

# RAF NORTHOLT



## Defence Aerodrome Manual

Edition 3.2  
(Effective From 24 Jun 20)

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Amendment No.	Amendment Date	Date of Incorporation	Name	Signature
Initial Issue	15 Apr 14	15 Apr 14	Sqn Ldr H R Undrell	Signed Electronically
1.1	07 Jul 14	07 Jul 14	Sqn Ldr H R Undrell	Signed Electronically
1.2	12 Jan 15	12 Jan 15	Sqn Ldr H R Undrell	Signed Electronically
1.3	12 Jan 15	17 Dec 14	Sqn Ldr H R Undrell	Signed Electronically
1.4	08 May 15	08 May 15	Sqn Ldr H R Undrell	Signed Electronically
1.5	12 Oct 15	12 Oct 15	Sqn Ldr H M French	Signed Electronically
1.6	15 Feb 16	15 Feb 16	Sqn Ldr H M French	Signed Electronically
1.7	29 Jul 16	29 Jul 16	Sqn Ldr H M French	Signed Electronically
1.8	18 Apr 17	18 Apr 17	Sqn Ldr H M French	Signed Electronically
2.0	28 Feb 18	28 Feb 18	Sqn Ldr T L Howell	Digital Copy
3.0	04 Oct 19	04 Oct 19	Sqn Ldr K Read	Digital Copy
3.1	18 Mar 20	18 Mar 20	Sqn Ldr K Read	Digital Copy
3.2	XX Jun 20	XX Jun 20	Sqn Ldr K Read	Digital Copy

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Annex B	Safety Meeting Organisational Structure – RAF Northolt Air Safety Management System (ASMS)
Annex C	RAF Northolt Aerodrome Operations Organisational Structure
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Annex E	Aerodrome Operators Hazard Log
Annex F	Formal Aerodrome Related Agreements
Annex G	Aerodrome Safeguarding Waivers and Exemptions
Annex H	Orders to cover all noise abatement procedures, including high power ground running
Annex I	Orders for temporary obstructions on or around any manoeuvring area that are considered to be a hazard to either Air System or vehicles. Indemnity and Release Form for Disabled Air System
Annex J	Orders for both the maintenance and safe operation of the RHAG. ( N/A at RAF Northolt)
Annex K	Orders for both the safe operation and maintenance of the barrier. (N/A at RAF Northolt).
Annex L	Orders for the safe parking, manoeuvring, refuelling and servicing of Air System
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## 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 Air Systems, Air Traffic Control (ATC), Operations, Aerodrome 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.

S Firth  
Wg Cdr  
OC Operations/Aerodrome Operator  
RAF Northolt

## CHAPTER 1: INTRODUCTION

1.1 **Regulatory Cross-Reference.** This manual supports and must be read in conjunction with the following MAA Documents & Regulations:

RA 1020(4)	Responsibilities of ADH-Facing Organizations
RA 1200	Defence Air Safety Management
RA 1205(4)	Responsibilities of Organizations supporting an Air System Safety Case
RA 1026	Aerodrome Operator
▶◀	
RA 1410	Occurrence Reporting
RA 1430	Aircraft Post Crash Management and Significant Occurrence Management
RA 2415	<b>Third Party Use of Military Airfields</b>
<b>ATM 3000</b>	Air Traffic Management Regulatory Articles (RAs)
MAS	Manual of Air Safety (MAS)
MPCM	Manual of Post-Crash Management (MPCM)
MMATM	Manual of Military Air Traffic Management (MMATM)
▶◀	
JSP 360	Use of Military Aerodromes by Civil Aircraft
DSA DFSR 02	Defence Aerodrome Rescue and Fire Fighting (ARFF) Regulation
AP 600	Royal Air Force Information and CIS Policy

1.2 & 1.3 **Purpose & Scope.** The RAF Northolt Defence Aerodrome Manual (DAM) describes the aerodrome at RAF Northolt, including the management, physical characteristics, available services, aerodrome hazards 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 the aerodrome or providing aerodrome services. It also provides enhanced reference guidance to the Aerodrome Operator (AO) to ensure that all aerodrome management requirements are being met and assured correctly. The DAM acknowledges the essential requirements of EC legislation EC 216/2008 and is to be read in conjunction with the documents set at Chapter 1 Para 1.1. The Defence Aerodrome Assurance Framework (DAAF) can be accessed at the following online link: DAAF.

**1.4 Information Accuracy.** The AO is to ensure that information contained in the DAM is up to date and accurate. Where Aeronautical Information published in national Aeronautical Information Publications (AIPs) is also published in the DAM, the information must be identical. The AO is responsible for ensuring changes to Aeronautical Information are published according to relevant procedures, and that these changes are mirrored in the DAM. Both the DAM and the AIP have legal authority.

**1.5 Primary & Master Document.** The master copy of the RAF Northolt DAM is held by RAF Northolt Operations and is available on the Northolt SharePoint site at <https://modgovuk.sharepoint.com/:w:/r/teams/7865/10/DAM.doc?d=wcf889c83960a41bda063b2fefdbcd57a&csf=1&e=kyV222> or on request from Station Operations ((+44(0)208 833 8916). Amendments to the manual will be made when required and the latest version published online.

**1.6 Responsibilities of the Aerodrome Operator.** The Aerodrome Operator will actively manage an aerodrome environment such that it accommodates the safe operation of Air Systems iaw the requirements laid down in RA 1026 Aerodrome Operator. This DAM provides the basic framework upon which additional areas may be added. Familiarity with regulatory cross-referenced material will assist the Aerodrome Operator in meeting his responsibilities which are outlined fully in RA1026. It is acknowledged that many of these functions may not necessarily fall under the direct authority of the AO and as such appropriate interfaces should be established. Ultimately the AO is responsible for providing assurance to the Head of Establishment and Aviation DH regarding a safe operating environment.

a. Aerodrome Operator Responsibilities:

- i. The AO will establish formal relationships with Aviation DHs and/or Accountable Managers (Military Flying (AM(MF))) to ensure that any decisions made which affect the aerodrome or its facilities are made with due regard to the impact on Air Safety. Areas to be considered will include, but are not limited to, facilities, personnel, equipment and materiel. The AO will undertake assurance of activities regarding the documentation of tasks, roles, responsibilities, procedures, access to relevant data and record-keeping, in accordance with the MRP and related reference documents referred to in Chapter 1 Para 1.1.
- ii. The AO will provide assurance that the DAM requirements are complied with taking appropriate measures to ensure hazards are identified and highlighted to ADHs and civilian operators.
- iii. The AO will ensure that an appropriate aerodrome wildlife risk management programme is established and implemented in accordance with RA 3270 - Aerodrome Wildlife Control.
- iv. The AO will ensure that movements of vehicles and persons on the movement area and other operational areas are coordinated with movements of Air Systems iaw RA 3262 – Aerodrome Access.
- v. The AO will ensure that procedures to reduce the hazards associated with aerodrome operations in winter, adverse weather conditions, reduced visibility, or at night, if applicable, are established and implemented.
- vi. The AO will ensure that arrangements with other relevant organisations including, but not limited to, Air System operators and air navigation and ground handling service providers whose activities or products may affect Air System safety, are established to ensure continuing compliance with extant aerodrome regulations.

- vii. The AO will ensure that procedures exist to provide Air Systems with fuel which is uncontaminated and of the correct specification, either through service means, or by means of contracts with third parties.
- viii. The AO will ensure that the maintenance of aerodrome Communication, Navigation and Surveillance (CNS) equipment covers repair instructions, servicing information, troubleshooting and inspection procedures in accordance with extant support policy statements and AP 600 – Royal Air Force Information CIS (Note: The maintenance policy for an individual item of technical equipment, including software, is detailed in a Support Policy Statement (SPS) or equivalent Naval Ship Support Publication. The SPS is the executive document specifying the support arrangements for equipment throughout its in-service life and reflects the broad policy contained in this leaflet and other relevant instructions within AP600, QRs Chapter 11 and specialist APs).
- ix. The AO will ensure that the maintenance of aerodrome lighting and Air System arresting equipment covers servicing information, troubleshooting, inspection procedures and repair instructions, in accordance with extant support policy statements.
- x. The AO will ensure that all personnel who need to enter the movement area, as part of their TORs, are both trained and qualified to do so with the appropriate authority (line manager, ATC, etc).
- xi. The AO will ensure that an aerodrome emergency plan is developed in accordance with the **MPCM**, RA 1430 and DSA DFRS 02 – Defence Aerodrome Rescue and Fire Fighting (ARFF) Regulation.
- xii. The AO will ensure that adequate aerodrome rescue and fire-fighting services (ARFF) are provided in accordance with DSA DFRS 02 – Defence Aerodrome Rescue and Fire Fighting (ARFF) Regulation. (Note: This is laid out in the Joint Business Agreement (JBA) or Internal Business Agreement (IBA) between DFRMO and the TLBs and should be contained within Annex F of the DAM).
- xiii. The AO will ensure that Obstacle Limitation Zones around aerodrome movement areas be safeguarded from obstacles, in accordance with RA 3500 series – Aerodrome Design and Safeguarding.
- xiv. The AO will ensure that an effective Safety Management System (SMS), linked to the respective Front Line Command (FLC) or ADH SMS, is established and maintained in accordance with guidance laid down in MAA 1200(1) Defence Air Safety Management.
- xv. The AO will ensure that an occurrence reporting system using the Air Safety Information Management System (ASIMS) and the associated Defence Air Safety Occurrence Reports is in place, in accordance with MAA RA 1410(1) Occurrence Reporting.
- xvi. The AO will strive to engender an engaged safety culture.

## CHAPTER 2: TECHNICAL ADMINISTRATION

### 2.1 Name and Work Address of Aerodrome Operator:

Wing Commander S Firth  
Officer Commanding Operations Wing  
RAF Northolt  
West End Road  
Ruislip  
HA4 6NG

Mil ☎ 95233 8904  
Civ ☎ 0208 833 8904  
Fax: 0208 833 8903  
Email: Simon.Firth322@mod.gov.uk

**2.2 Aerodrome Operator's Authority.** The AO is responsible for actively managing an environment that accommodates the safe operation of Air Systems in accordance with RA1026. The management and running of the aerodrome is a Duty Holder Facing (DHF) responsibility.

**2.3 Letter of Delegation.** A copy of the Letter of Delegation is contained at Annex A.

**2.4 Safety Meeting Structure.** An organisational aviation safety meeting flow diagram is at Annex B. The diagram 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.

**2.5 Organisational Structure.** An organisational structure that identifies/outlines the organisation of RAF Northolt aerodrome operations is displayed at Annex C. It identifies lead Operational Duty Holder, Delivery Duty Holder and Aerodrome Operator, as well as additional safety organisations that operate from within the site.

**2.6 Key Post Holders.** A list of aerodrome key post holders, including their post role and work contact numbers, is at Annex D.

**2.7 Aerodrome Operating Hazard Log (AOHL).** The AOHL is at Annex E.

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

**2.9 Aerodrome Waivers, Exemptions and Alternative Acceptable Means of Compliance (AAMC).** Details of all aerodrome related waivers, exemptions and AAMC are captured at [Annex G](#).

**2.10 Orders.** Orders described within the DAM are linked from their respective Annex to enable their amendment without having to reissue the whole of this document.

**2.11 Frequent Aerodrome Users.** A list of frequent aerodrome users is available from Stn Ops. This will facilitate ease of communication in urgent or emergency scenarios, such as fuel or water contamination and major infrastructure works affecting serviceability.

## CHAPTER 3: AERODROME LOCATION AND LAYOUT

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

### 3.2 Local Area Map.

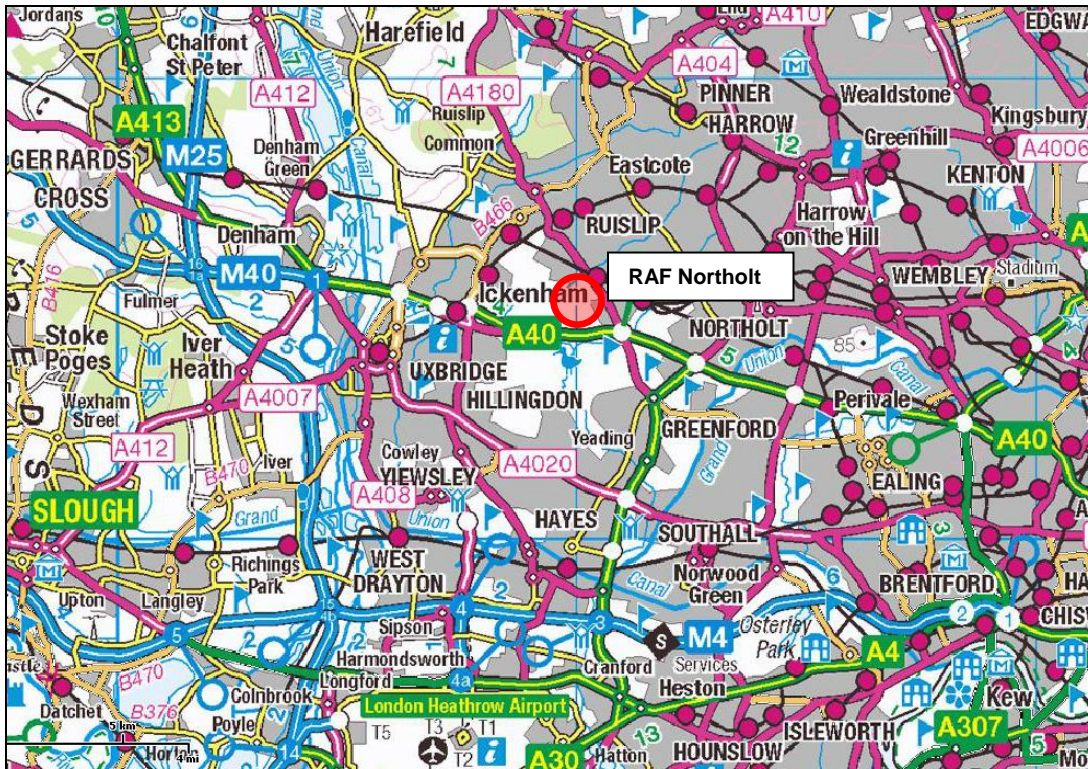


Figure 1 – Local Area Map

3.3 **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.

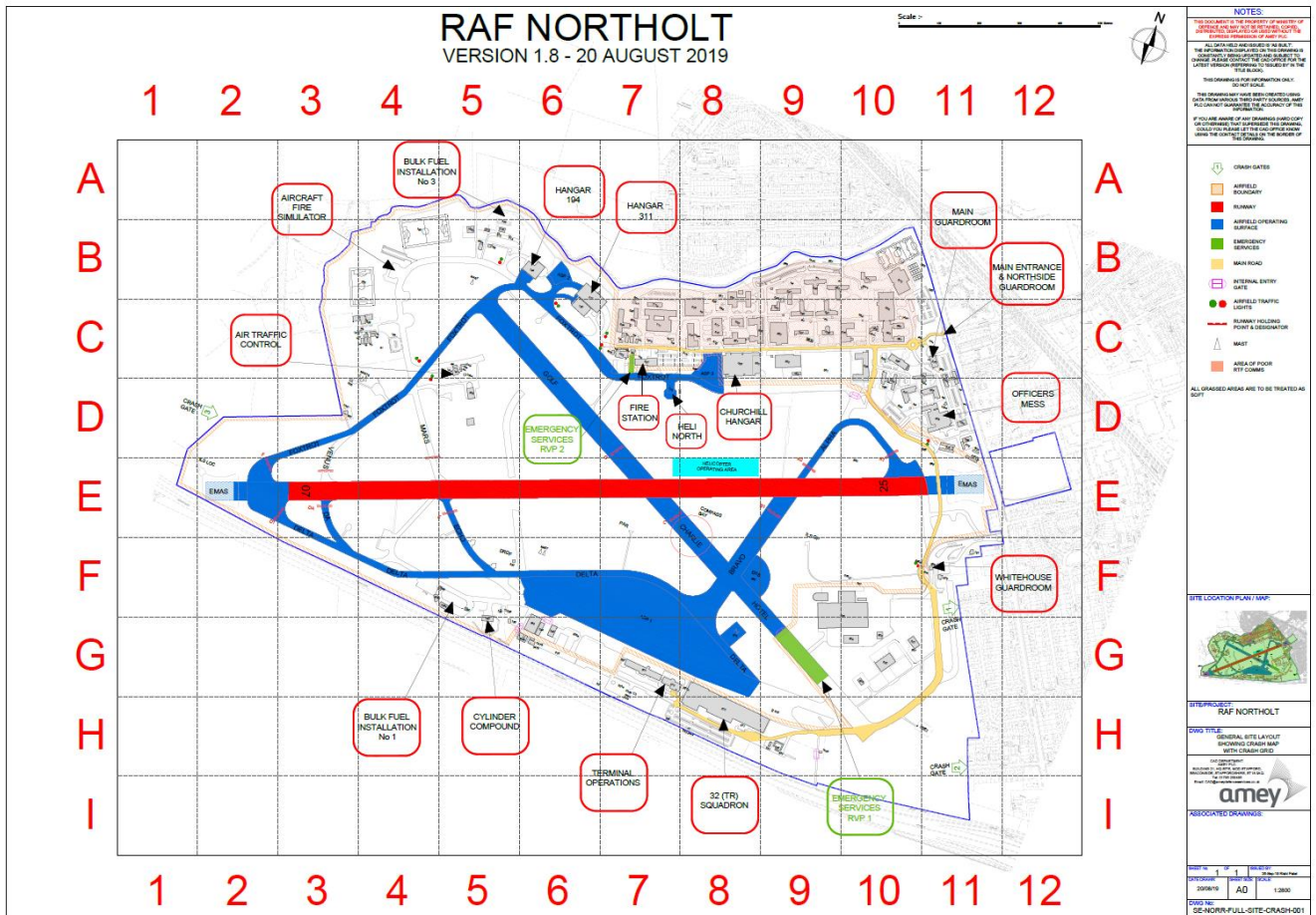


Figure 2 – Aerodrome Map

## CHAPTER 4: AERODROME DATA, CHARACTERISTICS & FACILITIES

4.1 Location Indicator and Name		
EGWU – RAF Northolt.		

4.2 Aerodrome Administrative Data		
4.2.1	ARP co-ordinates and site at AD:	N51 33 09.77 W000 25 10.55, Mid-point of Runway07/25.
4.2.2	Direction and distance from city:	2nm ENE of Uxbridge.
4.2.3	Elevation/Reference Temperature:	124ft/23°C.
4.2.4	Magnetic Variation/Annual Change:	0.45°W(Sep 18) /-0.15°
4.2.5	Geoid Undulation at AD Elev Position:	---
4.2.6	AD Administration: Address:  Tel:  Email:	Station Operations Royal Air Force Northolt West End Road Ruislip Middlesex HA4 6NG  Mil ☐95233 8915 Civ ☐ Station Ops +44(0)208 833 8915 Civ ☐ Commercial Booking +44(0)208 833 8137/8 NOR-NORTHOLTOPS@mod.gov.uk
4.2.7	Types of Traffic Permitted (IFR/VFR):	IFR/VFR/SVFR.
4.2.8	Remarks:	All photography and filming, including via personal electronic devices such as mobile phones, is forbidden at RAF Northolt unless prior permission is granted by the Aerodrome Operator. Telephone calls may be recorded.

