

**MOD St Athan** 

Defence Aerodrome Manual (DAM)

Military Aviation Authority



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Amendment No.	Amendment Date	Date of Incorporation	Name	Signature
1	12 Jan 2015	19 Jan 2015	S R THOMAS	S R Thomas
2	19 Jun 2015	22 Jun 2015	F MacFarlane	F MacFarlane
3	22 Sep 2015	22 Sep 2015	S R THOMAS	S R Thomas
4	18 May 2016	18 May 2016	S R THOMAS	S R Thomas
5	01 Oct 2016	01 Oct 2016	S R THOMAS	S R Thomas
6	07 Mar 2017	17 Mar 2017	S R THOMAS	S R Thomas
New Issue	21 Mar 2017	01 May 2017	S R THOMAS	S R Thomas
New Issue	26 Mar 2018	26 Mar 2018	F MACFARLANE	F MacFarlane

#### 4. Annexes

- Annex A Letter of Delegation.
- Annex B Safety Meeting Structure.
- Annex C Organizational Structure.
- Annex D List of Key Post Holders.
- Annex E Aerodrome Operating Hazard Log (AOHL).
- Annex F Formal Aerodrome Related Agreements.
- **Annex G** Aerodrome Safeguarding Waivers and Exemptions.
- Annex H Orders to cover all noise abatement procedures.
- <u>Annex I</u> Orders for temporary obstructions on or around any manoeuvring area that are considered to be a hazard to either Air System or vehicles.
- **Annex J** Orders for both the maintenance and safe operation of the RHAG.
- **Annex K** Orders for both the safe operation and maintenance of the barrier.
- Annex L Orders for the safe parking, manoeuvring, refuelling and servicing of Air System.
- **Annex M** Emergency Orders / Aerodrome Crash Plan.
- **Annex N** Orders for Disabled Air System Removal.
- Annex O Aerodrome Rescue and Fire Fighting Orders Serco Fire Safety Order Book.
- <u>Annex P</u> Aerodrome Rescue and Fire Fighting Training Area Orders (including ARFF Training Area Risk Assessments and Orders).
- Annex Q Air Traffic Control Orders (Operational).
- <u>Annex R</u> Orders for the reporting procedures to advise No 1 AIDU of any permanent changes to aerodrome information.
- Annex S Aerodrome Serviceability Inspections Orders.
- Annex T Aerodrome Technical Inspections Orders.
- **Annex U** Protection of Radar and Navigation Aids Orders.
- Annex V Surveillance Equipment Maintenance & Monitoring Orders.
- **Annex W** Navigation Equipment Maintenance & Monitoring Orders.
- Annex X Aerodrome Works Safety Orders.

- Annex Y Control of Entry and Access Control orders.
- **Annex Z** Aerodrome Users Vehicle and Pedestrian Control Orders.
- Annex AA Wildlife Management (Birds) Orders.
- **Annex BB** Wildlife Management Orders.
- Annex CC Handling of Hazardous Materials (Spillage Plan) Orders.
- **Annex DD** Air System Parking.
- **Annex EE** Low Visibility Operations (LVP) Orders.
- Annex FF General Orders Terms and Conditions/Use of MOD Aerodromes by civil Air Systems.
- **Annex GG** Breach of Terms and Conditions Orders.
- Annex HH Thunderstorm & Strong Wind Procedures Orders.
- Annex II Electrical Ground Power Procedures Orders.
- Annex JJ Aviation Fuel Management Procedures Orders. JSP317
- Annex KK Jettison Area Orders.
- Annex LL Compass Swing Area Orders.
- **Annex MM** Explosive Ordnance Disposal Area Orders.
- **Annex NN** FOD Prevention, Training and Awareness Orders.
- Annex OO Dangerous Goods (DG) Procedures Loading /Unloading Orders.
- Annex PP Hydrazine (H70) Leak Orders.
- Annex QQ Air System Arresting Mechanisms (Rotary Hydraulic Arrestor Gear (RHAG) / Portable Hydraulic Arrester Gear (PHAG) / Barriers) etc Orders.
- Annex RR Snow and Ice Operations Orders.
- <u>Annex SS</u> Force Protection Responsibilities Force Protection (FP) Orders (Kept separately due to security classification).

#### **FOREWORD**

## Foreword by MOD St Athan Aerodrome Operator

- 1. This document, the MOD St Athan Aerodrome Manual, describes the airfield at MOD St Athan including the management, physical characteristics, services available and operating procedures. The manual is written to inform both military and commercial aircrew and to provide a reference guide for personnel operating the airfield. The Aerodrome Manual conforms with the guidance provided by the Manual of Military Air Traffic Management (MMATM), which supports the Military Aviation Authority (MAA) Regulatory Article RA3018 (Sect 1–14). The manual is issued in conjunction with St Athan Air Orders and can be considered equivalent to the CAA CAP 168 Aerodrome Manual. The terms aerodrome and airfield are used interchangeably with aerodrome used in the titles in recognition of CAP 168 nomenclature.
- 2. Chapter 4 of the manual contains detailed information regarding the runway and instrument approaches, but **this should not be relied upon for final flight planning** and aircrew should continue to refer to AIDU and Navtech documents as well as NOTAMs for the most up to date information. The Aerodrome Manual outlines some aspects of the MOD St Athan Air Safety Management System; however, full details are contained in the MOD St Athan Air Safety Management Plan.
- 3. The master copy of the Aerodrome Manual is held by the MOD Aerodrome Operator and is available on the St Athan internet website at <a href="https://raf-beta-public.org/our-organisation/stations/mod-st-athan/flying-info/">https://raf-beta-public.org/our-organisation/stations/mod-st-athan/flying-info/</a> or on request from the Serco ATC on telephone no; Civ: 01446 798717 Mil: 95421 8717. Amendments to the manual will be made on a regular basis and the latest version published online.

S THOMAS B2 Aerodrome Operator MOD St Athan

#### **REVIEW PROCEDURE**

a. Owner: Aerodrome Operator

b. To be reviewed annually: Mar.

### **CHAPTER 1: INTRODUCTION**

1.1 **Regulatory Cross-Reference**. This Manual supports and must be read in conjunction with the following MAA Documents and Regulations, and other policy documents:

RA 1020(4) - Responsibilities of ADH-Facing Organizations

RA 1200 - Defence Air Safety Management

RA 1205(2) - Air System Safety Cases (Responsibilities of DH-Facing Organizations)

RA 1026 - Aerodrome Operator RA 1410 - Occurrence Reporting

RA 1430 - Aircraft Post Crash Management and Significant Occurrence Management

RA 1400 - Flight Safety

RA 2415 - Third Party Use of Military Airfields

ATM 3000 - 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)
 MADS - Manual of Aerodrome Design & Safeguarding (MADS)

Use of Military Aerodromes by British and Foreign Civil Aircraft

JSP 426 - Defence Fire Safety and Fire Risk Management AP 600 - Royal Air Force Information and CIS Policy<sup>1</sup>

- 1.2. **Purpose.** The purpose of the Defence Aerodrome Manual (DAM) is to provide, in a standardized format, a mechanism to inform both military and civilian operators of accurate aerodrome data that includes physical characteristics, available services, aerodrome hazards and operating procedures. It will also provide reference material 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 European Commission (EC) legislation EC 216/2008 (as amended at Annex Va)<sup>2</sup> and is to be read in conjunction with the documents set at Chapter 1, Para 1.1 of the DAM.
- 1.3 **Scope.** The DAM is to be used as a basic framework for AOs to develop their own bespoke Aerodrome Manual. The DAM is intended to be a living document in which AOs can add chapters and sections, dependent upon the complexity of the aerodrome. Note: AOs are to develop their own 'Foreword' and not use the one at the beginning of this document. A Defence Aerodrome Assurance Framework (DAAF) is to be contained within the DAM. The DAAF should cover all chapters and sub paras of the developed DAM to allow a record of full assurance at 1<sup>st</sup> / 2<sup>nd</sup> / and 3<sup>rd</sup> party level.
- 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)<sup>3</sup>, is also published in the DAM, the information must be identical. The AO is responsible for ensuring changes to Aeronautical Information are published according

<sup>&</sup>lt;sup>1</sup> The policies and regulations published as Chapters in this AP are mandatory for personnel at all Air Command Stns. However, other Top Level Budgets (TLBs) that wish to adopt any policy from this AP are to publish guidance on which Chapters are applicable to their subordinate organizations. Notwithstanding this, owing to CAA regulations and the MOD's self-regulatory position, personnel at <u>all</u> military aerodromes are to adhere to the policies covered in Chapter 3 - Maintenance and Responsibilities and Chapter 6 - Agreedomes.

