Defence
Safety
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Defence Aerodrome Manual (DAM)

Military Aviation Authority

Military Aviation Authority
MAA

RAF NORTHOLT

Defence Aerodrome Manual

Edition 8.0
(Effective From 15 Sep 2025)

FOREWORD

1. This document, the RAF Northolt Defence Aerodrome Manual, describes the aerodrome at RAF Northolt including the management, physical characteristics, services available and operating procedures. The Manual is written to inform and direct military and civilian aircrew using the aerodrome and to provide orders for personnel operating on the aerodrome or providing aerodrome services. The Defence Aerodrome Manual conforms to the guidance provided by the Military Aviation Authority (MAA) in Regulatory Article (RA) 1026 and is consistent with CAA CAP 168 Aerodrome Manual requirements.

2. This Manual contains information regarding the runway and instrument approaches, but due to the review period **this should not be relied upon for flight planning** and aircrew should continue to refer to the Mil Aeronautical Information Publication (AIP) for the most up-to-date information. The Manual is **mandated reading** for the pilots of Station-based aircraft, Air Traffic Control (ATC), Operations, Air Movements Sqn (AMS) and Contractor personnel responsible for the delivery of aerodrome services. The Defence Aerodrome Manual outlines some aspects of the Station Air Safety Management System; however, full details are contained in the RAF Northolt Air Safety Management Plan and the Unit Crash Plan. C

3. The majority of the l inks in this document are to the Ministry of Defence's intranet. If access to the documents at the links is required, access can be requested by email to NOR-NORTHOLTOPS@mod.gov.uk.

M Bond
Wg Cdr
OC Operations/Aerodrome Operator
RAF Northolt

Table of Amendment

Amendment No.	Amendment Date	Date of Incorporation	Name / Role	Signature
7.0	13 Dec 24	20 Dec 24	Wg Cdr M Bond - OC Ops	*M Bond*
7.1	14 Jan 25	15 Jan 25	Wg Cdr M Bond - OC Ops	*M Bond*
8.0	11 Sep 25		Wg Cdr M Bond - OC Ops	*M Bond*

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

1.1 **Name and Work Address of Aerodrome Operator:**

Wing Commander M Bond
Officer Commanding Operations Wing
RAF Northolt
West End Road
Ruislip
HA4 6NG

Mil: (95233 8904
Civ: (0208 833 8904
Fax: 0208 833 8903
Email: NOR-NORTHOLTOPS@mod.gov.uk

1.2 **Aerodrome Operators Authority and Letter of Delegation**. The AO is responsible for actively managing an environment that accommodates the safe operation of aircraft in accordance with RA1026. The management and running of the aerodrome are a Duty Holder Facing (DHF) responsibility. A copy of the Letter of Delegation is contained at **Annex A.**

1.3 **Safety Meeting Structure**. An organisational aviation safety meeting schedule is at **Annex B**. The table includes the lowest level meetings (weekly/monthly) and flows up to the highest level (monthly, bi-monthly, six monthly etc). Civilian contractors and customers, as well as external defence organisations, are represented where appropriate. Further details are available in the RAF Northolt Air Safety Management Plan.

1.4 **Aerodrome Key Stakeholders**. A list of aerodrome key stakeholders, including their post role and work contact numbers, is at **Annex C**.

1.5 **Aerodrome Operating Hazard Log (AOHL)**. The AOHL can be found at **Annex D**.

1.6 **Formal Aerodrome Related Agreements**. Copies of all formal aerodrome related agreements, which are to be reviewed annually, are captured in **Annex E**.

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

1.8 **Aerodrome Location and Control of Entry and Access**. Please refer to **Annex G**.

Chapter 2: Aerodrome Data, Characteristics & Facilities

2.1 **Aerodrome Data.** The authoritative source for all aerodrome data is the **UK Mil AIP** Part 3 Aerodromes.

2.2 **Special Procedures.** As per the **UK Mil AIP.**

2.3 **Noise Abatement Procedure Orders**. The procedures are always to be observed by pilots using Northolt. However, the requirements may at any time be departed from to the extent necessary for avoiding immediate danger or for complying with ATC instructions. Orders pertaining to Noise Abatement Procedures can be found at **Annex H.**

2.4 **Temporary Obstruction Orders**. The Temporary Obstruction Orders are contained at **Annex I**.

2.5 **Runway Strip Obstructions**. All legacy[1] runway strip obstructions are to be published within the AOHL, **Annex D**. Any new runway strip obstruction[2] will require a waiver request to be submitted and if authorized, will be contained within **Annex F**.

2.6 **Runway End Safety Area (RESA)**. As per the **UK Mil AIP.**

2.7 **Light Aggregate (Lytag) Arrestor Beds or Engineered Materials Arrestor System (EMAS)**. Details can be found at **Annex J.**

2.8 **Aerodrome Arresting System Orders**. N/A.

2.9 **Manoeuvring Area Safety and Control Orders**. Please find the orders at **Annex K**.

[1] Legacy is classified as any facility in place prior to the RA 3500 series being released in Sep 2018.
[2] Refer to RA 3590(10): Safeguarding – Surface Obstructions.

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, RA 3311 and DSA02 DFSR[3]. RA 3049[4] stipulates that Defence Contractor Flying Organizations operating MAA regulated Aircraft must meet the requirements detailed in DSA02 DFSR[5]. The relationship between the AO and the Defence ARFF Service Provider is defined within DSA02 DFSR[5] and the Business Agreements between Defence ARFF Service Provider and the TLBs. The Defence ARFF Service Provider is a DH-Facing Organisation, and its Fire Stations operate to national good practice providing a service to the AO.

3.2 **Emergency Orders / Aerodrome Crash Plan**. RAF Northolt has responsibility for Aircraft Post Crash Management (APCM) of any accident on, or in the immediate vicinity of Northolt. Additionally, the Unit has a Regional APCM responsibility covering the Greater London area. The actions in the event of an aircraft accident, either on the aerodrome, near the aerodrome or within the APCM area of responsibility are detailed in the RAF Northolt Crash and Major Incident Plan (CMIP). Northolt Ops Sqn is responsible for the upkeep of the CMIP, a copy of which can be found through the link in **Annex L** or by contacting Stn Ops. The Station CMIP is made available to the following external agencies: Uxbridge Police Station, Hillingdon Emergency Planning Office, Cabinet Office Emergency Planning College, London Ambulance Service Emergency Planning Manager, London Fire Brigade Operational Planning Division and Hillingdon Hospital.

3.3 **Aerodrome Rescue and Fire Fighting (ARFF) Services and Training Orders**. ARFF services are published in the **UK Mil AIP.** Fire Section orders can be found at **Annex M** and are in compliance with DSA02 DFSR[5].

3.4 **Disabled Aircraft Removal**. It may be necessary to quickly and safely remove an aircraft that has caused a temporary closure of a runway, taxiway or ASP, but which falls beneath the criteria of an accident that would be dealt with under the CMIP. The disabled aircraft removal procedures are linked from **Annex N**.

[3] Refer to RA 3261(2): Aerodrome Emergency Services, RA 3263 – Aerodrome Classification, RA 3311 – Aircraft Emergency and Crash Procedures and DSA02 DFSR – Defence ARFF Regulation.
[4] Refer to RA 3049 – Defence Contractor Flying Organization Responsibilities for UK Military Aircraft Operating Locations.
[5] Refer to DSA02 DFSR – Defence ARFF Regulation.

Chapter 4: Air Traffic Services and Local Procedures

4.1 **Air Traffic Control Orders**. ATC Squadron Orders cover ATC procedures for the safe and expeditious flow of air traffic. They comply with the RA 3000 series, Manual of Military Air Traffic Management (MMATM) and BMOs. Full ATC Orders can be found 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 accurate. Orders for the reporting procedures to advise the relevant agency of any permanent changes to Aerodrome information are contained at **Annex P**.

5.2 **Aerodrome Serviceability Inspections**. Orders pertaining to the Serviceability Inspections can be found at **Annex Q**.

5.3. **Aerodrome Technical Inspections**. Orders can be found at **Annex R**.

5.4 **Radar, Radio and Navigation Aid Maintenance, Monitoring and Protection**. Further orders can be found at **Annex S**.

5.5 **Aerodrome Works Safety**. Orders can be found at **Annex T**.

5.6 **Aerodrome Users - Vehicle and Pedestrian Control**. Orders contained within **Annex U**.

5.7 **FOD Prevention - Training and Awareness.** Orders are contained at **Annex V.**

5.8 **Aerodrome Wildlife Management**. The wildlife activity on and around the aerodrome is managed by a contractor. **Annex W** contains full details of the RAF Northolt Aerodrome Wildlife Management Plan (AWMP).

5.9 **Low Visibility Operations (LVO)**. Aircraft operations during reduced visibility or low cloud conditions present additional hazards to aircraft and other aerodrome users. The enhanced control measures implemented by ATC to safeguard aircraft and personnel are detailed in **Annex X**.

5.10 **Snow and Ice Operations**. Snow and Ice Orders are contained at **Annex Y**.

5.11 **Thunderstorm and Strong Wind Procedures**. The following procedures should be followed in the event of an increased risk of thunderstorms or lightning. Details on actions of these warning are contained in **Annex Z**.

5.12. **Civil Registered Aircraft Aerodrome Usage - Terms and Conditions**. Use of MOD Aerodromes by civilian aircraft shall be in accordance with JSP 360 - Use of Military Aerodromes by Civil Aircraft. The Terms and Conditions of use for civilian aircraft utilising RAF Northolt can be found within **Annex AA** and at **www.londonvipairport.com.**

5.13. **Safeguarding Requirements - Waivers and Exemptions**. The procedures involved in safeguarding the operational environment of military Aerodromes is explained in greater detail in the RA 3500 Series[6] and depends upon whether the obstacle is sited within or outside MOD property. All Safeguarding activities are to be conducted iaw extant regulations and any waivers or exemptions issued by the MAA are promulgated at **Annex F**.

5.14. **Aerodrome Assurance Activity**. All personnel involved in activities on or around the aerodrome are to be suitably trained, standardised, and assured. The AO will ensure that reports, surveys, and assurance documentation regarding the aerodrome and its facilities are captured within the RAF Northolt Defence Aerodrome Assurance Framework (DAAF). In addition, the AO will determine which 2nd Party assurance reports (of those involved in activities on or around the aerodrome) are also captured.

5.15. **Electrical Ground Power Procedures.** Orders can be found at **Annex BB.**

[6] Refer to RA 3500 Series – Aerodrome Design and Safeguarding.

5.16. **Aviation Fuel Management Procedures**. Fuel management procedures can be found at **Annex CC**.

5.17. **Hazardous Materials - Spillage Plan**. Orders can be found at **Annex DD.**

5.18. **Jettison and Fuel Dumping Area.** Not applicable.

5.19. **Compass Swing Area**. Orders can be found at **Annex FF**.

5.20. **Explosive Ordnance Disposal Area**. Not applicable.

5.21. **Dangerous Goods (DG) Procedures**. There are no civilian freight services offered at RAF Northolt. Details of military freight operations are detailed in **Annex HH.**

5.22. **Hydrazine (H70) Leak**. Not applicable

5.23. **RPAS Orders**. Please refer to **Annex JJ.**

ANNEX A to
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AERODROME OPERATOR LETTER OF DELEGATION

1. The Aerodrome Operator Letter of Delegation can be found on SharePoint using this link, please open in the app and not the online version.

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SAFETY MEETING STRUCTURE

1. An overview of the internal RAF Northolt Air Safety Meeting structure is shown below. Northolt personnel also provide input into Air Wg and Group led meetings iaw with their battle rhythm but these have not been listed.

2. Further information on Air Safety Meetings can be found in the RAF Northolt Air Safety Management Plan or the FSEMP for Functional Safety.

Forum	Schedule	Details
Northolt Air Safety Board	Annually	Chair – HoE
Defence Air Safety and Occurrence Report (DASOR) Review Gp	Fortnightly	Chair – OC Ops Wg
DASOR Recommendation Gp	Monthly	Chair – OC Ops Wg
BM Flight Safety Mg	Quarterly	Chair – SATCO
Operators Engagement Forum	Monthly	Chair – Operations Manager
Bi-Monthly Air Safety Meeting	Bi-Monthly	Chair – Stn Air Safety Officer

3. For further information on the RAF Northolt Safety Meeting structure or input into higher level meetings, please contact the RAF Northolt Station Air Safety Officer: 020 8833 8826.

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AERODROME KEY STAKE HOLDERS

Role	Post Holder
Head of Establishment	Group Captain L Wales
Aerodrome Operator/ OC Operations Wing	Wing Commander M Bond
OC Operations Squadron	Squadron Leader F Maybury
Senior Air Movements Officer	Squadron Leader A Castle
Senior Air Traffic Control Officer	Squadron Leader L Mitchell
OC Safety and Assurance Squadron	GAPPED
Station Air Safety Officer	Flight Lieutenant B Reynolds
Station FOD Prevention Officer	Mr R Lawrey

Note: Contact details if required are to be requested from Station Operations 020 8833 8918 / NOR-NORTHOLTOPS@mod.gov.uk

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AERODROME OPERATING HAZARD LOG

1. This can be found online at this Link and can also be requested via Station Ops. The AOHL is also hosted alongside the DAM on Private Airfield in London – Safety Info | London VIP Airport for full visibility for commercial operators at Northolt. The AOHL provides information of hazards logged at RAF Northolt that are relevant to the safe and efficient operation of the aerodrome. This document is reviewed on the 1st of the following months Feb/May/Aug/Nov every year (Quarterly). These reviews are to be completed by SATCO with oversight from OC Ops on 1 May and 1 Nov.

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FORMAL AERODROME RELATED AGREEMENTS

1. Extant LoAs and MoUs are recorded below; to considerably reduce this document size, scanned copies are no longer reproduced in the DAM but are available on MoD internal computers or available upon request from Ops.

LoA/MoU Title	Effective Date
MoU GW and WU Departure interactions.	28 Jul 23
MoU between Northolt Radar and Denham Aerodrome.	30 Mar 12 (Suspended)
LoA between RAF Northolt Air Traffic Control and The Flyin' Fish RC Helicopter Training	18 Apr 24
LoA between RAF Northolt Air Traffic Control and RAF Northolt Airfield Electricians	20 Jan 23
LoA between RAF Northolt and 78 Squadron, Governing the Provision of Radar Approach Control Air Traffic Services	7 Feb 24
LoA between the Air Traffic Control Sqn and 63 Sqn (KCS) regarding the deployment of mobile mirrors onto the KCS parade square	Suspended
LoA between RAF Northolt Air Traffic Control and 14(F) Sqn Air Training Corps	29 May 24

2. RAF Northolt holds MOUs with several aerodrome users, details of which are held by OC Ops Sqn and can be found following this link.

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AERODROME ALTERNATE ACCEPTABLE MEANS OF COMPLIANCE (AAMC), WAIVERS AND EXEMPTIONS (AWES)

1. All details regarding the supporting safety documentation and limitations for all MAA AWES, and AAMC are held by ATC and can be made available on request however, for ease, a short paragraph for each exemption/waiver/notification is detailed below. All safety assessments considered the risk of operating along with mitigations to reduce the severity and likelihood which was presented to the regulator for acceptance. Links for internal MOD use only.

2. **Non-Compliant Approach Lighting**. RAF Northolt has a CL3B on both Runway 25 and Runway 07. Regulatory exemption has been granted from the requirements of RA 3016(3). **MAA_AWE_2019_135.**

3. **Runway Strip Obstructions.** Northolt is classified by the MAA, as a code 3 Instrument Runway (>1200 m and <1800 m in length). Within the Runway Strip[10] there are a number of legacy obstacles as follows:

a. Adjacent to Runway 25 Threshold, the southeast Officers' Mess Block (150 – 130m north of the Runway centreline), trees (130 – 110m north of the extended centreline). **MAA/Exemption/2014/25**.

b. Adjacent to Runway 07 Threshold, the A40 road and the Station Perimeter Fence. At the very end of the Runway strip, the A40 is within 60 m (vice 150 m) of the extended centreline of the Runway. **MAA/Exemption/2014/18.**

c. Operationally Essential Obstacles which are permitted in the Runway Strip include, PAR installation (82.5m south of Runway centreline, approx. midpoint), ILS installation (125m south of Runway centreline at the eastern end), PAR MTI markers, HRDF, PAPIs, Aerodrome Signage and Runway IRDMs as shown on the aerodrome map. **MAA/Exemption/2014/14**.

d. Operationally Essential Signage is placed at various points around the aerodrome to direct aircraft and vehicles. **MAA/Exemption/2014/19**.