4.3 Operational Hours		
4.3.1	AD:	All times Local. Business Aviation operating hours: Mon-Fri 0800-2000; Sat 0800-1500; Sun 1200-1900. PH Fri 0800-1500; PH Mon 1200-1900.  Military operating hours: Mon-Sun 0800-2200. The airfield may open as required to support operational tasking.
4.3.2	Customs and Immigration:	By arrangement.
4.3.3	Health and Sanitation:	Nil.
4.3.4	AIS Briefing Office:	HO via Northolt Station Operations.
4.3.5	ATS Reporting Office (ARO):	Nil.
4.3.6	MET Briefing Office:	0600(local) until AD closes for military crews only.
4.3.7	ATS:	HO.
4.3.8	Fuelling:	HO, unless prior arrangements have been made.
4.3.9	Handling:	As aerodrome Business Aviation hours.
4.3.10	Security:	H24.

4.3.11	De-Icing:	See 4.4.5
4.3.12	Remarks:	All flts require PPR, minimum 4hrs for flights inbound from the EU & 24hrs for all other flights including from the Common Travel Area. Air Systems without PPR will not be admitted, without exception.
<b>4.4 Handling Services &amp; Facilities</b>		
4.4.1	Accommodation:	No overnight accommodation is available.
4.4.2	Fuel/Oil/Hydraulic Types:	Fuel: (Mil) JET A-1 with FSII (F34 AVTUR) by arrangement via Stn Ops/VASS. (Civ) JET A-1 without FSII (F35 AVTUR) via marshaller on arrival, or in advance through CBC. Oils: Various, by prior arrangement when booking aircraft slot
4.4.3	Fuelling Facilities/Capacity:	(Mil) 20,000 ltr Bowsers. (Civ) 40,000 ltr Bowsers.
4.4.4	Oxygen:	Aircraft quality High Pressure Gaseous Oxygen (HPOX) is available. Visiting aircraft are responsible for connection and replenishment activity.
4.4.5	De-Icing Facilities:	By arrangement. Airframe de-icing with type II fluid (AL342), delivered by a single vehicle capable of de-icing one Air System in 15 mins.  Aircrew are to book this service the day before through Stn Ops/CBC. Engine running airframe de-icing is not available.  During busy periods, expect delays to this service.  No aircraft anti-icing facilities.
4.4.6	Starting Units:	Ground power available. No other starting units (HP Air etc) or associated connectors are available.
4.4.7	Hanger Space for Visiting Air Systems:	Limited. Mil acft only, subject to prior arrangement.
4.4.8	Repair Facilities for Visiting Air Systems:	Limited support can be given including Mobile Elevated Work Platforms, High Pressure Gaseous Nitrogen and Oxygen and ground power.
4.4.9	Remarks:	**Further details from VASS: +44(0)208 833 8969. Nitrogen available, subject to prior arrangement.
<b>4.5 Passenger Facilities</b>		
4.5.1	Accommodation:	Civilian passengers have access to an executive lounge. Military passengers have access to a waiting lounge. No overnight accommodation is available.
4.5.2	Medical Facilities:	Military personnel may seek treatment of minor injuries from the Medical Centre. No medical treatment is available for civilian passengers. See also Section 4.26.
4.5.3	Remarks:	Military handling does not include catering services; these must be booked through the civilian service agent or direct via the Air System Operator.
<b>4.6 Rescue and Fire Fighting Services</b>		
4.6.1	AD Category for Fire Fighting:	ICAO 6*

4.6.2	Rescue Equipment:	Availability and manning of vehicles will vary to deliver required ICAO crash category.		
4.6.3	Capability for removal of disabled Air Systems:	Limited. Further details from VASS: 0208 833 8969.		
4.6.4	Remarks:	*0800-2200 - ICAO 6 2200-0100 - ICAO 2 2200-0800 - ICAO H3 at 1hr notice (H3/A ICAO 5 Equivalent) All times - ICAO 6 at 6hrs notice All times - ICAO 8 at 12hrs notice		
<b>4.7 Seasonal Availability - Clearing</b>				
4.7.1	Type of Clearing equipment:	2x ASCV - plough, brush & blower 2x LAD de-icer, Chemical de-icing (ISOMEX)		
4.7.2	Remarks:	Braking action assessment by Mu-Meter.		
<b>4.8 Apron, Taxiways and Check Locations Data</b>				
4.8.1	Apron Surfaces:	Apron	Surface	Strength
4.8.2		Main Line 1-5	Concrete Block	30/R/C/X/T
		Line 6/7	Concrete Block	25/F/C/X/T
		Taxiway	Width	Surface
		ALPHA	15m	41/F/C/W/T
		BRAVO	25m	17/R/C/W/T
		CHARLIE	45m	28/R/C/W/T
		DELTA	15m	19/R/C/X/T
		DELTA ALPHA	15m	25/R/C/X/T
		ECHO	15m	28/R/C/W/T
		FOXTROT 07 Thld to GOLF	15m	15/R/C/X/T
		GOLF to ASP 3		21/F/C/X/T
		GOLF	15m	28/R/C/W/T
		HOTEL	45m	20/R/C/X/T
4.8.3	Altimeter Check Location and Elevation:	N/A.		
4.8.4	VOR Checkpoints INS Checkpoints:	Nil Nil		
4.8.5	Remarks:	Values listed are the lowest for that surface when multiple strengths are recorded on the aerodrome survey across the pavement listed.  Specific PCN information can be obtained from Stn Ops.		
<b>4.9 Landing and Surface Movement Guidance and Control System Markings</b>				
4.9.1	Use of Air System stand ID signs:	Parking line numbers marked on taxiway with lead off guidelines.		
4.9.2	Taxiway guide lines & visual docking/parking guidance system of Air System stands:	White boxes with line numbers at end of each line. Lit at night with a flashing amber light.		
	Runway and taxiway markings and lighting:	Runway: Side strips, aiming points and touch down zone markings.  High intensity unidirectional runway edge lights – White. Low intensity omni-directional runway lights – White.		
		Taxiway: Standard markings		

4.9.3	Stop Bars and runway guard lights:	Non-standard green centreline lighting marking the turn-off from the main Runway to ALPHA, BRAVO, CHARLIE and GOLF.
4.9.4	Other runway protection measures:	Guard lights located at BRAVO 1 and DELTA 1 holds.
4.9.5	Remarks:	Rwy ahead markings on twys ALPHA, BRAVO and DELTA.
Pilots are to exercise caution when taxiing on the ASPs and taxiway DELTA as wing tip clearance is not assured.		
<b>4.10 Aerodrome Obstacles</b>		
See Section 2.10 of the UK AIP for RAF Northolt Measured Height Survey, available via No.1 AIDU MILFLIP Website and supplementary information at Annex G		
<b>4.11 Meteorological Information</b>		
4.11.1	Associated Met Office:	Northolt.
4.11.2	Hours of service: MET Office outside hours:	0600(Local) until aerodrome closes – Daily (for military crews only). Defence Guidance Unit (DGU) - H24.
4.11.3	Office responsible for TAF information: Periods of validity:	Northolt. 18 hrs.
4.11.4	Type of landing forecast: Interval of issuance:	TREND. Hourly.
4.11.5	Briefing/consultation provided:	Mil only (and Stn-based assets): Self-briefing/personal/telephone.
4.11.6	Flight documentation: Language(s) used:	Abbreviated plain language text. Charts / TAFs / METARs. English
4.11.7	Charts and other information available for briefing or consultation:	Actual / Forecast surface analyses and upper wind charts, rainfall radar, tephigrams, satellite imagery, thunderstorm location.
4.11.8	Supplementary equipment available for providing information:	PC Data display – Visual Weather, MOMIDS.
4.11.9	ATS units provided with information:	Northolt, Swanwick (Northolt Radar)
4.11.10	Additional information (limitation of services etc):	Nil.
4.11.11	Remarks:	Tel 0208 833 8937 (Civ) 95233 8937 (Mil). DGU Tel 9677 01332 (Mil)

#### 4.12 Runway Physical Characteristics

Runway	True MAG Bearing	Dimensions of runway m/ft	Strength (PCN) & Surface	Threshold Co-ordinates	Threshold elevation/ Highest elevation of TDZ of precision APP Runway	Slope of runway	Stopway	Clearway dimensions m
07	069°49' 46" GEO 070°16' 46" MAG	1,684 x 40.6 / 5,525 x 148	PCN 30/F/C/W/T Grooved Marshall Asphalt	N51 33 01.40 W000 25 47.10	114.0ft TDZE 115.49ft	0.20 % U	Nil	174 x 150
25	249°50' 47" GEO 250°28' 47" MAG	1,684 x 40.6 / 5,525 x 148	PCN 30/F/C/W/T Grooved Marshall Asphalt	N51 33 19.16 W000 24 29.52	124.0ft TDZE 124.0ft	0.20 % D	Nil	140 x 150

#### Arresting Systems

Runway 07 (See below) (Ovrn) \_\_\_\_\_ (See below) (Ovrn) Runway 25

**EMAS.** An Engineered Material Arresting System (EMAS) is located within each runway overrun. The system is CAA and MAA approved and was installed at RAF Northolt during the runway refurbishment in 2019. 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 design of EMAS installed at RAF Northolt is based around the mixed fleet which operate from the airfield, including the BAe 146, Bombardier Global Express, Cessna Citation 5600. The EMAS has the following dimensions:

Runway 07 overrun:  
65m set back from runway end  
76.2m long x 47m wide

Runway 25 overrun:  
10.6m set back from runway end  
104.2m long x 47m wide

Remarks: Runway 07 Threshold is displaced by 92m  
Runway surface is predominantly Grooved Marshall Asphalt, with the following exceptions:  
a. Threshold Ends – not grooved  
b. 25 Threshold to intersection at ALPHA 2 / BRAVO 1 – 8 m either side of the centreline is not grooved

	<p>c. Runway mid-point – 120 m length (full width) is not grooved</p> <p>Pilots should exercise caution when braking in wet/contaminated conditions</p> <p>Runway strip infringed at the South West corner by the A40 public highway.</p> <p>Air Systems requiring a PCN above 30 must receive prior permission from the Aerodrome Operator.</p>
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**4.13 Declared Distances**

Runway	TORA m/ft	TODA m/ft	ASDA m/ft	LDA m/ft	Remarks
07	1,594/5,229	1,786/5,800	1,594/5,229	1,501/4,924	Displaced threshold 92 m/302 ft TORA = Thr 07 to CL stop light TODA = Thr 07 to perimeter road LDA = Thr 07 to CL stop light ASDA = Thr 07 to CL stop light
25	1,558/5,111	1,698/5,570	1,558/5,111	1,558/5,111	TORA = CL stop loght to Thr 25 TODA = CL stop light to Arrestor LDA = Thr 25 to Thr 07 ASDA = CL stop light to Thr 25
Fast Jet standoffs	<p>Due to the jet blast from Typhoon &amp; F-35B engines and the proximity of the runway threshold to the EMAS, it is requested that all fast jets roll from the piano keys when departing from runway 07 and roll with the nose wheel on the numbers when departing from runway 25RH. The manufacturer of the EMAS have said that the integrity of the EMAS could be compromised if the AS power up any closer.</p> <p>Fast Jet amended runway 25 TORA: 1501m/4924ft    TODA: 1641m/5383ft</p>				

**4.14 Approach and Runway Lighting**

Runway	Approach Lighting	Threshold Lighting	PAPI	TDZ Lighting	Runway C/L Lighting	Runway Edge Lighting	Runway End Lighting	Stopway Lighting
	Type Length Intensity	Colour Wingbars	Angle Distance from Thr (MEHT)	Length	Length Spacing Colour Intensity	Length Spacing Colour Intensity	Colour Wingbars	Length Colour
Rwy 07	CL3B 1,430 ft/436 m HI	Green Uni HI	3° --- 30 ft	---	---	White, last third amber HI Uni, 30 m White LI	Red	---

						Omni, 90 m		
Rwy 25	CL3B 1,859 ft/567 m HI	Green Uni HI	3.5° --- 38 ft	---	---	White, last third amber HI Uni, 30 m White LI Omni, 90 m	Red	---
Remarks:		Non-standard Approach and Runway Edge lighting. Some additional flush edge lighting at intervals.						
<b>4.15 Other Lighting, Secondary Power Supply</b>								
4.15.1	A Bn/I Bn Location: Characteristics: Hours of operation: Colour:	I Bn. North of rwy mid-point, top of hangar – see TAPC D1/E1 “NO” - - - - HO Red						
4.15.2	Anemometer location and lighting:	Southside mid-aerodrome. Red obstruction light.						
4.15.3	Taxiway edge and centreline lighting:	Blue edge lighting on all taxiways except DELTA ALPHA (unlit). Non- standard green centreline lead off lights from the runway onto taxiways ALPHA, BRAVO, CHARLIE & GOLF. Taxiways BRAVO and CHARLIE have non-standard blue edge lighting. Non-standard spacing on curves.						
4.15.4	Secondary power supply:  Switch over time:	Secondary no-break supply to all essential equipment in ATC. Non-standard switchover time to aerodrome lighting circuits.						
4.15.5	Remarks:	Amber edge lighting on Helipad.						
<b>4.16 Helicopter Landing Areas</b>								
4.16.1	Location:	Helicopter Operating Area: Between taxiways ALPHA and GOLF, North of Runway 25/07. N51 33 13.54 W000 25 03.46 N51 33 19.06 W000 24 53.09 N51 33 17.66 W000 24 52.35 N51 33 15.14 W000 25 02.68 Unmarked.  Helipad South: Adjacent to eastern end of ASP 1, marked with an ‘H’. Helipad North: Adjacent to Fire Section, unmarked. N51 33 19.41 W000 25 04.45  Helicopters may be instructed / request to land on the intersection of taxiways BRAVO and CHARLIE.  Station Based helicopters may operate on the Helipad painted on GOLF N51 33 13.98 W000 25 9.89						
4.16.2	Elevation:	Helicopter Operating Area: 118 ft. Helipad South: 124 ft. Helipad North: 124 ft.						
4.16.3	Lighting:	Helicopter Operating Area: Unlit. Helipad South: Amber edge lighting. Helipad North: Unlit.						
4.16.4	Remarks:	Air Systems may be parked on taxiway HOTEL at night (Unlit, marked by red ground light).						

4.16.5		
<b>4.17 ATS Airspace</b>		
4.17.1	Designation and lateral limits:	Northolt ATZ. Circle, radius 2 nm centred on N51 33 09-77 W000 25 10-55.
4.17.2	Vertical Limits:	SFC to 2,000 ft AAL.
4.17.3	Airspace Classification:	D (within London CTR).
4.17.4	ATS Unit C/Sign: Language:	Northolt Approach. English.
4.17.5	Transition Altitude:	6000ft.
4.17.6	Remarks:	When Northolt aerodrome is closed, Heli routes / ATZ transits are controlled by Heathrow Radar (125.625 MHz)

#### 4.18 ATS Communication Facilities

Service Designation	Callsign	Frequency MHz	Hrs of Operation		Remarks
			Winter	Summer	
APP	Northolt Approach	126-450	HO	HO	
DEP	Northolt Departures	129-125	HO	HO	
RAD	Northolt Director	130-350	HO	HO	
PAR	Northolt Talkdown	284-050 125-875 123.300*	HO	HO	*NATO Common Frequency Available on request only.
TWR	Northolt Tower	281-175 120-675 257.800*	HO	HO	*NATO Common Frequency Available on request only.
GND	Northolt Ground	121.575	HO	HO	All start calls to be made on ground.
ATIS	Northolt Information	299.800 125-125	HO	HO	
Other	Northolt Operations	118.100	HO	HO	

#### 4.19 Radio Navigation and Landing Aids

Type	Ident	Frequency MHz	Hours of Operation		Antenna Site Co-ordinates	Elevation of DME Transmitting Antenna	Remarks
			Winter	Summer			
UDF/VDF		243.000 121.500	HO	HO	N51 33 02-67 W000 25 16-99		Not in use by Northolt frequencies – D&D only
ILS/DME	<i>I-NHT</i>	108.500 Ch 22X	HO	HO	N51 33 12-83 W000 24 39-57	114ft	DME reads 0d at Thld
Glide path		329-900			N51 33 12-80 W000 24 39-34		3.5° ILS Ref Datum Height 38ft
Localiser		108-500			N51 32 59-02 W000 25 57-55		LOC 251°

Remarks

1. The quality of guidance is suitable to support auto-coupled approaches to the Cat I decision height.
2. DME restricted beyond 16 nm.
3. Localiser: False localiser captures may occur between 7 nm and 17 nm outside 12° left and 18° right of centreline below 2500 ft, and may occur between 17 nm and 25 nm outside the course sector below 3000 ft.

**4.20 Local Traffic Regulations**

4.20.1 Pilots are to note:

- a. Runway 25 departures must not overfly Denham ATZ below 1500ft London / Northolt QNH.
- b. All Departures to ensure compliance with minimum climb gradients in accordance with TAP Charts.

NOTE: A mandatory GP of 3.5° is required for all arrivals to Runway 25 to ensure terrain clearance.

**4.21 Noise Abatement Procedures**

4.21.1 See 4.27 for Noise Abatement Procedures.

**4.22 Flight Procedures**

4.22.1	Procedures for in bound Air Systems:	See TAP Charts.
4.22.2	Departures:	See TAP Charts.
4.22.3	Radio Comms Failure:	See TAP Charts.
4.22.4	MAP:	See TAP Charts.
4.22.5	Aerodrome Op Minima:	See TAP Charts.
4.22.6	Remarks:	See TAP Charts.

**4.23 Additional Information**

4.23.1 If required.

**4.24 Charts Relating to this Aerodrome**

Terminal Approach Procedure Charts		En-Route Charts
Special Procedures (1).....	AD 2 - EGWU - 1 - 13	UK(L)1
Special Procedures (2).....	AD 2 - EGWU - 1 - 14	UK(L)2
Aerodrome.....	AD 2 - EGWU - 1 - 15	UK(L)SP1
Taxi.....	AD 2 - EGWU - 1 - 16	UK(H)2
Ramp.....	AD 2 - EGWU - 1 - 17	UK(H)6
BUZAD SID.....	AD 2 - EGWU - 1 - 19	EU(L)2
MATCH SID.....	AD 2 - EGWU - 1 - 20	EU(L)9
COMPTON SID.....	AD 2 - EGWU - 1 - 21	EU(H)9
DETLING SID.....	AD 2 - EGWU - 1 - 22	EU(H)12
Runway 07 Non-airways Departures.....	AD 2 - EGWU - 1 - 23	EU(H)13
Runway 25 Non-airways Departures.....	AD 2 - EGWU - 1 - 24	EU(H)SP1
BIGGIN STAR.....	AD 2 - EGWU - 1 - 25	EU(H)SP1 - OAT
WEALD STAR.....	AD 2 - EGWU - 1 - 26	AT(H)3
BOVINGDON STAR.....	AD 2 - EGWU - 1 - 27	
BOVVA STAR.....	AD 2 - EGWU - 1 - 28	
LAMBOURNE STAR.....	AD 2 - EGWU - 1 - 29	
OCKHAM North & West STAR.....	AD 2 - EGWU - 1 - 30	
TOMMO North & West STAR.....	AD 2 - EGWU - 1 - 31	
OCKHAM Southwest STAR.....	AD 2 - EGWU - 1 - 32	
TOMMO Southwest STAR.....	AD 2 - EGWU - 1 - 33	
OCKHAM East STAR.....	AD 2 - EGWU - 1 - 34	
TOMMO East STAR.....	AD 2 - EGWU - 1 - 35	
Runway 07 Non-airways Arrivals.....	AD 2 - EGWU - 1 - 36	
Runway 25 Non-airways Arrivals.....	AD 2 - EGWU - 1 - 37	
Radar Procedures.....	AD 2 - EGWU - 1 - 39	
SRA Runway 07.....	AD 2 - EGWU - 1 - 40	
SRA Runway 25.....	AD 2 - EGWU - 1 - 41	

PAR Runway 07.....	AD 2 - EGWU - 1 - 42	
ATC Surveillance MNM Altitude.....	AD 2 - EGWU - 1 - 43	
ILS/DME Runway 25.....	AD 2 - EGWU - 1 - 44	

**4.25 Special Procedures**

Elev 124ft	Var 1°W	TA 6000			Date 08 Dec 16	Chart No. B1
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**NOISE ABATEMENT**

See Section 4.27.