<sup>&</sup>lt;sup>2</sup> Users are directed to the Consolidated version of Regulation (EC) No 216/2008.

<sup>&</sup>lt;sup>3</sup> The AIP is the primary source for Aeronautical Information.

to relevent procedures, and that these changes are mirrored in the DAM<sup>4</sup>. Both the DAM and the AIP have legal authority.

- 1.5 **Master Copy.** The master copy of the DAM is to be appropriately protected, held by the AO and made available on their Dii / MOSS / internet websites (to allow civil access). Amendments to the Manual must be made when changes occur and the latest version published online.
- 1.6 **Responsibilities of an Aerodrome Operator**. The AO will actively manage an aerodrome environment such that it accommodates the safe operation of Air System iaw with the requirements laid down in RA 1026 Aerodrome Operator. The DAM provides the basic framework upon which additional areas may be added. 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)) in order 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 at Chapter 1, Para 1.1.
    - ii. The AO will provide assurance that the DAM requirements are complied with at all times 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 MADS.
    - 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 organizations including, but not limited to, Air System operators, air navigation and ground handling service providers whose activities or products may have an effect on 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.

<sup>&</sup>lt;sup>4</sup> The Military AIP is amended through No.1 Aeronautical Information Documents Unit. The Civilian AIP is subject to a separate amendment process.

- 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 aircraft 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 JSP 426.
- xii. The AO will ensure that adequate aerodrome rescue and fire-fighting services (ARFF) are provided in accordance with JSP 426. Defence Fire Safety and Fire Risk Management. (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 MADS.
- 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:

Mr Steve Thomas, Aerodrome Operator Unit Safety and Assurance Cell MOD St Athan Barry Vale of Glamorgan CF62 4WA

Mil \$\alpha\$ 95421 8281 Civ \$\alpha\$ 01446 798281

Email: SAN SU-SPT Aero Op (Thomas, Steve B2) SANSU-SPTAeroOp@mod.uk

- 2.2 **Aerodrome Operators Authority.** The Station Commander MOD St Athan 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. The Station Commander delegates the routine management of the aerodrome to the Aerodrome Operator, through the Letter of Delegation.
- 2.3 **Letter of Delegation.** A copy of the Letter of Delegation is contained at Annex A.
- 2.4 **Safety Meeting Structure.** An organizational aviation safety meeting flow diagram is captured at Annex B.
- 2.5 **Organizational Structure.** An organization structure that identifies/outlines the organization of aerodrome operations is captured at <u>Annex C</u>.
- 2.6 **Key Post Holders.** A list of aerodrome key post Holders, including their post role and work contact numbers is captured at Annex D.
- 2.7 **Aerodrome Operating Hazard Log (AOHL)**. The MOD St Athan AOHL is captured at Annex E.
- 2.8 **Formal Aerodrome Related Agreements.** The MOD St Athan Formal Aerodrome Related Agreements are captured at Annex F.
- 2.9 Aerodrome Waivers, Exemptions and Alternative Acceptable Means of Compliance (AAMC). To cater for operational/training requirements and legacy issues, MOD St Athan has been issued waivers by the MAA to operate outside of the MADS regulations. To aid understanding and avoid confusion, visiting aircrews should be aware that the following waivers exist and can be found at Annex G:
  - a. MAA/Waiver/2013/26 dated 19 Aug 13: A Waiver had been granted that objects do not project into the airspace above defined limits (Obstacle Limitation Surfaces). A comprehensive safety assessment has been completed including supporting comments by ATM Force Command and acceptance by the DDH that the risk is tolerable and ALARP. All infringements are lit with obstruction lights and publicised within the relevant flight information publications. This waiver is valid for VFR daytime only operations until 31 March 2019.

- b. MAA Waiver dated 14 Feb 14 has been granted for Night VFR operations and is to be read in conjunction with the Day VFR Waiver listed above.
- c. MAA Waiver dated 3 Apr 17 has been issued regarding ILS usage and is valid until 31 Mar 19.
- 2.10 **Orders.** All separate orders, requested in the DAM, are to be located as an Annex so that they can be amended without having to reissue the whole document following any amendment.
- 2.11 **Frequent Aerodrome Users**. A list of Air System operators (both civil and military) that utilise the aerodrome frequently has been produced and is at Annex Q, Part 1.1.

## **CHAPTER 3: AERODROME LOCATION AND LAYOUT**

3.1. **Aerodrome Location.** MOD St Athan is located off the B4265, approximately 3 miles west of Cardiff Airport and some 20 minutes' drive from the M4. There is a local train station in Llantwit Major with direct links to Cardiff to the east and Bridgend to the west.

## 3.2. Local Area Map.



Figure 1 – Local Area Map.

## 3.3 Aerodrome Crash Map.

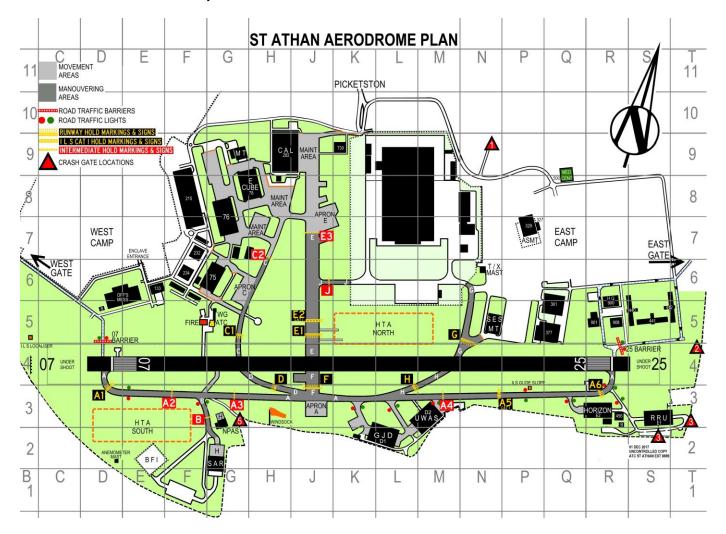


Figure 2 – Aerodrome Crash Map.

## **CHAPTER 4: AERODROME DATA FACILITIES & CHARACTERISTICS**

4.0. The AO is to ensure all aerodrome data provided is accurate and information contained in the Aerodrome Manual is to mirror the equivalent information published in other military aviation publications. The following information is set up to duplicate current AIP format to allow for easier amendment to both documents, however this document is uncontrolled and information is not to be relied on, solely, for flight planning purposes (refer to the published/online AIP).

4.1 LOCATION INDICATOR AND NAME							
EGDX – ST ATHAN							
4.2. AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA							
4.2.1	ARP Co-ordinates and site at AD:	N51 24.17.10 W003 26.08.71, RWY 07/25 intersection with Taxiway E/F					
4.2.2	Direction and distance from City:	10nm WSW of Cardiff city.					
4.2.3	Elevation/Reference Temperature:	164ft / 20°C					
4.2.4	Magnetic Variation/Annual Change:	1°45'W (FEB 17) / 0° 09' decreasing.					
4.2.5	Geoid Undulation at AD Elev Position:						
	AD Administration: Address:	ATC MOD St Athan Barry Vale of Glamorgan CF62 4WA					
4.2.6 Telephone:  Fax: Email: Web site:		Aerodrome Operator (MOD): 01446 798281. Civ: 01446 798889 / 01446 798717 (ATC). Mil: 95421 8717 (ATC). Civ: 01446 798526 (ATC). Mil: 95421 8526 (ATC) ATC: stathanatc@serco.com http://www.raf.mod.uk/modstathan/flyinginfo					
4.2.7	Types of Traffic Permitted (IFR/VFR):	IFR arrivals. Departures VFR & SVFR. See AD 4.22 item 6.					
4.2.8	Remarks	Nil.					
4.3. OPE	RATIONAL HOURS						
4.3.1	AD:	ATC available 7 days a week. Winter 0900-1700. Summer 0800-1600. PPO 24 Hrs. Extension of ATC hours by arrangement.					
4.3.2	Customs and Immigration:	By arrangement.					
4.3.4	Health and Sanitation:	Nil.					
4.3.5	AIS Briefing Office:	HO.					
4.3.6	ATS Reporting Office (ARO):	HO.					
4.3.7	MET Briefing Office:	Nil.					
4.3.8	ATS:	HO.					
4.3.9	Fuelling:	HO.					

