisor/ATCO IC before commencing activity; the TATCC (S) Supervisor/ATCO IC is to consult with the DOC who holds final approval authority. The DOC maintains overall situational awareness of potentially sensitive activity on the ground within the airfield boundary which might be affected by RPAS flights within the FRZ. Short notice requests for RPAS activity will be considered, based on other commitments and operational necessity.
3. **Procedure for Integrated RPAS Activity Within FRZ.** RPAS flying programs may be scheduled to take place at BZN in support of Lodger Units or for other requirements. Details of Launch Zones (LZ) are at Para 5.
 - a. **C2.**
 - (1) Flt Cdr Ops is the single point of contact for initiating this order. All RPAS users who wish to use RAF Brize Norton should contact Flt Cdr Ops, via bnz-airfieldoperations@mod.gov.uk, sending details of requirements with a minimum of one week's notice. Flt Cdr Ops should ensure TATCC (S), flying sqns and the Flying Club are notified by email of activation of the order with the dates and timings.
 - (2) The DOC is responsible for the strategic control of all RPAS operations. TATCC (S) is responsible for the operational control of all RPAS operations. The RPAS Operator (RPASO) is responsible for the tactical control of all RPAS operations.
 - b. **Operating Approval Procedure:** A minimum of 30 minutes before any planned activity, the RPASO is to:
 - (1) Request permission from the DOC, on ext 6500, to fly a RPAS. The DOC should ensure there is no strategic reason for the planned activity not to take place.
 - (2) Inform the TATCC (S) Supervisor/ATCO IC, on ext 7878, of the timings of the intended RPAS flight, the requested LZ(s) of operation and their duty mobile contact number. The TATCC (S) Supervisor/ATCO IC is to plan the operational deconfliction of RPAS activity with known aircraft movements.

UK OFFICIAL

(3) At least 10 minutes prior to any planned activity, the RPASO is to establish, and maintain, 2-way comms from the intended Launch Site (LS) with TATCC (S) via MRE.

c. **RPASO SOPs:** Sorties may last up to 30 minutes; they will launch from a pre-defined LS within the approved LZ. RPASOs are to:

- (1) Operate iaw with References A - D.
- (2) Once RPAS operations have been approved and successful 2-way MRE communication with TATCC (S) has been established, RPASOs will request the LZ(s) become 'Hot'.
- (3) Comply with all control instructions issued by TATCC (S).
- (4) Ensure clearance to launch a RPAS has been issued by TATCC (S), via MRE, prior to a RPAS leaving the ground.
- (5) Immediately inform TATCC (S) when a RPAS has returned to, and will remain on, the ground.
- (6) Ensure no RPAS operates in the 'No Fly Zone' shown at Para 5.
- (7) Only operate RPAS within the lateral limits of the LZs, shown at Para 5, when approved by TATCC (S); RPAS are not to be flown above 400ft AGL.
- (8) Inform TATCC (S) when a LZ can be returned to 'Cold' status.

d. **TATCC (s) SOPs.** When RPAS operations have been authorised by the DOC and notified by the RPASO, TATCC (S) is to:

- (1) Ensure the Supervisor/ATCO IC remains in the VCR for the duration of RPAS activity.
- (2) Ensure VCR staff comply with the Voice Procedures detailed in Reference D.
- (3) Coordinate activation and deactivation of requested LZs with the RPASO.
- (4) Ensure LZ activity is broadcast on ATIS, stating: "Remotely Piloted Air System activity North/South of the runway; not above 400ft AGL".
- (5) Ensure LZ activity, detailing which LZ(s) is/are hot, is included on the CIS Info page, using the phrase: "RPAS LZ(A/B/C/D/E/F) Hot".
- (6) Ensure RPAS LZ activation (Hot) and deactivation (Cold) is recorded in the TATCC (S) Watch Log. E.G. "RPAS Launch Zone Alpha Hot; xx:xx Local time" "RPAS Launch Zone Alpha Cold; xx:xx Local time".
- (7) Ensure that prior to RPAS launch, the 'Centurion 1' marker is displayed on the ADC pinboard, annotated with the LZ designator. The 'Runway Obstructed' plaque is to be used for de-conflicting movements.
- (8) Ensure that information on RPAS activity is passed to all arriving/departing AS and circuit traffic: "Remotely Piloted Air System activity North/South of the runway, not above 400ft AGL".