**DEPARTURES**

1. On initial check-in with Northolt Radar, pilots are to state passing altitude for Transponder Mode C verification.

**RADIO COMMUNICATION FAILURE PROCEDURES**

2. In the event of complete radio communication failure in an Air System, the pilot is to adopt the appropriate procedures described in UK CIV AIP ENR 1.1 (Section 3.4).

**AIR SYSTEM INBOUND VIA AIRWAYS**

3. VHF failure for UHF equipped Air Systems.
- a. Air System with VHF/UHF radio equipment, experiencing a VHF radio failure whilst under the control of London Control/Heathrow Director, should initiate a PAN call with LONDON CENTRE on 243.00 MHz stating their hold fix, actual flight level and cleared flight level. LONDON CENTRE will then relay instructions to permit the approach to continue.

**COMPLETE COMMUNICATIONS FAILURE**

4. Before the STAR holding fix, or when established within a STAR holding fix the Air System will:

- a. Fly to the appropriate terminal holding point as detailed in the STAR.
- b. When established within the hold, maintain the last assigned flight level and set Transponder Code 7600.
- c. Continue within the hold for 10 mins, then leave controlled airspace at last assigned level by route shown below and continue flight to planned alternate or suitable aerodrome outside controlled airspace;

OCK (VOR) (or TOMMO when applicable) – OCK R270 at last assigned level.  
 BNN(VOR) (or BOVVA when applicable) – BNN R298 at last assigned level.  
 LAM(VOR) (or TAWNY when applicable) – LAM R084 at last assigned level.  
 BIG(VOR) (or WEALD when applicable) – BIG R089 at last assigned level.

5. **During Intermediate Approach** (after leaving the STAR holding fix) the Air System will:

- a. Descend to and maintain last assigned flight level/altitude and set Transponder Code 7600.
- b. Continue approach visually and land if able to do so. If not leave controlled airspace by the shortest route, maintaining the last assigned flight level/altitude and continue flight to a planned alternate or suitable aerodrome outside controlled airspace.

6. **During Final Approach** the Air System will:

- a. Set Transponder Code 7600, continue the approach visually and land if able to do so or, if not;
- b. Turn north and leave Controlled Airspace (CAS) Class A or Class D, taking into account the MSA and Denham aerodrome.

### **AIR SYSTEM DEPARTING VIA AIRWAYS**

7. After departure, if an Air System experiences a radio failure, they are to continue in accordance with the published SID (adhering to the stepped climb profile) and proceed in accordance with UK CIV AIP ENR 1.1 (Section 3.4)

### **AIR SYSTEM ARRIVING NON-AIRWAYS**

8. Prior to Entry Into CAS. If a complete communication failure occurs at any stage of the approach prior to the Air System entry into CAS, the air system is to remain outside CAS and attempt to contact Northolt Radar on any published frequency. If communication cannot be established the Air System is to set Transponder Code 7600 and divert to a suitable aerodrome outside CAS.

9. Following Approval to Enter CAS. Air Systems who have been given approval to penetrate CAS are to set Transponder Code 7600 maintain not above altitude 2000 ft and:

- a. ILS Approach. Should RW25 be in use Air System may self-position for an ILS approach. Air Systems are only to intercept the localiser from the North and are not to transit south of the extended centre line to ensure separation from London City and London Heathrow traffic.
- b. Visual Approach. A visual approach may be commenced taking into account the MSA and position of Denham aerodrome.
- c. Any Air System unable to land from the above approach are to:
  - i. ILS – Execute MAP and divert to nearest suitable aerodrome outside CAS.
  - ii. Visual Approach - Maintain VFR and leave CAS to the north, taking into account the MSA and Denham aerodrome. Station Based Air Systems only may either join the visual circuit and attempt a second approach.

### **AIR SYSTEM DEPARTING NON-AIRWAYS**

10. Should a complete communication failure occur on a CHARLIE or ROMEO SID, the Air System is to complete the profile and divert to a suitable aerodrome outside CAS.

### **OVERFLIGHT OF OPERATIONALLY ESSENTIAL OBSTACLES IN THE RUNWAY STRIP**

11. Overflight of aerodrome ground installations and signage is not permitted, due to RADHAZ and/or potential downwash damage.

#### **4.26 Medical Response Equipment**

4.26.1	Number & type of Medical Response Vehicles	1 x RAF Tactical Medical Vehicle (Pinzgauer Ambulance).
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#### **4.27 Noise Abatement Procedures**

The following procedures are to be observed at all times 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.

1. Pilots are to ensure that their Air Systems are operated in a manner likely to cause the least disturbance in the areas surrounding the aerodrome.
2. Ground running of engines is to be kept to a minimum and confined to the areas specified. All engine runs are to be authorised by through Stn Ops and the air system is to be in communication with ATC.
3. Pilots are to ensure that their Air Systems are loaded and operated in such a manner that, using normal take-off and climb procedures, a minimum height of 70 ft is attained on crossing the aerodrome boundary.
4. Pilots are to maintain a rate of climb of at least 500 ft per min at power settings which will ensure progressively decreasing noise levels at points on the ground under the flight path.

5. Pilots of Air Systems taking-off from either runway, or carrying out a missed approach, are to climb ahead on runway heading to a minimum altitude of 700 ft before turning.
6. Pilots of Air Systems receiving a radar service shall not descend below the glidepath, nor thereafter fly below it, unless instructed by ATC.
7. Also see TAP Charts.



4.28 **Wake Turbulence.** As there is a difference in standards for military and civilian air systems and given the requirement to maintain a minimum radar separation, Northolt Radar will provide Wake Turbulence Approach Separation (WTAS) to the more stringent specifications (Civil Air System Separation), regardless of aircraft operator.

4.29 **Temporary Obstructions.** Temporary obstructions on or around any manoeuvring area that are considered to be a hazard to either Air System or vehicles will be marked by ground markers, high visibility markers, tape or fencing with additional red-light markers at night. For the safe movement of Air Systems, a NOTAM will be issued, and taxi patterns will be controlled by ATC and briefed to pilots on landing or when calling for start.

4.30 **Runway Strip Obstructions.** See Annex G.

4.31 **Runway End Safety Areas (RESA).** See Annex G.

4.32 **Engineered Material Arresting System.** See Annex G.

4.33 **Portable Hydraulic Arrestor Gear (PHAG).** Nil at Northolt.

4.34 **Air System Barriers.** Nil at Northolt.

4.35 **Manoeuvring Area Safety and Control Orders.** The following apply at RAF Northolt:

a. **Engine Running Off/On-Loads (EROs).** Civilian Fixed Wing (FW) Air System EROs are not permitted regardless of Air System home unit procedures. Passengers must be embarked, and passenger doors closed prior to start. Military Fixed Wing (FW) Air System EROs require pre-arranged authorisation from the AO, **which should be requested via Stn Ops during the booking process.**

b. **Rotors Running Off/On-Loads (RROs).** EROs are permitted with pre-arranged authorisation from the AO, **which should be requested via Stn Ops during the booking process.** Northolt movements personnel are not type-certified, therefore RROs must be supervised by an individual competent on type (i.e. Crewman or non-handling pilot).

c. **Air Taxiing.** Air taxiing by visiting aircraft on the ASP is prohibited. Where RW Air Systems have skids, the Air System is to be parked on the heli-spot or the outer spaces on each line, 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 Section 8.13e for more detail on RW parking limitations.

d. **Dangerous Air Cargo (DAC) Parking.** DAC parking is available at RAF Northolt. MoD F1658 Explosives Licence, detailing the maximum NEQs authorised, is held by the Station Explosive Safety Representative (a copy is held in Movements Control). DAC Parking will be controlled and managed by the Aerodrome Movements Squadron (AMS) and Visiting Aircraft Servicing Section (VASS), and further details can be obtained from the SAMO. In the event of a requirement to utilise the DAC Parking, the ASP is to be cleared of civilian Air Systems in accordance with the Mod F1658. Taxiway CHARLIE has one earthing point for use by a DAC Air System.

e. **Rotors Running Refuels.** Not permitted at RAF Northolt.

f. **Safe Parking.** All Air System parking is carried out under the guidance of Ops and Load Control iaw AESOs Book 2 Chap 6 Sect 2 Order 001 and Section 8.13 of this document.

g. **Manoeuvring and Ground Handling of Air Systems.** All visiting military and civilian Air Systems will be handled by VASS, **without exception**. No movement on the ASP is to be carried out without authorised ground handler(s).

h. **Pedestrian Access.** Pedestrian access to the ASP is strictly controlled. No person is to enter the ASP or any other Aircraft Operating Surface without explicit **permission and safety brief** from Northolt Load Control.

i. **Refuelling.** All refuelling operations are to be conducted iaw MAP-01, Chap 2.6 and local work instructions. In all instances, 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.**

j. **De-icing of Parked Air Systems.** All de-icing is conducted by authorised personnel iaw MAP-01, Chapter 2.7 and contractor Work Instructions. All requests for de-icing are to be directed through VASS Control. 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.**

4.36. **Conditions for Civilian Air Systems.** RAF Northolt is a military aerodrome regulated by the Military Aviation Authority. Opening hours for Civilian Operators are 0800-2000 local on weekdays (excluding Public and Bank Holidays), Saturday and Public Holiday Friday 0800-1500 local, and Sunday and Bank Holiday Monday 1200-1900 local. Civilian activity is only undertaken through the utilisation of irreducible spare capacity and military tasking will always take priority. In addition, the following conditions apply:

a. Civilian Air Systems are restricted to carrying **no more than 29 passengers**.

b. Civilian Air System **Aerodrome Rescue and Fire Fighting (ARFF)** requirements **(the aircraft category)** are not to exceed the **declared aerodrome/ARFF category**. **DSA DFSR 02 details and requirements and provisions relating to MOD ARFF services.**

c. Charter Airline operations are not permitted at RAF Northolt.

d. Scheduled Air System operations are not permitted at RAF Northolt.

e. RAF Northolt is not a designated Port of Entry and does not have a permanent HM Revenue and Customs (HMRC) or UK Border Force presence. Non-availability of any of these agencies may cause cancellation of slots or **rejection of change** requests. Any such decision is outside the control of RAF Northolt and, accordingly, the Lessee, Civilian Air System Operator or Company shall not be entitled to make any claim against the Station Commander or the Leaser.

f. **National Emergency/Operational Imperatives.** **RAF Northolt may be closed in the event of a Local or National Emergency whether declared or not.** In addition, the aerodrome may be closed due to operational imperatives, other exceptional circumstances or manpower reapportionment. A non-exhaustive list of potential circumstances includes:

i. Loss or reduction to **ARFF** capability.

ii. Repatriation ceremonies.

- iii. Loss of power to parts or all of the Station.
- iv. Interruptions in communications both within the Station and with external agencies.
- v. Unforeseen illnesses.

In the event of such closure, access to RAF Northolt may be restricted, although where possible air systems will be allowed to ferry flight out. No liability is accepted for any loss or damage (whether direct or indirect) arising.

**4.37 Standard Operating Procedures for Civilian Flights.** The acceptance of civilian flights is governed by the Terms and Conditions published on [www.londonvipairport.com](http://www.londonvipairport.com) and are accepted by civilian users on making a booking. **Any breach of the Terms and Conditions could constitute grounds for termination of a lease/licence and/or the privilege of operating at RAF Northolt being withdrawn on a temporary or permanent basis.**

**4.38 Northolt Ops.** Northolt Ops coordinates all flying activity at RAF Northolt. Air System movements are monitored through correct flight following; the Duty Operations Controller (DOC) is to ensure that information for all Stn-based and visiting Air System movements is displayed accurately. Commercial Booking Cell personnel are responsible for collection and display of accurate information on all civilian Air Systems.

**4.39 QNH as Standard Pressure Datum for Flights In and Out of Northolt Aerodrome.** RAF Northolt operates on the Northolt QNH for arrivals and the London QNH for departures into the London TMA or Heli-Lanes. Crews should pre-brief to arrive and depart on a QNH based pressure (unless departing VFR remaining outside the London TMA). QFE based arrivals/departures are available on request.

## CHAPTER 5: EMERGENCY ORDERS

5.1 **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 Air System 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 M 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.



5.2 **Disabled Air System Removal.** It may be necessary to quickly and safely remove an Air System 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 Air System removal procedures are **linked from Annex N.** If there is any doubt as to the status of an incident, advice should be sought from the Air Accident Investigation Branch (AAIB) for civilian registered Air System or the Defence AIB **Air**, for military registered Air Systems.

- a. **Indemnity and Release Form for Civilian Air System.** The form at Annex I (Indemnity and Release Form for Disabled Air System) should be signed and returned to Station Ops ASAP. In the event of military necessity, the Air System may be moved without the desired clearances being received.
- b. **Actions.** For civilian Air System operations, the main points of the procedure include:

### **Commercial Booking Cell**

- i. For civilian Air Systems, notify the Air System operating authority that the Air System has been involved in an incident and needs to be moved.
- ii. Notify all Air System operators likely to be affected by the Runway being unavailable during of an incident on the aerodrome.

### **Air System Owner**

- iii. The Air System owner is defined as the holder of the certificate of registration and can be held responsible for Air System removal and disposal of spilt fuel and other hazardous material (noting that RAF Northolt will have instigated the Unit Spillage Response Plan).

### **VASS/Eng Control**

- iv. Once cleared by Ops, and if possible, VASS are to tow the disabled Air System clear. **This is IAW of RAF Northolt CMIP**

## 5.3 Aerodrome/Air System Emergencies



- b. **Preservation of Evidence and Occurrence Reporting.** Following an Air System accident or incident, it is important that evidence is preserved to assist the relevant inquiry.

Photographs are often used to support the findings and it is imperative, therefore, that the Air System is safeguarded until this evidence has been gained. If exceptional operational circumstances dictate that an Air System should be flown, dispensation must be sought from the Defence AIB before doing so, and the Station Commander or his designated representative is to be briefed accordingly. *Civilian Air System captains are encouraged to adopt similar procedures.*

c. **FW Landing Gear Malfunction by Day.** If a pilot requires confirmation of landing gear position, he is to proceed as follows:

- i. Inform Northolt ATC as soon as possible to allow contact to be made with OC Ops Wg and, if a 32(TR) Sqn Air System is involved, the Duty Pilot. The Duty Pilot may elect to inspect the landing gear from the ground or delegate the task to ATC.
- ii. Hold under the control of Northolt ATC until advised that personnel are in position to inspect the undercarriage.
- iii. Fly through the circuit as directed by ATC. Crews may expect to fly through to the North of the runway, passing abeam the ATC Tower, at a height of not below 300 ft AGL, regaining circuit height once past the Tower, or as directed.
- iv. Take action appropriate to the condition of the landing gear.
- v. Consider diverting to an aerodrome with a longer/wider runway.

d. **FW Landing Gear Malfunction by Day with Comms Failure.** If a pilot requires confirmation of landing gear position, with loss of comms on final approach, (following receiving a clearance to enter Controlled Airspace (CAS)), he is to proceed as follows:

- i. Join the visual circuit, flying past the Tower at 500ft AGL.
- ii. Acknowledgement by ATC will be a green Verey signal when Air System is downwind.
- iii. If an undercarriage check is required, fly past the Tower not below 300 ft AGL. When the Air System is downwind, one green Verey signal will be fired for each wheel apparently down and locked, and a red signal for each wheel apparently not down and locked in the order Port, Nose, Starboard.
- iv. Take action appropriate to the condition of the landing gear.
- v. Standard Aldis lamp or Verey signals from the ATC Tower will then be employed to indicate permission, or otherwise, to land.

e. **FW Landing Gear Malfunction at Night.** If an undercarriage malfunction is suspected at night, and/or an undercarriage inspection is required, if possible the captain is to divert to an aerodrome that has the appropriate equipment available to illuminate the undercarriage. The Duty Pilot, Ops and ATC are to be kept informed of the captain's intentions.

f. **32(TR) Sqn RW Air System with Comms Failure or Total Electrical Failure at Night.** Should a 32(TR) Sqn helicopter experience radio or total electrical failure after receiving a positive clearance to enter CAS at Northolt at night, the pilot is to proceed as follows:

- i. Cross the threshold of the runway in use at 1000 ft Northolt QNH, maintaining a good lookout.

- ii. Land on the Southside Dispersal remaining clear of the VIP area.
- iii. After landing, contact the ATCO IC by telephone.

g. **RW Air System with Landing Gear Malfunction (Wheels Up Approach).** The Helipad may be used for wheels-up approaches for station based A109 helicopters only. When the pilot informs ATC of a gear malfunction and the requirement for a wheels-up approach, ATC is to carry out the following actions:

- i. Take Emergency State 2 action.
- ii. Request the intentions of the pilot; They may require to hover in position or join the visual circuit until the recovery team are in place.
- iii. Call Sloane (ext 8340), the Duty Pilot and the DOC.
- iv. Inform VASS and request the removal of any Air System on line 6 outer, if practicable.
- v. Ensure no Air System, vehicles or personnel other than those involved in the emergency are in the vicinity of the Helipad.

The helicopter will hover over the helicopter landing area and the undercarriage will be locked into position manually.

h. **DASOR/ASIMS.** In accordance with MAA RA1410, para 13, Air System commanders are reminded of the mandate for the Station to report upward an occurrence within 2 working days (asap <1hr for accidents). If an occurrence takes place away from home base or a recognised RAF staging post, email or FAX should be used to ensure the initial report is received in sufficient time to meet these deadlines. *Civilian Air System captains are encouraged to provide details of any occurrences (including near misses) to the Stn Flight Safety Officer (ext 6666).*

## CHAPTER 6: RESCUE & FIRE FIGHTING SERVICE ORDERS

The AO is to be familiar with the following documents and requirements:

RA 3261(2): Aerodrome Emergency Services

RA 3263: Aerodrome Classification

DFSR 02: Defence Aerodrome Rescue & Fire Fighting (ARFF) Regulation

**6.1 Emergency Organization.** The AO is to be familiar with RA 3261(2): Aerodrome Emergency Services, RA 3263: Aerodrome Classification and DSA DFSR 02 - Defence Aerodrome Rescue Fire Fighting Regulations, which provides greater detail on Aerodrome Crash / Rescue Fire Services whilst Acceptable Means of Compliance and Guidance Material are contained within RA 3261(2): Aerodrome Emergency Services and RA 3263 – Aerodrome Classification. Note: RA 3049 – Defence Contractor Flying Organization responsibilities for UK Military Air System Operating Locations stipulates that all organizations operating MAA-regulated Air Systems **shall** meet the requirements detailed in DSA DFSR 02.

**6.2 AO / Capita Relationship.** The relationship between the AO and Capita Fire Section is defined within DSA DFSR 02 and the Joint Business Agreement/Internal Business Agreement between Capita and the TLBs. The Fire Section is a service delivery component of the DF&R which is operated under the direction of Capita and provides a DH-Facing service to the AO. Note: All orders are to be contained at separate Annexes.

**6.3 Aerodrome Rescue and Fire Fighting Services Orders.** In addition to Standard Operational Procedures, FRS Generic Risk Assessments, Fire Facts and Capita Chief Fire Officers Instructions, detailed Tactical Information Plans covering site-specific operational requirements are to be produced, by the Fire Station Manager, in accordance with Capita direction. These together with Fire Section Orders are contained at Annex O.

**6.4 Aerodrome Rescue and Fire Fighting Training Orders.** ARFF Training area risk assessments and orders are to be produced and contained at Annex P.