4.3.10	Handling:	HO.					
4.3.11	Security:	H24.					
4.3.12	De-Icing:	Nil.					
4.3.13	Remarks:	Host sponsor should request extension with Welsh Govt. Contact tel: 01446 753032. Mil operators who wish to operate outside ATC hrs should request permission from AD operator (MOD). Contact tel: 01446 798281. Rotary acft movements by NPAS and HM Coastguard helis outside ATC hrs.  A fuel bowser and a safety person can be provided on request to assist visiting aircrew with refuelling.					
4.4 HAND	LING SERVICES & FACILI	TIES					
4.4.1	Cargo Handling Facilities:	Nil.					
4.4.2	Fuel / Oil / Hydraulic Types:	100LL AVGAS, F34.					
4.4.3	Fuelling Facilities / Capacity:	2 x 5000 ltr AVGAS. 1 x 9000 ltr AVTUR. 1 x 17400 ltr AVTUR.					
4.4.4	Oxygen:	Nil.					
4.4.5	De-Icing Facilities:	Nil.					
4.4.6	Starting Units:	Contact sponsor to confirm.					
4.4.7	Hanger Space for visiting Air Systems:	Limited, by arrangement. Mil contact: 01446 798281. Civ: 01446 753032.					
4.4.8	Repair Facilities for visiting Air Systems:	and GJD.					
4.4.9	Remarks:	All visiting acft require to be sponsored by one of the resident AD organisations: MOD; Cardiff Aviation Ltd; Horizon Aircraft Services; eCube; Bristow Helicopters; NPAS, and GJD.					
4.2.8	Remarks	Nil.					
4.5. PAS	SENGER FACILITIES						
4.5.1	Accommodation:	Accommodation only in Service messes. Hotels in vicinity.					
4.5.2	Medical Facilities:	Station Medical Centre.					
4.5.3	Remarks:	Nil.					
4.6. RESC	CUE & FIRE FIGHTING SER	RVICES					
4.6.1	AD Category for Fire Fighting:	RFFS ICAO 4.					
4.6.2	Rescue Equipment:	As required for RFFS ICAO 4 and above.					
4.6.3	Capability for removal of disabled aircraft:	MOD acft will be dealt with by MOD resources. Civ acft using outside resources in conjunction with acft operator.					
4.6.4	Remarks:	RFFF Cat 5/6 on request. Cat 7 and above by arrangement.					
4.7. SEA	SONAL AVAILABILITY - CL	_EARING					
Nil.							
4.8. APR	ONS, TAXIWAYS AND CHE	ECK LOCATIONS DATA					

		Ар	ron		Surface			Strength	
4.0.4 Annua o Confessor		Alpha		Concrete		LCG IV			
4.8.1	8.1 Aprons Surfaces: Charl		arlie		Concrete		LCG V		
		Ech	าด		Concrete		LCG V		
		Tax	kiway	Wic	lth	Surfa	ce		Strength
		AD	H	14n	n		phalt with		LCG IV
							ete end		
4.8.2	Taxiway width, surface and strength:	EF G		44n 14n			alt/Conc alt/Conc		LCG V
	Surface and Strength.	C		14n			alt/Conc		LCG IV
		В		9m		Aspha		1010	LCG V
		J		16n	n	Conci			LCG IV
4.8.3	Altimeter Check Location and Elevation:	N/A.							
4.8.4	VOR & INS Checkpoints:	Nil.							
4.9 SURF	ACE MOVEMENT GU	IDANC	E AND	CON	TROL SYS	ТЕМ М	ARKING	GS	
4.9.1 Taxiway guide lines &		Nil. Yellow taxiway markings & parking slot guidance on Apron Echo.							
4.0.0	Runway and taxiway		Runwa	Runway: Marked as a Precision Instrument runway.					
4.9.2	markings & lighting:		Taxiwa	Taxiway: Standard markings.					
4.9.3	Stop Bars:		Nil.	Nil.					
4.9.4	Remarks:		Nil.	Nil.					
4.10 AER	ODROME OBSTACLE	S							
Wenvoe T	ΓV mast Γ	V51 27	33.46 V	V003	16 53.77		1,294ft	elev	Lit.
St Hilary r			26.78 W003 24 10.63 1,161f			Lit.			
Aberthaw	,					Lit. Lit.			
chimney									
	Please refer to the "N	1easure	ed Heigl	nt Su	rvey" data o	n the M	/IIFLIP \	website.	
4.11. ME	TEOROLOGICAL INF	ORMA	ΓΙΟΝ						
4.11.1	11.1 Associated MET Office:			liham					
4.11.2	1.2 Hours of Service: MET Office outside hours			HO. 					
4.11.3 Office Responsible for TAF information: Periods of validity:				Odiham. 9 Hours					
4.11.4 Type of landing forecast: Interval of issuance:									
4.11.5	Briefing / consultation			Self-briefing / telephone.					

	provided:	
4.11.6	Flight Documentation: Language(s) used:	Charts / TAFs / METARS. Abbreviated plain language text.
4.11.7	Charts and other information available for briefing or consultation:	Actual / Forecast surface analysis and upper wind charts, rainfall radar, thunderstorm location.
4.11.8	Supplementary equipment available for providing information:	PC data display – MOMIDS, internet access.
4.11.9	ATS units provided with information:	Cardiff.
4.11.10	Additional information (limitation of Services etc.):	Nil.
4.11.11	Remarks:	Nil.

	4.12. OPERATIONAL HOURS								
Designation s Runway Number	N	ie and Mag aring	Dimensions of Runway (m)		Strength ( and surfa Runway Stopwa	ce of and	Threshold co-ordinates		Threshold elevation, highest elevation of TDZ of precision APP Runway
07	07 N 25	073.05° GEO 1828 074.92° MAG 253.07° GEO		PCN 40/F/C/W/T 8x45 Grooved asphalt		N51 24 10.54 W003 26 43.16		160.9ft TDZE160.9ft	
25	25	4.93° IAG	1828	PCN 40/F/C/W/T Grooved Asphalt		N51 24 27.189 W003 25 15.81		133.4ft TDZE 152ft	
25	25	53.04	1828x45 5997x148		PCN 40/F/0 Grooved A		N51 24 27.18 W003 25 15.81		133ft TDZE152ft
Desig & Slope Rwy / Swy		Dimer	way nsions n)		earway ensions (m)	Stri	p Dimensions (m)		OFZ
07 – 0.45%	D	17 >	< 43	137	′ x 180	1	1900 x 150		-
25 – 0.45%	U	12 >	< 45	260	) x 180	1	1846 x 150 -		-
4.12.12		Arresti Systen	_				Nil.		
4.12.13		Remar	ks:	s: White edge marking is not at edge of paved surface but in 43m in width,			ace but indicates		
4.13. DECLA	RED	DISTA	NCES						
Runway	Т	ORA (m)		ODA (m)	ASI (m		LDA (m)		Remarks