4. **Obstacle Limitation Surfaces (OLS)**. Due, in part, to the proximity of the A40 and A4180 and urban environment, a number of obstacles penetrate the approach and take-off climb surfaces at Northolt. Full details of these and other obstacles can be found in the Measured Height Survey data in the **UK Mil AIP** or can be provided by ATC. Approach and departure procedures are either PANS-OPS or MIPS compliant and ensure safe clearance from relevant obstacles in the vicinity of Northolt. As per CAA guidance for the use of Government aerodromes,[7] operators should conduct aircraft performance and safety assessments before planning to operate from Northolt. Of note, pilots should be aware that the Threshold Crossing Height for a PAR approach to Runway 07 is 30 ft, as opposed to the Military Instrument Procedures and Standards (MIPS) requirement of 32ft.[8]

5. **Buildings infringing the OLS.** Various buildings have been identified in the CAP 1732 Survey as infringing the OLS. This data is available on request from ATC or in the **UK Mil AIP** Measured Height Survey data for RAF Northolt. **MAA/Exemption/2014/25**

[7] CAA SN-2015/007: Use of Government/Military Aerodromes by Civil Aircraft Operators.
[8] The PAR is not a civilian procedure and, although all procedures are written iaw civilian PANS-OPS regulations, the MIPS standards apply to PAR procedures.

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AERODROME LOCATION AND CONTROL OF ENTRY AND ACCESS

1. **Aerodrome Location**. RAF Northolt is located by the A40, just inside the M25 motorway and is approximately 13 miles from London's West End.

a. **Access by Road**. Easy access to the M25 motorway provides a link to all major roads and motorways out of London. All aircrew and passengers intending to depart from RAF Northolt must report to the control of entry point at the Whitehouse Gate entrance. A Shell petrol station on the corner of the road helps to identify the Whitehouse Gate. Note: RAF Northolt is within the Ultra Low Emission Zone (ULEZ).

b. **Access by Rail**. Train and Underground Stations nearby include Ruislip Gardens and South Ruislip, both on the London Underground Central Line. The Chiltern Rail Line into Marylebone Station also serves South Ruislip. All terminals of Heathrow Airport are accessible via London Underground services or can be reached by road within 30 mins (depending on traffic).

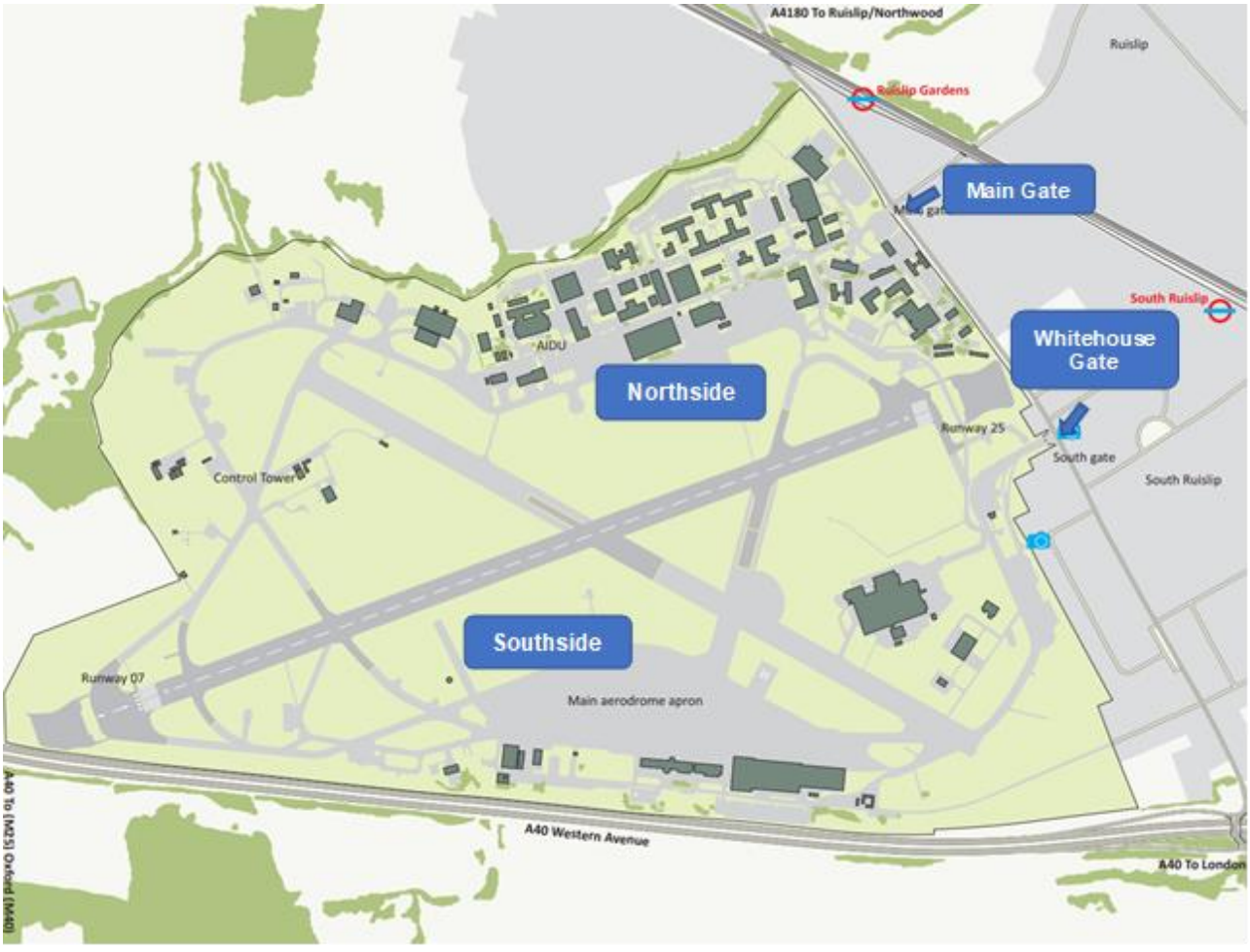

Figure G-1 – Local Area Map

2. **What3words**. This is a mobile app system that is an alternative to grid referencing. By using the app, you can provide an accurate reference to your location using 3 words provided by the app. Key points location are provided using what3words below:

Key Location	What3Words	Remarks
Main Gate	///ruler.wells.loyal	H24
Whitehouse Gate	///herb.detect.wake	As per commercial operating hours
Terminal Building	///robot.merit.dish	Main entrance
Air Traffic Control	///sums.kinds.liability	Open for flying
Fire Section	///lasts.lives.usage	H24

4. **Control of Entry and Access.** RAF Northolt is a secure military base and prior notification is required for all visitors, including civilian aircrew and passengers. Identity and vehicle checks will be conducted at the Whitehouse Gate before visitors are allowed entry. Unescorted access onto any part of the movement area is strictly prohibited to all persons other than specifically authorised employees of RAF Northolt. Arrangements for control of airside access include:

a. Access is limited to authorised staff via security-controlled doors operating on an electronic pass system.

b. Access to the movement area is strictly controlled. Vehicle access is via two remotely controlled barriers monitored by CCTV. Access for passengers and crew is through approved entry and exit doors with electronic scanning of both personnel and baggage and physical checks when required. Civilian aircraft operations at RAF Northolt are subject to the Department for Transport (DfT) UK National Aviation Security Programme (NASP) regulations. CAA undertake regular inspections of RAF Northolt commercial operations. CAA to ensure EU and National Regulatory compliance. Further details on aviation security at RAF Northolt are available from the Senior Air Movements Officer (SAMO), who is the RAF Northolt Aviation Security Manager and owns the RAF Northolt Aviation Security Plan. ATC MT Route access to the movements area is controlled through a remotely controlled barrier monitored by ATC (0208 833 8227).

c. Vehicles requiring regular access to the main ASP (ASP1) are to be issued with, and display, an airfield pass. All drivers of vehicles requiring access to the ASP are required to undertake an Aerodrome Access Brief from ATC and hold a valid Aerodrome Access Permit in accordance with Annex U.

d. Aircraft services, including engineering teams, requiring access to the base and ASP must be pre-notified to Universal Aviation, who will arrange access to the Station and escort these parties on the ASP at all times.

e. Ambulances requiring access for aeromedical movements will be escorted on the ASP by movements personnel. The operator booking the aircraft movement will provide vehicle and ambulance personnel details at the time of booking, so that access to the Station can be arranged.

f. Inbound passengers and baggage are liable to checks by staff from the UK Border Agency, iaw UK law, ensuring that persons arriving have a legitimate right to enter the country and that any goods being brought in are permitted.

g. Any unauthorised entry onto the movement area is to be reported to, and dealt with by, the RAF Police initially, then, if necessary, escalated to the Civil Police or UK Border Force.

h. The RAF Air Movement Squadron (AMS) is responsible for controlling access to the manoeuvring area during aerodrome opening hours and can be contacted on 020 8833 8945. Outside aerodrome opening hours, the security of the manoeuvring area is the responsibility of the Police and Security Flight. All contractors requiring access to the ASP, in order to conduct maintenance activity, are to report to VASS Control where they are to read, and sign as having understood, the “RAF Northolt Contractors Health & Safety Brief for Operations on the ASP”.

5. **Aerodrome Map.** The layout of the aerodrome is shown below. The air terminal and operations building are situated on the south side of the aerodrome with the main Aircraft Servicing Platform (ASP) in front.

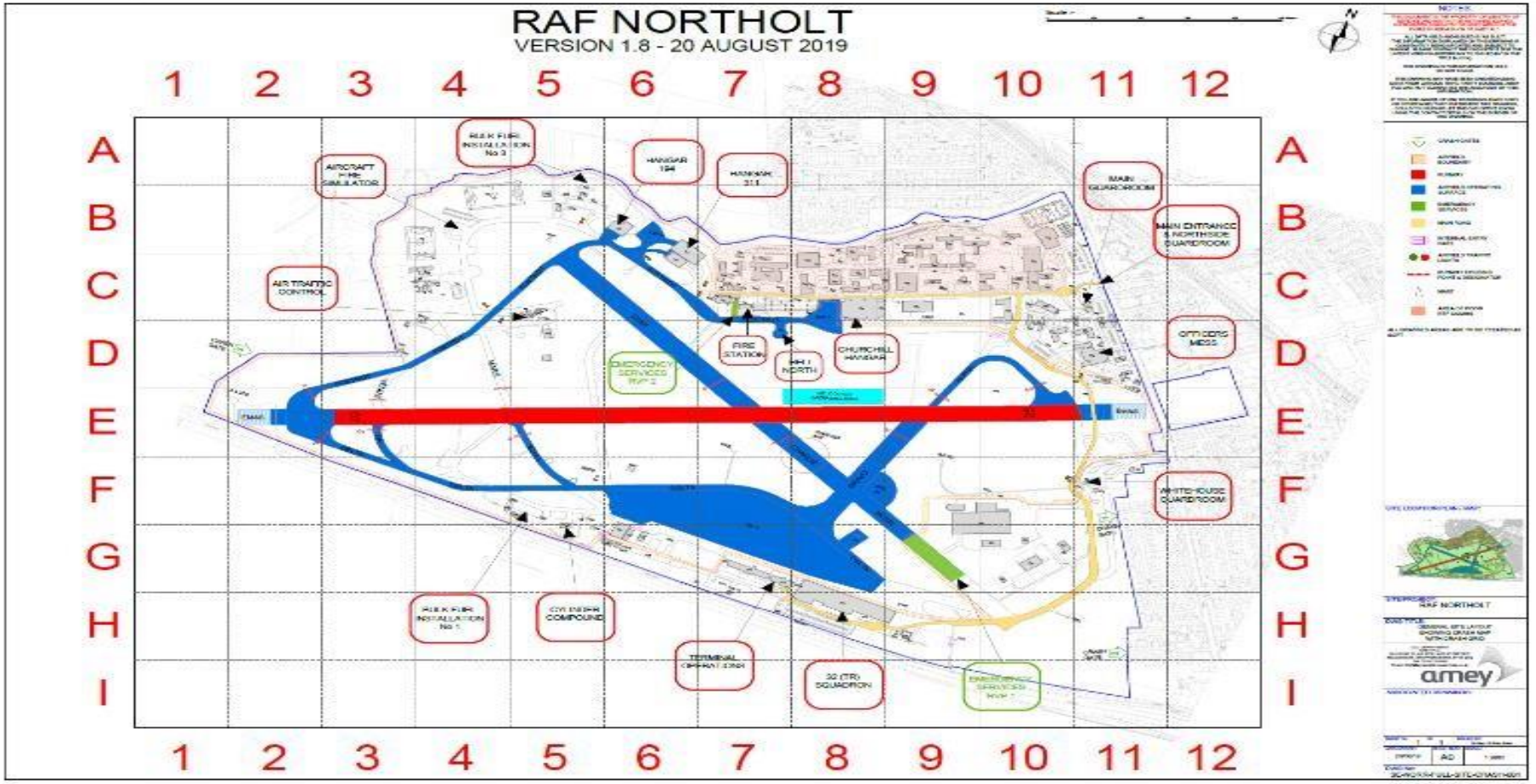

Figure G-2 – Aerodrome Map

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NOISE ABATEMENT PROCEDURE ORDERS

1. **Aircraft Engine Ground Runs (EGR).** To minimise disturbance to the local community, EGR are to be carried out under the following conditions. Should EGR be required out with these conditions i.e., to satisfy essential fleet availability and readiness requirements, permission is to be sought in writing from the AO or their nominated deputy:

a. **Low Power EGR (at idle RPM):**

(i) Permitted H24.

(ii) Runs are not to exceed 45 mins duration.

(iii) Multiple runs are not to be undertaken consecutively.

(iv) Appropriate precautions are taken to avoid noise or blast damage to adjacent aircraft, vehicles, buildings, and personnel.

b. **High Power EGR (above idle RPM):**

(i) Permitted weekdays 0800-2200L.

(ii) To be conducted on the Engine Running Bay (ERB). Transit to and from the ERB will require permission from ATC.

(iii) Runs are not to exceed 45 mins duration.

(iv) Multiple runs are not to be undertaken consecutively.

(v) Appropriate precautions are taken to avoid noise or blast damage to adjacent aircraft, vehicles, buildings, and personnel.

d. **Airfield Closed**. When the airfield is closed, ATC and Ops are not present to provide alerting and initiate an ARFF response should there be an incident; therefore, when the airfield is closed, all EGR are to be conducted with an appropriate Fire Crew present for their duration.

e. **ERB**. The purpose-built aero-engine ERB is located immediately to the east of the intersection of Taxiways BRAVO and CHARLIE at Crash Map Grid Reference F8. This ERB is to be used for all engine ground runs that require the engine(s) to be operated at higher than idle rpm.

f. **Control of Ground Running**. When the aerodrome is open, the movement of aircraft, vehicles, and personnel to and from the ERB is only to be conducted with prior permission from local ATC, with whom radio contact is to be maintained, not only during the movements to and from the ERB, but also throughout the engine run. Ground runs may be required to cease at short notice; ATC will advise if required. When the aerodrome is closed, The Approved Maintenance Organisation will assume responsibility for the safe conduct of ground movements to and from the ERB, and of the engine runs.

g. **Positioning of Aircraft**. An aircraft requiring one or more of its engines to be tested is normally to be positioned at the centre of the ERB, with its nose directly into wind.

h. **De-confliction of Taxiing Aircraft from Engines being Tested**. Due to the proximity of the ERB to active Taxiways BRAVO (south) and CHARLIE (south), there is a need to ensure that engine ground runs being undertaken in still air conditions, or when the wind is from the east, do not affect any taxiing aircraft. Radio communication is to be maintained between the aircraft on the ERB and ATC, so that the movement of aircraft along taxiways BRAVO and CHARLIE can be de-conflicted.

i. **RW Ground Runs**. Un-tethered engine ground runs of military RW aircraft may be carried out on the main ASP at any time if the following conditions are satisfied:

(i) Un-tethered ground runs are only to be undertaken by pilots qualified on type.