**6.5 Task Resource Analysis (TRA).** ARFF minimum staffing levels are to be calculated by the completion of the TRA process defined within DSA DFSR 02. The Aerodrome Operator (AO) endorsed TRA complete with all required assessments is contained at Annex UU

**6.6 ARFF Assessment Requirements.** To ensure that ARFF Services are operationally prepared for the provision of service, they are required as defined within DSA DFSR 02 to carry out the following assessments: Response Area Assessment, 1000Mtr Assessment and Water Assessment. These assessments are contained at Annex VV

**6.7 Reduction in ARFF Category Provision.** 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. DSA DFSR 02 contains this risk assessment form. All completed risk assessments are contained at Annex WW

## CHAPTER 7: AIR TRAFFIC CONTROL PROCEDURES

7.1 **Air Traffic Control Orders.** Full ATC Orders can be found at Annex Q.

7.2 **Local Airspace and Procedures.** RAF Northolt Air Traffic Control functions are split between an *in-situ* Northolt Tower (Twr) and Northolt Radar based at RAF(U) Swanwick. Northolt Twr delivers a Visual Control function and a Precision Approach Radar (PAR) service for Runway 07 only. An SRA can be provided to both Runways, either by Northolt Twr using the PAR in azimuth only or by Northolt Radar using multiple surveillance radars. Northolt Radar also provides an approach radar service and a non-airways departure service. An Instrument Landing System (ILS) is available on Runway 25 with a mandatory 3.5° glide path to ensure the required terrain clearance.

- a. **Air Traffic Zone (ATZ).** The RAF Northolt ATZ is bounded by the arc of a circle radius 2 nm, centred on the Aerodrome Reference Point and extending from ground level to an altitude of 2000 ft AAL. No fixed wing flying is to take place within the ATZ south of the extended runway centrelines due to the proximity of London Heathrow. The Northolt and London QNH are deemed the same for the purposes of co-ordination and separation.
- b. **Visual Circuit.** The circuit directions are Rwy 07 left hand and Rwy 25 right hand. Due to airspace restrictions, the visual circuit is only available to Stn based AS and there is no deadside. For AS departing into the visual circuit, ADC should acquire a squawk from Northolt Radar, and this serves as notification of the visual circuit being active. Departure approval is not required. The standard circuit altitude is 1000 ft Northolt QNH. Requests for higher than 2000 ft must be approved by the Northolt RA controller. The visual circuit should be closed when the visibility is less than 5 km or when the cloud ceiling falls to 1500 ft or below.
- c. **Visual Circuit Go-Arounds.** There is no dead-side, instead AS conducting a go-around will maintain runway track. Therefore, controllers are not to issue a take-off clearance if traffic is executing a go-around, until the ac is established on the MAP, in the cct, or as directed; controllers are to exercise normal separation criteria.
- d. **Radar-to-Visual Recoveries.** AS carrying out R2V approaches are to be visual with the aerodrome by 3 nm. If the AS is not visual by 3 nm then it is to be broken off and vectored for an instrument approach.
- e. **Radar Training Circuit.** RTCs are available to Station-based Air Systems on request. Crews should expect to fly a ROMEO Departure from Runway 25 and a CHARLIE Departure from Runway 07 in order to de-conflict with inbound traffic.
- f. **Deconfliction Service (DS).** Due to high traffic density, airspace restrictions and unidentified traffic in the Northolt area, when crews request a DS from Northolt Radar they are advised that standard separation may not be achieved. Therefore, it is recommended that crews fly airways or in controlled airspace wherever possible. However, if crews request DS all efforts will be made to apply separation standards.
- g. **Special Visual Flight Rules (VFR).** Special VFR clearances are not to be issued to any FW Air Systems departing Northolt when the ground visibility and cloud ceiling at Northolt fall below 1500 m and 600 ft respectively. If the weather is worse than these minima, the Air System is to depart IFR. RW Air Systems are not permitted to operate Special VFR, with the exception of 'Rescue' call signs, when the ground visibility falls below 800 m and cloud ceiling falls below 600 ft iaw MAA RA 3261 Aerodrome Service.
- h. **Non-airways Departure Routes.** The CHARLIE and ROMEO procedures provide non-airways departure routes from Northolt. These routes terminate at the London Controlled Zone (CTR) boundary.

- i. **Air System Priorities.** The priorities afforded to Air Systems at RAF Northolt are:
  - i. Emergencies.
  - ii. Humanitarian/post-accident flight checks/open skies/police flights.
  - iii. Royal/Heads of State.
  - iv. Heads of Government or Senior Ministers.
  - v. Flight check Air System.
  - vi. Routine flights (arrivals or departures, not circuit traffic).
  - vii. Training flights (visual or instrument circuit traffic).

If equal, the following priorities apply:

- i. British Military.
  - ii. Foreign Military.
  - iii. Civilian.
- j. **Rotary Wing (RW) Operations** RW AS can make an approach to either Helipad South, the BRAVO/CHARLIE intersection, Taxiway Golf, the HOA under VFR conditions. In addition, station-based helicopters can perform practice/actual rejected take-off to the HOA or Rwy. RW AS may continue to operate on the HOA not above 500 ft AGL whilst AS are operating on Rwy 07/25.

*“Rwy XX cleared to land/Take-off, helicopter operating Northside not above 500ft.”*

- k. **Use of the Helipads.** The use of the Helipads has the following restrictions:
  - i. Its use is prohibited during Low Visibility Procedures (LVP) Conditions 2 and 3.
  - ii. It is not to be used for refuelling.
  - iii. Helipad South is not to be used when there is a high-powered ground run in progress on the Engine Running Bay (ERB).
  - iv. Helipad South. Clearances to land or take off must include any relevant traffic information on Air Systems taxiing or near the ‘H’.
  - v. Helipad South is not to be used by heavy rotary (Chinook/Merlin sized Air Systems) if lines 7 outer, 8 or 9 are in use. In addition, heavy rotary Air Systems are to ground taxi to and from the ‘H’.
  - vi. **The London Air Ambulance will tow the Aircraft manually to outside of Pod 3 before going through start up procedures with ATC. They will then hover taxi to and from their desired departure/landing surface.**

- l. **Single-Engine Air Systems.** Single-engine Air Systems are permitted to operate to and from RAF Northolt. Due to the surrounding urban environment, Air Systems arriving VFR are to route via Denham Lakes. In weather minima that precludes VFR approaches, an IFR approach can be requested from ATC.

m. **Aborted Take-off Training for Station-Based Air Systems.** Aborted take-off training for Station-based crews should normally be conducted in an approved flight simulator. Practice aborted take-offs are permitted in accordance with the following:

- i. Terminated <80 kts.
- ii. Prior notification to ATC.
- iii. The intention to carry out a practice aborted take-off is pre-briefed.

7.3 **Runway Selection.** Runway selection at RAF Northolt is linked to the in-use runway at London Heathrow and may require Air Systems at Northolt to operate with a tailwind component. Should an Air System captain consider that the weather conditions render the runway in use unacceptable, the following can be requested:

a. **Circling Approach to Runway 07.** Air Systems can carry out an instrument approach to Runway 25 to circle and land via the visual circuit for Runway 07. Circling approaches are only available to **RAF Northolt-based military Air Systems.**

b. **Inbound Against the Flow to Runway 25.** Air Systems can carry out an approach to Runway 25 while Runway 07 is nominated as the in-use Runway. Crews are advised that this will require flight outside of controlled airspace.

c. **Departures Against the Flow.** **Departures against the flow are not permitted.**

7.4 **Night Vision Devices (NVD) Operations.** RAF Northolt cannot support NVD Operations due to the surrounding ambient light of the A40 and West End Road.

7.5 **Runway Condition Reporting.** ATC will broadcast on RTF or ATIS, the runway condition report when the surface is anything other than DRY. Reports will be in accordance with UK AIP Section AD Page 1.1-2.

## CHAPTER 8: AERODROME ADMINISTRATION & OPERATING PROCEDURES

8.1 **Aerodrome Reporting.** The aim of the reporting procedures is to ensure that the MAA and No1 AIDU are notified of any changes to the physical condition of the aerodrome and of new obstacles that may affect the safety of Air Systems operations.

a. **Responsibilities.** 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 Air Systems operations.

i. SATCO is responsible for documenting reporting procedures and for advising No1 AIDU of any permanent changes to aerodrome information.

ii. The ATCO IC is responsible for reporting the day-to-day serviceability of the aerodrome and notifying temporary changes to published aeronautical information through Notices to Airmen (NOTAM) filed by the Northolt Operations DOC.

iii. Any changes to the aerodrome are to be reported to SATCO.

b. **Legislation, Standards and Technical References.** The ATCO IC is to provide up-to-date information on the aerodrome and on hazards to air navigation; he does this through the AIP and NOTAM.

c. **Reporting Procedures.** Any situation that may have an immediate effect on the safety of Air Systems operations will be reported in the first instance to ATC by radio or telephone. Confirmation by NOTAM, if applicable, will follow as soon as possible. Verbal reports to the ATCO IC should be passed via:

i. Air Traffic Emergency Ext 3333.

ii. ATC Switchboard Mil 95233 8228 or Civ 0208 833 8228.

iii. Ground Controller 121.575 MHz.

Urgent messages conveyed by radio to the Ground Controller will be confirmed by email or fax to the DOC as soon as possible. In most cases, aerodrome conditions or new obstacles that need to be reported immediately, will be detected during the daily serviceability inspections.

d. **NOTAM.** All NOTAM action is to be recorded in the NOTAM file box maintained by the Air Operations Specialist in Northolt Operations. This file box will be made available on request to authorised MAA officers for audit. NOTAM will be originated in the standard NOTAM format for any of the following circumstances:

i. A change in the serviceability of the manoeuvring area.

ii. A change in the operational information contained in this manual and published in the Mil AIP.

iii. Aerodrome works affecting the manoeuvring area or penetrating the Obstacle Limitation Surfaces (OLS).

iv. New obstacles which affect the safety of Air Systems operations.

v. Wildlife or animal hazards on or in the vicinity of the airport.

- vi. A change in the availability of aerodrome visual aids, i.e. markers and markings, runway lighting, etc.
- vii. Any temporary change in aerodrome facilities published in AIP.

**8.2 Aerodrome Serviceability Inspections.** Surface inspections are carried out daily by the ATCO IC in accordance with the MMATM, as directed by the RAF Northolt Air Traffic Control Order Book (ATCOB); this can be accessed at Annex Q. Lighting inspections are carried out twice daily by a Contracted aerodrome electrician in accordance with the Letter of Agreement (LoA), available at Annex F.

**8.3 Aerodrome Technical Inspections.** A technical inspection of aerodrome lighting is to be conducted daily by the aerodrome electrician. A further inspection of the aerodrome and associated equipment is conducted each week by the SATCO and ATC Flight Operations Manager (FOM). 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 as follows:

- a. The Contracted agency is responsible for carrying out routine inspections of the technical equipment (transmitters, receivers, ILS etc).
  - i. Precision navigation aids are calibrated by a flight check Air System
  - ii. Every 6 months on a rolling maintenance contract.
- b. Runway, taxiway and obstruction lights, along with Precision Approach Path Indicators (PAPIs) and aerodrome traffic lights, are inspected twice daily by the aerodrome electricians.
- c. All earthing points are checked annually.
- d. Movement areas and drainage are maintained and repaired on a rolling contract by MOD contractors.
- e. All aerodrome signs are inspected weekly by ATC and monthly by a DIO approved maintenance contractor.
- f. All Fire and Rescue vehicles and associated equipment are inspected daily with major servicing inspections being carried out every 2 months.
- g. The Crash Ambulance and associated equipment is inspected daily with major servicing inspection being carried out every 6 months.
- h. The Aerodrome Wildlife Control Unit (AWCU) equipment and vehicle are inspected daily with vehicle maintenance carried out in accordance with manufacturer's recommendations.
- i. Aerodrome lighting along with other essential equipment is backed up by stand-by generators. The generators are inspected daily with a switchover test being carried out weekly in conjunction with the DIO-approved maintenance contractor.
- j. Aerodrome Driving Orders are constantly monitored for effectiveness and reviewed annually. Traffic lights, CCTV and road barriers for the control of airside vehicle control measures are inspected daily.
- k. Aerodrome information published in AIP, Standard Operating Procedures and other Flight Information Publications (FLIPs) are constantly reviewed and will be checked at least annually by ATC and Station Ops.

I. The Compass Calibration equipment is tested bi-annually, and a certificate of serviceability is available at Station Ops.

#### 8.4 Protection of Radar and Navigation Aids.

- a. All activity on the aerodrome is monitored by ATC.
  - i. Any personnel requiring access to any of the aerodrome navigation aids or areas in their immediate vicinity are to be directed to Ground Radio Servicing Flight (GRSF) who will provide an escort.
  - ii. All radar and navigational aids are installed with signs warning of any hazards, including microwave radiation.
  - iii. These are checked as part of the GRSF maintenance plan and replaced when necessary.
  - iv. Ground maintenance, such as grass cutting near the ILS and PAR, is within the contract for the aerodrome ground maintenance and is monitored by ATC.
  - v. Ground maintenance issues are directed to Estates Management through the ATC Air & Space Operations Manager.
- b. Contracted personnel carry out daily and/or scheduled servicing in accordance with AP 600 . Where an aspect of servicing is not covered in the document, the Northolt equipment is serviced under locally generated Work Orders.
- c. Ground Radio hold the following Concession Certificates

**8.5 Surveillance Equipment Maintenance & Monitoring.** Since Dec 2011, the provision of radar services to Air Systems operating into or out of RAF Northolt has fallen to Northolt Radar, situated at RAF(U) Swanwick, 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.

**8.6 Navigation Equipment Maintenance & Monitoring.** Contracted GRSF personnel carry out daily and/or scheduled servicing in accordance with AP 600. Where an aspect of servicing is not covered in these documents, the Northolt equipment is serviced under locally generated Work Orders.

**8.7 Aerodrome Works Safety.** Control of Working Parties is achieved through the following:

- a. **Work in Progress 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.
- b. **Work in Progress Book.** In addition to an aerodrome plan, a Work in Progress book 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.
- c. **Work in Progress Briefings.** The ATCO IC is responsible for ensuring that the supervisor of the working party is properly briefed. The briefing includes the following details:

- i. Limits of the work area.
- ii. Direction of Air Systems movements.
- iii. Route to be taken by works vehicles.
- iv. Parking area for works vehicles and equipment.
- v. Control to be exercised over works vehicles and workers.
- vi. Signals to be employed.
- vii. FOD prevention.

d. **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 Air Systems movement in their vicinity. SATCO is responsible for issuing orders and instructions to the work party. Air Systems captains are to be informed of any Work in Progress that may affect Air Systems 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.

**8.8 Control of Entry and Access.** Control orders are contained at Annex Y. 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 Air Systems operations at RAF Northolt are subject to the requirements of the UK National Aviation Security Programme (NASP). In accordance with the requirements of NASP the RAF Northolt commercial operation receives regular inspections from the CAA to ensure compliance with EU and National Regulations. 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. Those vehicles that require regular access to the main ASP (ASP1) should be issued with, and display, a specific pass. All drivers of vehicles that require access to the ASP are also to have attended an Aerodrome Access Brief from ATC and hold a valid Aerodrome Access Permit.
- d. Inbound passengers and baggage may be subject 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.

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

f. 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 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”.

<b>8.9 Aerodrome Users - Vehicle and Pedestrian Control</b>		
8.9.1	Air System Movements Area	Vehicle and pedestrian movement is kept to an absolute minimum and controlled at all times by an authorised person.
8.9.2	Apron	As above.
8.9.3	Aerodrome Access Permit (AAP)	<p>Drivers operating on the aerodrome are to have an aerodrome access permit with the exception of those visiting drivers of vehicles (operating beyond the yellow line on the main ASP only) associated with:</p> <ul style="list-style-type: none"> <li>a. VIP (Royal or high level governmental only) Air System movements.</li> <li>b. Civilian Emergency Service vehicles on operational tasks, including ambulances carrying patients to and from aeromed Air System.</li> <li>c. HM Revenue &amp; Customs vehicles.</li> </ul> <p>These vehicles are to be marshalled at all times by AMS (chocked when appropriate).</p>
8.9.4	Aerodrome Driving Briefs	Available through Air Traffic Control for frequent aerodrome users and contain all orders pertinent to driving airside. Aerodrome Driving Orders are available at Annex U to Station Standing Orders or on request from Northolt Operations.
8.9.5	Access Routes	<p>ASP 1 access to the movement area is controlled through two remotely controlled barriers monitored via CCTV by AMS (0208 833 8945).</p> <p>ATC MT Route access to the movements area is controlled through a remotely controlled barrier monitored by ATC (0208 833 8227).</p>
8.9.6	Orders for Airside Vehicle Control	As per Section 8.8 Control of Entry and Access.
8.9.7	Additional Orders for Drivers on Aprons (ASPs)	Nil.
8.9.8	Additional Orders for the Control of Airside Vehicles at Night	Nil.
8.9.9	Orders for Pedestrians	Pedestrian movement is restricted to authorised personnel, other than the transit of military and civilian passengers, who will be accompanied by authorised personnel. All personnel, military and civilian are to wear Hi-visibility clothing when on the

		ASP, this includes all military and civilian aircrew. The only exception to the rule being passengers being escorted to/from an Air System under the guidance of the Duty Movements staff, or the Duty Air Movements Officer (DAMO) when undertaking VIP Protocol duties in accordance with their primary role. However, in this instance the DAMO is to be escorted by another member of the RAF Northolt Movements Staff who is wearing an item of Hi-visibility clothing.
8.9.10	Orders for Pedal Cyclists	Pedal Cyclists are not permitted airside.
8.9.11	Orders for riders/dog walkers/runners etc	Riders, dog walkers and runners are not permitted airside. The Station Saddle Club members are permitted access to the aerodrome, outside commercial flying periods, with prior permission from Air Traffic Control (x 8227) and, for the safety of all aerodrome users, only before dusk. OIC Saddle Club is responsible for fully briefing all Saddle Club personnel prior to using the aerodrome.
8.9.12	Signals for the Control of Vehicles and Pedestrians	Nil.
8.9.13	Speed Limits	All local speed limits are to be observed and in accordance with the aerodrome driving brief.