(9) Ensure no low-level visual circuits are approved during periods of RPAS activity. If aircraft low level circuits are requested and approved, the RPASO is to be instructed to return the RPAS to the LS. Only after the confirmed landing of the RPAS may low level circuits be permitted.

e. **Contingency SOPs**

(1) If, during RPAS operations, MRE becomes unserviceable or is unavailable, only operationally essential manned aircraft movements may be conducted, until it has been confirmed that the RPAS has landed. Any last-minute changes to arranged RPAS activity, or refusals of permission for the RPAS to be flown, are to be recorded in the TATCC (S) Watch Log.

(2) Should a manned aircraft emergency or short-notice movement occur, the following 'options' are available and can be passed to the RPASO via MRE or mobile telephone iaw Reference D. The TATCC (S) Supervisor/ATCO IC should exercise professional judgement when selecting the most appropriate option. The options are:

(a) **Option 1.** Home and land. RPAS to be recovered to LS. This can take up to 2 minutes.

(b) **Option 2.** Land now at current location. The camera is to be oriented directly below the RPAS which is to be landed vertically at a safe location. This can take up to 1 minute.

(c) **Option 3.** Immediate motor shutdown. This option will result in RPAS destruction and has the potential for collateral damage/injury. This will take approximately 30 seconds.

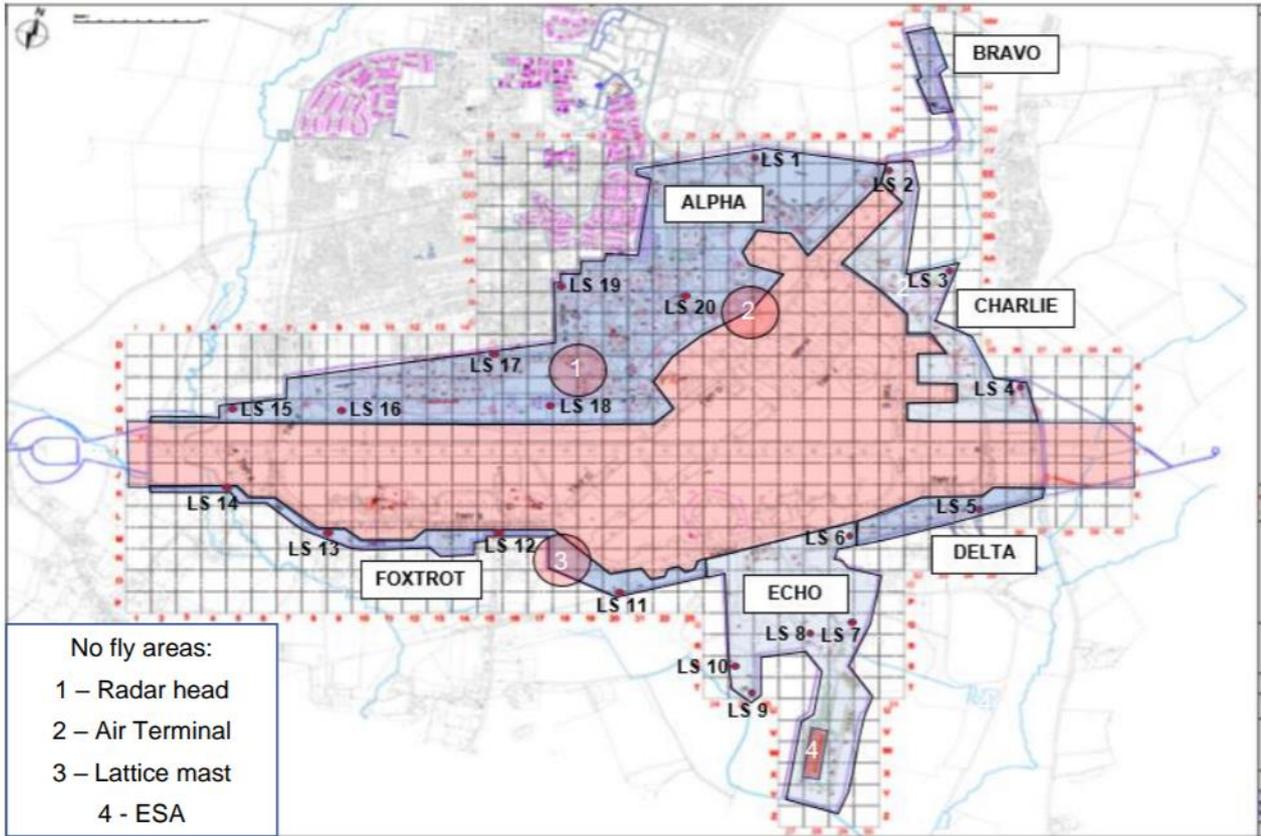
(3) Should it be necessary to restrict the upper operating height of the RPAS, the RPASO is to be instructed to fly the RPAS at/below a new maximum height iaw phraseology in Reference D.