(ii) Where the ground run is on an aircraft with the engine cowling removed, a fire engine must be in attendance.

(iii) The regulations pertaining to out of hours ground runs detailed above are to be complied with.

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TEMPORARY OBSTRUCTION ORDERS

1. **Temporary Obstructions on RAF Northolt**. Due to on-going or emerging activity on or around the manoeuvring area there may be a requirement for temporary obstructions to be present which may be considered as a hazard to aircraft or vehicles. In the event of notification of a temporary obstruction the following process will be followed:

a. The location, requirement and longevity of the obstruction will be assessed.

b. The obstruction will be marked by ground markers, high visibility markers, tape or fencing subject to the size and environmental conditions. Additional red-light markers will be added at night where possible.

c. A NOTAM will be issued to ensure all airfield users are aware of the location and marking method used.

d. Taxi patterns will be controlled by ATC and briefed to pilots on landing or when calling for start where required.

e. ATC staff will inspect any temporary obstructions twice daily to ensure the marking is still sufficient and there have been no changes.

2. **Temporary Obstructions Off Site**. There may be occasions where temporary obstructions, excluding cranes, are required off site. Where notified ATC will endeavour to ensure the OLS is not infringed or implement additional mitigations where possible. A NOTAM will be submitted to inform all airfield users of the obstructions of this nature. The method of managing these obstructions will be on a case-by-case basis.

3. **Temporary Crane Obstructions**. Due to the urban surroundings and continual development, there is a requirement to manage crane activity. Upon receipt of a crane application for crane activity either within the confines of the Station or within the local area the following procedures are followed:

a. Assess the location and height to determine whether it infringes the OLS and IFP.

b. Where the crane does not infringe the IFP details will be retained, and a NOTAM submitted providing the relevant information.

c. Where the crane does infringe the IFP a “Crane Up, Crane Down” procedure is adopted whereby the crane will be lowered to a safe heigh prior to any departure or arrival removing the OLS/IFP infringement.

d. All crane operators are instructed to inform ATC prior to raising any cranes that infringe the OLS daily prior to commencing and upon completion of activity.

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AERODROME ARRESTING SYSTEM ORDERS

1. A CAA and MAA approved Engineered Material Arresting System (EMAS) is located within each runway overrun. The main component of the system is a lightweight aggregate foam made from recycled glass, which in the event of an overrun is designed to crush under the weight of the aircraft, quickly decelerating the aircraft and bringing it to a safe stop, whilst causing minimal damage to the aircraft. The dimensions of the EMAS are depicted below with a simplified description in the Mil AIP.

2. Although engaging the EMAS should not be a desired outcome for the end of a flight, pilots need to know what EMAS is, how to identify it on the airfield diagram and on the airfield, as well as knowing what to do should they find themselves approaching an installation in an overrun situation. Pilots also need to know that an EMAS may not stop lightweight general aviation aircraft that are not heavy enough to sink into the crushable concrete. Following the guidance below ensures that the aircraft engages the EMAS according to the design entry parameters.

a. Continue deceleration - Regardless of aircraft speed upon exiting the runway, continue to follow Rejected/Aborted take-off procedures, or if landing, Maximum Braking procedures outlined in the Flight Manual.

b. Maintain runway centreline - Not veering left or right of the bed and continuing straight ahead will maximize stopping capability of the EMAS bed. The quality of deceleration will be best within the confines of the bed.

c. Maintain deceleration efforts - The arrestor bed is a passive system, so this is the only action required by the pilot.

d. Once stopped, do not attempt to taxi, or otherwise move the aircraft.

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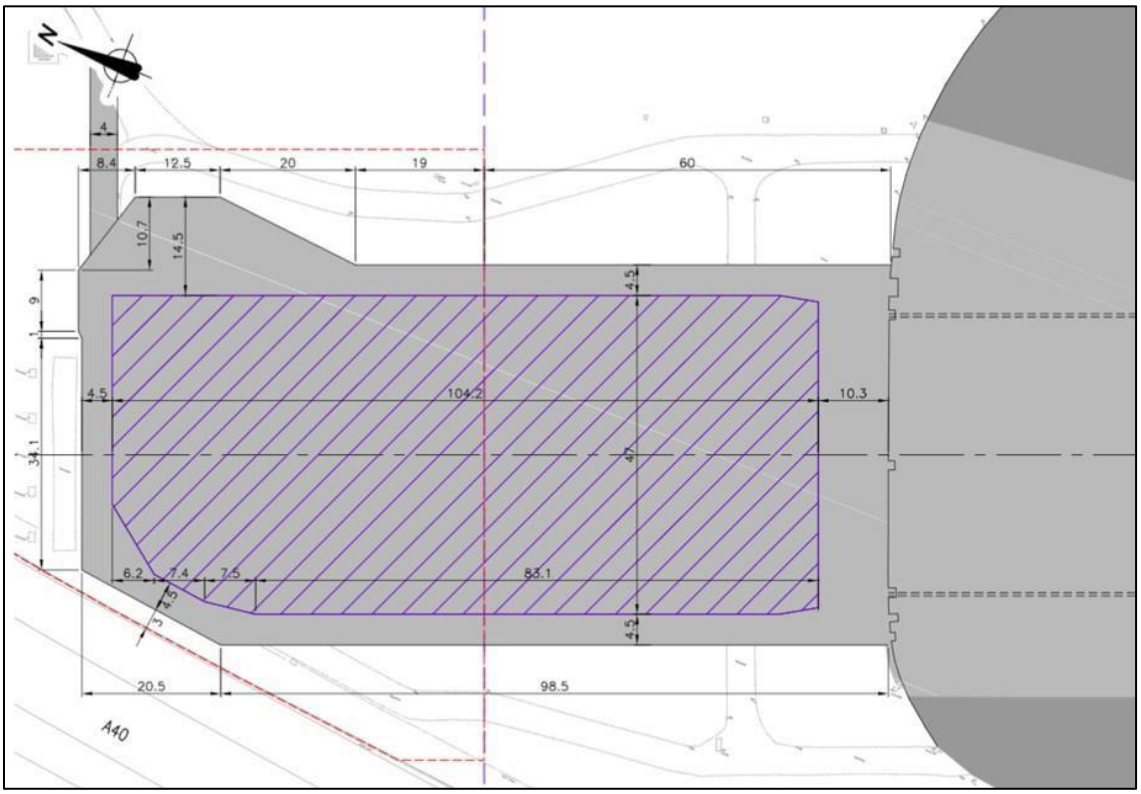
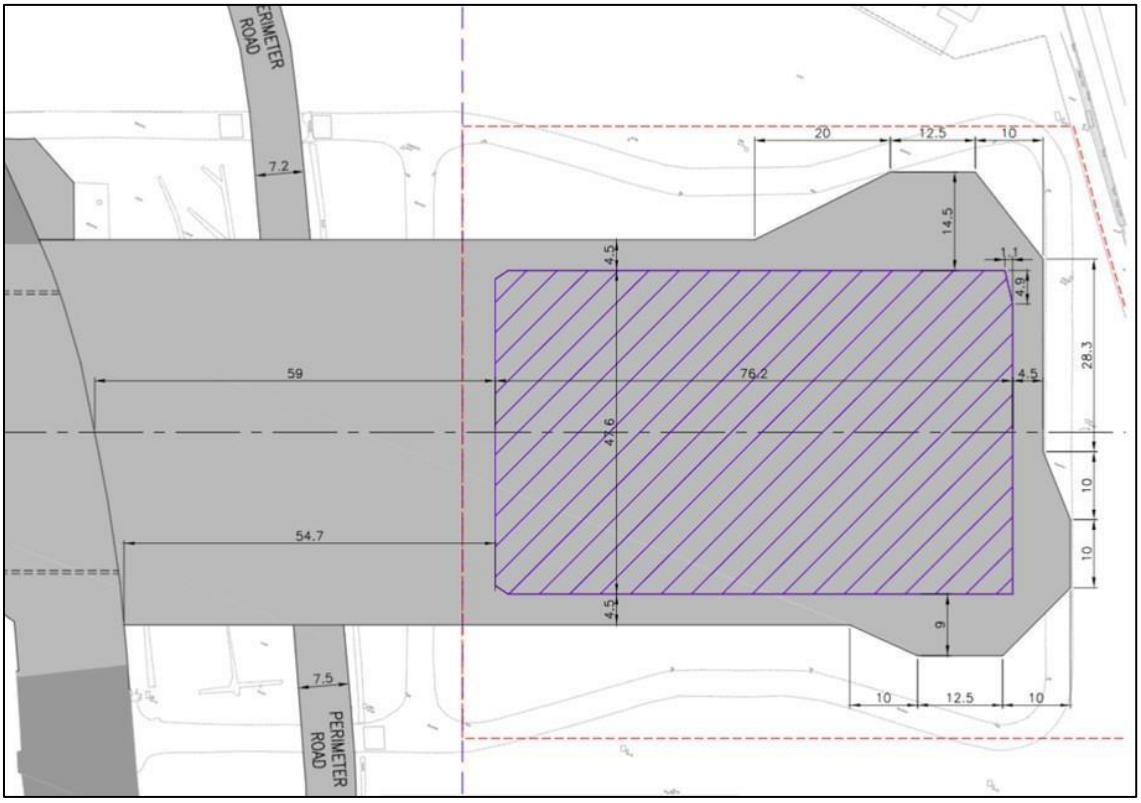
Defence Aerodrome Manual
Runway 07 EMAS Dimensions and photographical representation.



Runway 25 EMAS Dimensions and photographical representation.



Annex K to
RAF Northolt
Defence Aerodrome Manual

MANOEUVRING AREA SAFETY AND CONTROL ORDERS

Part 1 – General Operations

1. **Start-up.** For safety purposes, a marshaller is to be present and equipped with appropriate fire extinguishing equipment during engine start and shut down. The marshaller will be provided by VASS on ASP 1. Those operating away from ASP 1 are responsible for providing their own marshaller.

2. Aircraft are not to start-up without prior permission from Northolt Ground, including outside Hangar 311. If permission is granted pilots should expect the response, “With Northolt marshaller approval, start-up approved". This indicates that a marshaller has been dispatched and that once he is positioned in front of the Aircraft, with the fire trolley and contact has been made with the captain, a normal start-up can commence. The only exceptions to the requirement for a marshaller on start is armed Aircraft parked on Charlie that have SQEP personnel on board to conduct start-up, or those with Closed Field Operations approved.

3. Generally, all aircraft will be parked in a west-facing orientation, however, if the prevailing wind is observed to be constant 15Kts easterly, the aircraft parking orientation will change to east-facing.

4. **Marshalling**. Handling agencies are to ensure that an appropriate team is ready to marshal in the aircraft. Should ATC be informed of a delay, the aircraft is to be held on the taxiway until a marshalling team is present. No movement on the ASP, other than station-based aircraft, is to be carried out without authorised ground handler(s). Aircraft handling is carried out iaw the Manual of Airworthiness Maintenance – Process (MAM-P), Chapter 3.4, Ground Operations.

5. See Annex U for guidance on vehicular and pedestrian access.

6. ‘Follow Me’ vehicle procedures are in Annex X.

7. **Engine Running Off/On-Loads (EROs).**

   a. **ERO requests.** The authority to approve ERO requests lies with the DOC and approval must be sought either at the booking stage or on the day on frequency via ATC who shall seek approval from the DOC on behalf of the aircrew.

   b. **Mil.** EROs are subject to the condition that they are conducted under supervision of the Air Loadmaster who is responsible for the passengers’ safety until they reach the Double White Line of the ASP/MT Route where they will handover passenger and cargo manifests and any Dangerous Goods (DG) paperwork to AMS. From the Double White Line, the passengers are under the control of AMS staff. During EROs, no activity is to take place on parking stands between the aircraft and the Terminal. EROs loading / unloading palletised/ wheeled freight is prohibited due to lack of currency of RAF Northolt AMS personnel.

   c. **Commercial.** A pilot may request an ERO either during the booking process, or on frequency with ATC. EROs are subject to the following requirements:

      (i) The aircraft shall have two or more turbo jet or turbofan engines aft of the passenger door. EROs are not permitted for turboprop aircraft of any kind.

      (ii) The aircraft shall remain in contact with ATC on the ground frequency 121.580Mhz at all times.

(iii) The aircraft shall only run one engine at idle power on the side of the aircraft opposite to that being used to embark / disembark passengers. Fire cover is not required unless requested.

(iv) The handling agent shall position their vehicle in front of the wing and on the side of the aircraft opposite to the engine at idle power.

(v) The handling agent or a member of the aircrew shall escort passengers from the vehicle to the aircraft, ensuring that passengers remain well clear of other aircraft conducting EROs.The handling agent or a member of the crew shall unload / load luggage from / onto the aircraft.

8. **Safe Parking.** All Air System parking is carried out under the guidance of Ops and Load Control iaw Annex K of this document.

9. **ASP 1 Parking.** ASP 1 is broken into taxi lanes and numbered parking stands. Parking is allocated by AMS and VASS. It is directed by ATC.

a. **London Air Ambulance** commonly use Heli 1 and Heli 2.

b. **VVIP** parking is on stands 31 and 41.

c. **Aeromed** are commonly parked on Stand 51.

d. Due to potential interference with Distress and Diversion (D&D) triangulation equipment at the far west of ASP 1, Line 8 should be used for the smallest practicable aircraft, and for the shortest practicable time.

e. **Visiting FW Civilian Aircraft**. Visiting Civilian FW aircraft are to be parked, whenever possible, on one of the main ASP parking lines (4 to 8).

f. **Visiting FW Military Aircraft.** Visiting military fixed wing Aircrafts will generally be parked on Lines 4 and 3. However, military aircraft may be parked on any line. Large aircraft (A400M upwards) require all Stands adjacent to the taxi path of the aircraft to be vacated, unless the aircraft taxis with wing walkers. In addition, large aircraft cannot be parked on Stands coloured green in the image below due to wingtip clearance from DELTA taxiway.

10. **Overflow parking.** As per the “Terms and Conditions for Civilian Aircraft Operators”, in the event of military necessity all commercial aircraft must be parked ready for aircraft towing operations. This is to include: the aircraft being parked with the “Brakes-Off”, and the aircraft being parked with the Nose Wheel disconnected. Helipad South, Engine Running Bay, and Bays 1 - 4 on Taxiway GOLF[9] can be used for overflow parking with permission from OC Ops Wg.

11. **Alpha Loop.** This may be used for events parking with prior approval from the Aerodrome Operator. Aircraft should spend the minimum time practicable parked in this area. Large aircraft may be taxied into position on the Alpha Loop only with wing walkers.

[9] Bays are 64 m apart and Aircraft must be parked clear of Taxiway GOLF by 5 meters.