	ONCONTROLLED COFT WHEN FRINTED DAW									
	07	1828	1846			1828	1777			-
	25	1828	1840			1840	1816			-
4.14 A	APPROAG		UNWAY LI	GHTII	NG		T			
Run- way	Approad Lighting Type Length Intensity	ng Colo	PAPI VASIS Angle Distance from Thr (MEHT)	TDZ Ligh Leng	ting	Runway Centre-line lighting Length Spacing Colour Intensity	Runway Edge lighting Length Spacing Colour Intenisty	y I lig Co	unwa End hting blour ingba	Stopway lighting Length (M) Colour
1	2	3	4	5		6	7	8		9
07	CL1B 1500ft /457m HI	n Uni Hi	PAPI 3° Port 202m Stbd 212m (25ft)	-			Elevated flush at intersection with F/E White HI Uni, with White LI Omni component, 30m, last 2000m amber.		Red Uni HI	
25	CL2B 1500ft/4 m HI		PAPI 3° Stbd 294m (26ft) Port NIL	-			Elevated flush at intersection with F/E White HI Uni, with White LI Omni component, 30m, last 2000m amber.		Red Uni HI	
R	emarks:	Pilot	Controlled Li				e ATC hrs, activat		wy edge	e and stop
4.15.	OTHER	LIGHTING	, SECOND				n on for 15 minute	S.		
4.15.1	A B cha	n / I Bn loc	•		lil					
4.15.2	4.15.2 Anemometer location & lighting:				SW corner of airfield. Unlit.					
4.15.3 Taxiway edge & centre line lighting:			e ar lig	Blue edge lighting on Taxiways A and B (elevated on B) and on taxiway C from Rwy to Apron CD. Nil centre lighting.						
4.15.4		ondary po tch over tir	wer supply: ne:		es. 2 seco	nds.				
4.15.5	4.15.5 Remarks: Taxiway Bravo and western portion of taxiway A edge lights are left on outside ATC hours.					edge				
4.16 H	HELICOP	TER LANI	DING AREA		jiilo ai	C ICIT OIT OULS!	ac ATO Hours.			
					1	Nil.				

Limits   L	ertical nits 17.2 500ft AL SFC	Airspace Class 4.17.3			
4.17.1 4.17 St Athan Local Flying Zone (LFZ). N51 25 24 W003 33 07 – N51 2456 W003 25 23 – N51 24 06 W003 23 02 – N51 22 47 W003 23 02 – N51 21 24 W003 30 42 – N51 22 09 W003 33 1,5	17.2 500ft	4.17.3			
N51 25 24 W003 33 07 - N51 2456 W003 25 23 - N51 24 06 W003 23 02 - N51 22 47 W003 23 02 - N51 21 24 W003 30 42 - N51 22 09 W003 33 1,5		D			
·		D			
Thence clockwise by the arc of a circle radius 8nm centred on N51 23 48 W003 20 36 from N51 22 09 W003 33 06 – origin. (See EGDX AD 2.22- Flight Procedures for info).					
St Athan ATZ. Circle 2nm radius centred on N51 24 19 W003 26 00, mid-point of the longest rwy (07/25) except that part of the circle east of a straight line joining – N51 25 32 W003 23 28 and N51 22 41 W003 24 10.					
4.17.4 ATS Unit Callsign: St Athan. English.					
4.17.5 Transition Altitude: 6,000ft Cardiff QNH.					
4.17.6 Remarks:  Outside St Athan ATC hrs departing helicopters contact Cardiff Twr on 133.1 prior to departure for clearance to enter Cardiff Controlled airspace.					
4.18 ATS COMMUNICATION FACILITIES					
Service Designation Callsign Frequency MHz Hours of Operation Winter Summer	Remarks				
4.18.1 4.18.2 4.18.3 4.18.4 4	4.18.5				
APP         Cardiff Approach         119.150 125.850*         H24         H24         */*	As directe	ed by ATC			
TWR St Athan 118.125 HO HO */	*As directed by ATC				
Ground	*As directed by ATC				
St Athan Information 340.450 HO HO	-				
ATIS Cardiff ATIS 132.475 H24 H24		-			
4.19 RADIO NAVIAGATION AND LANDING AIDS					
Type Category (Variation)  Ident Frequency  Winter Summer Site co-ordinates	Elevation of DME Trans- mitting Antenna	Remarks			
4.19.1     4.19.2     4.19.3     4.19.4     4.19.5       DME     I-SAT     111.150 Ch 48Y     H24     H24     H24   W003 25 30.27	4.19.6	4.19.7 Rwy 25: DME SAT			

							reads 0d at Thld
RDF	Cardiff APP	119.150	НО	НО	N51 24 33.24 W003 24 47.73		
Glidepath					N51 24 21.79 W003 25 30.12		3° ILS
Localiser		-	-	-	N51 24 07.64 W003 26 58.36	1	LOC 255°
4.20 AEDODDOME CEOCDADUICAL AND ADMINISTRATIVE DATA							

#### 4.20. AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

## 1 Airport Regulations

- a. St Athan is a Government aerodrome regulated by the Ministry of Defence. No guarantee can be given that this airfield meets the requirements of ICAO Annex 14 Volume I and II. Operators are to satisfy themselves that they have met all the requirements of the UK Air Navigation Order 2009 and EU-OPS.
- b. The CAA regulates the safety of civil registered aircraft using St Athan.
- c. PPO. Visiting civil aircraft must book in with a based aerodrome operator who will act as a sponsor.
- d. Pilots are warned when landing on runway 25 in strong north westerly winds turbulence may be encountered.
- e. Ground running of aircraft engines for test or maintenance purposes is permitted between the hours of 0800-2000(local time) only. ATC require notification and additionally ATC approval required if conducted outside an operators demised area. Operators should advise whether attendance of the Aerodrome Fire Service is required for the duration of the engine run.
- f. Non radio aircraft not permitted.

#### 2 Ground Movement

- a. Traffic lights control vehicular traffic crossing the undershoot of Rwys 25 & 07 during ATC operational hrs only.
- b. Traffic lights control vehicular access to taxiway A during ATC operational hours only.
- c. Aircraft larger than B757-200 will be pushed back onto the departure runway threshold prior to departure and towed off the runway after landing.
- d. Commanders of aircraft that cannot backtrack the runway if unable to vacate at taxiway Echo turn off should advise ATC and their sponsor organisation prior to arrival.

## 3 CATII/II Operations

Nil.

#### 4 Warnings

a. St Athan is located 3nm West of Cardiff Airport within the Cardiff CTR. By arrangement with Cardiff ATC during St Athan ATC hours of watch and subject to

conditions detailed in EGDX AD 2.22 Flight Procedures flights by St Athan based aircraft may take place in VMC, without reference to Cardiff ATC, within a Local Flying Zone (LFZ).

- b. Rotary wing activity (NPAS & HM Coastguard) conducted H24.
- c. Uncontrolled vehicular traffic can expect to be encountered on the aerodrome outside ATC operational hours.

### 5 **Helicopter Operations**

- a. National Police Air Services (NPAS) and HM Coastguard Search and Rescue (Bristow Helicopters) operate H24. Aircrew to make 'Blind RT calls' on 118.125 on number 2 radio when taxiing, departing and arriving.
- b. Rotary traffic departing outside ATC operational hours are to contact Cardiff Tower on 133.1 to obtain a clearance into Controlled Airspace as well as make 'blid calls' in accordance with reference 5a.
- c. Two Helicopter Training Areas (HTAs) delineated by white markers at the corners of the HTAs are established for the use of Bristow Helicopters and NPAS. Refer to Aerodrome chart St Athan AD 2 EGDX -1 -09.
- d. Visiting aircrew are to arrive and depart from the runway.

### 6 Use of runways

Aircraft taxiing from the north side can expect to back track the runway when so cleared by ATC.

Aircraft larger than B757-200 require push back off the runway after landing if the landing roll is beyond intersection with taxiway F and E which may result in delays until the runway is vacated.

#### 7 Training

Visiting aircraft requiring to conduct training at St Athan require an dairspace brief by Air Traffic Control before commencing any training details.

#### 4.21. NOISE ABATEMENT PROCEDURES

Avoid overflight of St Athan village south east of the Aerodrome.

#### 4.22. HANDLING SERVICES & FACILITIES

#### 1. General Information

The attention of pilots is drawn to the close proximity of Cardiff Airport 3 miles east of St Athan.

Aerodrome Control service is provided by Serco Group PLC.

Approach Radar services are provided by the Air Navigation Services Provider, NATS Services Ltd, located at Cardiff Airport.

Military operators who wish to conduct unusual air activity on the aerdorme e.g. TALO, fast roping, should request permission from the Aerodrome Operator. Contact Tel: 01446 798281.