(4) Everyone is to be aware that in the event of a loss of control connection between RPAS and the RPASO, the RPAS will automatically return to the LS in a direct route.

(5) If any doubt exists regarding the safety of aircraft or personnel, the RPASO is to cease operations iaw the most appropriate COA as detailed in para e. i.

4. **Reporting Procedure for RPAS Sightings.** The advertised initial contact number for drone sightings is the TATCC (S) supervisor (01993 897878). If it is determined that the RPAS activity is unauthorised, the DOC is to ensure that the RAFP and TATCC (S) are immediately made aware of unauthorised drone activity within the FRZ. Once an initial report has been made, the DOC is to inform OC OSW of the sighting and actions taken.

5. RPAS Launch Zones and Launch Sites:



C17 COMBAT OFFLOADS**Sponsor:** SLOps

1. The C-17 has a requirement to train for the capability to off-load pallets of cargo without the use of handling facilities on the ground. The only suitable area on the manoeuvring area to train is taxiway G with the run starting at G1.
2. **Procedure.** When C-17 Combat Offload training takes place the TATCC (S) Supervisor/ATCO IC is to ensure the ADC carries out the following actions:
 - a. Ensure the training has been approved by Ops and that Bays 33-37B are not being used for DG.
 - b. Prior to the start of Combat Offload training select the JADTEU traffic lights to red, and if possible lower the JADTEU barrier. Dispatch the Airfield Driver to the intersection of taxiways B, C and G to ensure the MT route on taxiway G is blocked. The nominated driver is to be in position prior to the Combat Offload commencing.
 - c. Once the aircraft has taxied into position it will be asked to report "ready to commence ground manoeuvre".
 - d. When the aircraft calls ready, providing the taxiway is sterile, the instruction "ready to commence ground manoeuvre, report complete" will be given.
 - e. Be cautious when standing down the Airfield Driver as there may be more than one offload required.
 - f. When complete, Ground Handling will remove the pallets. Airfield Ops will then task the Airfield Ops Driver to conduct a surface check and FOD sweep of taxiway G.
 - g. To alleviate the amount of traffic holding at the JADTEU lights or on the taxiways, controllers should determine suitable gaps to release the traffic; this should only be completed once confirmation is received from the pilot that the C-17 will hold position until the taxiway is sterile again.
 - i. Once all activity has been completed the ADC controller is to inform TATCC (S) and the DOC.

FLARE MISFIRE / HANG-UP PROCEDURE

Sponsor: Airfield Operations

Introduction

1. C-17 and A400M are equipped with defensive aid systems that use flares to counter IR threats. If flares are fired from the aircraft, the potential exists for a flare or flares to malfunction, and this can result in a misfire or hang-up; there is no indication to the crew inside the aircraft that a misfire or hang-up has occurred. Any malfunction would leave the flare or flares in an unknown and potentially dangerous state. Only following an external inspection of the flare dispensers from outside the aircraft after landing can the status of the dispensers be confirmed.

Aircraft Recovery to RAF Brize Norton

2. The crew are to inform Airfield Ops via TATCC (S) or AERO-I at the earliest opportunity they have dispensed flares and there exists the possibility of a flare misfire or hang-up. The crew should complete a normal recovery to land. The DOC should inform the Duty Eng Ops Co-ordinator (DEOC) so the appropriate 99 Sqn Eng, A400M Senior Engineering Officer (SEngO) and stn Armament staff can be given advance notice of the aircraft arrival, including its flare state. Preparation should be made by Airfield Ops so that, should the (air or ground) crew discover a misfire or hang-up during their post-flight inspection of the flare dispensers, the aircraft can be taxied to a remote parking slot. TATCC (S) are to initiate an Emergency State 2 when notified by the crew of a misfire or hang-up.