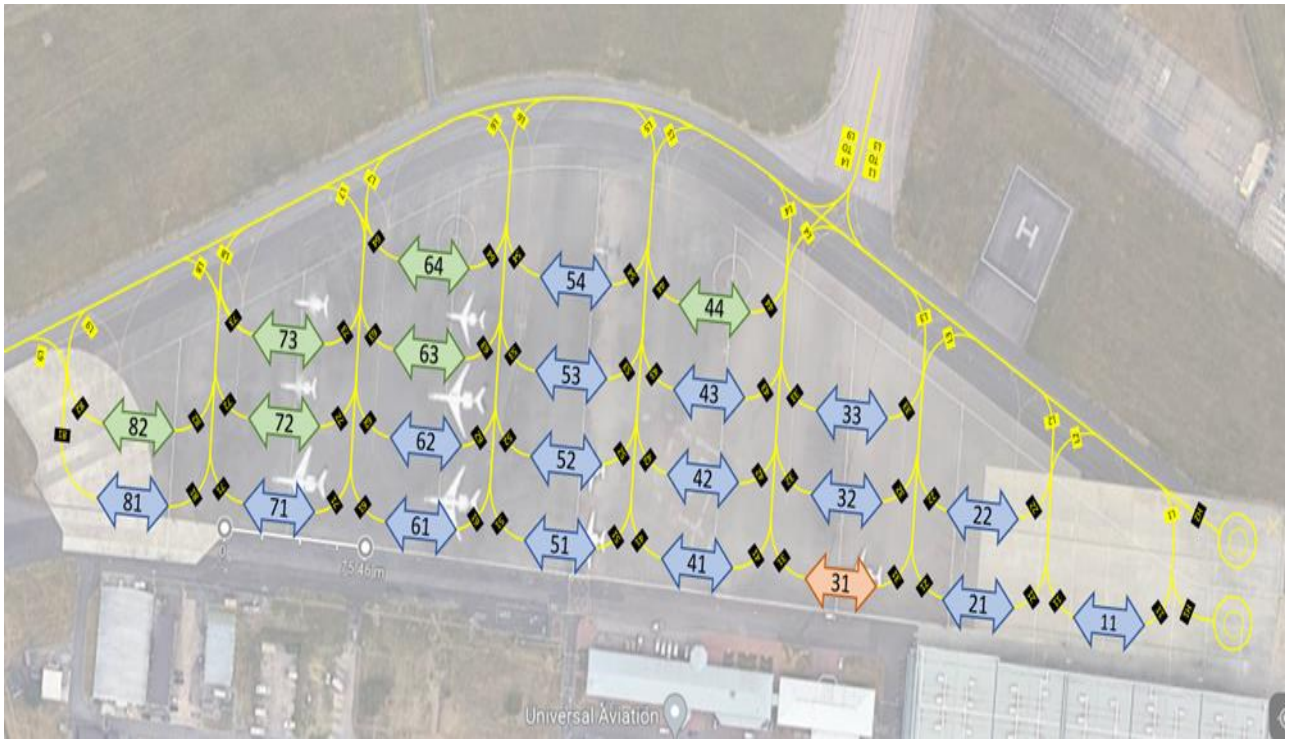


Figure K-1 – ASP1 Parking Stand Locations. Not to scale, for reference only.

12. **De-icing of Parked Air Systems.** All de-icing is conducted by authorised personnel, iaw RA 2115, RA 5401 and RA 1310 and contractor Work Instructions. All requests for de-icing are to be directed through VASS Control at the earliest opportunity ideally 24 hours prior . Application of de-icing is carried out using the guidance holdover times referred to in the Federal Aviation Administration (FAA) guidelines for Kilfrost ABC-K Plus, Type 2 fluids. Should there be multiple, simultaneous requests for de-icing, Stn Ops will determine the priority.

13. **ASP 1 Opening Procedures.** Prior to opening the airfield, the following activities are to take place:

a. Air Traffic Control (ATC) will conduct an airfield inspection, which includes the ASP.

b. Visiting Aircraft Support Squadron (VASS) will conduct the following actions iaw with VASS local orders.

(i) Inspect the ASP for Foreign Object Debris (FOD).

(ii) Remove Civilian Omni-directional Runway Edge Lighting (COREL) from any visiting aircraft parked overnight[10].

(iii) Position chocks by parking line number boxes south of the ASP (terminal building side)

(iv) Turn off ASP lighting[11].

c. Ground Engineering Flight (GEF) are to perform a MISCRIT Check iaw Ref A and inform Stn Ops of any deficiencies.

[10] COREL lighting to remain in place if airfield opens during hours of darkness or low visibility conditions.

[11] ASP lighting to remain on if airfield opens during hours of darkness or low visibility conditions.

d. World Fuels and Fuels Group will conduct AS refuelling on request from ATC. If out of hours, Stn Ops will coordinate.

e. If required, de-icing of aircraft and surfaces is to be completed iaw Ref B.

f. ASP lighting is to be turned off[12].

g. ATC will declare the airfield open and inform Stn Ops followed by all relevant stakeholders.

[12] If the airfield is opened during hours of darkness or low visibility conditions, lighting is to remain on.

ANNEX K to
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Part 2 – Fixed Wing Operations

References:

A. JAP 100E-10 Military Airfield Support Equipment Management and Policy
B. RAF Northolt Snow and Ice Clearance Plan (Op BLACKTOP)
C. Manual of Airworthiness Maintenance – Processes (MAM-P)

STATION BASED AIRCRAFT -

1. **Escorts.** Passengers are to be escorted between their aircraft and their vehicle or the Terminal by AMS personnel. Crews do not need an escort. Freight will be transported by AMS.

2. **Marshalling**. All marshalling is provided by VASS except Envoy, which is done by Centreline, and LAA, marshalled by VASS by exception.

3. **Arrivals.** The following procedures are to be followed for aircraft arrivals:

a. Northolt Radar will call ATC when the aircraft is approximately 15-minutes from landing. This estimate is to be passed to the agencies responsible for handling the air system, and AMS if required.

4. **32(TR) Sqn FW** Aircraft**. Procedures** for 32(TR) Sqn fixed wing aircraft operating from the main ASP (ASP 1) are:

a. Aircraft due to depart with VIP passengers are to be towed onto a VIP parking line under control of Eng Line personnel, with co-ordination from VASS/Load Control.

b. Aircraft departing without VIP passengers will usually depart from stand 31.

c. Aircraft arriving with VIP passengers are to be marshalled by Centreline. Marshallers are to remain in position until the passengers have left the ASP. The aircraft towing team is not to commence any ground handling/engineering activity until the VIP convoy/principal car has departed the ASP.

d. Aircraft arriving without VIP passengers are to taxi to Line 3 and will remain under the direct control of Centreline aircraft marshallers.

COMMERCIAL AIRCRAFT

5. **Escorts**. Passengers and crews are to be escorted between their aircraft and their vehicle or the Terminal by Universal Aviation personnel.

6. **Arrivals.** The following procedures are to be followed for aircraft arrivals:

a. Northolt Radar will pass a ‘stack time’ to ATC, which indicates when the AS will be approximately 15 minutes away from arrival. This is followed by ’10-mile’ call to ATC, indicating that the aircraft is 5-10 minutes from landing.

b. ATC are to contact VASS with the estimates to enable marshallers to prepare to meet the aircraft. Close communication is to be maintained to ensure minimal delays. If ATC is informed there is a delay, the AS is to be held on the taxiway until a marshaller is in place.

c. VASS will perform the following actions:

(i) Inform Tower of the aircraft allocated parking spot and contact Universal Aviation.

(ii) Conduct an internal brief before moving out onto the ASP 5 minutes before the aircraft is due to arrive.

(iii) Check which ground handling services have been pre-booked and log any services provided using a form F603. The Commercial Booking Cell will use this to generate a bill.

(iv) Liaise with World Fuels to coordinate refuelling.

(v) On completion, ensure any GSE is returned to GSE Park.

7. **Departures.** The following procedures are to be followed for aircraft departures:

VASS are to provide ground handling services as requested.

a. Universal Aviation will notify VASS to make their way outside ready for engine start.

b. When ready for engine start, the aircraft Capt will make the request to ATC. A VASS Marshalling team is to be present with appropriate fire extinguishing equipment prior to the aircraft starting engines.

c. Once the aircraft has taxied off the ASP, VASS are to remove any GSE and return it to GSE Park.

VISITING MILITARY AIRCRAFT

8. **Escorts.** Passengers and crews[13] are to be escorted between their aircraft and their vehicle (if airside) or the Terminal by AMS personnel. AMS are to supervise and handle any freight loading, along with visiting aircraft crew. They are to co-ordinate the use of Ground Support Equipment (GSE) and Aircraft Handling Equipment (ACHE), as appropriate.

9. **Arrivals.** The following procedures are to be followed for aircraft arrivals:

a. Northolt RADAR will prenote the inbound aircraft to ATC, who are to notify VASS and Stn Ops.

b. VASS will

i. Inform Tower of the aircraft allocated parking spot and contact AMS and Stn Ops.

ii. Conduct an internal brief before moving out onto the ASP 5 minutes before the aircraft is due to arrive to marshal it.

10. **Departures.** The following procedures are to be followed for aircraft departures:

a. Passengers arriving for ‘direct reporting’ (no Air Transport Security (ATSy) screening required) will be driven directly to the barrier and then airside for embarkation. AMS

[13] If the AS is crew only, no AMS support will be required. Crew are to contact Stn Ops (020 8833 8915) for any transport requirements.

personnel will marshal the vehicle to the desired location, the DAMO will be present to meet the passenger if they are categorised as a VIP. The DAMO will escort the passengers from the vehicle to the aircraft. Passengers or their security detail will have been briefed prior to arrival and White House Gate will inform passengers whether they are to park airside or landside.

b. Passengers requiring ATSy screening will wait in the lounge for a brief from AMS personnel prior to embarkation. The DAMO is to escort passengers to the aircraft following the crew call to start.

NIGHT OPERATIONS[14]

11. ASP, aerodrome ground lighting (AGL)[15] and ASP barrier lighting will be turned on. The airfield will be inspected by ATC.
VASS will:

a. Double chock aircraft.

b. VASS will utilise marshalling wands when marshalling aircraft at night.

Lighting of Aircraft on the ASP

12. All aircraft parked on the ASP in low visibility conditions or darkness are to be lit with COREL lighting. The following stakeholders have responsibility for their own AS:

a. VASS. For any visiting or commercial aircraft that will be parked on the ASP during hours of darkness, place COREL lighting on the outermost aircraft wing tip, closest to taxiway.

b. Centreline, LAA and Stn Flt are responsible for their own aircraft.

13. The process for obtaining CORELs is as follows:

c. Serviceable CORELs will be available in the GSE Dutch Barn. GEF will ensure that CORELs are available for use by recharging or servicing, as required.

d. All sections are responsible for the collection and return of CORELs from the labelled rack in the GSE Dutch Barn. CORELs must be returned when no longer required (including when low visibility ceases i.e. the morning) and placed in the correct section of the rack i.e. ‘serviceable’, ‘requires charge’ or ‘unserviceable’.

e. All sections using CORELs are to familiarise themselves with DAP 120K-0118-1 for this equipment, with particular reference to the self-testing function and safety.

f. If the number of CORELs required exceeds the available stock, a decision on priority and location will be made by the DOC. If any aircraft do not have COREL lighting, ATC are to be informed and the position given so that they can make taxying aircraft aware.

14. The DOC is responsible for checking at ECT/airfield closing, whichever is earlier, that all aircraft parked on the ASP are correctly lit. If any AS are not correctly lit, they are to contact the appropriate section and direct them to light their AS.

[14] Night is defined as the time between the end of ECT and the beginning of morning civil twilight (MCT).
[15] AGL inspection will be undertaken by the Airfield Electricians, or ATC in their absence.

Part 3 -Rotary Wing Operations

A. Manual of Maintenance and Airworthiness processes (MAM-P), Fuelling Operations for Aircraft on the Ground (Chap 3.4.1)
B. DAP 3150 - RAF MT Instructions, Part 3, Instruction 9

1. All the orders which apply to fixed Wing also apply to RW, unless otherwise specified.

2. **RW Ops.** In addition to the Stands, RW Aircraft can use Helipad South or the RW Aircraft parking spots at H1 and H2 (see Figure K-3). Helipad South is suitable for large helicopters, including Chinook, Merlin and Puma and equivalent foreign military rotary Aircraft (e.g. CH-53).

a. RW aircraft must ground taxi on the ASP unless unable to i.e. skids or locked gear.

b. RW Aircraft unable to ground taxi may not occupy the inner stands (those nearest the Terminal i.e. 31, 41, 51 etc), regardless of the status of the passengers.

c. RW Aircraft unable to ground taxi will be parked on the Helipad South or the RW Aircraft spots H1 or H2, or the outer spaces of each lane (i.e. those further from the Terminal).

d. The potential effects of downwash from stands 21, 22 and 11 against the pod doors (with a windspeed limit of 40mph) are to be considered, particularly for larger RW Aircraft such as CH-47 and Merlin.

e. Bays are 64 m apart and RW aircraft must be parked clear of active taxiway by 5 m.

f. Aircraft fitted with skids are exempt from the requirement of the Northolt Ramp TAP that ‘Parking is to be at the right angles to the indicated stands’ and may park into wind for the shortest time necessary; if parking into wind on an ASP 1 Stand is not practicable, aircraft should use Heli-South, H1 or H2.

g. RW aircraft may be cleared to take-off and land under VFR/SVFR conditions on the rwy, at an intersection of the rwy and as follows:

i. Helipad South.

ii. Any taxiway provided that no aircraft or vehicles are overflown. The controller should aim to minimise impact to the FW taxi pattern and is to maintain positive control of all vehicles in the vicinity of the RW aircraft.

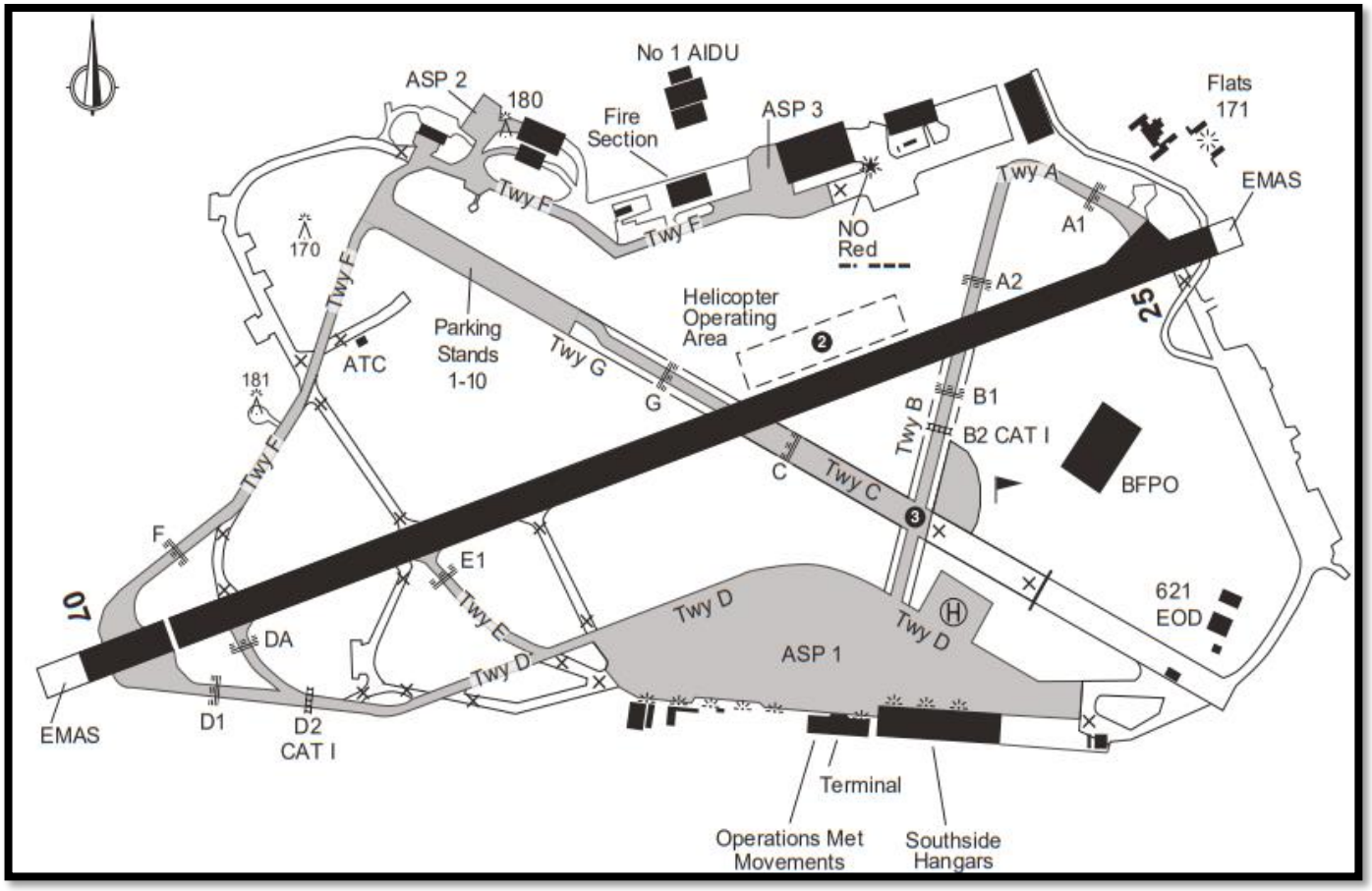

Figure K-2 Depicting the Helicopter Operating Area

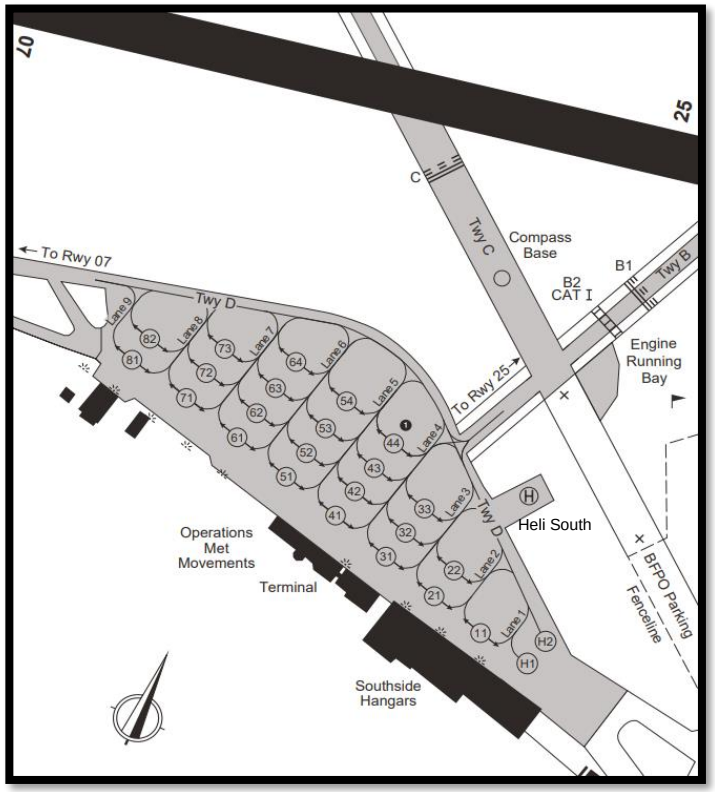

Figure K-3 Depicting H1, H2 and Heli South

3. **Northolt Based RW Aircraft**. Station based RW aircraft are permitted to depart and arrive to Heli 1, 2 or Heli South without the assistance of aircraft marshallers.