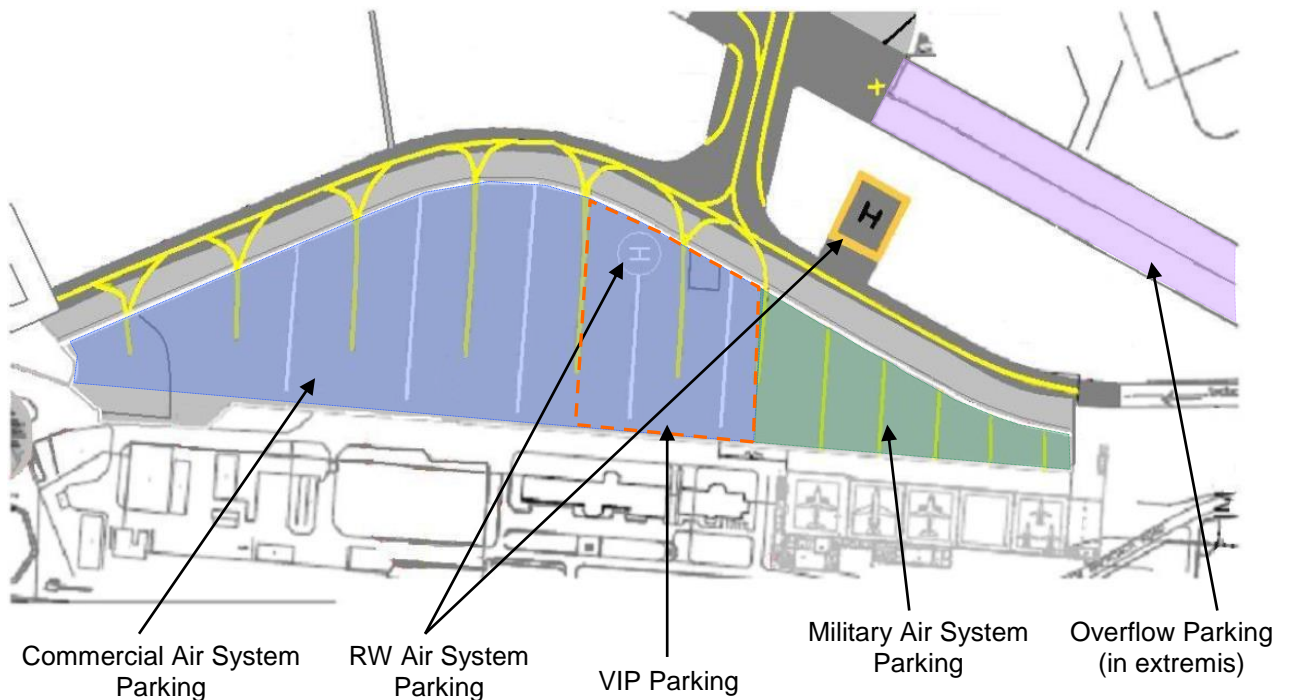
8.10 Aerodrome Wildlife Management. The wildlife activity on and around the aerodrome is managed by a contractor. Annex N contains full details of the RAF Northolt Aerodrome Wildlife Management Plan (AWMP).

8.11 Animal Management. Animal management on the aerodrome is dealt with by the Estates Management Section through external contractors, as and when issues are reported.

8.12 Handling of Hazardous Material (Spillage Plan). No Hazardous Material handling relating to commercial operations will take place on the aerodrome. The handling of Hazardous Material relating to military operations will be conducted by suitably qualified personnel. The RAF Northolt Unit Spillage Response Plan can be found at the following online link:  
RAF Northolt Unit Spillage Response Plan Ed 3.1

### 8.13 Air System Parking and Southside Ground Operations.

a. **ASP 1 Markings.** ASP 1 parking lines are numbered from 1 to 9. The VIP parking lines are Line 5 (primary) and Line 6 (secondary). Due to potential interference with Distress and Diversion (D and D) triangulation equipment at the far west of ASP 1, Air Systems are only permitted to be parked on with prior permission. Figure 4 shows the ASP 1 markings and how the ASP is split between Military and Civilian Air Systems.



**Figure 4 – ASP 1 Markings**

b. **32(TR) Sqn FW Air System.** Procedures for 32(TR) Sqn fixed wing Air Systems operating from the main ASP (ASP 1) are:

- i. Air Systems due to depart with VIP passengers are to be towed onto a VIP parking line under control of Eng Line personnel but with coordination from VASS/Load Control.
- ii. Air Systems departing without VIP passengers are to be towed out of the hangar and should depart from immediately outside on Line 7.
- iii. Air Systems arriving with VIP passengers are to be marshalled by VASS until the passengers have left the ASP. On departure of the VIP passengers, VASS Control is to inform 32(TR) Sqn Line Control. An Air System towing team is not to arrive before the VIP convoy/principal car has left the ASP.
- iv. Air Systems arriving without VIP passengers are to taxi back to Line 7 and will remain under the direct control of a 32(TR) Sqn Air System marshaller.

c. **Air System Parking and Start-up Procedure.** Allocation for Air System parking on the main ASP (ASP1) is the responsibility of Air Movements Sqn (AMS) which co-ordinates this through the VASS. VASS will pass Air System parking positions to ATC for onward transmission to approaching Air Systems. ATC are to inform VASS of Air System arrivals in order to have a marshaller on the apron ready to direct the Air System to its allocated parking position. Air Systems are not to start-up without prior permission from Northolt Ground. 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 Air System, with the fire trolley and contact has been made with the captain, a normal start-up can commence. Air System start-up is **NOT** to commence without a VASS marshaller in attendance.

d. **Rotors running on/offload.** Rotors running passenger loading/unloading is only permitted if operationally essential and when passengers are supervised and escorted by a qualified crewman. For A109 operations, passengers should not be permitted to walk beneath

the helicopter main rotors while rotating except when authorised by the handling pilot when it is impractical for the passengers embark / disembark otherwise. Passengers should be briefed on approach and departure procedures and embark / disembark the AS under the supervision of a crew member or, when operating at heliports, with trained ground handling team.

e. **Visiting FW Military Air System.** Visiting military fixed wing Air Systems are generally to be parked on Line 6. However, military Air Systems may be parked on any line.

f. **Visiting RW Air System.** Visiting RW Air Systems can use Helipad South or the RW Air Systems parking spots on the end of Lines 3 and 5. The following apply:

g. Helipad South is suitable for large helicopters, including Chinook, Merlin and Puma and equivalent foreign military rotary Air Systems (e.g. CH-53).

h. Only those RW Air Systems capable of ground taxi (i.e. with wheels) are allowed to occupy the inner slots.

i. RW Air Systems capable of hover taxi only (i.e. with fixed undercarriage) are not permitted to occupy the inner slots and are to be parked on the Helipad South or the RW Air System spots, regardless of the status of the passenger(s) on board.

j. The potential effects of downwash from lines 7 and 8 against the pod doors are to be considered, particularly for larger RW Air Systems such as CH-47 and Merlin.

k. Rotors Running Refuels (RRRFs) are not permitted at RAF Northolt.

l. Bays 1 - 4 along Taxiway GOLF can be used for overflow parking with permission from the Aerodrome Operator. Bays are 64 m apart and RW Air Systems must be parked clear of active taxiway by 5 m.

m. **Visiting Civilian Air Systems.** Visiting Civilian FW Air Systems are to be parked, whenever possible, on one of the main ASP parking lines. In addition, Helipad South, ERB, taxiway HOTEL and Bays 1 - 4 on Taxiway GOLF1 can be used for overflow parking with permission from OC Ops Wg. Air Systems are not to be taxied onto HOTEL and must be towed. As per the "Terms and Conditions for Civilian Aircraft Operators", in the event of military necessity all commercial Air Systems should be parked ready for Air System towing operations. This is to include: the Air System being parked with the "Brakes-Off", and the Air System being parked with the Nose Wheel disconnected. The Air System captain, or appropriate member of crew, will be required to sign a declaration confirming they have left the Air System ready for towing operations.

h. **Hangar 311 Engine Start.** Permission to start an Air System outside Hangar 311 must be obtained through ATC.

o. **Aircrew movement.** Aircrew are to be escorted to their Air Systems by Load Control. Aircrew are not to commence start-up procedures without receiving permission to do so from ATC and must have a VASS member in attendance. VASS are to be available in adequate time before departure of Air Systems at the request of Aircrew and/or ATC.

8.14 **Low Visibility Operations.** Air System operations during reduced visibility or low cloud conditions present additional hazards to Air Systems and other aerodrome users. The enhanced control measures implemented by ATC to safeguard Air Systems and personnel are detailed in Annex P.

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<sup>1</sup> Bays are 64 m apart and Air System must be parked clear of Taxiway GOLF by 5 m.

8.15 **General Conditions (Terms and Conditions).** Use of MOD Aerodromes by civil Air Systems shall be in accordance with JSP 360 - Use of Military Aerodromes by Civil Aircraft. The Terms and Conditions of Use for Civilian Air Systems utilising RAF Northolt can be found within Annex FF and at [www.londonvipairport.com](http://www.londonvipairport.com).

8.16 **Safeguarding Requirements.** The procedures involved in safeguarding the operational environment of military aerodromes is explained in greater detail in the RA 3500 series – Aerodrome Design and Safeguarding and depends upon whether the proposed obstacle is sited within or outside MOD. RAF Northolt's waivers and exemptions can be found at Annex G.

8.17 **Standards Checks/SQEP (Suitably Qualified and Experienced Personnel).** All personnel involved in activities on or around the aerodrome are to be suitably trained, standardized and assured. The following personnel are subject to a periodic check of professional standards:

- a. Air Traffic Controllers.
- b. Air & Space Operations Specialists.
- c. Duty Operations Controllers.
- d. Aircrew.
- e. Ground Radio Engineers.
- f. Firefighters.
- g. Medics.
- h. Armourer/Supply & Movement Staff/Aerodrome.

8.18 **Thunderstorm and Strong Wind Procedures.** The following procedures should be followed in the event of an increased risk of thunderstorms or lightning (details on distribution of these warning are contained in Annex HH).

- a. **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:
  - i. **HIGH.** A thunderstorm is occurring or is expected to occur over the area in the immediate future (normally within 15 mins).
  - ii. **MODERATE.** Thunderstorms are developing, or have been reported, within 40 km of the area, but are not expected to affect the area in the immediate future.
  - iii. **LOW.** Thunderstorms are not occurring at the present time or are not expected.
- b. **Refuelling in Thunderstorm Level High.** When a Thunderstorm Level **HIGH** warning has been issued or thunderstorm activity is apparent in the vicinity of an Air System, fuelling operations are to cease, unless directed by the AO or their nominated deputy for operational reasons.

c. If deemed **operationally essential**, in consultation with Air System operating crews, OC Ops Wg (or his appointed deputy), may allow fuelling operations to proceed. If OC Ops Wg (or his deputy) is not available, an appropriate Level J or Level K should be consulted to seek permission to allow fuelling operations to proceed.

d. **Strong Wind Procedures.** Gale warnings are:

i. **Strong Wind.** Mean speed 25 kts or more, or gusts of 30 kts or more. Air Systems are chocked and positioned normally (light Air Systems may need to be double chocked).

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

iii. **Severe Gale.** Mean speed of 44 kts or more, or gusts of 50 kts or more. Air Systems 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 Air System blanks and windblown FOD. In case of light Air Systems, hangarage should be sought, or in extreme cases large MT vehicles should be parked in front as wind breaks.

8.19 **Electrical Ground Power Procedures.** Air Systems electrical ground power will be supplied and connected on request from the Air System crew by VASS on Air System arrival. A qualified member of the Air System crew must be present before connection or disconnection can take place.

8.20 **Jettison Area - Designated Fuel/Underslung Load/Ordnance.** Not applicable.

8.21 **Compass Swing Area.** The compass swing area is located and marked on Taxiway CHARLIE. The area is for use by military Air Systems only and is not to be used for any Air System 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 December 2020.

8.22 **Foreign Object Debris (FOD) Prevention, Training and Awareness.**

a. **FOD.** FOD is defined as any material (including loose articles) that originates from any source, either external to, or part of, an Air System, which can cause damage to that Air System or its equipment. FOD presents a significant risk to Air Safety since latent damage caused by foreign objects could cause catastrophic failure at any time. Whilst FOD is an inevitable part of Air System operations, every effort must be made to ensure that all avoidable FOD incidents are prevented, and that all instances of FOD are reported to enable effective investigation and analysis.

b. **FOD Prevention.** All personnel at RAF Northolt must proactively take a personal interest in, and responsibility for, FOD prevention in their areas of responsibility. FOD prevention is an essential element of Flight Safety and must be given appropriate priority. The main aims of FOD Prevention are to ensure that:

i. Operational and maintenance practices minimize the likelihood of FOD damage to Air Systems.

ii. If FOD enters an Air System or Air System operating area, processes are in place to remove that FOD before it can cause damage.

c. **FOD Precautions.** All personnel at RAF Northolt are to be aware of the hazard posed by FOD. The following methods may be used to reduce the threat of FOD:

i. **FOD Plods.** The Station must carry out a FOD Plod of the ASP and Air System manoeuvring area at least once each year. Additionally, FOD checks of in-use Air System operating areas must be carried out at least daily, prior to flying operations.

ii. **Aerodrome Operating Surface (AOS) Sanitisation.** Potential sources of FOD will be minimized through pro-active management of the AOS. There are 3 areas of focus to reduce the generation of FOD:

(1) **AOS Fault Management.** SATCO is responsible for inspecting the AOS on a regular basis and managing aerodrome faults through PRIDE.

(2) **AOS FOD Migration.** Every effort is to be made to prevent the migration of FOD onto the AOS. Only official entry and exit points to the aerodrome are to be used and vehicles should drive over the FOD grids. Skips and bins around the unit are to have covers and must not be allowed to overflow.

(3) **AOS Clearing.** The aerodrome sweeping plan is coordinated between MT and ATC to ensure that the AOS is kept clear of FOD.

iii. The Station FOD Prevention Officer (ext 8967), is responsible for all aspects of FOD prevention, reporting and investigation.

8.23 **Dangerous Goods (DG) Procedures - Loading/Unloading.** There are no civilian freight services offered at RAF Northolt. Details of military freight operations are detailed in Dangerous Goods Manual V2. Actions in the event of fuel or chemical spillage are detailed in the Unit Spillage Response Plan.

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

8.25 **Air System Arresting Mechanisms.** Nil.

8.26 **RAF Northolt Aerodrome Grass Cutting Plan.** The aerodrome grass cutting plan promotes safe operation of Air Systems at RAF Northolt; over-long grass degrades the performance of the PAR/ILS and increases the likelihood of wildlife-strikes. Prior to the commencement of grass cutting, contractors are to contact ATC and may be required to attend a briefing in person in the Tower. Depending upon the location of the cutting area and the Runway and/or Nav aids in use, the method of communication will vary:

a. Priority A:

i. Runway 25: PAR to be turned off. Tractors are not to infringe the ILS area when the ILS is in use. An MRE is to be issued to the driver; if the driver is not confident that he will hear the MRE, an escorting vehicle may be required. Mobile telephone is to be used as a backup.

ii. Runway 07: PAR to be turned off. Mobile telephone is to be used for comms.

b. Priority B:

- ii. When operating close to the Runway<sup>2</sup>, inside the Illuminated Runway Distance Marker (IRDM) boards or in either undershoot, an escorting MRE equipped vehicle is to provide comms with ATC.
- iii. When operating away from the Runway, outside the IRDM boards, mobile telephone is to be used for comms.
- c. Priority C:
  - i. When operating close in the Runway 07 undershoot, an escorting MRE equipped vehicle is to provide comms with ATC.
  - ii. When operating away from the Runway a mobile telephone is to be used for comms.
- d. Priority D:
  - i. A mobile telephone is to be used for comms.

To maintain the safe operation of the aerodrome, grass cutting is to be given priority above routine tasks. Therefore, where an escort is needed it should be facilitated if possible. BCU staff or the ATC Driver is to be used. The use of an escort vehicle should enable dynamic management of the situation and so maximise the cutting time available. Where there are significant gaps between movements, the priorities can be varied to allow the Runway margins to be cut before the PAR/ILS strip. Occasionally, factors such as wet conditions and access restrictions may result in the recommended grass lengths being exceeded<sup>3</sup>. Concerns that the grass has exceeded the prescribed lengths are to be raised with the Amey Help Desk on 0800 707 6000.

## 8.27 Air System Refuelling

- a. **Fuelling Operations.** The primary location for Air System 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.
- b. **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.

## 8.28 Embargoes

- a. **Noise Embargoes and Flying Bans.** The impact of noise pollution on the local population requires careful management (see Section 8.29). In addition, certain occasions will require a noise and/or flying embargo. A full noise and movement embargo is to be applied for Air System movements involving HM The Queen in a ceremonial capacity. At all other times a limited noise embargo for Air System movements involving HM The Queen and senior members of the Royal Family is to be implemented. Movements will keep lines 5 and 6 clear of Air Systems requiring APU activity during the embargo.
- b. **Noise and Movement Embargo Procedures – Full Embargo.** During a full noise embargo, all Air Systems on the main ASP are to be shut down, have their power units turned off and doors closed. Vehicle movement within this area is also to be prohibited,

<sup>2</sup> Within 90 m of the runway centreline.

<sup>3</sup> Recommended grass lengths can be found in the MAA Manual of Aerodrome Design and Safeguarding - Chapter 16

except for flight safety reasons. Air Systems may take off, land or taxi provided the Royal Flight has priority at all times (other than CAT A/B/C). All arriving passengers are to stay on-board their Air System, while all passengers waiting to depart are to stay in the lounge until the Royal party has boarded their Air System and departed the ASP. All Air System noise/movement embargoes take precedence over ATC slot times.

c. **Noise and Movement Embargo Procedures – Limited Embargo.** For a limited noise and movement embargo, all Air Systems on the main ASP Lines 4,5 and 6 are to be shut down, have their power units turned off and doors closed, as at Figure 5. In addition, there is to be no vehicle movement on the ASP road.



**Figure 5 – Limited Noise Embargo Area**

d. **Control of Noise and Movement Embargo.** The embargo is to be controlled by Station Ops under the direction of the Duty Air Movements Officer (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, Load Control should be informed immediately. Crews affected by the embargo who require clarification are to be referred to the SAMO, OC Ops Sqn or OC Ops Wg.

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

i. **Air System Arrivals.** The embargo is to apply from when Load Control receives the 10nm call until after the VIP exits the ASP. Load Control staff are to advise ATC when the VIP has departed.

ii. **Air System Departures.** The DAMO is to obtain the ETA of the VIP at the WHG and pass this information to ATC. The embargo will apply from the expected time of the VIP's arrival at the WHG until Load Control informs ATC that the embargo can be lifted. This will generally be shortly after the Royal Party has boarded its Air System but may be extended until the Air System starts to taxi.

**8.29 Air System Engine Ground Runs (EGR).** To minimise disturbance to the local community, Engine Ground Runs are to be carried out satisfying 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 Air Systems, 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 Air Systems, vehicles, buildings and personnel.

c. **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.

d. **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, ~~and ground runs at idle rpm that are of longer than 45 mins duration.~~

e. **Control of Ground Running.** When the aerodrome is open, the movement of Air Systems, 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.

f. **Positioning of Air Systems.** An Air System 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.

g. **De-confliction of Taxiing Air Systems 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 Air System. Radio communication is to be maintained between the Air System on the ERB and Local ATC, so that the movement of Air System along taxiways BRAVO and CHARLIE can be de-conflicted.

- h. **RW Ground Runs.** Un-tethered engine ground runs of military RW Air Systems 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 Air System 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.

## CHAPTER 9: SNOW AND ICE OPERATIONS

9.1 **Snow & Ice Operations.** The RAF Northolt Snow and Ice Plan is available at the following online link: [Op BLACKTOP ORDER](#)

## CHAPTER 10: FORCE PROTECTION RESPONSIBILITIES

**10.1 RAF Police & Security Flt.** Force Protection (FP) is provided for the Aerodrome Operator/Head of Establishment (HoE) by the RAF Police and Security Flt (RAFP & Sy Flt), part of No 7 RAFP Sqn, No 2 Police Wg (2PW) as governed by policy<sup>4</sup> and in line with the following Mission Statements:

- a. **2PW:** *To provide focused police, counter intelligence and protective security support to Air Comd and JHC Stns and Units, that will limit the vulnerabilities of materiel, information and personnel to threats from organizations and individuals whose actions may inhibit commanders from delivering effective military capability.*
- b. **No 7 RAFP Sqn:** *To provide enabling policing and security services to stns and units within the Sqn AoR, simultaneously supporting the higher-formation mission statements.*

**10.2 RAFP & Sy Flt FP Responsibilities.** The primary FP responsibility is to deliver efficient, effective and enduring policing and security support to the Aerodrome Operator/HoE and, where applicable, operations projected from the Unit. FP for the Aerodrome<sup>5</sup> is delivered in depth through a series of mutually supporting FP capabilities and Force Elements (FEs).