Actions After Landing

3. The crew are to vacate the runway as directed by TATCC (S) and, in accordance with SOPs, the ALM is to be sent to check the physical state of the flare dispensers at the earliest opportunity. Should no misfire or hang-up be detected, the aircraft can be taxied to a 'normal' dispersal for de-arming during which Flare Danger Area (FDA) restrictions are to be adhered to. Should a misfire or hang-up be detected, the aircraft is to be taxied to the safe area specified by the DOC. Sqn eng personnel are to receive the aircraft; they are to pay particular attention to ensure they remain outside of the FDA. The aircraft is to be shut down in accordance with the engine shutdown checklist and only then are any passengers cleared to leave the aircraft, via the ramp only. The aircraft captain may order the evacuation of the pax/freight at any time if they decide this is required for safety reasons. Vehicles sent to transport passengers are to remain to the rear of the aircraft and must not be driven into the FDA at any time. Once all passengers have left the aircraft, and when it is safe to do so, the aircraft is to be shut down completely to a 'Black cockpit' state. The aircraft is then to be handed over to the stn Armament personnel in order for the aircraft to be made safe. No maintenance, unloading/loading tasks are to be carried out until the flare dispensers have been made safe by the authorized personnel.

RAF BRIZE NORTON DESIGNATED PARACHUTE/FREE-FALL DROP ZONES

Sponsor: SLOps

1. The RAF Brize Norton designated parachute/free-fall drop zones within the stn bounds are:

- a. Gateway Sports Pitch.
- b. Stn Sports Pitch.
- c. JADTEU HLS.

2. TATCC (S) Supervisor/ATCO IC Duties. The TATCC (S) Supervisor/ATCO IC is to liaise with the Drop Zone Safety Officer (DZSO) and/or the aircraft captain prior to the commencement of parachuting at RAF Brize Norton, (iaw BMOB 3.6.1). Before each drop the TATCC (S) Supervisor/ATCO IC is to:

- a. Ensure that the airspace 2nm (or more in consultation with the aircraft captain and/or DZSO) around the stn is sterile of air traffic.
- b. Ensure there are no rotors running or propellers turning anywhere on the airfield (the captain of the parachute dropping aircraft may be asked for approval for rotary or other traffic to operate South side of the airfield when the parachuting is taking place North side).
- c. Minimize the ground taxiing/movement of jet/turbine aircraft on the airfield and ensure that details of such activity are passed to the captain of the dropping aircraft.
- d. Ensure that the location(s) of any EGRs (e.g. de-tuners) is/are passed to the aircraft captain.

ORDERS FOR AIRCRAFT ENGINE GROUND RUNS**Sponsor:** SEngO

References:

- A. AESO 1.2.1.2.
- B. AESO 2.1.2.1.
- C. DAM Ch 2 Para 3 & Annex H.

1. **General.** EGRs are to be conducted iaw References A - C. To minimize noise disturbance to the local community, EGRs are to be conducted under the following restrictions:

- a. **Normal Operating Hours.** To minimize noise disturbance to the local community, routine EGRs are primarily to take place between 0700L and 1900L Mon to Sat and 0830L – 1900L on Sun/Bank Holiday.
- b. **Out of Hours.** Requests for EGRs between 1900L-0700L require the approval of the DOC (who holds delegated approval authority from OC OSW); if approved, they are to be conducted iaw AESOs.

2. **Responsibilities.**

- a. **Normal Operating Hours.** To minimize noise disturbance to the local community, routine EGRs are primarily to take place between 0700L and 1900L Mon to Sat and 0830L – 1900L on Sun/Bank Holiday.
- b. **SEngO.** The sqn SEngO is responsible for ensuring the requirement to conduct EGRs is actively managed to minimise the requirement for OOH EGRs.
- c. **Sqn Personnel.** Sqn personnel are to request permission for EGRs through the DEOC. Request details are to include the nature (number of engines and to what power setting) as well as the duration of the EGR. OOH EGR requests are to include the anticipated operational and engineering impact if permission is not granted.
- d. **DOC.** All EGRs require approval by the DOC who is to record all EGR applications in the DOC EGR Log. The DOC is to make a judgement based on the operational requirement against the potential noise disturbance to the local community.
- e. **DEOC.** Once an EGR has been approved by the DOC, the DEOC is to determine the most appropriate location in which to conduct the EGR.

3. **Communication.** The DOC is to inform Brize Norton TATCC (S) when a High Power (HP) EGR is required. During the EGR, TATCC (S) may require engineers to reduce power to idle if an aircraft landing or taking off is likely to be affected by jet blast; constant communication between the personnel conducting the EGR and TATCC (S) is essential. Following completion of the EGR, the engineers are to check of the area behind the aircraft to ensure no FOD problem has been created.