a. If parked away from the Main ASP, in the hrs of darkness, the aircraft operators will provide their own obstacle lighting.

b. Vehicles are not authorised to drive on GOLF taxiway, therefore passengers may transit on foot across the grass from Hanger 311, but are not to enter GOLF without permission from ATC via the crewman.

c. If aircraft parked on Eastern stands that preclude the use of H1 and H2, RW aircraft are to use Heli-South instead.

d. Stn-based, or appropriately briefed RW aircraft may use the Helicopter Operating Area (HOA) (see Figure K-2).

e. Stn-based, or appropriately briefed RW aircraft may perform practise/actual rejected take-offs to the HOA or the rwy.

4. **Rotors Running Off/On-Loads (RROs)**. Rotors running passenger loading/unloading is permitted upon DOC approval and when passengers are supervised and escorted by a qualified crew member.

5. **Air Taxiing**. Air taxiing by visiting aircraft on the ASP may be permitted by the ATCO IC and the DOC. Where RW Air Systems have skids, the Air System is to be parked on the heli-spot or the outer spaces on each lane, regardless of the status of the passenger. RW Air Systems able to ground taxi are permitted to taxi on the ASP and park on the inner lines when required. See Annex K for more detail.

ROTORS RUNNING REFUELS

6. Requests for RRRF are to be indicated on the Prior Permission Required (PPR) with confirmation that the visiting air / groundcrew will conduct the RRRF.

7. The refuelling of visiting RW with engines running and rotors turning is to be carried out iaw Refs A and B. The RRRF team should, as a minimum, consist of an aircraft tradesman or aircraft crewman authorised to conduct RRRF on the ac type, a LCAR / refueller driver and an aircraft handler / safety person.

8. **Protective Clothing.** The LCAR/refueller driver and the aircraft handler / safety man are to wear ear defenders, eye protection, protective clothing, gloves and a Hi Vis vest as a minimum.

9. **Fire Cover.** A Fire Tender/Crash vehicle is to be in position before RRRF commences and is to ensure that they are clear of the aircraft handler and not obstructing any other taxing aircraft and vehicles. Once RRRF commences any subsequent external emergency (ac or domestic) requiring attendance by the RRRF FFV must immediately be communicated by the FFV crew to the ac handler/safety person and RRRF is to cease.

10. **Operation.** The tradesman / crewman is responsible for the refuelling operation of their ac and the LCAR / refueller driver is to remain with his vehicle at all times only operating the vehicle refueller controls at the request of the tradesman / crewman and to cease fuel flow in the event of an emergency. At no time is the LCAR / refueller driver / Aircraft Handler / safety person to enter

the rotor disc area. Personnel not directly involved in the fuelling process are to be kept clear. No concurrent refuelling is to be carried out, only one RW at a time.

11. **Aircraft Handler / Safety Person.** The Aircraft Handler / Safety Person is to be positioned such that they can maintain visual contact with the LCAR / refueller operator and the trades / crewman. They are responsible for the cessation of the fuelling operation in the event of any incident affecting the safety of the ac or personnel. Essential Non-verbal signals are to be agreed in advance with refueller driver. The Aircraft Handler / Safety Person must hold a local authorisation (in the case of Babcock / contracted staff a company approval) to demonstrate they have undertaken appropriate training and understand the local safety precautions put in place

12. Site for RRRFs. RRRFs are normally to be carried out on ASP 1 or as directed by Ops personnel and the LCAR / refueller must be positioned such that it can be safely driven away in an emergency.

13. The following safety precautions are to be observed:

a. RRRFs are only to be authorised following direct consultation with OC Ops or their appointed deputy.

b. RRRFs will not be allowed in wind speeds in excess of 30 Knots, during thunderstorm level warnings, at night or in conditions of low light.

c. LCAR / refuellers are to have their amber anti-collision lights switched on when operating in the vicinity of the ac.

d. Record the availability of RRRFs to visiting RW in the appropriate Risk Register

CLOSED FIELD OPERATIONS ORDER

14. **Introduction**. Closed Field Operations (CFO) enables rotary wing units who are familiar with RAF Northolt to operate when the airfield is closed and there is no ATC provision. This procedure is available to 32(TR) Sqn RW CSAT, London Air Ambulance (LAA) and 658 Sqn AAC who, for the purpose of this order, shall be referred to as Stn RW assets. It may also be available to units who are specifically briefed. Detailed orders are available here. If unable to use the links above, please contact NOR-NORTHOLTOPS@mod.gov.uk who can provide on offline version.

15. **Planned CFO Approval Requirements**. CFO should not be considered as a routine procedure. When the need for a departure or arrival is during periods where the airfield is closed, Stn RW assets are to request permission from Stn Operations when booking their movement or slot. Once Stn Operations have identified the need for CFO and approval has been granted by the AO they will notify the requesting unit. The risk of CFO will then need to be acceptable within aviation orders[16] or agreed to by the relevant Aviation Duty Holder chain. In order to support CFO, the following limitations must be considered:

a. **Single/Formation RW assets only**. CFO can only be conducted by one flying element[17] at a time, therefore Stn Operations may have to impose timing restrictions to ensure deconfliction.

b. **Planned Airfield Activity**. CFO can only be operated when there is no planned activity on the airfield such as airfield works or snow clearance activity. Therefore, CFO should not be authorised during BLACKTOP AMBER/RED.

[16] Eg: JAC FOB J2350.105.2
[17] RW flying in formation can be considered as a single element provided they are from the same operating unit.

c. **Weather**. Northolt's forecast airfield visibility throughout the CFO period must be >600m. No IFR capability is available when the airfield is closed as Northolt Radar will also be closed.

d. **Lighting.** Airfield obstruction lights shall be left on. All other lights shall be turned off (as per normal ATC closures) unless specifically requested to be left on.

16. **Stn RW Assets Responsibilities**. Stn RW assets are responsible for:

a. Specify lighting requirements when booking CFO.

b. Ensuring a comprehensive meteorological brief.

c. Engaging with Heathrow Radar to pre-note routing in and out of RAF Northolt.

d. Prior to aircraft start at Northolt, or departure from home unit, contact RAF Northolt Fire Section on 0208 842 3175 or 07919693674 providing Persons on Board and Estimated Time of Departure and Arrival.

e. Vehicle movements may occur around the airfield at any time, especially after 0700 local. Personnel should **not** assume that the vehicle has seen them prior to aircraft taxy.

f. The surfaces which are approved for arrivals and departure at RAF Northolt under CFO can be found at Appendix K1.

g. **On departure from RAF Northolt**. Approved departure/taxy surfaces can be found at Appendix K1. Transmit blind calls on the Tower frequency 120x675 as follows:

(1) On start, give the location and number of persons onboard the AC.

(2) Prior to taxy, detail the intended taxi routing.

(3) Prior to lift, detail the intention get airborne and in which direction.

h. **On arrival to RAF Northolt**. Approved arrival/taxy surfaces can be found at Appendix K1. Transmit blind calls on tower frequency 120x675 as follows:

(1) On being released from Heathrow Radar, detail the direction the ac is joining from and number of persons onboard.

(2) Prior to landing, give a gear down call if the ac has retractable undercarriage.

(3) Prior to taxy, detail the taxi routing.

i. **Aircraft Emergencies**. In the event of ARFF being required to respond in support of an aircraft emergency, pilots are to broadcast on the Tower frequency the nature of the emergency and intentions.

17. OIC CFO TORs can be found here.

Appendix K1 to
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RW asset approved surfaces for taxy, departure, and arrival

1. The following surfaces are approved for arrivals and departure at RAF Northolt under CFO:

   a. **Rwy 25RH**. RW should not touch down until abeam the taxiway BRAVO/ALPHA intersection with the rwy as the NSLR traffic lights will remain on “GREEN”.

   b. **Rwy 07**. RW should not touch down until abeam the taxiway ECHO intersection with the rwy as vehicles may be required to transit the Rwy 07 threshold.

   c. **Taxiway BRAVO/CHARLIE intersection**. London Air Ambulance (LAA) only.

   d. **Heli South**. LAA only.

2. The following taxy routing is approved for arrivals and departure at RAF Northolt under CFO:

   a. **Rwy to ASP 1**. Taxiway BRAVO/CHARLIE and cross/transit taxiway DELTA to appropriate taxi **lane** to designated parking stand.

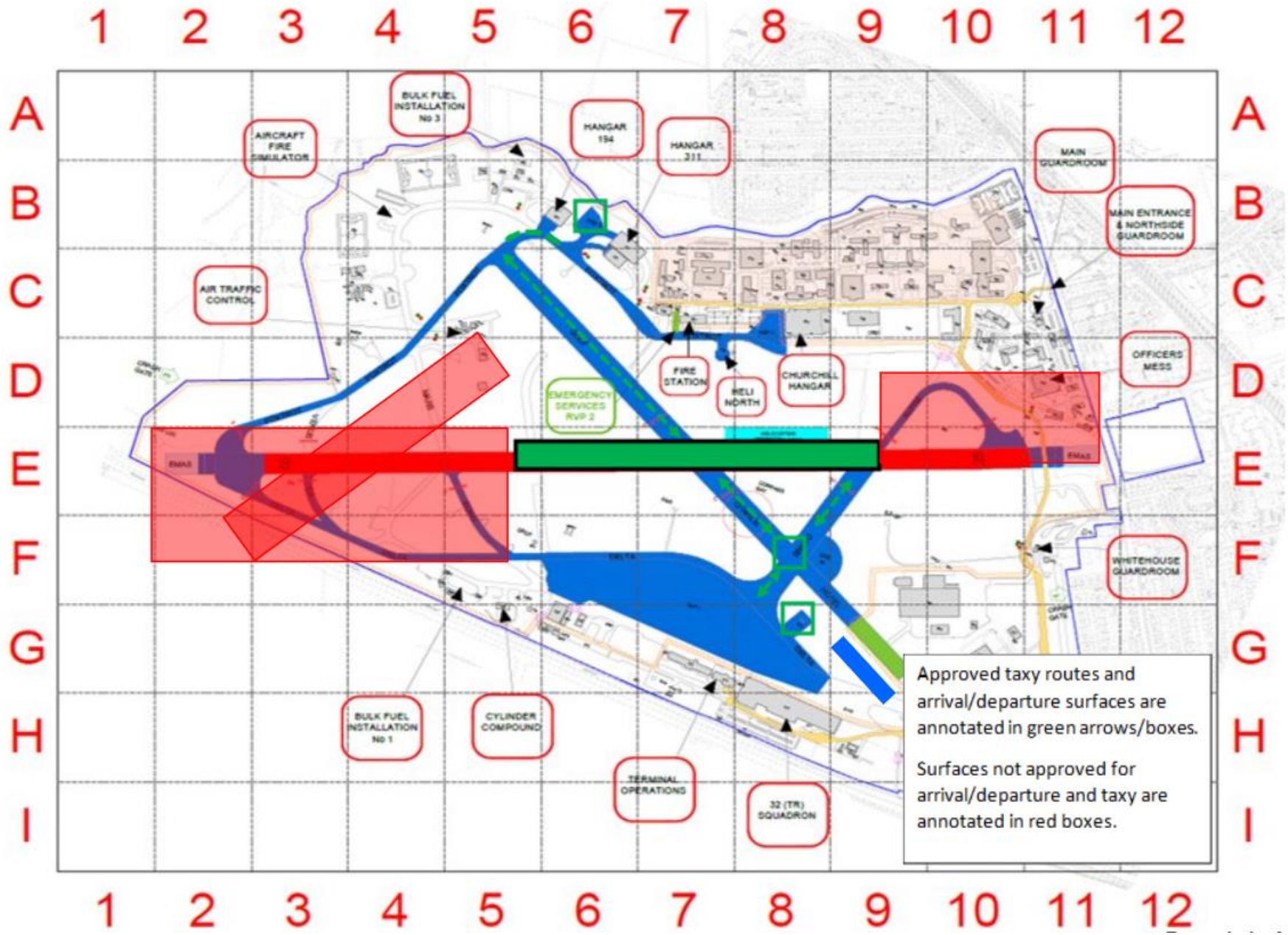
   b. **Rwy to ASP 2. Taxiway GOLF and taxiway FOXTROT.**

   c. **BRAVO/CHARLIE Intersection to ASP 1.** Taxiway BRAVO/CHARLIE and cross/transit taxiway DELTA to appropriate taxi lane to designated parking stand.

   d. **Heli South to ASP 1.** Cross/transit taxiway DELTA to appropriate taxi lane to designated parking stand.

   e. All taxi routing may be reversed to facilitate taxy for departures.

3. A pictorial representation of the approved surfaces can be seen on the next page:


1 2 3 4 5 6 7 8 9 10 11 12
A B C D E F G H I
BULK FUEL INSTALLATION No 3
HANGAR 194
HANGAR 211
AIRCRAFT FIRE SIMULATOR
MAIN GUARDROOM
MAIN ENTRANCE & NORTHSIDE GUARDROOM
AIR TRAFFIC CONTROL
OFFICERS MESS
FIRE STATION
HELI NORTH
CHURCHILL HANGAR
EMERGENCY SERVICES RVP 2
RMAS
WHITEHOUSE GUARDROOM
BULK FUEL INSTALLATION No 1
CYLINDER COMPOUND
TERMINAL OPERATIONS
32 (TR) SQUADRON
Approved taxy routes and arrival/departure surfaces are annotated in green arrows/boxes.
Surfaces not approved for arrival/departure and taxy are annotated in red boxes.

EMERGENCY ORDERS / AERODROME CRASH PLAN

The RAF Northolt Crash and Major Incident Plan (CMIP) can be found at this Link.

ANNEX M to
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AERODROME RESCUE AND FIRE FIGHTING SERVICE AND TRAINING ORDERS

1. Royal Air Force Northolt Fire Section Orders can be found at the following online link:

   a. Fire Section Orders

2. CFR Standard Operating Procedures & CFR Capita Operating Instructions can be found at the following online link:

   a. CFR SOP & COI

3. Fire Rescue Service Generic Risk Assessments can be found at the following link:

   a. FRS Generic Risk Assessment

4. Fire Rescue Service Fire Facts can be found within the Incident Command System pack carried on the Crash vehicles and in the Crew Commanders Office at the Fire Section.