**10.3 FP FEs and Capabilities.** In order to affect comprehensive FP for the Aerodrome and Aerodrome Operator/HoE the RAFP & Sy Flt comprises the following supporting FEs/capabilities:

- a. **General Policing Duties.** Vehicle and foot sy and policing patrols in and around the aerodrome operating environment and Security Vigilance Area, Volume Crime Investigations, crime prevention/reduction, and liaison with other police and law enforcement agencies.
- b. **Protective Security/Counter Intelligence.** Security Risk Management, Physical, Personnel, Information, and Protective Sy, Counter Intelligence and Counter Intelligence Investigations, Vetting, support to Royal and VIP visits and Public Military Events, and liaison with other civilian, Home Office and MoD security organisations.
- c. **Aviation Sy/Air Transport Sy.** Security Risk Management and Security Risk Assessment support to CSAT operations and Force Protection Independent Air Operations, and physical ATSy for Military air moves.
- d. **Military Working Dogs.** Specialist Arms & Explosives Search, Vehicle Search, Service Police and Patrol Dog teams.
- e. **Military Provost Guard Service Defence Platoon (MPGS Def PI).** Overt Armed and Unarmed patrolling, Armed Quick Reaction Force, Control of Entry, Perimeter and Area Sy.

**10.4 Orders.** Disparate FE responsibilities and specific orders are located in the Orders section of the RAFP & Sy Flt MOSS site. Requests for information relating to these Orders are to be directed through the Protective Security office on 020 8833 8796

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<sup>4</sup> AP 1722 – RAF Police Tactics, Techniques & Procedures; [AP 3085](#) – Manual of Security Risk Management; [AP 1990](#) – Manual of Aviation Security; [JSP 440](#) Defence Manual of Security.

<sup>5</sup> Including all airfield support elements, infrastructure and personnel.

## AERODROME OPERATOR LETTER OF DELEGATION

From Group Captain N Worrall ADC MA RAF  
Station Commander



### Royal Air Force Northolt

West End Road  
Ruislip  
Middlesex  
HA4 6NG  
Tel: 0208 8338901  
Fax: 0208 8338903  
Email: [Nor-StnCdr@mod.gov.uk](mailto:Nor-StnCdr@mod.gov.uk)

Wing Commander S T Firth BSc RAF  
Aerodrome Operator  
RAF Northolt  
West End Road  
Ruislip  
Middlesex  
HA4 6NG

Reference: NOR/

10 Jul 2019

### LETTER OF AUTHORITY TO ACT (LOAA) AS THE AERODROME OPERATOR FOR ROYAL AIR FORCE NORTHOLT

#### References:

- A. Military Aviation Authority Charter dated 31 Aug 10.
- B. Military Aviation Authority Regulatory Policy (MAA01).
- C. MAA/RA 1026 Issue 4
- D. MAA/RA1200 Issue 5

1. The Secretary of State for Defence set the requirement at Reference A for an assurance<sup>1</sup> process to ensure the highest standards of Air Safety<sup>2</sup> are maintained in the conduct of military aviation. As the CSAT DOH and RAF Northolt Head of Establishment (HoE), I am responsible for implementing an effective Air Safety Management System and ensuring that air operations at RAF Northolt are at all times conducted at a level of safety that is at least Tolerable and ALARP. In discharging these responsibilities it is a requirement that I am supported by a Suitably Qualified and Experienced (SQEP) crown servant Aerodrome Operator, although I will remain accountable. In accordance with References A, Band C, I appoint you as Aerodrome Operator for RAF Northolt from 10 July 2019 until the incoming OC Ops Wg takes up post.

2. In appointing you as Aerodrome Operator, I acknowledge that you will meet all of the SQEP criteria specified at Reference C at the earliest opportunity. I am content for you to sub-delegate selected areas of Air Safety to SQEP personnel within Operations Wing on the basis that you remain responsible in accordance with References C and D.

#### AO RESPONSIBILITIES

- 3. As Aerodrome Operator you are responsible for actively managing an aerodrome

<sup>1</sup> Assurance is defined as adequate confidence and evidence, through due process, that safety requirements have been met (MAA02).

<sup>2</sup> Air Safety is the state of freedom from unacceptable risk of injury to persons, or damage, throughout the life cycle of military air systems. Its purview extends across all Defence Lines of Development and includes Airworthiness, Flight Safety, Policy and the apportionment of Resources. It does not address survivability in a hostile environment.

environment that accommodates the safe operation of aircraft in accordance with Reference C. Specifically, you should:

- a. Support me in my role as DOH and HoE by ensuring that the requirements of Reference C are applied to the management and operation of the aerodrome.
- b. Establish formal mechanisms to ensure robust communication of any hazards and/or issues relevant to me and other affected DHs.
- c. Ensure any decisions made are cognisant of the impact on Air Safety. These shall include, but are not limited to, facilities, personnel, equipment and materiel.
- d. Establish formal mechanisms to ensure the monitoring and the assurance of all activities, operating procedures, standards and flight safety within your AoR and interfacing areas.
- e. Conduct Aerodrome Management activities in accordance with the Defence Aerodrome Manual (DAM) - see Reference C.
- f. Maintain a comprehensive record of aerodrome assurance activities through the use of the Defence Aerodrome Assurance Framework (DAAF) - see Reference C.
- g. Ensure the accuracy of aerodrome data and notification of all aerodrome hazards at all times.

4. If you believe that you are unable to meet any of the responsibilities placed upon you through this letter, or if you believe that the content requires amendment, you are to advise me at once. Furthermore, should you become aware of any circumstance, practice or procedure which casts doubt on the safety of operations at RAF Northolt (military, OGD, commercial etc), you are to take immediate action to restore safety including cessation of activity if required.

5. You are to sign below that you have read and understood this LOAA.



N Worrall  
Gp Capt  
DDH

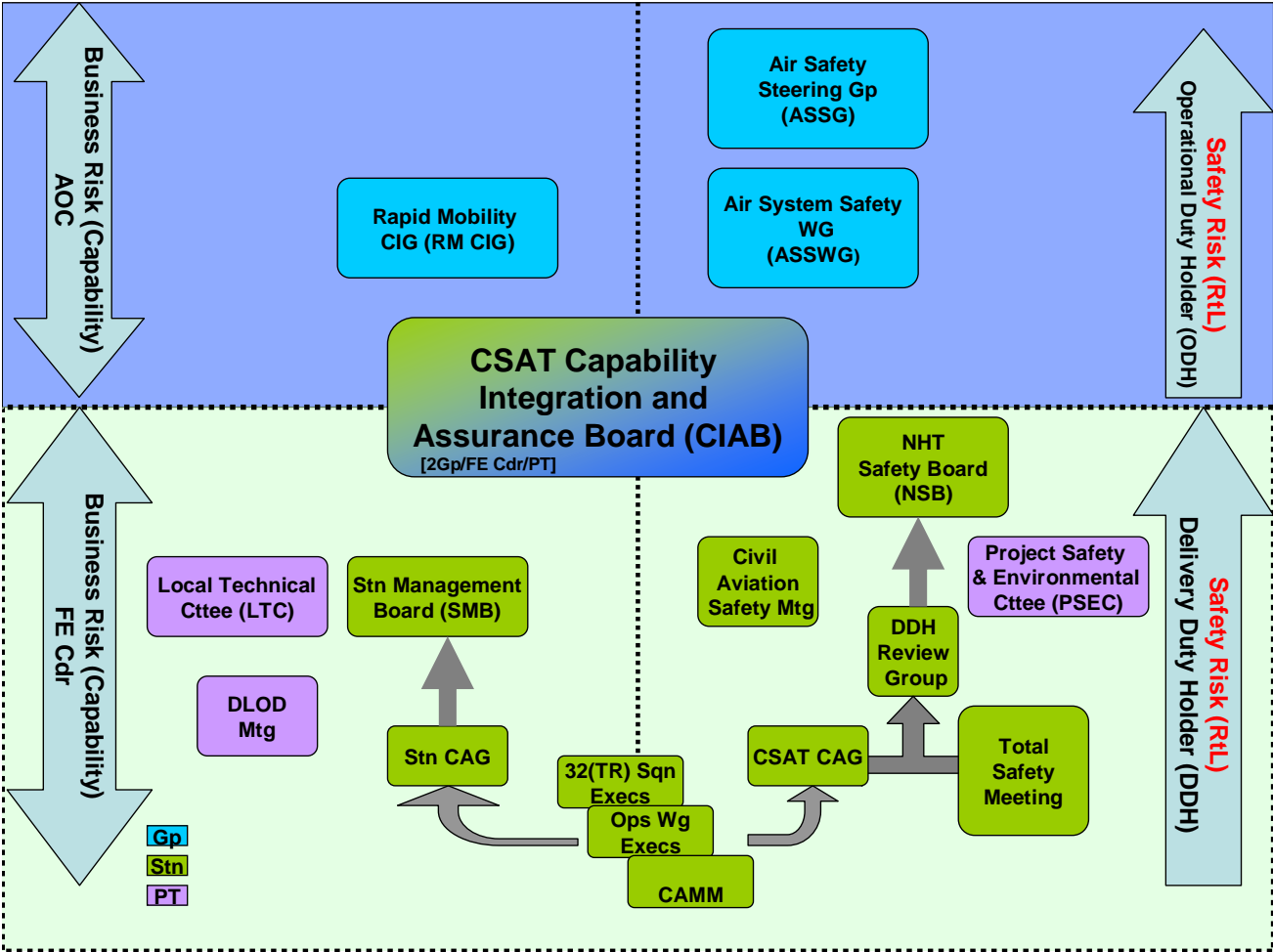
I certify that I have read, understood and received a copy of the above LOAA.



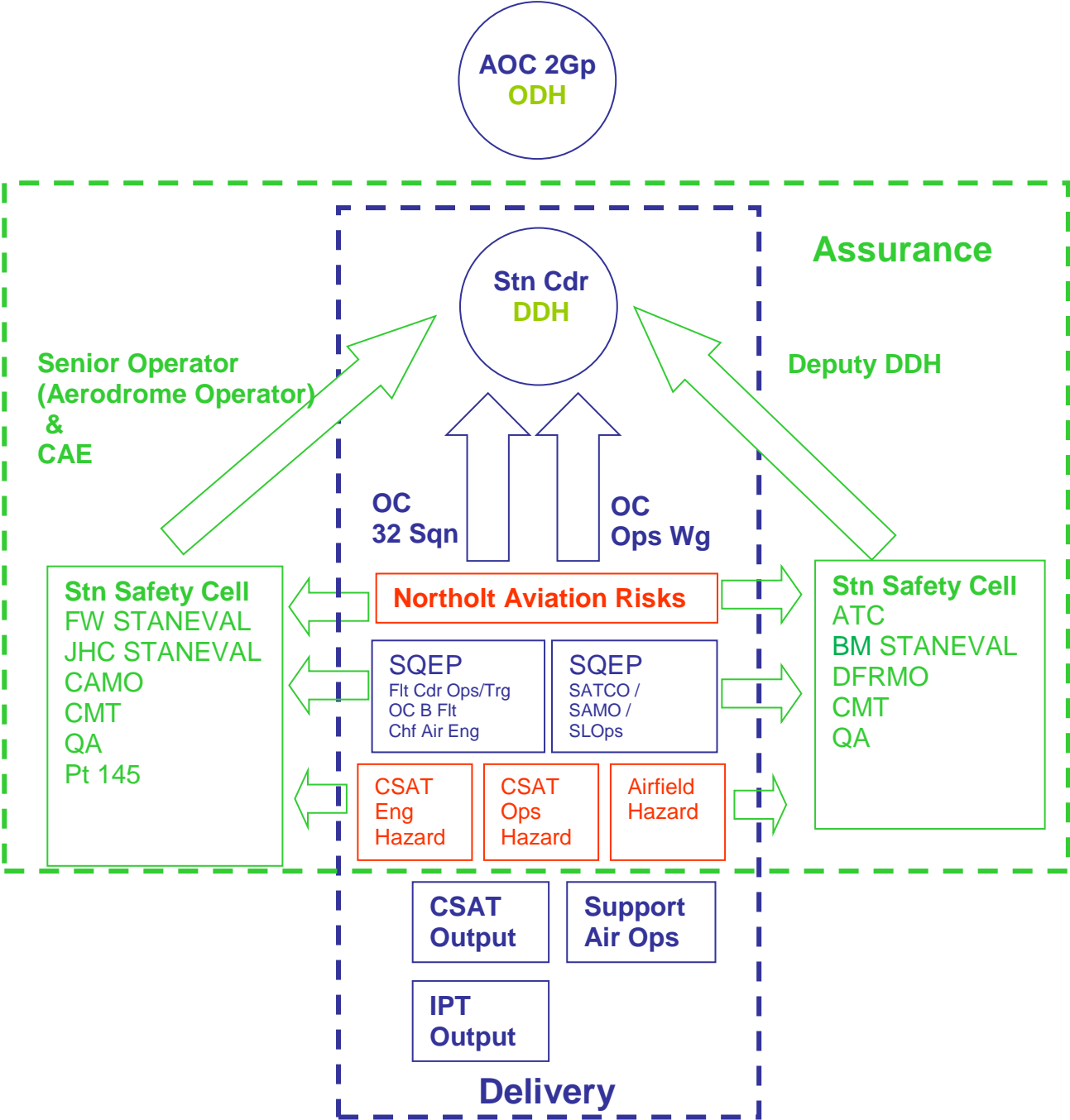
S T Firth  
Wg Cdr  
AO

10 Jul 19

**SAFETY MEETING ORGANISATIONAL STRUCTURE – NORTHOLT ASMS**



RAF NORTHOLT AERODROME OPERATIONS ORGANISATIONAL STRUCTURE



**LIST OF KEY POST HOLDERS AT RAF NORTHOLT**

<b>Role</b>	<b>Post Holder</b>	<b>Tel</b>
Station Commander	Group Captain N Worrall	0208 833 8901
Aerodrome Operator/OC Operations Wing	Wing Commander S Firth	0208 833 8904
OC 32 Squadron	Wing Commander <b>D Chadwick</b>	0208 833 8280
Mil Chief Air Engineer & Continuing Airworthiness Manager	Squadron Leader A Dimeck	0208 833 8500
OC Operations Squadron	Squadron Leader K Read	0208 833 8910
<b>BAe 146 Staneval</b>	Squadron Leader P Gray	01993 89 7941
Senior Air Movements Officer	Squadron Leader H Norris	0208 833 8939
Senior Air Traffic Control Officer	Squadron Leader A Edgecombe	0208 833 8364
32 Sqn Chief Engineer	John Ratcliffe	0208 833 8618
Station Flight Safety Officer	Flight Lieutenant <b>T Wakeham</b>	0208 833 8571/6666
Station FOD Prevention Officer	Mr R Lawrey	0208 833 8967

## **AERODROME OPERATOR HAZARD LOG**

This can be found online at this [LINK](#) and can also be requested via Station Ops.

**FORMAL AERODROME RELATED AGREEMENTS**

1. MOU between RAF Northolt ATC and Denham Aerodrome which can be found at the online link.
2. RAF Northolt also holds MOUs with several other aerodrome users, details of which are held by OC Ops Sqn.

## **AERODROME SAFEGUARDING WAIVERS AND EXEMPTIONS**

1. **Non-Compliant Approach Lighting.** RAF Northolt has a CL3B on both Runway 25 and Runway 07. The environment precludes the installation of a CL5B and therefore an exemption from the appropriate regulation has been granted by the Military Aviation Authority (MAA). A comprehensive safety assessment considered the risk of operating with reduced approach lighting. Risk to life is not increased as a result of the non-compliant approach lighting and a well-established go-around procedure is in place in the event that the required visual references cannot be obtained. Regulatory exemption has been granted from the requirements of RA 3016(3). MAA/Exemption/2013/10.
2. **Non-Compliant Taxiway Lighting.** RAF Northolt AOS has 2x taxiways, BRAVO & CHARLIE, which do not have green centreline lighting and instead are equipped with non-standard taxiway lighting. Non Standard Taxiway Lighting.
3. **Runway Strip Obstructions.** Northolt is classified by the MAA, RA 3500 to 3599 Aerodrome Design and Safeguarding as a code 3 Instrument Runway (>1200 m and <1800 m in length). Accordingly, a Runway Strip clear of obstacles should extend at least 150 m either side of the Runway centreline and 60 m beyond the runway end and any stopway. A number of legacy obstacles at RAF Northolt infringe the RA 3500-defined Runway Strip:
  - a. At the eastern end of the Runway (Runway 25 Threshold), the South East Officers' Mess Block (150 – 130 m north of the Runway centreline), trees (130 – 110 m north of the extended centreline). MAA/Exemption/2014/25.
  - b. At the western end (Runway 07 Threshold), the A40 road and the Station Perimeter Fence infringe the Runway strip. 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. At the Eastern end of the Runway to the south, a wooden frangible fence and curb are located just inside the Runway Strip. An exemption has been granted from the MAA on the basis that the fence is frangible, it prevents aerodrome incursions and intruders to the Station; the curb is behind the fence (not airside) and steps down away from the aerodrome. MAA/Exemption/2013/13.
  - d. Operationally Essential Obstacles which are permitted in the Runway Strip include:
    - (1) The PAR installation, 82.5 m south of the Runway centreline, at approx. midpoint of the Runway. MAA/Exemption/2014/14.
    - (2) ILS installation, 125 m south of the Runway centreline, at the eastern end of the Runway. MAA/Exemption/2014/14.
    - (3) PAR MTI markers, HRDF, PAPIs, Aerodrome Signage and Runway IRDM Markers, as shown at [section 3.3](#) on the aerodrome map. MAA/Exemption/2014/14.
    - (4) Operationally Essential Signage is placed at various points around the aerodrome to direct Air Systems and vehicles. MAA/Exemption/2014/19.
4. **Runway End Safety Area (RESA).** A RESA provides an undershooting or overrunning Air Systems with a cleared and graded area. The Northolt RESA details are as follows:
  - a. Eastern end (Runway 07 over-run):

i. For Air Systems overrunning Runway 07, the RESA length is 180 m and width is twice that of the Runway. There is An Engineered Material Arresting System occupying the 60 m furthest from the Runway. No obstacles impinge the RESA; however, the West End Road, and associated obstacles, prevent the RESA meeting the recommended length of 240 m. 20140627-NHT Minimum RESA Notification.

ii. For Air Systems approaching Runway 25, the undershoot RESA satisfies the minimum requirement in RA 3500, i.e. 90m by twice the Runway width. The arrestor bed referred to above sits coincident with the RESA.

b. Western end (Runway 25 over-run):

i. For Air Systems overrunning Runway 25, the RESA length is 131 m and width is twice that of the Runway. There is An Engineered Material Arresting System occupying the 10 m furthest from the runway. The A40, and associated obstacles, prevent the RESA meeting the recommended distance of 240 m. 20140627-NHT Minimum RESA Notification.

ii. For Air Systems approaching Runway 07, the undershoot RESA satisfies the minimum requirement in RA 3500, i.e. 90 m by twice the Runway width. The arrestor bed referred to above occupies the 40 m furthest from the Runway.

5. **Engineered Material Arresting System (EMAS).** The EMAS is located within each runway overrun. The system is CAA and MAA approved and was installed at RAF Northolt during the runway refurbishment in 2019. 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 design of EMAS installed at RAF Northolt is based around the mixed fleet which operate from the airfield, including the BAe 146, Bombardier Global Express, Cessna Citation 5600. The EMAS has the following dimensions:

Runway 07 overrun: 60m from pavement edge. 76.2m long x 27.6m wide.

Runway 25 overrun: 10m from pavement edge. 104.2m long x 47m wide.