4. **EGR Locations and Constraints.** The location selected for an EGR takes into account impact on the local community (noise) and impact on operations on the airfield. The locations below are approved for each aircraft type are specified in Reference B. All EGRs are to be conducted iaw AESOs and require prior approval by the DOC and TATCC (S). Aircraft are to be positioned such that no other aircraft are within the prop wash / jet wash danger zone. All personnel involved in conducting a high power EGR are to be aware of the necessity to keep the runway available for arriving and departing aircraft, including the Op TANSOR commitment. For the purpose of this Order, a high power EGR is one in which the power is planned to exceed flight idle. When an EGR is being conducted on a taxiway, the tug is to remain with the aircraft throughout the test to ensure that the taxiway can be re-opened at the earliest opportunity.

5. **Engine Runs on Taxiways:**

a. **Northerly Wind Direction.** When the wind direction is from the north, the aircraft is to be positioned as follows:

(1) **During normal working hours on Taxiway Charlie.** The JADTEU traffic lights are to be selected to red and the MT route on Taxiway Bravo is to be blocked south abeam TATCC (S) for the duration of the EGR by a member of the engineering staff.

(2) **Outside of normal working hours.** Taxiway Delta may be used, taking care not to obstruct the entrance to the Flying Club and AVGAS Bay.

b. **Southerly Wind Direction.** When the wind direction is from the south, Taxiway Charlie is to be used, with the aircraft having been towed to point into the wind. The junction of Taxiways Bravo, Charlie and Golf is not blocked.

c. **Easterly Wind Direction.** When the wind direction is from the east, the aircraft is to be positioned at the Golf 3 hold in line with the taxiway. The JADTEU traffic lights are to be selected to red and the MT route on Taxiway Golf is to be blocked at the junction of Taxiways Bravo, Charlie and Golf for the duration of the EGR by a member of the engineering staff.

d. **Westerly Wind Direction.** When the wind direction is from the west, the aircraft is to be positioned as follows:

(1) Aircraft requiring a 3 or 4-engine high powered EGR are to be positioned abeam bays 40/41, in line with the taxiway. The JADTEU traffic lights are to be selected to red and the MT route on Taxiway Golf is to be blocked at the junction of Taxiways Bravo, Charlie and Golf for the duration of the EGR by a member of the engineering staff.

(2) Aircraft requiring a 1 or 2-engine high power EGR may be positioned abeam bays 29/30, in line with the taxiway. The MT route along Taxiway Golf can remain open; there is no requirement to select the JADTEU traffic lights to red for the duration of the EGR in this position.

6. **Use of Runway for EGRs.** The runway is only to be used for a EGR in exceptional circumstances. If it is required to conduct an EGR on the runway, the aircraft must be taxied into position, held on the brakes until the run has been completed and then taxied off the runway. Under no circumstances should an aircraft be towed onto the runway to conduct an EGR. Blocking the runway for EGRs is to be avoided if possible.

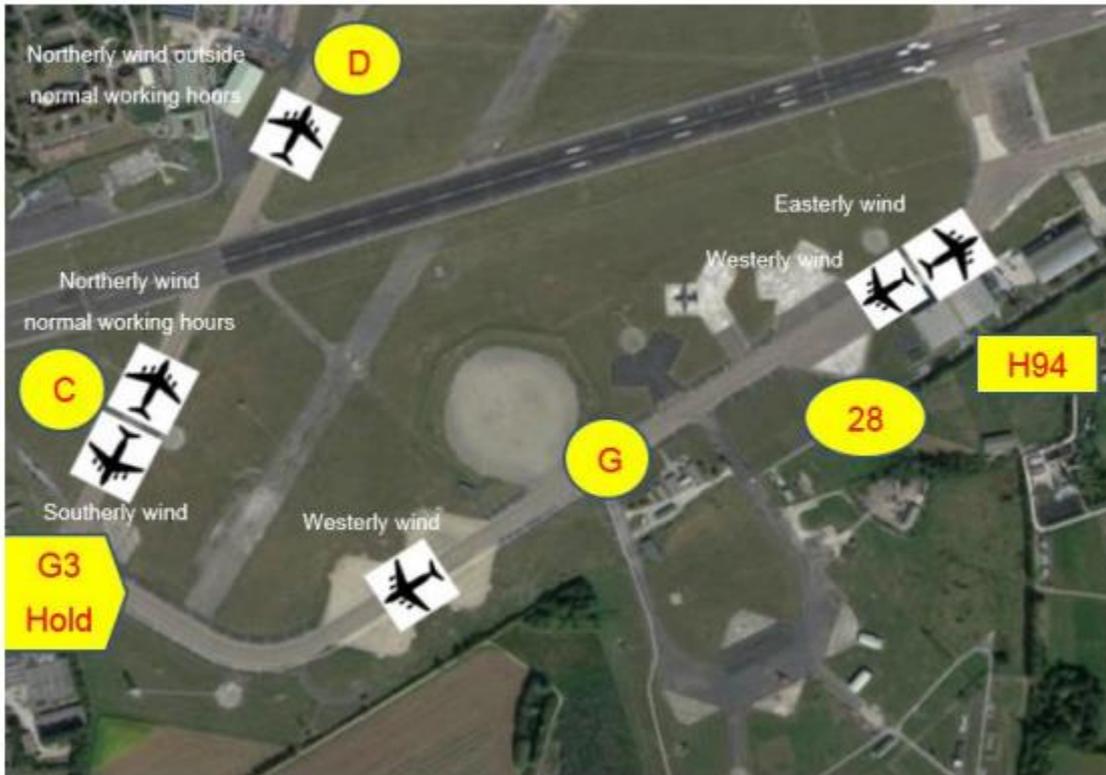
7. **HP EGR Locations (C-17, Voyager, A400M and visiting aircraft).** Several different taxiway locations are available for HP EGRs to enable the aircraft to be parked nose into wind, however, these locations can impinge on traffic using the MT Route. To protect other airfield users for the duration of the HP EGRs, the following additional measures are required:

- a. **Taxiway Delta.** Used when the wind direction is from the north. Contact between TATCC (S) and EGR personnel must be maintained throughout the test to ensure that prop or jet efflux does not affect aircraft on the airfield. Selection of the location for the EGR must be made in coordination with TATCC (S) to ensure that the aircraft is positioned as close to the hold as possible. Other aircraft parked nearby, especially light aircraft, must be considered.
- b. **Taxiway Charlie.** Used when the wind direction is from the north or south. When the wind direction is from the north, the aircraft is to be parked nose into wind. The MT Route on Taxiway Bravo is to be blocked to the south, near to TATCC (S), for the duration of the EGR by an additional member of the engineering team. The JADTEU traffic lights are to be selected to RED by TATCC (S). When the wind direction is from the south, the aircraft is to be positioned such that the junction of Taxiways Charlie, Bravo and Golf is not blocked.
- c. **Taxiway Golf 3 Hold.** Used when the wind direction is from the east. The EGR aircraft is to be parked at the Golf 3 Hold in line with the taxiway. The MT Route on Taxiway Golf is to be blocked at the confluence of Taxiways Bravo, Charlie and Golf for the duration of the EGR by an additional member of the engineering team. The JADTEU traffic lights are to be selected to RED by TATCC (S). The DEOC is to consider implications on the use of the DAC ASP.
- d. **Taxiway G (adjacent to Hangar 94, East of MT route).** Used when the wind direction is from the east or west. The EGR aircraft is to be parked in line with the taxiway to the east of the entrance to bay 28; maintenance on the DAC ASP will not be impacted. The DOC and TATCC (S) are to determine if there are any implications for users of the MT route based on the location of the EGR aircraft and the direction in which its nose is pointing. Due to the level of noise generated, details of all C-17 HP EGRs must be passed to 47 Sqn Eng as early as possible so that maintenance activity in Hangar 94 can be planned accordingly. Furthermore, JADTEU are to be contacted to ensure they are aware of the EGR details. It is important to note that A400M HP EGRs are not permitted in this location.

8. **Restrictions for Running of APUs.** The running of APUs have the following restrictions:

- a. **C-17:**
 - (1) **Normal Working Hours.** C-17 APU ground runs are only to be carried out on bays cleared for EGRs.
 - (2) **APU runs during towing operations.** C-17 APUs will need to be run as the aircraft is being towed to the southern side of the airfield. The DOC is to be made aware of the requirement to run the APU and that permission will be sought prior to aircraft movement.
- b. **A400M: Normal Working Hours.** A400M APU ground runs are only to be carried out on bays cleared for EGRs.

HP EGR approved locations at RAF Brize Norton.



9. **Visiting Aircraft LP and HP EGRs.** All LP and HP EGRs for visiting aircraft require prior permission of the DOC prior to commencement.

10. The location for an EGR will be determined by the DOC (in conjunction with TATCC (S) Supervisor/ATCO IC and the DEOC) after consideration of the noise level to be expected, intensity of prop or jet efflux, aircraft size and engine configuration.

11. The visiting aircrew/engineering team must satisfy themselves that the location is suitable for their aircraft type and that no drain covers, signs, lighting, buildings, etc, could sustain damage during the EGR.