5. Fire Section Tactical Information Plans (TIPs) can be found at the following online link:

   a. RAF Northolt TIPs

6. Fire Section Task Resource Analysis (TRA) can be found using the following online link

   a. Northolt TRA V1.3

7. The Fire Section Equipment Needs (ENA) analysis can be found using the following link

   a. ENA

8. ARFF Assessment Requirements are located at DSA 02 DFSR (ARFF) Forms

9. Reduction of ARFF Category Provisions

   a. Circumstances may require that flying is conducted to/from aerodromes with reduced levels of ARFF services. HoE/ADHs may approve such activity following a risk assessment informed by advice from the Defence F&R ARFF provider.

   b. The risk assessment is conducted using DSA DFSR 02 which is to be archived once completed as the auditable record of the HoE/ADH's decision. Aircraft Operating Authority are responsible for detailing in their Orders who can make risk-based decisions and to what level of reduced ARFF category will require elevation to the appropriate risk owner.

   c. All completed risk assessments are to be retained and can be located by utilising the following hyperlinks: DSA 02 DFSR (ARFF) Forms

ANNEX N to
RAF Northolt
Defence Aerodrome Manual

DISABLED AIRCRAFT REMOVAL

1. **Overview**. The RAF Northolt Major Incident Plan will be implemented for any aircraft incident which causes the closure of an airfield surface.

2. If, in the judgement of the Defence Accident Investigation Branch (DAIB) or Air Accidents Investigation Branch (AAIB) the incident requires no further investigation or, if the runways surface is essential for a critical Defence output, and it is safe to do so, following advice from JARTS and the engineering authority for the platform, then the aircraft may be removed from the airfield surface by VASS. In this case, the following form may be used to request permission from the operator of the disabled aircraft.

3. If operationally essential to the airfield, the aircraft may be moved without permission from the operator.

INDEMNITY AND RELEASE FORM FOR DISABLED AIRCRAFT

To: Aerodrome Operator

1. I, the undersigned, being the owner or the duly authorised representative of the owner of the aircraft described below hereby agree to provide this indemnity and release on the conditions set out below.

2. I agree and consent to the Aerodrome Operator, its servants, agents, contractors and employees to move at any time required the aircraft at my sole cost and expense.

3. In consideration of the Aerodrome Operator moving the aircraft I agree to indemnify and keep indemnified the Aerodrome Operator against all and any loss damage cost charge expense or other liability however suffered paid or incurred by or threatened against the Aerodrome Operator in relation to or arising out of or in consequence of any action, proceeding, claim or demand which is or may be brought made or prosecuted or threatened against the Aerodrome Operator in respect of any loss of or damage to property, loss of life or personal injury or other loss that may arise in any way from the moving of the aircraft by the Aerodrome Operator.

4. I further agree to release the Aerodrome Operator from all claims actions, causes of actions, proceedings and demands which I and or the owner now has or but for this indemnity and release would or might at any time in the future have against the Aerodrome Operator and from all present and future liability of the Aerodrome Operator to me and or the owner however caused in relation to or arising out of or in consequence of the moving of the aircraft.

5. I confirm that it is the intention of this indemnity and release that each servant, agent, contractor and employee of the Aerodrome Operator obtain the benefits expressed in their favour under this indemnity and release and be entitled to enforce such benefits.

6. I confirm that I and the owner have abided and will abide by all applicable laws including without limitation acts, regulations, bylaws, directions, and determinations relating to or made by the Civil Aviation Authority, the Aircraft Accident Investigation Branch, the Aerodrome Operator and any other relevant authority or body which has authority in relation to interference with or movement of an aircraft.

Description of aircraft:

Type of aircraft:

Registration No:

Full name:

Signed by: Date:

ANNEX O to
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Defence Aerodrome Manual

AIR TRAFFIC CONTROL ORDERS

1. The Northolt Air Traffic Control Controllers' Order Books can be found at the following online link: Northolt Air Traffic Control Order Book

2. Northolt Radar Controllers' Order Book (Section 7) information is available on request from RAF Northolt Station Operations. (This document is updated every 28 days).

3. **Aerodrome Circuit.** To avoid Heathrow traffic there is no dead side, aircraft are to make circuits to the North of the aerodrome, within the ATZ at 1,000ft Northolt QNH, as depicted in Figure O-1. Single engine aircraft and helicopters may fly within the ground track depicted as required to achieve a safe glide profile or trg objectives. All visual circuits must maintain outside the Denham ATZ therefore, any aircraft which cannot meet the turn radius required will not be authorised to conduct visual circuits.

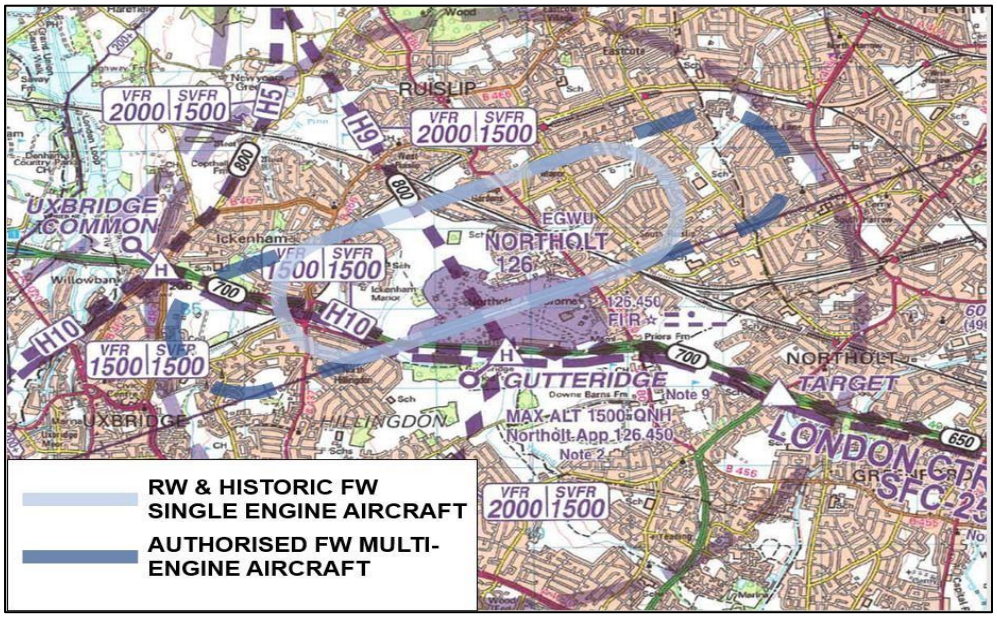

Fig. O-1

ANNEX P to
RAF Northolt
Defence Aerodrome Manual

AERODROME DATA REPORTING PROCEDURES

1. Any requests for permanent changes to aerodrome information are to be submitted via email to RAF Northolt Station Ops (NOR-NORTHOLTOPS@mod.gov.uk), for the attention of SATCO and OC Station Operations Squadron. Following consultation with relevant agencies, approved changes will be passed to the RAF Northolt Station Ops for onwards transmission to No1 AIDU.

2. NOTAMs will be issued to inform all personnel of approved changes with the latest aerodrome information made available to aerodrome users on ATIS where applicable. It is the responsibility of all personnel to inform Station Operations Squadron of any errors identified in current aerodrome information documents at the earliest possible opportunity.

a. Further information on reporting procedures is contained in the UK Mil AIP.

b. For enquiries via email to No.1 AIDU, please use UKStratCom-DI-NCGI-AIDU-OpsCntr@mod.gov.uk

3. The Senior Air Traffic Control Officer (SATCO) has overall responsibility for ensuring that procedures are established, and resources provided, to report changes to aerodrome physical characteristics or any other change that may affect the safety of aircraft operations. Furthermore, SATCO is responsible for the following:

b. Documenting reporting procedures and for advising No1 AIDU of any permanent changes to aerodrome information.

c. Reporting the day-to-day serviceability of the aerodrome and notifying temporary changes to published aeronautical information through Notices to Aviation (NOTAM) filed by the Duty Ops Controller (DOC).

4. Any changes to the aerodrome or the flight procedures, are to be reported to SATCO at the earliest opportunity.

AERODROME SERVICEABILITY INSPECTIONS

Aerodrome serviceability inspections are conducted in accordance with the ATC Order Book linked at Annex O, section 100.100.

ANNEX R to
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Defence Aerodrome Manual

AERODROME TECHNICAL INSPECTIONS

1. Inspection of the aerodrome and associated equipment is conducted each week by the SATCO and additional representation as required. An independent in-depth check of all paved surfaces is conducted monthly on behalf of the Defence Infrastructure Organisation (DIO). In addition to these inspections, routine maintenance is carried out on all surfaces and equipment. The table below details the requirements and actions following aerodrome serviceability inspections at RAF Northolt:

Aerodrome Technical Inspections - Orders	
1	The contracted agency is responsible for carrying out routine inspections of the technical equipment (transmitters, receivers, ILS etc) every 6-months on a rolling maintenance contract. Precision navigation aids are calibrated by a flight check aircraft and conducted accordance with AP 600-Royal Air Force Information CIS policy and relevant SPS.
2	Rwy, taxiway and obstruction lights, along with PAPIs and aerodrome traffic lights are inspected daily.
3	All earthing points are checked annually by Vinci.
4	Manoeuvring Areas and drainage are inspected, maintained and repaired in accordance with DIO guidance on a rolling contract with MOD contractors.
5	All aerodrome signs are inspected weekly by ATC and monthly by DIO SME. All defects should be reported through the Vinci Helpdesk on 0800 707 6000 from civilian telephone networks. They are addressed in accordance with priority matrix. The Helpdesk will inform the individual reporting the fault what priority number the job has been given with a confirmed response time.
6	Aerodrome lighting along with other essential equipment is backed up by stand-by power system. The stand-by power system is to be inspected daily with a switchover test being carried out weekly, which is covered under Vinci pre-planned maintenance regime.
7	All ARFF vehicles and equipment are inspected and tested daily in accordance with MT, manufacturer's instructions, and MOD policy with major servicing inspections being carried out every 2 months. Unserviceability is to be reported to the relevant agencies through MT Control or DFR.
8	The Crash Ambulance and associated equipment is inspected daily with major servicing inspection being carried out every 6-months and tested in accordance with MT, manufacturer's instructions, and MOD policy. Unserviceability is to be reported to the relevant agencies through MT Control or Medical & Dental Support Squadron.
9	The duty The Aerodrome Wildlife Control Unit (AWCU) Operator is responsible for a daily inspection. AWCU equipment and vehicle are inspected daily with vehicle maintenance carried out in accordance with manufacturer's recommendations
10	Traffic lights, for the control of airside vehicles, are inspected daily during the morning inspection and prior to any station night flying. Any fault should be immediately reported and recorded.
11	Annual review of Airfield Driving orders is undertaken by SATCO and are constantly monitored for effectiveness. Training is carried out by ATC personnel every Monday or by exception following liaison with the ASOM.
12	The Compass Calibration equipment is tested bi-annually, and a certificate of serviceability is available at Station Ops.

ANNEX S to
RAF Northolt
Defence Aerodrome Manual

RADAR, RADIO AND NAVIGATION AID MAINTENANCE, MONITORING AND PROTECTION

1. All activity on the aerodrome is monitored by ATC. Only authorised personnel are permitted to access aerodrome navigation aids. Anyone requiring access in the immediate vicinity must contact Aquilla and are to be directed by ATC.

2. **Radar and Navigational Aids**. They are installed with signs warning of any hazards, including microwave radiation. All RAF Northolt navigation aids & associated equipment under the ownership of GRMS are checked daily to ensure optimum performance, if during this these checks any fault is found to be present the duty GRMS Shift Technicians aim to rectify any fault promptly in accordance with AP 600 or relevant equipment AP references. Navigational Aids that are owned and serviced by Aquila are monitored remotely and by ATC personnel. Faults are highlighted to the Aquila Helpdesk on 01329 722711.

3. **Ground maintenance**. Any ground maintenance in the vicinity of the NAVAIDS is managed by ATC. Ground maintenance issues are directed to Estates Management through the ATC.

4. To ensure that all navigation, approach aid and surveillance equipment at RAF Northolt meets the required service schedules the orders, contracted personnel carry out daily and/or scheduled servicing in accordance with AP600. Where an aspect of servicing is not covered in the document, the Northolt equipment is serviced under locally generated Work Orders. This is in conjunction or direction from the RAF High Wycombe Engineering Role Office which is strictly enforced and adhered to.

5. Aquilla hold the following Concession Certificates.

6. **Surveillance Equipment Maintenance & Monitoring**. Since Dec 2011, the provision of radar services to aircraft operating into or out of RAF Northolt has fallen to Northolt Radar, situated at 78 Squadron, Swanwick (Mil), co-located within the NATS London Terminal Control Centre, Swanwick. The provision of SRE for Northolt Radar now falls to NATS. RAF Northolt does not operate or provide primary or secondary surveillance radar but instead receives a feed from NATS. Contracted personnel maintain the links and displays for this feed in accordance with AP600.

7. **Navigation Equipment Maintenance & Monitoring**. Contracted Aquilla personnel carry out daily and/or scheduled servicing in accordance with AP600. Where an aspect of servicing is not covered in these documents, the Northolt equipment is serviced under locally generated Work Orders. All RAF Northolt navigation aids & associated equipment are checked frequently to ensure optimum performance, if during this these checks any fault is found to be present the duty Aquilla Technicians will aim to rectify any fault promptly in accordance with AP 600 or relevant equipment AP references. During normal working hours ATC have control of the navigation equipment and ground to air communications; if during this period a fault is suspected ATC would report all changes to the operational status to the Aquila Helpdesk on 01329 722 711 who will task an engineer to attend the site to rectify the fault.

8. Local orders, within this annex for the maintenance and monitoring of navigational, approach aid and surveillance equipment have been produced in accordance with extant Support Policy Statements (SPS), AP 600 and in conjunction with the RAF High Wycombe Engineering Role Office.

9. Any airfield operator who believes there may be a fault with a particular system should report it immediately to either ATC or Aquilla.

ANNEX T to
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Defence Aerodrome Manual

AERODROME WORKS SAFETY

<table>
<tr><th colspan="3">Aerodrome Works Safety</th></tr>
<tr><td>1</td><td colspan="2">Work in Progress (WIP) Records. A plan of the aerodrome is kept prominently displayed in both ATC and Station Operations for the purpose of marking all obstacles, obstructions, and Work in Progress. It is the responsibility of the ATCO IC and DOC to ensure that the information displayed on the plan is always fully up to date.