6. **Obstacle Limitation Surfaces (OLS).** Due, in part, to the proximity of the A40 and A4180 to the runway thresholds, a number of obstacles penetrate the approach and take-off climb surfaces at Northolt. Full details of these and other obstacles can be found at section 4.10 of this document. Both approach and departure procedures are PANS-OPS compliant and ensure safe clearance from relevant obstacles in the vicinity of Northolt. Operators should, nevertheless, assess Air System performance for each arrival and departure to ensure their compliance with published procedures. 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.<sup>6</sup>

7. **Buildings infringing the OLS.** Various buildings have been identified in the CAP 232 Survey as infringing the OLS. This data is available on request from RAF Northolt Operations or in the AIP entry for RAF Northolt. MAA/Exemption/2014/25.

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<sup>6</sup> 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.



Orders to cover all noise abatement procedures, including high power ground running

[LINK](#)

Orders for temporary obstructions on or around any manoeuvring area that are considered to be a hazard to either Air System or vehicles

[LINK](#)

**INDEMNITY AND RELEASE FORM FOR DISABLED AIR SYSTEMS**

To: Aerodrome Operator

1. I, the undersigned, being the owner or the duly authorised representative of the owner of the Air System 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 Air System at my sole cost and expense.
3. In consideration of the Aerodrome Operator moving the Air System 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 Air System 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 Air System.
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 Air System.

Description of Air System:

Type of Air System:

Registration No:

Full name:

Signed by:

Date:

Orders for both the maintenance and safe operation of the RHAG. (N/A at RAF Northolt)

Orders for both the safe operation and maintenance of the barrier. (N/A at RAF Northolt).

Orders for the safe parking, manoeuvring, refuelling and servicing of Air System

[LINK](#)

RAF Northolt Crash and Major Incident Plan (CMIP).

[LINK](#)

Orders for Disabled Air System Removal. Runway Clearance – Orders

[LINK](#)

## **AERODROME RESCUE AND FIRE FIGHTING SERVICE ORDERS**

1. RAF Northolt Fire Section Orders Part 2 (Operational) can be found at the following online link:

Fire Section Orders Part 2 (Operational)

2. Fire Section Orders can be found at the following online link:

Fire Section Orders

3. DFRMO Standard Operating Procedures can be found at the following online link:

DFRMO SOP

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

FRS Generic Risk Assessment

5. 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.

6. DFRMO Chief Fire Officers Instructions (CFOI) can be found at the following online link:

DFRMO CFOI

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

RAF Northolt TIPs

## **AERODROME RESCUE AND FIRE FIGHTING TRAINING AREA ORDERS**

1. RAF Northolt Training Area Orders can be found at the following online links:

[Training Simulator Orders](#)

[Training Simulator H&S Event Sheet](#)

[Training Simulator Work Instructions](#)

## **AIR TRAFFIC CONTROL ORDERS (OPERATIONAL)**

1. The Northolt Air Traffic Control and Northolt Radar Controllers' Order Books can be found at the following online links:

[Northolt Air Traffic Control Order Book](#)

Northolt Radar Controllers' Order Book (Section 5) (This document is updated every 28 days) (information required from this will be on request from Stn ops).

**ORDERS FOR THE REPORTING PROCEDURES TO ADVISE No 1 AIDU OF ANY  
PERMANENT CHANGES TO AERODROME**

1. Any requests for permanent changes to aerodrome information are to be submitted via email to RAF Northolt Station Ops, 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. NOTAMs will be issued to inform all personnel of approved changes. 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.
2. Further information on reporting procedures is contained in the UK AIP/Mil AIP.

## **AERODROME SERVICEABILITY INSPECTIONS - ORDERS**

1. Prior to the commencement of daily flying, all surfaces accessed by air system or vehicle is inspected by a qualified controller. The same inspection is also carried out prior to any night flying. Any faults that are found are recorded and reported to the correct agency and a contingency plan for the day can then be planned if a surface is declared U/S. All inspections are recorded in the ATC log book.

## **AERODROME TECHNICAL INSPECTIONS - ORDERS**

1. The table below details the requirements and actions following aerodrome serviceability inspections at RAF Northolt.

<b>Aerodrome Technical Inspections - Orders</b>	
1	Routine inspections of the technical equipment (transmitters, receivers, ILS etc) with precision navigation aids being calibrated by a flight check air system are 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 Carillion.
4	Manoeuvring Areas and drainage are inspected, maintained and repaired in accordance with DIO guidance.
5	All aerodrome signs are inspected weekly by ATC and monthly by DIO SME. All defects should be reported through the Carillion 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 Carillion 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. Unserviceabilities are reported to the relevant agencies through MT Control or DFR.
8	The Crash Ambulance and associated equipment is inspected and tested in accordance with MT, manufacturer's instructions and MOD policy. Unserviceabilities are reported to the relevant agencies through MT Control or Medical & Dental Support Squadron.
9	The duty AWCU Operator is responsible for a daily inspection.
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 Aerodrome Driving orders is undertaken by SATCO. Training is carried out by ATC personnel every Monday or by exception following liaison with the ASOM.

## **PROTECTION OF RADAR AND NAVIGATION AIDS - ORDERS**

1. Only authorised personnel are permitted to access aerodrome navigation aids. Anyone requiring access must contact the Ground Radio Section on ext 8434 or civ 020 8833 8434.

## **SURVEILLANCE EQUIPMENT MAINTENANCE AND MONITORING - ORDERS**

1. To ensure that all surveillance equipment at RAF Northolt meets the required service schedules the orders in AP 600, in conjunction or direction from the RAF High Wycombe Engineering Role Office are strictly enforced and adhered to.
2. Local orders, within this annex for the maintenance and monitoring of 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.
3. All RAF Northolt navigation aids & associated equipment under the ownership of GRMS are checked on a daily basis 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 Aquilla are monitored by GRMS and highlighted to the Aquilla Helpdesk on 01329 722711 should any faults occur.
4. 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 Aquilla Helpdesk on 01329 722711 who with intern inform GRMS and task an engineer to attend station if it equipment not maintained by GRMS.
5. Any airfield operator who believes there may be a fault with a particular system should report it immediately to either ATC or GRMS.

## **NAVIGATIONAL EQUIPMENT MAINTENANCE AND MONITORING - ORDERS**

1. To ensure that all navigation and approach aid equipment at RAF Northolt meets the required service schedules the orders in AP 600, in conjunction or direction from the RAF High Wycombe Engineering Role Office are strictly enforced and adhered to.
2. Local orders for the maintenance of navigational and approach aid 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.
3. All RAF Northolt GRMS navigation aids & associated equipment are checked on a daily basis 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.
4. 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 Aquilla Helpdesk on 01329 722711 who with intern inform GRMS.
5. Any airfield operator who believes there may be a fault with a particular system should report it immediately to either ATC or GRMS.

## **AERODROME WORKS SAFETY - ORDERS**

### **WORK IN PROGRESS**

1. **Work In Progress.** 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. Station Ops will be informed of the works via a phone call.

Work In Progress Brief Form

## CONTROL OF ENTRY AND ACCESS – ORDERS

### AIRSIDE VEHICLE CONTROL

1. **Airside Vehicle Control.** Orders for the control of vehicular and pedestrian traffic on the aerodrome are written iaw the RA 3262 - Aerodrome Access and can be found in Annex T to the Station Standing Orders. Drivers operating on the aerodrome are to have an aerodrome access permit, available through Air Traffic Control once the relevant Briefs and Tests have been undertaken. The exemptions are limited to visiting drivers of vehicles (operating beyond the yellow line on the main ASP only) associated with:

- a. VIP<sup>7</sup> Air System movements.
- b. Civilian Emergency Service vehicles on operational tasks, including ambulances carrying patients to and from aeromed Air Systems.
- c. HM Revenue & Customs vehicles.

These vehicles are to be marshalled at all times by AMS (and where appropriate chocked).

2. **Airside Vehicle Access.** Airside access for all other vehicles should be kept to a minimum. All drivers of vehicles that require access to the ASP are to have attended an Aerodrome Access Brief from ATC, and hold a valid Aerodrome Access Permit. 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. **FOD Checks.** All vehicles other than Royal, VIP, and those vehicles within the respective convoy, are to have 100% physical FOD and security check carried out prior to gaining access to the main ASP. The duty NCO in Load Control is to witness the check using the CCTV facility before granting airside access. If they are not satisfied that a thorough check has been completed, they are to hold the vehicle at the barrier and dispatch a member of the AMS to advise the driver accordingly.

4. **Non-VIP Vehicles.** If any non-VIP passengers arrive in vehicles that are outside of the main convoy of VIP vehicles, then Load Control is to instruct the Whitehouse Gate (WHG) to direct the vehicles to the long-stay car park and for the passenger to report to the Ops Building Passenger Reception. However, at the DAMO’s discretion, they may be directed airside.

5. **Civilian Passenger Movements.** The conditions of operation for the Premier Passenger Service (PPS) are detailed in the license between RAF Northolt and the provider. Only dedicated Passenger Handling vehicles are allowed airside access. No other civilian passengers or companies are allowed direct access airside unless OC Ops Wg or the Senior Air Movements Officer (SAMO) has granted prior authority

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<sup>7</sup> Royal or high level governmental only; high ranking military only by exception.

## **AERODROME USERS – VEHICLE AND PEDESTRIAN CONTROL ORDERS**

### **OTHER USERS OF RAF NORTHOLT AERODROME**

1. **QCS 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.
2. **Orders for Organised Running/Marching on the Aerodrome.** Prior approval is required from the ATCO IC for QCS 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 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 Air System movement.

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

3. **Military Working Dogs (MWD) Training.** Station based MWD require a training area in the proximity of the kennels. This training may involve attack dogs being released from their chain. MWD may utilise the grassed area between the MWD Section and the transmitter masts, or the dedicated training area on the grassed area opposite the Fire Section Fire Simulator across the road from the MWD Section. When notified by other users of their intention to operate on the movements area in the vicinity of the MWD Section, the ATCO IC is to contact the MWD Section with details of the other proposed activity. If a conflict of usage arises, MWD have priority over all other sections other than QCS, DJCC and AWCU. Priority between the MWD and QCS is dependent upon the operational requirement of the training. The ATCO IC is to judge which training is the most urgent. AWCU and ABC as Flight Safety critical activity has primacy over all.

4. **RAF Northolt Model Air System Club.** The Northolt Model Air System Club may operate from the aerodrome at weekends and public holidays when the aerodrome is operating a reduced number of Air System movements (outside the published times for commercial movements) and at other times when prior permission has been obtained from SATCO, DSATCO or the ATCO IC. The club will use the football pitch as their operating area, up to an estimated height of 500 ft AGL and will appoint a Safety Officer who is to telephone ATC for prior approval for club flying. The Safety Officer is to notify ATC of the intent to fly and provide a mobile phone number. All models must be landed on receipt of a "cease operations" call from ATC. RW traffic may be accepted and coordinated by RAF Northolt during model Air System activity.

5. **Civil Model Flying Club.** A civil model flying club (The Flying Fish) operates in the field outside the perimeter fence, behind the football pitch (Crash Map coordinate A3-4), or at an alternative location agreed with the SATCO, DSATCO or ATCO IC. The model Air System can be flown up to an estimated height of 500 ft AGL. RW traffic may be accepted and coordinated by RAF Northolt during model Air System activity.

~~6. **Air Cadet Karting.** No 14(F) Sqn Air Cadet Karting Club may operate from the aerodrome at weekends, evenings and public holidays when the aerodrome is operating a reduced number of Air System (outside the published hours for commercial movements) and at other times when prior permission has been obtained from SATCO or DSATCO. Karting will take place on the ATC MT Route between the MWD Section and Tower Crossing point of Taxiway Foxtrot, including the 2 disused Air System parking bays adjacent to the ATC MT Route (Crash Map coordinate F7), or at a suitable alternative location agreed with the SATCO or DSATCO. No 14(F) Sqn Air Cadet Karting Club will appoint a Safety Officer who is to telephone ATC for prior approval for any karting sessions and give a suitable mobile number for the nominated Safety Officer. No karting is to take place before 0900L or after sunset/2200L (which ever time is earlier). On completion of a Karting session a FOD sweep is to be conducted by the club over the track and parking areas prior to vacating the Track and ATC are to be informed (if open). No pedestrian activity is permitted out with the Track perimeter or elsewhere on the aerodrome. The ADC is to ensure that:~~

~~a. No 14(F) Sqn Air Cadet Karting Club is in possession of a serviceable mobile phone whenever they wish to kart when the aerodrome is open and the Safety Officers has been briefed on Air System movements.~~

~~b. All drivers are to hold a valid aerodrome driving permit and all driving activities to and from the Kart Track are to be conducted in accordance with aerodrome driving regulations.~~

~~If at any time ATC requires the 14(F) Sqn Air Cadet Karting Club to cease operations urgently, instructions are to be passed to the Safety Officer by the nominated phone number, karting is to cease immediately. All karting is to be conducted in accordance with the Kart Club's Op Order and SOP and all staff/parents transit to/from the Track must be in receipt of a valid Aerodrome Driving Permit, or be escorted by a person holding such a permit. Appendix 1 to this Annex has a map of the Karting Club.~~

Contact ATC on ext 8228 for further details.

## **STATION SADDLE CLUB**

7. **Times of Operations.** The Saddle Club will be permitted to use the aerodrome when there are no planned movements (although Station Flt may be on standby). However, for the safety of all aerodrome users the Saddle Club will not be permitted to use the aerodrome after dusk.

8. **Permission for Aerodrome Access.** The Saddle Club will only be allowed access to the aerodrome with prior permission from ATC on ext 8227. Prior to aerodrome closure, ATC is to phone the Saddle Club and advise them that full access to the red route (see figure 1 below) is granted. If the Saddle Club is closed an answer phone message will be left stating the date and time of aerodrome closure and when the aerodrome is planned to re-open. If ATC is closed and the Saddle club have received an answer phone message with permission to use the aerodrome the lead rider is to call the Fire Section on ext 8301 to inform them of the planned finish time of the ride, how many riders are out on the aerodrome and provide a mobile telephone contact number. If the Fire Section cannot be contacted, the hack is not to use the Red Route. OIC Saddle Club is to ensure the Saddle Club telephone has answer machine capability.

9. **Priority.** Air System movements have priority over all Saddle Club activities. Any unplanned priority movements will result in the Saddle Club being directed to vacate the aerodrome immediately.

10. **Other Aerodrome Activities.** Permission to use the aerodrome may be denied if the area is being utilised by another activity, such as karting or model Air System flying; decisions will be made on a first come first served basis. Service activities such as police dog patrols and QCS/Regt Flt aerodrome runs will take priority over leisure activities. SATCO or the ATCO IC may remove the right to use the aerodrome without prior notice in the interest of flight safety or operational requirements.

11. **Saddle Club-related FOD.** During the aerodrome inspection the ADC controller is to be extra vigilant when looking for FOD on aerodrome surfaces adjacent to the Saddle club route. Any FOD is to be removed and reported to OIC Saddle Club at the earliest opportunity.

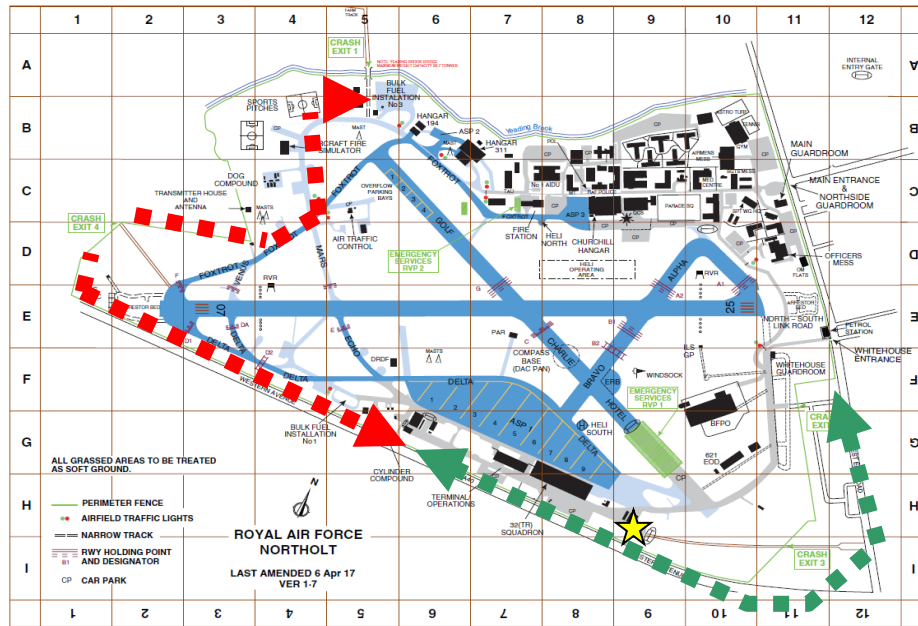


Figure 1 – Saddle Club Routes

12. **Routing.** The Saddle Club must remain clear of the Runway and taxiways at all times. The approved route is highlighted above in red and green.

- a. **Green Route.** This route does not require ATC permission.
- b. **Red Route.** This route requires ATC permission iaw para 6.7.2. The red route follows on from the green route towards the western end of the aerodrome along the pathway between the arrestor bed and the ILS Localiser and joins the grassed area west of taxiway F. The Saddle Club are to route between the Air Traffic Tower and the Dog Section on the grass adjacent to the MT route. The route reaches as far as the Tanker Pool and then turns back to retrace its steps to the Saddle Club. The lead rider is to carry a mobile telephone at all times when on the Red Route.

13. **Briefing of Saddle Club Members.** OIC Saddle Club is responsible for making sure all personnel using the aerodrome are fully briefed on the following:

- a. The requirement that the lead rider is to contact ATC before leaving the Saddle Club to ensure permission to proceed is granted. If ATC is closed, then the Saddle Club will be allowed access to the aerodrome if they are in receipt of a message from ATC stating closure and have left appropriate details with the Fire Section.
- b. The lead rider is to carry a copy of the Saddle Club Riding Areas Map and ATC/Fire contact numbers when on the Red Route.
- c. A contact number must be left with ATC in case of emergency; this number must be available throughout the duration of the ride. If ATC is closed this number should be left with the Fire Section along with number of riders and planned duration of the ride.
- d. The requirement that all members of the Saddle Club and horses are to remain at least 1m clear of all aerodrome equipment and lighting and that any damage should be reported to ATC immediately.

- e. That in the event of an emergency, when ATC is manned, the lead rider is to phone 0208 833 8227/8 or Ext 333 from a Station landline.
- f. The requirement that hi-visibility vests are worn by the lead and end riders at all times.
- g. FOD Hazards and FOD collection.
- h. Saddle Club members are to inform ATC on ext 8227/8 or if ATC is closed the Fire Section on ext 8301, stating that the ride is complete. On opening up the tower ATC will confirm details of the hack with the Fire Section.