ENGINES RUNNING ON AND OFF LOADS (EROS)**Sponsor:** SLOps**References:**

- A. OM Pt A 8.2.1
- B. AESO 2.2.18A.26

1. Parachute Charter Aircraft Engines Running On / Off load.

- a. **Authorisation.** Once the requirement for an ERO has been identified, ADW Ops are to request, in advance, authorisation from the DOC; the request is to be supported by an e-mail sent to BZN-OSW-OPS-DOC@mod.gov.uk.
- b. **Procedure.** Once an ERO has been authorised, the DOC is to instruct the DEOC to inform Serco Airfield Services. Serco Airfield Services personnel are to marshal the aircraft into position, usually on Bay 10, and await further instructions from the aircraft captain, who will control the operation and is responsible for the safety and security of passengers at all times. The PJIs are responsible to the aircraft captain for the control of loading and unloading operations outside the aircraft. The Movements and Serco Airfield Services teams are to undertake their normal duties and responsibilities during EROs. Once the aircraft is stationary on the parking bay the PJIs are to load/unload the parachutists under the direction of the aircraft captain. All PJIs are to wear high visibility tabards/jackets and are to walk either side of the column of passengers, onto or off the aircraft as appropriate.
 - (1) The steps should be wheeled into place, from the rear of the aircraft, and positioned with a minimal distance between ramp and steps. The steps are not to touch the ramp but are to be close enough to ensure that no gap is present that could cause a slip or fall hazard to those persons using them. This process is to be carried out by the despatcher or loading assistant (or captain/first officer if engines not running).
 - (2) The No 1 despatcher is to be in position aft of the aircraft ramp to control the loading/unloading process.
 - (3) The No 1 despatcher is to place a further despatcher on the port or starboard position (dependant on the approach) to ensure no passengers encroach into the danger area.
 - (4) The No 1 despatcher is also responsible for ensuring no passengers encroach into the opposite danger area.
 - (5) The Parafitter / Ops Staff are to approach the aircraft, supervising the passengers and ensuring that they stay either side until the passengers are positioned in 2 files at the rear of the aircraft. They are to ensure that all passengers stay together whilst maintaining the same pace and do not encroach into the danger area.
 - (6) For onload, the Parafitter / Ops Staff are to ensure that the manifest is signed by the aircraft captain whilst the despatchers complete their pre-emplaning checks (This must be completed prior to the departure of the aircraft; the manifest is to be retained by ADW Ops).

UK OFFICIAL

(7) The No 1 despatcher is to control the loading/unloading of all passengers.

2. **ERO Limitations for Para Activity (Charter).** The following limitations apply:

- a. EROs are not to be conducted on the first lift of the day.
- b. If a request is submitted for an ERO that is to be carried out during the hours of darkness, the fact that the ERO is to be undertaken in the dark must be highlighted.
- c. On/off loading must be carried out using the tail ramp only. On no account are the para doors or crew door to be used for this activity.
- d. The aircraft must be shut down for the normal PTS briefings.

3. Generic ERO Procedure for non-parachuting activity. This procedure is to be followed for A400M and C-17 aircraft when there is the requirement to undertake an ERO to expedite activity and/or to make efficient use of assets in order to maximise tasking.

a. **Authorisation.** Once the requirement for an ERO has been identified, sqn ops are to request, in advance, authorisation from the Aerodrome Operator (OC OSW). Once approval has been granted, the DOC and DEOC are to identify the most suitable location for this activity and are to forward the approval and location details to the sqn.

b. **Procedure.** Once an ERO has been authorised, the DOC is to instruct the DEOC to inform Serco Ramp Services of the planned activity.

(1) Consideration should be given to the location of the ERO and the safe movement of the pax on the active aerodrome. If required, a PAX bus is to be tasked to collect/drop off the pax at the required location. Once at the location the pax will be under the control of the identified safety individuals.

(2) The sqn is to provide 2 x SQEP to provide safety overwatch for the duration of the ERO; they are responsible to the aircraft captain for the control of loading and unloading operations outside the aircraft. These individuals are to be in place at the authorised ERO location in advance of the arrival of the aircraft. Once the aircraft is stationary on the parking bay, the 2 x sqn safety individuals are to load/unload the passengers under the direction of the ALM. Safety individuals are to wear high visibility tabards/jackets and are to walk either side of the column of passengers as these are moved onto or off the aircraft.

(3) The pilot of an aircraft that has been authorised to complete an ERO is to confirm this intention in the inbound RT message.