For any works planned to be carried out on the airfield, a foreman is to report to the ATCO IC to receive and Work In Progress brief. The ATCO IC will ensure that the working party has the required access permits and understand the planned movements for the duration of their works. A record of the brief is signed by both the foreman and ATCO IC which is then held in ATC.</td></tr>
<tr><td>2</td><td colspan="2">WIP Log. In addition to an aerodrome plan, a Work in Progress log is maintained in the control tower, in which the ATCO IC enters details of all Work in Progress. Each entry is signed by the both the ATCO IC and by the supervisor of the working party to certify that the extent of the work area and the necessary ATC briefing have been fully understood before the work has started.</td></tr>
<tr><td rowspan="8">3</td><td colspan="2">WIP Briefings. The ATCO IC is responsible for ensuring that the supervisor of the working party is properly briefed. The briefing includes the following details:</td></tr>
<tr><td>1</td><td>Limits of the work area.</td></tr>
<tr><td>2</td><td>Direction of Aircraft movements.</td></tr>
<tr><td>3</td><td>Route to be taken by works vehicles.</td></tr>
<tr><td>4</td><td>Parking area for works vehicles and equipment.</td></tr>
<tr><td>5</td><td>Control to be exercised over works vehicles and workers.</td></tr>
<tr><td>6</td><td>Signals to be employed.</td></tr>
<tr><td>7</td><td>FOD prevention.</td></tr>
<tr><td>4</td><td colspan="2">Control Measures. When work is to be carried out on the aerodrome and it is not possible to stop flying, special control rules are enforced to safeguard the working party. The works supervisor is to be issued with an MRE radio or the ATC Duty Driver is to be tasked to accompany the work party. The supervisor or ATC driver is to maintain constant radio contact with ATC and ensure the work party moves clear of the manoeuvring area prior to any aircraft movement in their vicinity. SATCO 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 including any taxiing instructions or special procedures necessary. All aerodrome work is to be clearly marked using approved high visibility markers and lit during hours of darkness.</td></tr>
<tr><td>5</td><td colspan="2">Grass Cutting. A grass cutting plan is to be established and maintained iaw the Aerodrome policy.</td></tr>
</table>

AERODROME USERS - VEHICLE AND PEDESTRIAN CONTROL

Aerodrome Users - Vehicle and Pedestrian Control		
1	Responsibility for issue of Aerodrome access permit.	ATC have full responsibility in delivering training and issuing of Airfield Access Permits (AAP).
2	How aerodrome access permits are presented and issued.	All drivers of vehicles that require access to the Airfield and MT routes that cross the Airfield are to have attended an Aerodrome Access Brief from ATC. Airfield driving orders are available on request from station operations. The only exception to this rule is if under the escort of a member of RAF Northolt staff who holds a Valid Aerodrome Access Permit. In addition, all contractors who require access to the ASP, in order to conduct maintenance activity, are to report to VASS Control where they are to read, and sign as having understood, the "RAF Northolt Contractors Health & Safety Brief for Operations on the ASP".
3	Training, briefing, and testing requirements	ATC provide training for all levels of access permit and associated testing. The pass mark for all levels of AAP is 100%.
4	Periodicity of Aerodrome access permit.	All AAP's have a validity period of 12 months.
5	Audit and Assurance process	Spot checks are regularly carried out by ATC personnel at a variety of locations on the airfield, ensuring all airfield users are holding the correct AAP. Permits are cross-referenced with the AAP database to ensure distributed permits match up with the information on the database.
6	When permits can be revoked or suspended.	Should there be an airfield incursion, an investigation will take place and the individuals line manager informed. First incursion- AAP revoked and a period of retraining. Second Incursion- AAP revoked for **14 days** and a period of retraining. Third Incursion- AAP revoked for **30 days** and a period of retraining. Forth incursion- AAP revoked and no further retraining. The individual will no longer be able to drive on the airfield. SATCO retains discretion of sanctions applied.
7	Details of access procedures during hours of darkness / closed.	Nil change.
8	Types of access allowed eg vehicle, cycle, pedestration.	Only vehicular and bicycle movements are permitted under the Airfield access permits.
9	Minimum and maximum speed limits.	All local speed limits are to be observed and in accordance with the airfield driving brief.
10	Details of Runway and Movement Area boundaries.	ASP 1 access to the movement area is controlled through two remotely controlled barriers monitored via CCTV by AMS (0208 833 8945). ATC MT Route access to the movements area is controlled through a remotely controlled barrier monitored by ATC (0208 833 8227).

		Drivers operating on the aerodrome are to have an aerodrome access permit. The exception is ASP 1 for only those visiting drivers of vehicles associated with: a.VIP (Royal or high level governmental only) aircraft movements. b. Civilian Emergency Service vehicles on operational tasks, including ambulances carrying patients to and from aeromed aircraft. c.HM Revenue & Customs vehicles. These vehicles are permitted to drive up to the double white line, where they will be met by AMS personnel. AMS will remain on foot while escorting the car to an appropriate location close to the aircraft and then escort the passengers to the aircraft steps. The vehicle will then be escorted back to the double white line and instructed to leave the ASP on the marked vehicle route. They are to be marshalled at all times by AMS (chocked when appropriate).
11	Parking arrangements	If parking on the airfield this must be done in accordance with the airfield access permit and with permission from ATC. Vehicles may be parked or left with engines running, however drivers are to: a. Turn on side lights. b. Park parallel to the aircraft and turn the vehicle wheels away from the aircraft. c. Apply the hand brake (vehicle chocks are not required). d. Vehicles are not to park nose on to aircraft, this will ensure taxiing aircraft wing tip clearance is maintained.
12	Requirement for mandatory FOD checks.	Mandatory FOD checks must be completed by all vehicles that have travelled over a 'loose surface' or 'off road' prior to re-entering any Airfield Operating Surface (AOS). FOD grids are located at the airfield entry points both North and Southside of the airfield.
13	Annual review of Airfield Driving Orders.	Airfield Driving Orders in Station Routine Orders are reviewed annually.

Personnel Movements on the ASP

1. No visiting personnel, whether passenger or crew, are to enter the ASP unescorted by AMS (military) or Universal Aviation (civilian). An escort between aircraft and the Terminal or the Whitehouse gate can be booked by calling 020 8833 8945 (AMS) // 8915 (Ops) // 8985 (Universal Aviation).

2. All personnel entering the ASP are to adhere to the following:

a. Personnel are to remain on the MT route (building side of the double white lines), as close to the building as practicable, and only cross the double white lines when specific access onto the ASP is required. When entering the ASP, the shortest route to and from the aircraft must be taken, i.e. perpendicular to the double white lines.

b. High visibility clothing and ear defenders are to be worn when operating on the ASP iaw Ref C. For groups of personnel, guidance on an appropriate distribution of high visibility clothing should be sought from AMS.

c. All visitors requiring access to the ASP are to visit Load Control for approval and safety brief before proceeding. When Load Control is not manned, visitors are to contact the DOC.

d. Visitors, including VIPs, are to be escorted at all times.

Vehicle Movements on the ASP

3. All drivers of vehicles being operated on the ASP are to hold the relevant airfield license and:

a. Drive on the designated MT routes and lines in order to minimise distance travelled on the ASP.

b. Turn on the beacon, if the vehicle is equipped, otherwise turn on dipped headlights.

c. Reverse only when in the presence of a marshaller.

d. Except for emergency services and World Fuels, any vehicle proceeding within the 5m of an aircraft is to be marshalled into position by the appropriate handling agency.

e. In the event of a break down, carry out ‘actions on breakdown’ as detailed within the Airfield Driving Brief.

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Defence Aerodrome Manual

FOD PREVENTION – TRAINING AND AWARENESS

1. Station FOD prevention, training and awareness details can be found in the RAF Northolt Air Safety Management Plan at the following link: 20240327-RAF Northolt current ASMP V14.0-O.docx Leaflet 512

ANNEX W to
RAF Northolt
Defence Aerodrome Manual

AERODROME WILDLIFE MANAGEMENT

1. As recommended by CAP 772 – Wildlife Hazard Management at Aerodromes and RA 3270 – Aerodrome Wildlife Control, SATCO and the contracted AWCU have produced the Wildlife Control Management Plan (AWCMP). The AWCMP can be found at the link RAF Northolt AWCMP.

2. The Aerodrome Wildlife Control Unit are contactable on Northolt.AWCU@bainessimmons.com or through ATC on 020 8833 8228.

3. The grass on the aerodrome is maintained in accordance with the RAF Policy to reduce the risk of wildlife-strikes to as low as reasonably practicable.

ANNEX X to
RAF Northolt
Defence Aerodrome Manual

LOW VISIBILITY PROCEDURES OPERATIONS[18]

1. **Introduction.** Aircraft operations during reduced visibility or low-cloud conditions present additional hazards to aircraft and other aerodrome users and require measures to mitigate the associated hazards. When LVP operations are declared, each measure should be verified as in place prior to resumption of flying operations. All LVP declarations shall be notified to Northolt Radar.

2. **Follow-Me Provision**. During periods of low visibility, for unfamiliar crews or if directed by the AO a Follow Me provision may be available. Where possible requests for the Follow Me provision **should** be made to ATC 24hrs in advance. Aircraft will not be permitted to taxi either from the ASP stand or beyond the directed runway exit point until they have the Follow Me vehicle in sight. ATC will inform the aircraft captain on RT of a vehicle description. When commencing the Follow-Me crews should maintain a steady taxi speed and should not rapidly reduce the distance to the Follow Me vehicle.

3. **Visibility Condition One.** Reported Met visibility is less than 1600m or a cloud ceiling 200ft AGL. Reported met visibility of less than 1600m can preclude some approaches. Converted Met Visibility (CMV) can be utilised in the absence of RVR. Cloud ceiling should also be considered as increasing the risk of a MAP. RW aircraft may approach via the Heli-routes if SVFR minima are met. All WIP on the manoeuvring area is to cease. If FOD could be a concern, an inspection is to be made by ATC before the continuance of operations.

4. **Visibility Condition Two**. Reported Met visibility is less than 600m or when the ADC can no longer see all the manoeuvring area.

a. Only 1 aircraft or vehicle may be permitted to taxi/proceed within each LVP area at a time unless:

(i) The leading aircraft reports at a specified Rwy holding point, then a subsequent aircraft may be permitted to taxi.

(ii) Vehicles are notified of other vehicles/aircraft within their LVP area.

b. A station wide broadcast on the tannoy & MRE is to be made.

c. The NSLR traffic lights are to be selected to RED. The ATCO IC is to inform the MGR and WHG of the NSLR closure. When conditions improve to LVP1 the MGR and WHG is to be informed that the NSLR is open.

d. The MT and Fire section traffic lights will remain at green until notification of a Station Flight movement. As soon as the ADC is informed of a Station Flight movement the MT and Fire section lights are to be set to RED. The ATC driver is to be despatched to undertake the following:

(i) Proceed to the aerodrome entry point at the Fire section using the Northern taxiway and ensure lights are at RED.

(ii) Inspect Northern taxiway.

(iii) Proceed to Tanker Pool and ensure lights are at RED.

(iv) Position on the Northern taxiway to provide a ‘follow me’ for Station Flight.

[18] RA 3274 – LVP.

Before a clearance to depart or land is issued, the ATC driver is to complete a visual inspection of the entire Rwy starting from the Rwy 07 threshold. They are to vacate at the Rwy 25 threshold and are to confirm that the North South Link Road (NSLR) is sterile with the barriers down. Only operational essential vehicles are to be permitted access to the manoeuvring area and all vehicles are to use dipped headlights.

e. The following sections are to be informed of the restrictions by the VCR Specialist:

(i) AQUILA GR.

(ii) Aerodrome Electricians.

(iii) Fire Section.

(iv) Medical Centre.

(v) MWD Section.

(vi) Stn Flt.

(vii) DJCC (Hangar 311).

(viii) Tanker Pool.

(ix) AWCU.

f. The Main Guard Room are to be instructed to display Low Visibility Procedures in Force on the Stn entrance LED board.

5. **Visibility Condition Three.** Reported met visibility is below 350m.

a. Departures are only permitted when the met visibility is greater than 250m.

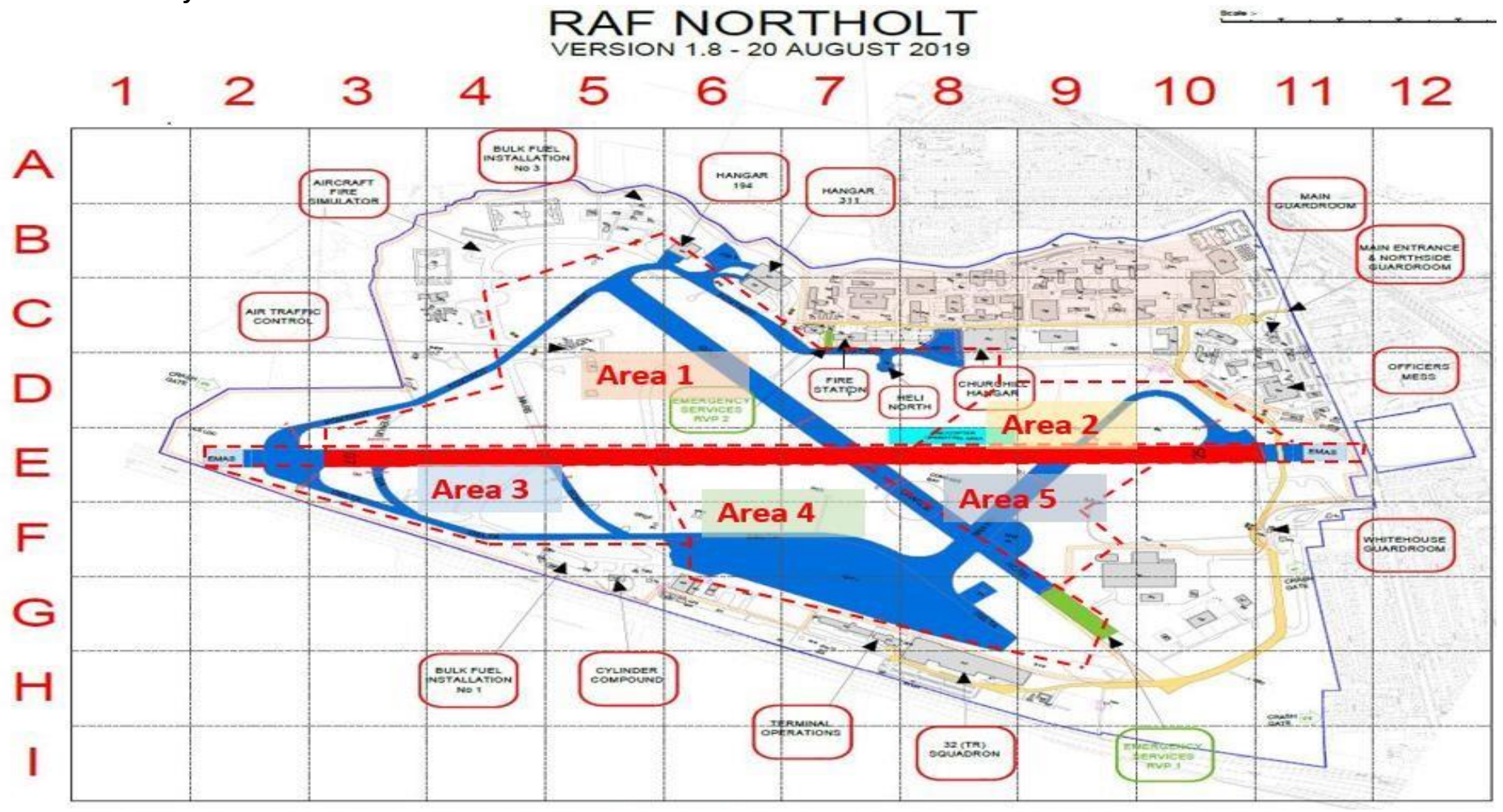
b. Only one aircraft /vehicle (except Follow Me escorting an aircraft) may be permitted movement on the manoeuvring area at a time when the reported met visibility is 350m or less. Additionally:

(i) Stn Based aircraft may taxi without a ‘follow me’ vehicle at their discretion.

(ii) All other aircraft are to be escorted to the runway by a ‘follow me’ vehicle.

c. All vehicles (including VASS, Universal Aviation and Movements Sqn) requiring access to the ASP are to be in contact with ATC.

Airfield Low Visibility Procedure Areas



SNOW AND ICE OPERATIONS ORDERS

1. Series of steps that gets to link RAF Northolt Op BLACKTOP orders can be found here.

THUNDERSTORM AND STRONG WIND PROCEDURES

1. **Thunderstorm Level (TL)**. The term 'Thunderstorm Level' is only issued for RAF Northolt and its immediate surrounding area. The issue of a TL includes the element of precise local observation, which is only possible when a forecaster can monitor developments in the immediate vicinity. The period of validity is maintained at a safe minimum in order not to hamper flying operations unnecessarily. Notification of a TL is to be given in the form of a single worded assessment, prefixed by the words 'Thunderstorm Level', in accordance with the following scale. The RAF Northolt MET Office Issue the Thunderstorm Warnings as follows:

a. **Thunderstorm – General/Level Low**. Issued to highlight that thunderstorms are expected in the area at some point. Level remains low.

b. **Thunderstorm – Level Moderate**. Thunderstorms are developing, or have been reported, within 40 km of the aerodrome, but are not expected to affect the site in the immediate future.

c. **Thunderstorm – Level High**. A thunderstorm is occurring or is expected over the site in the immediate future. When a Thunderstorm Level **HIGH** warning has been issued or thunderstorm activity is apparent in the vicinity of an aircraft, fuelling operations are to cease, unless operationally essentially and specifically approved by the AO or their nominated deputy, in consultation with OC Eng.