#### 2. Circuit Direction

Runway 07 Right hand circuits.

Runway 25 Left hand circuits.

Circuit heights:

Light piston aircraft: 800ft QFE.

All other types (Fast Jets, large multi-engine turbine and piston): 1300ft QFE.

Glide Ciircuit height: 1500ft QFE.

Low level circuit height: 500ft QFE.

No RT/Total electrical failure: 600ft QFE.

When circuit flying is taking place involving mixed Military and civil aircraft oval Military circuits are to be flown.

## 3. St Athan Local Flying Zone

- a) A portion of Cardiff CTR is delegated to St Athan ATCduring certain VMC weather criteria to enable St Athan Local Flying Zone (LFZ), (see EGDX AD 2.17 AQTS Airpsace) provided:
- b) Aircraft are to be in communication with and comply with instructions from St Athan ATC.
- All aircraft conduct their flights within the weather criteria specified for VFR flights within Class D airspace.
- d) Maximum Altitude 1,700ft Cardiff QNH (1,500ft St Athan QFE).
- e) Pilots operating in the LFZ are responsible for maintaining their own visual separation from other aircraft, including aircraft on final approach to Rwy 12 and departing from Rwy 30 at Cardiff which are in close proximity to the LFZ. (traffic information will be passed where possible by ATC). Arriving VFR aircraft can expect to be held south and west of the runway 25/07 mid-point when IFR traffic is departing from Runway 30 at Cardiff or Cardiff IFR approaching traffic is within 15 miles from touchdown Runway 12.

Flights to and from St Athan which are unable to comply with the requirements to remain within the St Athan Local Flying Zone will be subject to individual clearance from Cardiff ATC and will be integrated with Cardiff arriving and departing traffic.

### 4. Cardiff Controlled Airspace Visual Reference Points

VRP	NDB/DME	VOR/DME FIX
Cardiff Docks ‡ 512724N 0030906W	CDF 063° † CWA/CDF DME 7 nm	BCN 170°/17 nm
Clatworthy Reservoir 510423N 0032209W	CDF 186° MAG † CWA/CDF DME 19 nm	BCN 188° / 39 nm
Flat Holm Lighthouse 512232N 0030707W	CDF 099° MAG † CWA/CDF DME 8 nm	BCN 168° / 22nm

Lavernock Point	CDF 085° MAG † CWA/CDF DME 6 nm	BCN 172° / 20nm
Llandegfedd Reservoir 514130N 0025815W	CDF 039° MAG † CWA/CDF DME 22 nm	BCN 172° / 20nm
M4 Junction24 513607N 0025532W	CDF 053° MAG † CWA/CDF DME 20 nm	BCN 123° / 15nm
M4 Junction 36 (Services –N of Bridgend) 513156N 0033424W	CDF 316° MAG † CWA/CDF DME 20 nm	BCN 227° / 16nm
Minehead 511221N 0032830W	CDF 207° MAG † CWA/CDF DME 12 nm	BCN 197° / 32nm
Nash Point Lighthouse 512403N 0033308W	CDF 275° MAG † CWA/CDF DME 7 nm	BCN 211° / 22nm
Nash South (on St Athan RW 07 C/L 1nm south of Nash Point) 512253N 0033327W	CDF 267° MAG † CWA/CDF DME 8 nm	BCN 210° / 23nm
Old Severn Bridge 513640N 0023837W	CDF 066° MAG † CWA/CDF DME 29 nm	BCN 109° / 24nm
St Hilary TV Mast ( <b>Note 2</b> ) 512727N 0032411W	CDF 330° MAG † CWA/CDF DME 4 nm	BCN 200° / 17nm
Taff Ely Wind Farm 513403N 0032816W	CDF 337° MAG † CWA/CDF DME 11 nm	BCN 222° / 12nm
Wenvoe TV Mast ( <b>Note 3</b> ) 512734N 0031654W	CDF 030° MAG † CWA/CDF DME 5 nm	BCN 185° / 16nm

**Note 1**: † DME frequency-paired with Cardiff Airport ILS gives zero range indication with respect to the threshold of the runway with which it is associated.

**Note 2**: Pilots are advised to use caution when routing via this VRF due to the nature of this lighted Air Navigation Obstacle of height 754ft agl, 1161ft amsl.

**Note 3**: Pilots should exercise caution when routing via this VRP due to the nature of this lighted Air Navigation Obstacle of height 878ft agl, 1294ft amsl.

### 5. VFR Routes to/from St Athan

All arriving aircraft must obtain an ATC clearance from Cardiff ATC to enter Controlled Airspace.

In order to reduce RTF congestion, the published outbound and inbound VFR routes are allocated designators. Pilots are to ensure they are familiar with the route alignment. Level instructions will be passed with the appropriate ATC VFR clearance.

Route Designator	Runway	Route	Maximum Altitude Cardiff QNH	Remarks
East	07 & 25	Aircraft remain west of the quarry and route to remain west of Aberthaw Power Station over water, clearance limit Aberthaw Power Station then as directed by Cardiff Tower.	1500ft	Do not proceed east of the Aberthaw Power Station until cleared by Cardiff ATC.
South	07 & 25	Aircraft remain west of the quarry and leave CAS towards Minehead VRP.	1500ft	
Nash Point	07 & 25	Aircraft remain within the confines of the LFZ and leave CAS to the west routing along the coast towards Nash Point VRP.	1500ft	Runway 07 departures should remain west of the quarry.
Nash South	07	Right turn out to remain west of the quarry remaining within the confines of the LFZ track 250° to leave CAS to the west towards Nash South VRP.	1500ft	
Nash South	25	Leave CAS via Nash South.	1500ft	
North	07 & 25	Leave CAS between the St Hilary and Wenvoe TV masts.	1500ft	

- **Note 1.** Pilots who wish to operate above the 'maximum altitude' shall request this once airborne.
- **Note 2.** All routes are available Special VFR subject to ATC clearance.
- **Note 3.** Pilots can expect to receive a clearance in the format "<Callsign>, cleared to leave controlled airspace on a published <designator> departure, not above <altitude restriction> <QNH> VFR, <Squawk>." A complete read back is required.

## **Published VFR Arrival Routes**

Route Designator	Runway	Route	Maximum Altitude Cardiff QNH	Remarks
East	07 & 25	From the North East route as directed by Cardiff Tower to hold East of the Aberthaw Power Station and as directed by St Athan ATC.	1500ft	Do not proceed west of the Aberthaw Power Station until cleared by St Athan ATC.
South	07 & 25	Enter CAS from the South, remain west of the quarry	1500ft	

		and as directed by St Athan ATC.		
Nash Point	07 & 25	Enter CAS via Nash Point route eastbound along the coast over water then as directed by St Athan ATC	1500ft	
Nash Arrival	07 & 25	Enter CAS towards the St Hilary VRP to orbit and remain north of the mast, then as directed by Cardiff Tower.	1500ft	
Nash South	07 & 25	Enter CAS via Nash South then as directed by St Athan Tower.	1500ft	
Straight In	07 & 25	Enter CAS to position Straight in for the runway in use.	As directed	

- Note 1. Pilots who wish to operate above the 'maximum altitude' shall request this.
- **Note 2**. All routes are available Special VFR subject to ATC clearance.
- **Note 3.** Pilots can expect to receive a clearance in the format "<Callsign>, cleared to enter controlled airspace on a published <designator> arrival, not above <altitude restriction> <QNH> VFR." A complete read back is required.

#### 6. IFR Traffic

- a) Arriving IFR traffic accepted subject to conditions of IFR waiver granted by Military Aviation Authority.
  - i) Use of the ILS only by aircraft not carrying passengers.
- b) Enhanced arrival brief required from ATC for flights intending to use the ILS (01446 798889).
- c) Departing flights that have filed IFR flight plans will be issued with a VFR/SVFR clearance to depart on runway track climbing to altitude 4,000ft. On passing 2,400ft QNH the flight will become IFR.

#### 7. Radio Failure Procedures

In the event of an RT Failure the appropriate Procedures detailed in the UK AIP ENR 1.1 Para 3.4 should be followed.

## 4.23. ADDITIONAL INFORMATION

Nil.