(4) If Serco Ramp Services personnel marshal the aircraft into position at the approved location, they are then to await further instructions from the aircraft ALM who will control the operation on behalf of the aircraft captain.

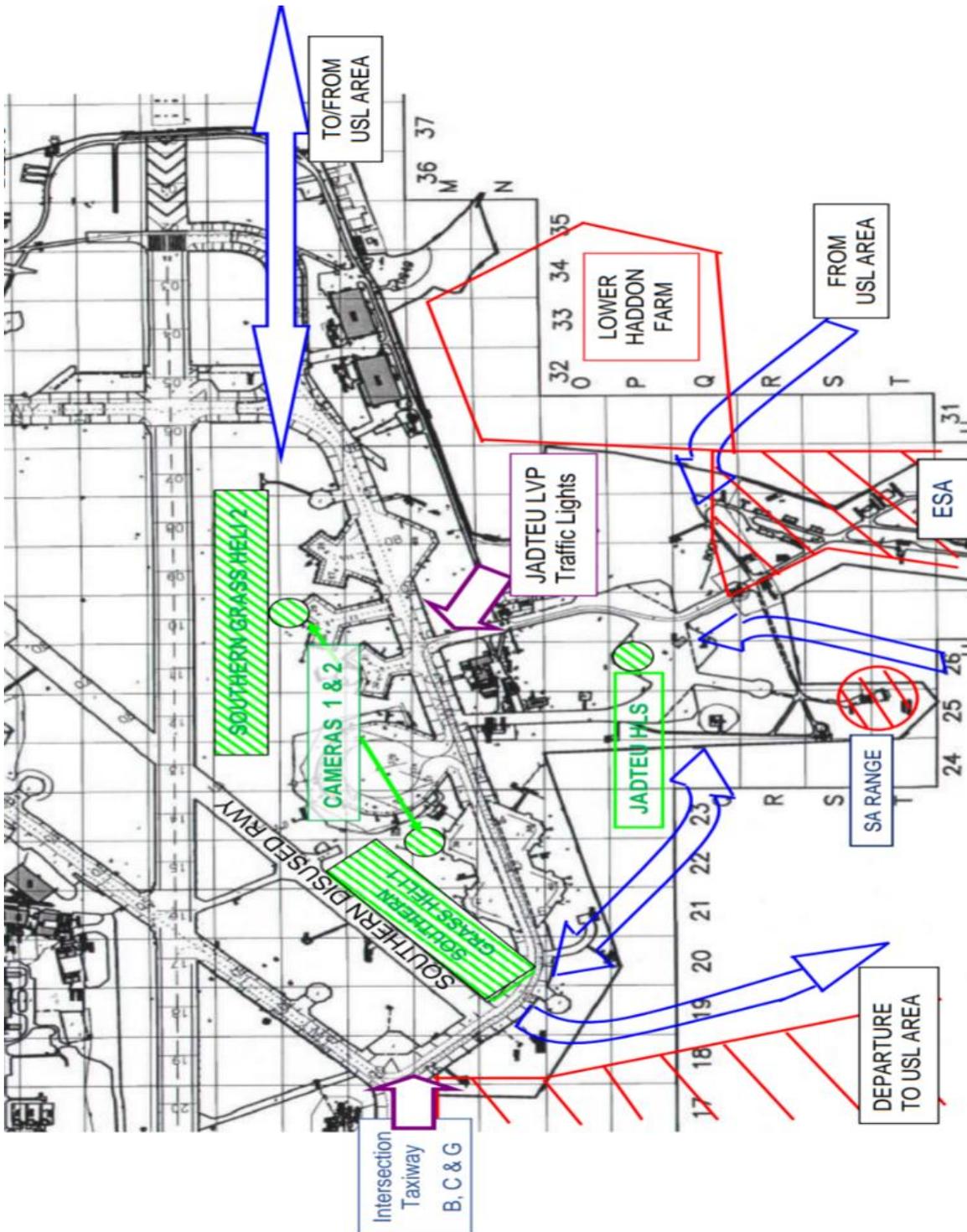
(5) The ALM is responsible to the aircraft captain for the safety and security of passengers and freight and for the safety of the aircraft at all times.

(6) Serco Ramp Services teams are to undertake their normal duties and responsibilities during EROs.

JADTEU OPERATING AREA

Sponsor: TATCC (S) Cdr

1. The image below details areas of the airfield which may be utilised for JADTEU operations. Further details can be found in the Mil AIP, AD 2, EGVN section.



Intentionally Blank