2. **Strong Wind**. If a Strong Wind / Gale warning is issued the following procedures should be followed:

a. **Strong Wind**. Surface gusts greater than 34 kts but less than 43 kts. Aircraft are chocked and positioned normally (light aircraft may need to be double chocked).

a. **Gale**. Mean speed of 34 kts or more, or gusts of 43 kts or more. Aircraft are to be positioned normally and double chocked. The AWCU, ATC and VASS are to make occasional inspections of the southern ASP for dislodged aircraft blanks and windblown FOD.

c. **Severe Gale**. Mean speed of 44 kts or more, or gusts of 50 kts or more. Aircraft may be positioned into wind and triple chocked if required. The AWCU, ATC and VASS are to make frequent inspections of the southern ASP for dislodged aircraft blanks and windblown FOD. In case of light aircraft, hangarage should be sought, or in extreme cases large MT vehicles should be parked in front as wind breaks.

3. Op BEAUFORT is to be reviewed in contingency plans to check if the criteria for the Op to be implemented is met, if so, the procedures are followed as laid down in the order.

CIVIL AIRCRAFT AERODROME USAGE - TERMS AND CONDITIONS

1. **Terms and Conditions**. Use of MOD Aerodromes by civilian aircraft shall be in accordance with JSP 360 - Use of Military Aerodromes by Civil Aircraft. Current T&Cs for civil aircraft usage can be found at www.londonvipairport.com.

2. **Opening Hours**. As per the AIP. Civilian visitors will not be accepted outside of published hours. Even when the aerodrome is notified as open and while every effort will be made to accommodate visitors, priority will be given for military flying and training. Where possible, an explanation will be given.

3. **Breaches of Terms and Condition**. Breaches of terms and conditions are considered on a case-by-case basis by the AO who may withdraw permission to use the aerodrome either temporarily or permanently.

4. **Airworthiness and Safety.** Visiting aircraft are to be maintained to standards recognised by their national regulator. All personnel at RAF Northolt, including civilians, are responsible for flight safety. The MoD uses a Defence Aviation Safety Occurrence Report (DASOR) format to enter data into the Air Safety Information Management System (ASIMS). Visitors are encouraging to contact Ops for help in reporting incidents or accidents – or through an appropriate system.

5. **Payment**. Visitors are to pay before departure.

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Defence Aerodrome Manual

ELECTRICAL GROUND POWER PROCEDURES AND ANCILLARY AIRCRAFT SERVICES

1. A qualified member of the aircraft crew must be present before connection or disconnection can take place of any ancillary services, including electrical, water, toilet etc. All processes are in accordance with the Manual of Airworthiness Maintenance – Process (MAM-P).

2. The following are available:

a. **Ground Power Units (GPUs).** All GPUs are mobile. GPUs should be requested at booking, or from their handling agent (AMS or Universal Aviation). They will be supplied and connected by VASS. Allocation of Ground Power Units (GPU) is carried out on a first come / first served basis by the VASS controller. If there is a problem with allocation of a GPU, the Duty Operations Officer (DOC) will decide based on operational priorities and first-come / first-served principles.

b. **Auxiliary power units (APUs).** Operating crews or aircraft engineers are to supervise these at all times. No fire suppression is mandated by RAF Northolt. Permission to use APUs is not required, except during embargo periods (see Annex LL).

c. **Fixed electrical ground power.** This is only available to Centreline.

ANNEX CC to
RAF Northolt
Defence Aerodrome Manual

AVIATION FUEL MANAGEMENT PROCEDURES

1. **Fuel sources as Northolt.** World Fuel Services and Mil Refuellers supply aviation fuel at Northolt. Visitors requiring fuel should make a request when booking in with Ops or the Commercial Booking Cell if civilian.

2. **Refuelling.** All refuelling operations are to be conducted iaw MAM-P 3.4.1 and local work instructions. For civilian aircrafts, an authorised member of the crew is to be present during all aspects of the refuelling operation. Requests for fuel should be made via Stn Ops during the booking in process. Ad-hoc requests may not be able to be fully met due to bowser capacity. **Put with RTRs.**

3. **Refuelling Locations.** The primary location for aircraft refuelling is ASP 1. Refuelling on ASP 2 is only permitted for essential operational reasons due to reduced fuel spillage protection. Fuel provided on ASP 2 is to be to the minimum amount and bowsers are to contain the lowest possible quantities.

4. **Procedures.** The following references relate to fuelling procedures:

Aviation Fuel Management Procedures	Reference
Management of Bulk Fuel Installations (BFI)	AESOs – Management of BFI Fuel Stocks
Fuel Storage, quality, and delivery.	AESOs – Aircraft Fuel Contamination Fuels Group WIs
Safety procedures.	Fuels Group WIs
Fuelling zone procedures.	Fuels Group WIs
Bonding and grounding of aircraft and fuelling equipment.	Fuels Group WIs
Fuelling with pax onboard.	
Fuelling and de-fuelling in hangars.	
Fuel spillage procedures.	**Annex DD** – Hazardous Materials – Spillage Plan

The following fuel priorities apply at RAF Northolt[19]:

a. Priority 1 - Military and State Aircraft.

b. Priority 2 - Other Government Department Aircraft.

c. Priority 3 - Aeromed Aircraft.[20]

d. Priority 4 - Commercial Aircraft.[21]

[19] Subject to discretionary change by the Aerodrome Operator or their nominated deputy.
[20] London Air Ambulance take priority as a Stn based aircraft and will routinely be refuelled by contacted provider unless unavailable, then permitted to be refuelled by ASMT.
[21] In the first instance commercial aircraft will be refuelled on a first come first served basis.

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HAZARDOUS MATERIALS - SPILLAGE PLAN

1. **Fuel Spillage.** In the event of a fuel spillage, fuelling operations are to cease and the Unit Spillage Response Plan immediately activated. Fuelling operations are not to recommence until clear up action has been completed.

2. The RAF Northolt Spillage Plan can be found here.

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COMPASS SWING AREA

1. The compass swing area is located and marked on Taxiway CHARLIE. The area is for use by military aircraft only and is not to be used for any aircraft parking or large vehicles/metallic objects. The RAF Northolt Compass Bay is a Class 2 facility. Calibration is maintained by OC Eng Sqn and is currently valid until 8th January 2027. Certificate here.

ANNEX HH to
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DANGEROUS GOODS PROCEDURES

1. The RAF Northolt Dangerous Goods orders are in accordance with higher orders here.

2. **Dangerous Goods Parking**. DG parking is available at RAF Northolt. In the event of an aircraft loaded with UNClass 1 DG freight requiring parking, the Unit Explosives Safety Representative is to be consulted to ensure that the NEQ is capable of being accommodated. The MOD F1658 Explosives Licence, detailing the maximum NEQs authorised, is held by the Station Explosive Safety Representative (ESR) with a copy held in Movements Control. DG Parking will be controlled and managed by the Air Movements Squadron (AMS) and Visiting Aircraft Servicing Section (VASS), and further details can be obtained from the SAMO. Dangerous Goods of the following classes are permitted to be parked as follows:

   a. AS carrying or loaded with UNCLASS 1 – must be parked on either taxiway CHARLIE or GOLF. Taxiway CHARLIE has two earthing points for use by a DG Air System and GOLF has three.
   b. AS carrying or loaded with UNCLASS 2-9 may be parked on ASP1 or CHARLIE / GOLF as required.

3. **Visiting Armed Aircraft**. RAF Northolt **cannot** accommodate visiting aircraft requiring a directional weapon safe heading (except crew served weapons), such as armed aircraft with forward firing weapons – missiles, rockets, cannons, or guns. Aircraft armed with countermeasures (CM) may be accommodated providing that the AS Flare Danger Area (FDA) can be achieved, AS armed with CM are to be parked on CHARLIE or GOLF only. The Unit Explosive Safety Representative is to be consulted 24hrs prior to the arrival of any visiting armed aircraft.

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C-UAS / RPAS ORDERS

1. At the earliest opportunity, aircrew should report any drone sightings to ATC. All RAF Northolt personnel are to be trained to report drone sightings to ATC via the emergency contact number '333'. ATC will assess the risk and take appropriate action as detailed in the RAF Northolt C-UAS plan.

2. The RAF Northolt C-UAS / RPAS Orders can be found here.

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AERODROME USERS – OTHER USERS OF RAF NORTHOLT AERODROME

1. **KCS C-IED Training Lane Access.** Prior approval is required from the ATCO IC for access to the C-IED lane, which is situated on the aerodrome in front of the Churchill Hangar. The NCO IC is to ensure all personnel remain within the C-IED Trg Area marked by earth bunds. On completion of training, a FOD sweep is to be conducted and ATC informed. Use of the northern grassed area by helicopters takes priority over use of the C-IED lane. Liaise with KCS.

2. **Orders for Organised Running/Marching on the Aerodrome.** Prior approval is required from the ATCO IC for KCS and NHT Regt Flt to utilise the aerodrome for organised training runs and marches. Use of the aerodrome is subject to the following orders:

a. A safety vehicle with a driver and assistant, holding a valid Aerodrome Access Permit, are to collect an MRE radio from ATC prior to commencing the run. The MRE is to be used to maintain radio communications with ATC during the session and obtain clearances to cross the Runway thresholds and proceed through traffic lights.

b. The safety vehicle is responsible for the transport of any personnel who have had to drop out of the session to the SMC on completion of the session.

c. All runners or marching troops must be in organised groups and under the direction of a Lead Guide (Flt Commander/SNCO). The Lead Guide is to ensure all running/marching/training personnel are fully briefed on the aerodrome layout and actions in the event of an emergency.

d. The Lead Guide must call ATC on Mil: 95233 8227/Civ: 0208 842 8227 immediately before starting and on completion of any form of training. The Lead Guide is to follow the routes and timings specified by the ATCO IC.

e. The Lead Guide is responsible for adhering to all traffic lights and must carry a mobile phone and provide ATC with the number prior to departure. If clearance to cross a traffic light or to proceed across the Runway threshold has not been received by the safety vehicle, the lead guide must call ATC on 0208 842 8227 before proceeding.

f. Groups are to conduct a FOD check prior to starting the session and when entering the aerodrome through the Southside gate.

g. Personnel at the front, rear and right-hand side of the running/marching troops are to wear a high visibility vest.

h. The group are to be aware of their FOD responsibilities. All equipment is to be checked for loose items and all muzzle covers are to be removed from weapons at the start of a run. Any group members who suspect that a personal item has been lost on the manoeuvring area are to report the fact to ATC.

i. All personnel are to move clear of any taxiways for aircraft movement.

j. If any personnel have any doubts regarding access to the aerodrome, advice and guidance must always be sought from ATC.

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NOISE AND MOVEMENT EMBARGO PROCEDURES

1. **Noise Embargoes and Flying Bans.** The impact of noise pollution on the local population requires careful management. In addition, certain occasions will require a noise, movement and/or flying embargo. A full noise and movement embargo is to be applied for Aircraft movements involving HM The King. At all other times a limited noise embargo for Aircraft movements involving all senior members of the Royal Family or a VVIP (in consultation with the Duty Air Movements Officer (DAMO)). In accordance with the parking plan, Movements will keep adjacent lines (see Fig 5 as an example) clear of Aircrafts APU/GPU activity during the embargo, in addition high powered ground runs are not to take place on the ASP while the embargo is in place (operational exemptions may apply at the discretion of the DAMO). The DAMO is to contact Station Operations if they are concerned that the embargo has not been initiated/ deactivated in a timely manner.

2. **Noise and Movements Embargo Procedures – Full Embargo.** During a full noise embargo, all Aircraft on the main ASP are to be shut down, have their power units turned off and doors closed. Vehicle movement on or within the ASP are prohibited, except for flight safety reasons or by prior arrangement with Station Operations. Authorised CAT A/B/C Aircraft may use Delta providing the Royal Flight has priority at all times. All arriving passengers are to stay on-board their Aircraft, while all passengers waiting to depart are to stay in the lounge until the Royal party has boarded their Aircraft and departed the ASP. All Aircraft noise/movement embargoes take precedence over ATC slot times.

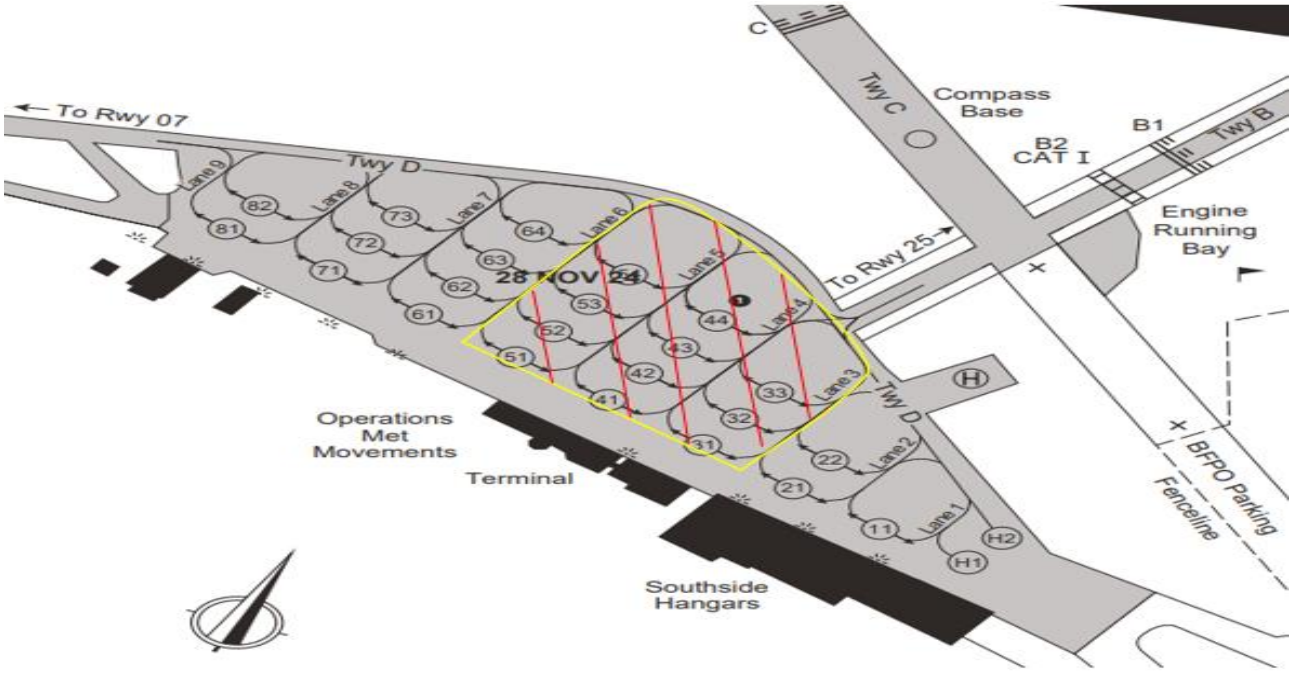

Figure 5 - Limited Noise and Movement Embargo Area

3. **Control of Noise and Movement Embargo**. The embargo is to be controlled by Station Ops, under liaison with the DAMO through the Load Control Staff. The DAMO is to inform the Premier Passenger Service Provider when a noise and movement embargo is in operation. If ATC is unable to comply with the embargo, Stn Operations should be informed immediately. Crews affected by the embargo who require clarification are to be referred to the DAMO, OC Ops Sqn or OC Ops Wg through the Duty Operations Controller. A station broadcast will be performed by Station Operations to inform all station personnel that a noise and movement embargo is in force. A subsequent station broadcast will be performed when a noise and movement embargo has ceased.

4. Noise and Movement Embargo Timings. Provided timings have not been specifically notified, the noise embargo will be in effect as follows:

a. Aircraft Arrivals. The embargo is to apply from when Station Operations receive an inbound call and until after the VIP exits the ASP. Load Control staff are to advise Station Operations when the VIP has departed.

b. b. Aircraft Departures. The DAMO/ Load Control is to obtain the ETA of the VIP at the WHG and pass this information to Station Operations. The embargo will apply from the expected time of the VIP's arrival at the WHG until the Aircraft starts to taxi.

5. Where any uncertainty exists as to the timings of the noise and movement embargo, Station Operations, in liaison with the DAMO, will initiate the embargo as per published NOTAM timings.