KARTING CLUB MAP



Wildlife Management (Birds). Orders

[LINK](#)

## **WILDLIFE MANAGEMENT – ORDERS**

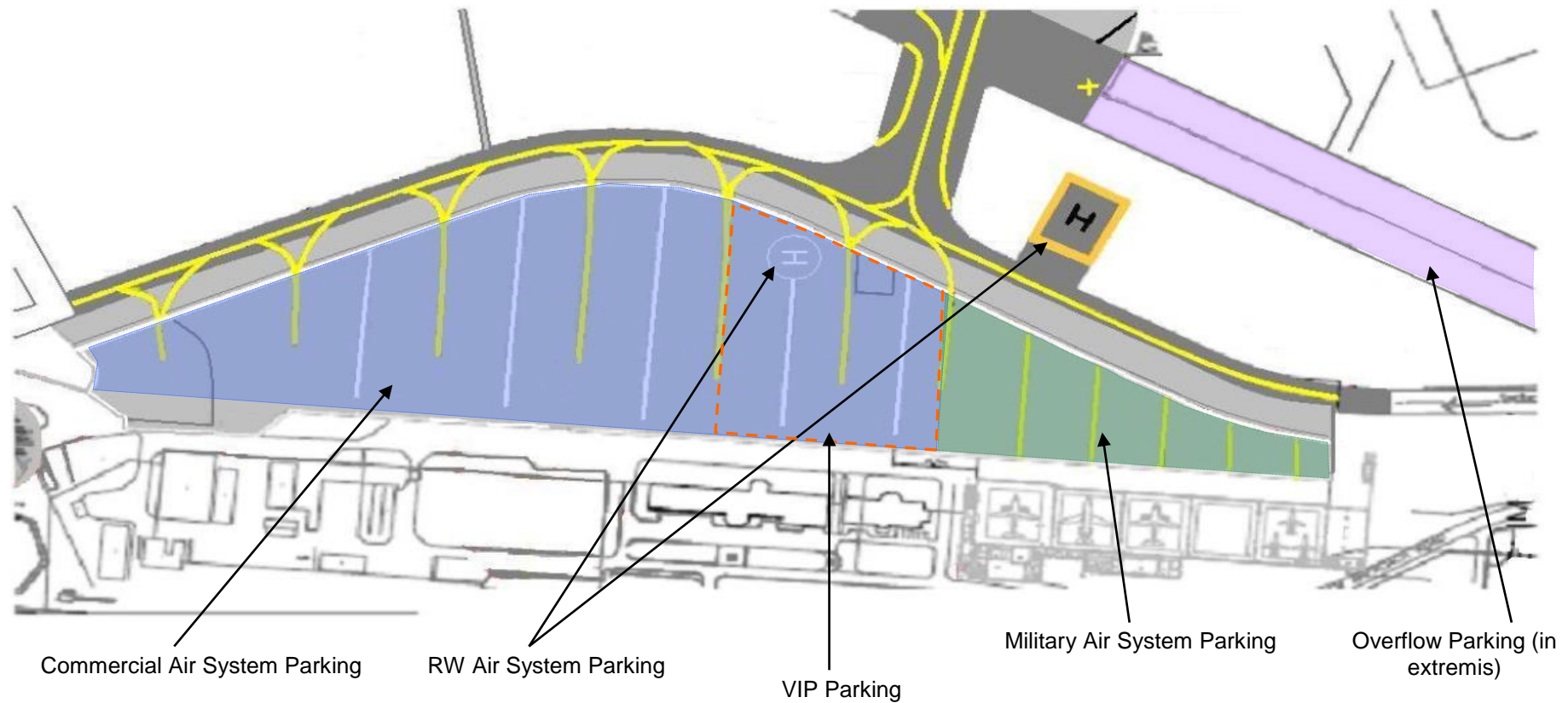
1. As recommended by CAP 772 – Wildlife Hazard Management at Aerodromes and RA 3270 – Aerodrome Wildlife Control, SATCO and the contracted AWCU have produced the Wildlife Control Management Plan.
2. The Aerodrome Wildlife Control Unit are contactable on 020 8833 8117, NOR-OPSAWCUSupervisor@mod.gov.uk or through ATC on 020 8833 8223 and are required to:
  - a. Assess and effectively minimise the local wildlife hazard to Air System through a coordinated wildlife control effort on the Station.
  - b. Record and collate information on wildlife concentrations and movement patterns both on the aerodrome and within its safeguarded zone.
  - c. Liaise with Station executives, Property Manager representatives, local authorities and landowners and tenant farmers whose land abuts the aerodrome, concerning such matters as the identification and dispersal of local wildlife concentrations, and the elimination of wildlife food sources and other topographical features which might attract wildlife to the aerodrome vicinity.
  - d. Coordinate the use of wildlife dispersal equipment and materials and ensure that their use is properly controlled in accordance with current regulations.
  - e. Ensure that all wildlife control equipment is properly serviced in accordance with current servicing schedules and that any unserviceability is rectified promptly.
  - f. Ensure that all wildlife control personnel are correctly trained in the use of wildlife dispersal equipment and its safe handling.
  - g. Ensure that wildlife hazard warnings are issued in accordance with the procedures published in FLIPs.
  - h. Attend Station Safety Management Committee meetings and report any general concerns or wildlife related issues.
  - i. Ensure all wildlife strikes are reported on a DASOR.
  - j. Seek specialist advice whenever necessary from DEFRA or Air-1GpBM-A35AirfieldsSO2@mod.gov.uk.
  - k. Supervise the maintenance of the Wildlife Control Log.
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, whilst maintaining the ability to provide the full suite of air traffic services

RAF Northolt Unit Spillage Response Plan

[LINK](#)

### AIR SYSTEM PARKING DIAGRAM

1. The diagram below shows the parking areas on ASP 1. Lines are numbered 1-9, line 1 being at the left of the diagram. Each line has a number marker to assist Air Systems on arrival at the ASP 1. All Air Systems will be marshalled by VASS, without exception.



## **LOW VISIBILITY PROCEDURES (LVP) – ORDERS<sup>8</sup>**

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

**2. Visibility Condition One.** Reported Met visibility is less than 1600m – 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. Rotary AS 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.

**3. 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 AS or vehicle may be permitted to taxi/proceed within each LVP area at a time unless:

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

(ii) Vehicles are notified of other vehicles/AS 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 NSMG and WHG of the NSLR closure. When conditions improve to LVP1 the NSMG 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) Sweep 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.

(e) 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<sup>9</sup>.

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<sup>8</sup> [RA 3274 – LVP](#).

<sup>9</sup> ICAO Annex 14 Para 5 (5.3.20.1a)

(f) Only operational essential vehicles are to be permitted access to the manoeuvring area and all vehicles are to use dipped headlights.

(g) The following sections are to be informed of the restrictions by the VCR Assistant:

- (i) AQUILA GR.
- (ii) Aerodrome Electricians.
- (iii) Fire Section.
- (iv) Medical Centre.
- (v) MWD Section.
- (vi) Stn Flt.
- (vii) DJCC (Hangar 311).

(h) The North Side Guard Room are to be instructed to display Low Visibility Procedures in Force on the Stn entrance LED board.

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

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

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

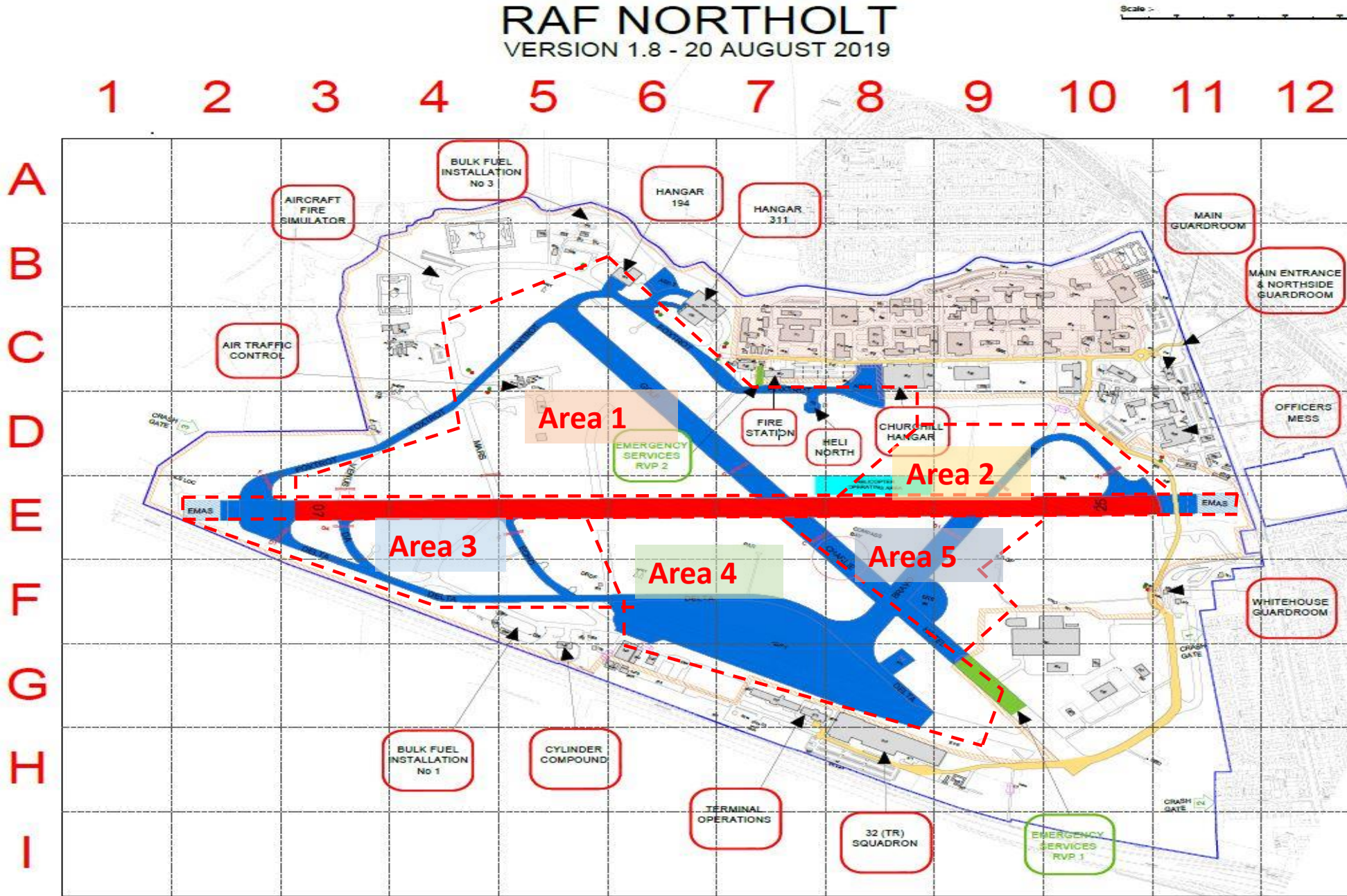
- (i) Stn Based AS may taxi without a Follow Me vehicle at their discretion.
- (ii) All other AS are to be escorted to the Rwy by a Follow Me vehicle

(c) A station wide broadcast on the tannoy & MRE is to be made:

(d) All vehicles (including VASS and passenger movement vehicles) requiring access to the ASP are to be in contact with ATC.

Annex EE to  
RAF Northolt  
Defence Aerodrome Manual

Airfield Low Visibility Procedure Areas



General Orders – Terms and Conditions / Use of MOD Aerodromes by civil Air Systems.

[LINK](#) and [www.londonvipairport.com](http://www.londonvipairport.com)

Breach of Terms and Conditions. Orders

LINK TBC

## **THUNDERSTORM AND STRONG WIND PROCEDURES – ORDERS**

1. Thunderstorm warnings criteria are as follows:
  - a. **General Thunderstorm Warning** - Issued to highlight that thunderstorms are expected in the area at some point. Level remains low.
  - b. **Level Moderate Thunderstorm Warning** - 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. **Level High Thunderstorm Warning** - A thunderstorm is occurring or is expected over the site in the immediate future.
2. The RAF Northolt MET Office Issue the Thunderstorm and Strong Wind Warnings as follows:
  - a. **Thunderstorm – General/Level Low**

VASS via phone call (ext 8969) and hand delivery  
Northolt ATC via fax (02088 338229 or NOR-OPSATCGpMailbox@mod.gov.uk)  
Ascent Refuellers via email  
RAF(U) Swanwick via fax (01489 612558)  
First Line via fax (95233 8856)  
Eng Ops via fax (95233 8362)  
Northolt Ops room via email (NOR-NORTHOLTOps@mod.gov.uk)  
Station Refuellers via fax (95233 8739)  
Stn Flt via fax (95233 8417) with phone call notification (ext 8452/8453)  
32 Sqn Duty Pilot via email (32Sqn-DutyPilotOps@mod.gov.uk)
  - b. **Thunderstorm – Level Moderate**

VASS via phone call (ext 8969) and hand delivery  
Ascent Refuellers via email  
RAF(U) Swanwick via fax (01489 612558)  
Northolt ATC via fax (02088 338229 or NOR-OPSATCGpMailbox@mod.gov.uk)  
Eng Ops via fax (95233 8362)  
Fire Section via fax (95233 8353) with phone call notification (ext 8301)  
First Line via fax (95233 8856)  
Northolt Ops room via email (NOR-NORTHOLTOps@mod.gov.uk)  
Stn Flt via fax (95233 8417) with phone call notification (ext 8452/8453)  
Station Refuellers via fax (95233 8739)
  - c. **Thunderstorm – Level High**

VASS via phone call (ext 8969) and hand delivery  
Ascent Refuellers via email  
RAF(U) Swanwick via fax (01489 612558)  
Northolt ATC via fax (02088 338229 or NOR-OPSATCGpMailbox@mod.gov.uk)  
Eng Ops via fax (95233 8362)

Fire Section via fax (95233 8353) with phone call notification (ext 8301)  
First Line via fax (95233 8856)  
Northolt Ops room via email (NOR-NORTHOLTOps@mod.gov.uk)  
Stn Flt via fax (95233 8417) with phone call notification (ext 8452/8453)  
Station Refuellers via fax (95233 8739)

**d. Strong Wind**

VASS via phone call (ext 8969) and hand delivery  
Ascent Refuellers via email  
Northolt ATC via fax (02088 338229 or NOR-OPSATCGpMailbox@mod.gov.uk)  
Eng Ops via fax (95233 8362)  
Fire Section via fax (95233 8353) with phone call notification (ext 8301)  
First Line via fax (95233 8856)  
Northolt Ops room via email (NOR-NORTHOLTOps@mod.gov.uk)  
Stn Flt via fax (95233 8417) with phone call notification (ext 8452/8453)  
Station Refuellers via fax (95233 8739)  
RAF(U) Swanwick via fax (01489 612558)

**Note: All faxes and emails are automatically disseminated through the RAF Northolt Met Office comms equipment.**

Electrical Ground Power Procedures. Orders

[LINK](#)

## **AVIATION FUEL MANAGEMENT PROCEDURES – ORDERS**

1. The following fuel priorities apply at RAF Northolt<sup>10</sup>:
  - a. Priority 1 Military and State Air Systems
  - b. Priority 2 Other Government Department Air Systems
  - c. Priority 3 Aeromed Air Systems<sup>11</sup>
  - d. Priority 4 Commercial Air Systems<sup>12</sup>
2. Further detail on refuelling can be found in Section 4.4.2, 4.34g and 8.27.

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<sup>10</sup> Subject to discretionary change by the Aerodrome Operator or his nominated deputy.

<sup>11</sup> London Air Ambulance take priority as a Stn based Air System and will routinely be refuelled by contacted provider unless unavailable, then permitted to be refuelled by ASMT.

<sup>12</sup> In the first instance commercial Air System will be refuelled on a first come first served basis.

Jettison Area. Orders (N/A at RAF Northolt)

[LINK](#)

Compass Swing Area. Orders (Where present)

[LINK](#)

Explosive Ordnance Disposal Area. Orders (N/A at RAF Northolt)

**FOD PREVENTION, TRAINING AND AWARENESS – ORDERS**

1. Station FOD prevention, training and awareness details can be found in the RAF Northolt Air Safety Management Plan at the following link:

RAF Northolt Air Safety Management Plan

Dangerous Goods (DG) Procedures. Loading /Unloading. Orders

[LINK](#)

PP Hydrazine (H70) Leak (Where present). Orders (N/A for RAF Northolt)

Air System Arresting Mechanisms (Rotary Hydraulic Arrestor Gear (RHAG) /Portable Hydraulic Arrestor Gear (PHAG) / Barriers) etc. Orders (N/A at RAF Northolt)

Snow and Ice Operations. Orders

[LINK](#)

Force Protection Responsibilities. Force Protection (FP) Orders (To be kept separately due to security classification)

[LINK](#)

## **TASK RESOURCE ANALYSIS**

1. As defined within DSA DFSA 02, RAF Northolt has carried out a Task Resource Analysis (TRA) to assess the aerodrome ARFF response capability and to determine the minimum requirement of rescue and firefighting equipment, personnel and supervisory grades.
2. This TRA was completed in consultation between the HoE/AO and DFRMO to ascertain the optimum level of resource required to effectively manage a Credible Worst Case Scenario (CWCS). The outcome of the TRA has been agreed with the HoE/AO and should be shared with the local Fire and Rescue Authority(s) or Host Nation equivalent and Local Resilience Forums.
3. Dependent upon the role of the aerodrome it may be necessary to have carried out TRAs for a number of ICAO Aircraft Categories. TRA reports endorsed by the AO complete with all assessments are available via the hyperlinks below:
  - ICAO Aircraft Category Six AO endorsed TRA Report is located here
    - CWCS Workload Assessment for Scenario 1 is located here
    - CWCS Time Line Assessment for Scenario 1 is located here
    - CWCS Workload Assessment for Scenario 2 is located here
    - CWCS Time Line Assessment for Scenario 2 is located here
    - IRMP CWCS is located here

If required, copy above for each ARFF Category to be promulgated at the Unit.

## **ARFF ASSESSMENT REQUIREMENTS**

### **Response Area Assessment**

1. The operational objective of the ARFF service is to achieve response times of two minutes and not exceeding three minutes to any point of each operational runway, as well as to any other part of the operating area (response area), in optimum surface and visibility<sup>13</sup>.
2. Response time is considered to be the time between the initial call to the ARFF service, and the time when the first responding vehicle(s) is (are) in position to apply foam at a rate of at least 50 per cent of the discharge rate required as defined within Table of DSA DFSR 02.

RAF Northolt Response Area Assessment is located at [Response Area Assessment](#)

### **1000Mtr Assessment**

3. As defined within DSA DFSR 02 assessment of the approach and departure areas within 1000m of the runway threshold<sup>14</sup> should be carried out to determine the options available for rescue. In considering the need for any specialist rescue and access routes, the environment of the risk area, in particular the topography and composition of the surface should be considered.
4. Emergency access roads should be provided on an aerodrome where terrain conditions permit their construction to facilitate achieving minimum response times. Particular attention should be given to the provision of ready access to approach areas up to 1000 m from the threshold, or at least within the aerodrome boundary. Where a fence is provided, the need for convenient access to outside areas should be taken into account.
5. Where an aerodrome is located close to uneven ground or difficult terrain, and where a significant portion of approach or departure manoeuvres take place over these areas, the ARFF service will be expected to respond to incidents in these areas and should be appropriately resourced with specialist rescue/firefighting equipment and training.

RAF Northolt 1000Mtr Assessment is located at [1000Mtr Assessment](#)

### **Water Assessment**

6. Additional water supplies shall be provided. The objective of providing additional water supplies at adequate pressure and flow is to ensure rapid replenishment of ARFF vehicles. This supports the principle of continuous application of extinguishing media to maintain survivable conditions at the scene of an aircraft incident for far longer than that provided for by the minimum amounts of water defined in DSA DFSR 02. Additional water to replenish vehicles may be required in as little as five minutes after an incident.

RAF Northolt Water Assessment is located at [Water Assessment](#)

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<sup>13</sup>Optimum visibility and surface conditions are defined as daytime, good visibility, no precipitation with normal response route free of surface contamination e.g. water, ice or snow and aircraft movement restrictions.

<sup>14</sup> If required for rotary wing aircraft all undershoot/overshoot areas for the operating areas.

## **REDUCTION OF ARFF CATEGORY PROVISION**

1. 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.
2. The risk assessment is conducted using DSA DFSA 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.

All completed risk assessments are to be retained and can be located by utilising the following hyperlinks: [ARFF Reduction of Cover - Hazard Assessment - \(DDH\)](#)

Submission for Waiver

**RAF Northolt ASP 1 Operating Orders**

[LINK](#)