4 24	<b>CHARTS RE</b>	LATING TO	THIS A	FRODROME
4.24.	CHANISKE	LAIINGIO	IIII A	LINDDINOINIL

Terminal Approach Procedure Charts	En-Route Charts
------------------------------------	-----------------

Aerodrome	UK(L)1 UK(L)2 UK(L)4 UK(L)SP1 UK(H)2
	UK(H)6 EU(L)2
	EU(L)9 EU(H)9
	EU(H)12 EU(H)13 EU(H)SP1 EU(H)Sp1 - OAT

- **4.25. Noise Abatement Procedures Orders –** All Air Systems are to avoid overflying St Athan village which is situated adjacent to the boundary fence on the South-Eastern corner of the airfield as per the map at Annex H showing the MOD St Athan Noise Abatement Area.
- **4.26. Temporary Obstructions Orders** Temporary obstructions on or around any manoeuvring area that are considered to be a hazard to either aircraft or vehicles will be marked by 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. See Annex I for reference.
- **4.27. RWY Strip Obstructions.** MOD St Athan is classified by the Military Aviation Authority, Manual of Aerodrome Design and Safeguarding (MADS) as a code 3 RWY (>1200m and <1800m in length). Accordingly, for IFR ops a RWY strip clear of obstacles should extend at least 150m either side of the RWY centreline (for VFR 75m) and 60m beyond the runway and any stopway. A number of legacy obstacles at MOD St Athan infringe the MADS defined RWY Strip as detailed in the runway strip obstructions and compliance document which can be found at the following link Runway Strip Obstructions and as indicated in the diagram below:

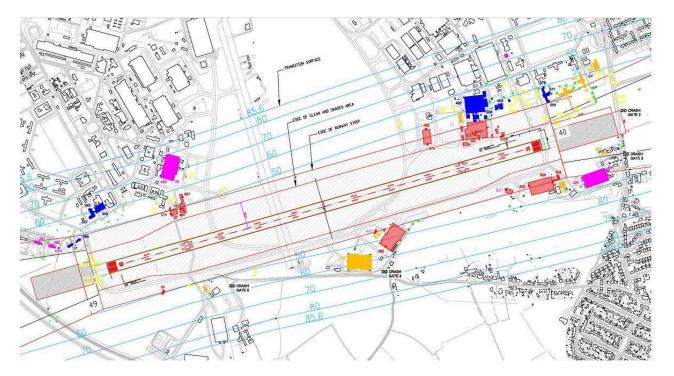


Figure 3 – Runway Strip Obstructions.

- **4.28. RWY End Safety Area (RESA).** Railway and road cross the undershoot of Rwy 07, 925ft/282m and 984ft/300m respectively from threshold.
- 4.29. Light Aggregate (Lytag) Arrestor Beds. There are no Lytag at MOD St Athan.
- 4.30. Rotary Hydraulic Arrestor Gear (RHAG) Orders. There is no RHAG at MOD St Athan.
- **4.31.** Barrier Orders. There are no barriers at MOD St Athan.
- **4.32 Manoeuvring Area Safety and Control Orders.** Safe parking and manoeuvring is the responsibility of Serco and ATC. Aircraft refuelling is carried out iaw Aviation Engineering Standing Orders, Book 2, Part 1, Chapter 4, Order No 24. The servicing of Air Systems is carried out iaw individual companies within their demised areas. Details are at Annex L.

## Chapter 5: EMERGENCY ORDERS – (AERODROME CRASH PLAN)

- 5.1 **Emergency Orders / Aerodrome Crash Plan.** The actions to be taken in the event of an Air System incident on the airfield involving a MOD St Athan-based or visiting Air System, are detailed at Annex M and are contained within the MOD St Athan Post Crash Management Plan (PCMP). The PCMP is to remain in force until the incident is closed by the Incident Officer or until an MOD Incident Officer has been appointed and taken control of the Unit response.
- 5.2. **Disabled Air System Removal.** It may be necessary to remove quickly and safely an Air System that has caused a temporary closure of a runway, taxiway or Aircraft Servicing Platform (ASP), as detailed at Annex N. The disabled Air System removal procedures are intended to deal solely with incidents that fall beneath the criteria of an accident, which is dealt with separately under the MOD St Athan ACPCMP. If there is any doubt as to the status of an incident, advice should be sought from the AAIB or MAAIB. Responsibility for aircraft removal will lie with the on-site aircraft operators. Visiting MOD Air Systems will be dealt with by MOD resources.

ATCO I/C						
5.2.1	Notify the RFFS.					
5.2.2	Air System identification and type.					
5.2.3	Nature of Air System un-serviceability.					
5.2.4	Location of Air System.					
5.2.5	Section of the manoeuvring area affected.					
5.2.6	People On Board (POB).					
5.2.7	Estimated time of Arrival (ETA) of all Air Systems requiring use of the closed runway.					
5.2.8	Latest time for affected Air System to divert.					
5.2.9	Ensure that any unserviceable areas of the manoeuvring area are correctly marked, in accordance with MAA standards, to provide for safe Air System operation of the remaining areas.					
Station Ope	Station Operations (Or equivalent)					
5.2.10	Notify ATC of a disabled Air System if not already aware.					
5.2.11	Ensure the appropriate Notice to Airmen (NOTAM) has been raised.					
5.2.12	If required carry out RUNWAY BLACK plan.					
5.2.13	Notify.					
5.2.14	OC Ops Wg / OC Ops Sqn (or equivalent).					
5.2.15	Eng Ops (or equivalent).					
5.2.16	VASS/Movements (or equivalent).					
5.2.17	XX Sqn (if it affects a station based Air System).					
5.2.18	Defence AIB Air, for civilian Air Systems, to verify that the establishment assessment of the incident falls beneath that warranting an Air Accident Investigation Branch (AAIB) investigation. <sup>5</sup> AAIB will require Air System identification and type; nature of Air System un-serviceability; location of Air System; section of the manoeuvring area affected and POB.					
Station Duty Officer.						
5.2.19	Obtain and record permission from the owner or duly authorized representative of the owner of the Air System to move the disabled Air System.					

<sup>&</sup>lt;sup>5</sup> If the AAIB elect to conduct an on-scene investigation, the disabled aircraft cannot be removed until authorised by the AAIB.

5.2.20	Notify all Air System operators likely to be affected if "RUNWAY BLACK".					
5.2.21	For civilian Air Systems, notify the Air System operating authority and AAIB.					
Fire Section						
5.2.22	Respond iaw JSP426, Volume 3, Leaflet 2 and site specific Crash Plan.					
Air System Owner						
5.2.23	The Air System owner is defined as the holder of the Certificate of Registration and can be held responsible for the Air System removal and disposal of fuel and other hazardous materials that have been spilt because of an incident (noting the aerodrome will have instigated the Stn Spill Plan). When advised of a disabled Air System, the owner should liaise with Station Operations (or equivalent) to discuss its removal.					
VASS / Eng Control (Or equivalent)						
5.2.24	Once cleared by Ops, tow the disabled Air System clear with the appropriate towing arm or 'universal dolly.'					
Note: At smaller establishments without ATC/Ops, AO's or their nominated representatives are						

**Note:** At smaller establishments without ATC/Ops, AO's or their nominated representatives are to make every effort to comply with the above guidance.

## 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. JSP 426 - Defence Fire Safety and Fire Risk Management.

- Emergency Organization. The AO is to be familiar with RA 3261(2): Aerodrome Emergency Services, RA 3263 – Aerodrome Classification and JSP 426 Defence Fire Safety and Fire Risk Management (specifically Volume 3 Leaflet 02 - ARFF Requirements (Apr 16))<sup>6</sup>. JSP 426 Volume 3 Leaflet 02 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 JSP 426 Volume 3 Leaflet 02.
- 6.2 AO / DFRMO Relationship. The relationship between the AO and the DFRMO Fire Section is defined within JSP 426, Volume 3, Leaflet 02 and the Joint Business Agreement/Internal Business Agreement between DFRMO and the TLBs. The Fire Section is a Duty Holder Facing organisation which is operated under the direction of DFRMO to national good practice and provides a service to the AO. Note: All orders are to be contained at separate Annexes.
- Aerodrome Rescue and Fire Fighting Services Orders. In addition to Standard Operational Procedures, FRS Generic Risk Assessments, Fire Facts and DFRMO 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 DFRMO Policy and contained at Annex O.
- 6.4 Aerodrome Rescue and Fire Fighting Training Area Orders. RFFS Training area risk assessments and orders are to be produced and contained at Annex P, within the DAM.

<sup>&</sup>lt;sup>6</sup> ► For access contact DFRMO-HQSDOps@mod.uk ◀.

#### **CHAPTER 7: AIR TRAFFIC SERVICES AND LOCAL PROCEDURES**

7.0 **Air Traffic Control Orders.** Air Traffic Control is provided by Civil Aviation Authority licenced Air Traffic Controllers operating in accordance with an Air Navigation Order Article 180 approval. The ATC service is provided in accordance with CAP 493 Manual of Air Traffic Control Part 1 procedures and selected ATM 3000 (RAs) which are contained in the St Athan Manual of Air Traffic Control Part 2 (local orders).

ATC Orders		
7.1	See Annex Q.	

# CHAPTER 8: AERODROME ADMINISTRATION & OPERATING PROCEDURES

#### 8.1 Aerodrome Reporting

Aerodrome Reporting		
8.1.1	are notifi	e. The aim of the reporting procedure is to ensure that the MAA and No1 AIDU ed of any changes to the physical condition of the airfield and of new obstacles affect the safety of Air System operations.
8.1.2	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 aircraft operations.  The Senior Air Traffic Service Assistant (SATSA) is responsible for informing the AO of changes and for advising No1 AIDU of any permanent changes to airfield information.  The Air Traffic Control Officer In Charge (ATCO IC) is responsible for reporting the day-to-day serviceability of the aerodrome and notifying temporary changes to published aeronautical information.	
8.1.3	<b>Legislation, Standards and Technical References.</b> Information relating to the aerodrome serviceability or hazards to air navigation is to be routinely updated through the Aeronautical Information Publications (AIP) and NOTAM. This is carried out by ATC and logged by the AO.	
8.1.4	Reporting Procedures. Any situation that may have an immediate effect on the safety of aircraft operations is be reported as soon as possible. In the first instance to ATC by radio or telephone who will alert the AO or deputy.  ATC Mil 95421 8717. Civ 01446 798717.	
8.1.5	<b>NOTAM</b> <sup>7</sup> . The AO is to ensure that all NOTAM action is recorded for possible 1 <sup>st</sup> / 2 <sup>nd</sup> and 3 <sup>rd</sup> line audit. NOTAMs will be originated by ATC in the standard NOTAM format for any of the following circumstances:	
	8.1.5.1	A change in the serviceability of the manoeuvring area.
	8.1.5.2	A change in the operational information contained in this manual and published in the Mil AIP.
	8.1.5.3	Aerodrome works effecting the manoeuvring area or penetrating the OLS.
	8.1.5.4	New obstacles which affect the safety of Air System operations.
	8.1.5.5	Bird or animal hazards on or in the vicinity of the airport.
	8.1.5.6	A change in the availability of aerodrome visual aids, i.e. markers and markings, runway lighting, etc.
	8.1.5.7	Any change in aerodrome facilities published in AIP.

8.2 **Aerodrome Serviceability Inspections.** Orders, contained at Annex S, for the inspection of the Aerodromes are conducted iaw the MATS Part 2 and RA 3264 (Aerodrome Inspections).

Aerodrome Serviceabilit	y Inspections. (	Orders
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<sup>&</sup>lt;sup>7</sup> NOTAM information must be provided by fax or email. Where urgent advice can be given by telephone, it must be confirmed by fax or email as soon as possible. Reporting Officers raising a NOTAM must subsequently check the issued NOTAM for accuracy.

8.2.1	Aerodrome Inspections are to be carried out by the Aerodrome Controller (ADC) who is to carry out a comprehensive inspection of the movement area.		
	8.2.1.1 Daily, before the aerodrome is opened for flying on each occasion.		
	8.2.1.2	If night flying is to be conducted a further inspection is to be conducted prior to last light.	
	8.2.1.3	Prior to sunset, before any planned night movements.	
	8.2.1.4	Check the serviceability of all aerodrome traffic lights.	
	8.2.1.5	Controllers are to vacate the vehicle at random intervals and conduct a close up visual inspection of an area of the runway.	
8.2.2	All inspections are to be logged in the ATC logbook, including any issues raised.		
8.2.3	Any issues are to be reported to the relevant section subject matter expert (SME) Any sweeping requests are to be logged.		
8.2.3	Any work requests are to be put through the correct channels and a record of the request and subsequent action maintained.		
8.2.4	Where ATC is not present the AO can delegate management of inspection to other individuals but not the responsibility.		

8.3. **Aerodrome Technical Inspections.** Orders, contained at Annex T, for the technical inspection of the aerodrome are conducted in accordance with aerodrome regulations. Technical inspections of aerodrome lighting is conducted by a qualified SME.

Aerodro	Aerodrome Technical Inspections. Orders		
8.3.1	Routine inspections of the technical equipment (transmitters, receivers, ILS etc) with precision navigation aids being calibrated by a flight check Air System in accordance with AP 600-Royal Air Force Information CIS policy and relevant SPS or equivalent Naval Ship Support Publications.		
8.3.2	Runway, taxiway and obstruction lights, along with PAPIs and aerodrome traffic lights are inspected daily.		
8.3.3	All earthing points are checked annually.		
8.3.4	Manoeuvring Areas and drainage are inspected, maintained and repaired in accordance with DIO guidance.		
8.3.5	All aerodrome signs are inspected weekly by ATC (if established) and monthly by DIO SME.		
8.3.6	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.		
8.3.7	All ARFF vehicles and equipment are to be inspected and tested in accordance with manufacture's instructions and MOD policy.		
8.3.8	The Crash Ambulance and associated equipment is inspected and tested in accordance with manufacture's instructions and MOD policy.		
8.3.9	Bird Control Unit equipment and vehicle is inspected daily with vehicle maintenance carried out in accordance with manufacturer's recommendations.		
8.3.10	Traffic lights, CCTV and road barriers for the control of airside vehicle control measures are inspected daily.		
8.3.11	Annual review of Aerodrome Driving orders.		

8.4 **Protection of Radar and Navigation Aids**. Orders, contained at Annex U, for the supervision of access/entry to any of the aerodrome navigation aids or their immediate vicinity are to be produced as part of the GRSF maintenance plan.

- 8.5 **Surveillance Equipment Maintenance & Monitoring.** Orders, contained at Annex V, for the maintenance and monitoring of surveillance equipment are to be produced in accordance with extant Support Policy Statements (SPS) and the AP 600.
- 8.6 **Navigation Equipment Maintenance & Monitoring.** Orders, contained at Annex W, for the equipment maintenance and monitoring of all aerodrome navigation equipment are to be produced in accordance with extant policy regulations and the AP600 to ensure navigation and approach aid equipment (TACAN/ILS/etc) have a continuously monitored fault and check procedure.
- 8.7. **Aerodrome Works Safety.** Orders, contained at Annex X, for the control and supervision of work in progress on the aerodrome are to be produced. It is suggested that control of Working Parties is achieved through the use of the following:

Aerodro	Aerodrome Works Safety – Orders				
8.7.1	with RA 3 of the ae Operatio work in p	Work in Progress (WIP) Records. WIP records are to be maintained in accordance with RA 3266 – Aerodrome Maintenance. At larger units with ATC/Ops facilities a plan of the aerodrome is to be kept prominently displayed in both ATC and Aerodrome Operations for the purpose of marking all obstacles, nature of obstruction marking and work in progress. At smaller establishments individuals nominated by the AO are to comply with the above but maintain and display the aerodrome plan.			
8.7.2	Maintena WIP Log	<b>WIP Log.</b> A WIP Log is to be established in accordance with RA 3266 – Aerodrome Maintenance. At larger units with ATC/Ops facilities, in addition to an aerodrome plan, WIP Log is to be maintained in the control tower. At smaller units the AO's nominated individual is to maintain a WIP log.			
8.7.3	WIP Briefings. Supervisors of any working parties are to be fully briefed on their responsibilities. At larger units with ATC/Aerodrome Operations facilities the ATCO IC is responsible for ensuring that the supervisor of the working party is properly briefed. At smaller units individuals nominated by the AO are responsible for the briefing. The briefing is to include as a minimum the following details:				
	8.7.3.1	8.7.3.1 Limits of the work area.			
	8.7.3.2	Direction of aircraft movements.			
	8.7.3.3	Route to be taken by works vehicles.			
	8.7.3.4	Parking area for works vehicles and equipment.			
	8.7.3.5	Control to be exercised over works vehicles and workers.			
	8.7.3.6	Signals to be employed.			
	8.7.3.7	FOD prevention.			
8.7.4	<b>Control Measures</b> . When work is to be carried out on the aerodrome and it is not possible to stop flying, special control rules are to be enforced to safeguard the working party. Orders for these control measures to be produced. Note: All aerodrome work is to be clearly marked using approved high visibility markers and lit during hours of darkness.				
8.7.5		<b>utting</b> . A grass cutting plan is to be established and maintained in accordance aerodrome policy.			

8.8. **Control of Entry and Access.** Control orders, contained at <u>Annex Y</u>, for the access to the base aerodrome and its associated manoeuvring area are to be produced. Consideration should be given to educate and brief those individuals or units not directly associated or familiar with

flying activities at your specific aerodrome. Force Protection responsibilities are addressed separately at Chapter 10.

8.9. **Aerodrome Users. Vehicle and Pedestrian Control.** Orders, contained at <u>Annex Z</u>, for the control of vehicular and pedestrian traffic on the aerodrome are to be written iaw RA 3262 – Aerodrome Access.

Some key points to consider are the following:

Aerodrome Users. Vehicle and Pedestrian Control		
8.9.1	Air System Manoeuvring Area.	
8.9.2	Apron.	
8.9.3	Airfield Access Permit (AAP).	
8.9.4	Airfield Access Briefs.	
8.9.5	Access Routes.	
8.9.6	Orders for Airside Vehicle Control.	Expand as required.
8.9.7	Additional Orders for Drivers on Aprons (ASPs).	Expand as required.
8.9.8	Additional Orders for the Control of Airside Vehicles at Night.	Expand as required.
8.9.9	Orders for Pedestrians.	
8.9.10	Orders for Pedal Cyclists.	
8.9.11	Orders for riders / dog walkers / runners / etc	Expand as required
8.9.12	Signals for the Control of Vehicles and Pedestrians.	
8.9.13	Speed Limits.	

8.10. **Aerodrome Wildlife Management (Birds).** The AO is to ensure that comprehensive orders on bird management are to be produced and contained at <u>Annex AA</u>. In addition to any extant contractual obligations, those units established with a BCU contract are to consider the following requirements be conducted as a basic minimum.

Aerodroi	Aerodrome Wildlife (Bird) Management		
8.10.1	Assess and effectively minimise the local bird hazard to Air Systems through a coordinated bird control effort on the Station.		
8.10.2	Record and collate recorded information on bird concentrations and movement patterns both on the aerodrome and within its safeguarded zone.		
8.10.3	Liaise with Station executives, DIO Property Management representatives, local authorities and landowners and tenant farmers whose land abuts the aerodrome, concerning such matters as the identification and dispersal of local bird concentrations, and the elimination of bird food sources and other topographical features which might attract birds to the aerodrome vicinity.		
8.10.4	Coordinate the use of bird dispersal equipment and materials, and ensure that their use is properly controlled in accordance with current regulations.		
8.10.5	Ensure that all bird control equipment is properly serviced in accordance with current servicing schedules and that any un-serviceability is rectified promptly.		
8.10.6	Ensure that all bird control personnel are correctly trained in the use of bird dispersal equipment and its safe handling.		
8.10.7	Ensure that bird hazard warnings are issued in accordance with the procedures published in FLIPs.		
8.10.8	At Station Safety Management Committee ensure the AO has the latest BCU report that covers any general concerns or bird related issues.		

8.10.9	Ensure all Wildlife Strikes are reported on a DASOR.
8.10.10	Seek specialist advice whenever necessary from SO2 ATM Infra or DEFRA.
8.10.11	Supervise the maintenance of the bird control log.

**Note:** For details concerning RAF Aerodrome BCU policy see Battlespace Management (BM) Force Orders. RN bird control policy is contained at BR 767 Order 500.10.

8.11. **Animal Management** – The AO is to ensure that the Estates Manager produces comprehensive orders, contained at <u>Annex BB</u>, on wildlife management. Items for consideration are as follows:

Aerodro	Aerodrome Wildlife (Animal) Management		
8.11.1	Conside	er prevention, any regulation, crop management, grass management, etc.	
8.11.2	List responsibilities, who manages the wildlife management procedures, who is in charge of the tasks, etc.		
8.11.3	Provide instructions on how to perform the tasks.		
8.11.4	Particulars of the procedures to deal with the danger posed to Air System operations by the presence of birds or mammals in the aerodrome flight pattern or movement area, including the following.		
	8.8.4.1	Arrangements for assessing wildlife hazards.	
	8.8.4.2	Arrangements for implementing wildlife control programmes.	

- 8.12. **Handling of Hazardous Materials (Spillage Plan)**. Orders, contained at Annex CC, for the Handling of Hazardous Materials (Spillage Plan) are to be produced and detailed in an Establishment Spillage Plan. Where commercial freight operations occur at any military aerodrome full details of the procedures are to be recorded and held by the AO. Details of military freight operations are to be detailed in Air Movements Section (Or equivalent) Orders.
- 8.13 **Air System Parking.** Orders, contained at <u>Annex DD</u>, for the co-ordinated parking of ac are to be produced that include agreements from respective ATC/Ops/Movements sections.
- 8.14 **Low Visibility Operations (LVO).** Orders, contained at Annex EE, for Low Visibility Operations are to be produced in accordance with RA 3274 Low Visibility Procedures (LVP). The orders may be contained within the manual or referred to and hyperlinked to another document. (It is suggested that the orders need to include all actions taken by control and movements staffs at specific levels of visibility to be determined by each establishment). The AO should consider as a minimum the following:

Low Vis	Low Visibility Operations (LVO)	
8.14.1	4.1 Authority, restrictions, etc.	
8.14.2	List responsibilities, who authorises/cancels LVO.	
8.14.3	Provide instructions on how to perform LVO (checklists).	
8.14.4	Particulars of procedures to be introduced for low-visibility operations, including the measurement and reporting of runway visual range as and when required, and the names and telephone numbers, during and after working hours, of the persons responsible for measuring the runway visual range.	

8.15 **General Conditions (Terms and Conditions).** Use of MOD Aerodromes by civil Air Systems shall be in accordance with <u>Use of Military Aerodromes by British and Foreign Civil</u>

<u>Aircraft</u><sup>8</sup>. Orders (Terms and Conditions), contained at <u>Annex FF</u>, governing use by civil Air Systems are to be produced. Civil Air System captains wishing to operate in and out of a MOD aerodrome must agree to abide by the aerodromes extant Terms and Conditions which should reflect <u>Use of Military Aerodromes by British and Foreign Civil Aircraft</u> and should include the following parameters as a minimum. (This can be expanded as required).

Genera	I Conditions	(Terms and Conditions) for Civilian Operators			
8.15.1	The Terms reflect any	and Conditions may be varied at any time by the Aerodrome Operator to changes, amendments or additions to working practices at the specific . Factors may include some or all of the following.			
	8.15.1.1	Winter Operations.			
	8.15.1.2	Operational Support.			
	8.15.1.3	Passenger Handling.			
	8.15.1.4 Animal Handling.				
	8.15.1.5	Refuelling Services.			
	8.15.1.6	Catering.			
	8.15.1.7	Air System Maintenance.			
	8.15.1.8	Security.			
	8.15.1.9	Flight Safety.			
	8.15.1.10	Air System Handling.			
	8.15.1.11	Airworthiness.			
8.15.2	to the Tern aware of e	Whilst the AO will use all reasonable endeavors to advise Civilian Users of any changes to the Terms and Conditions, it will be for the Civilian Users to ensure that they are aware of extant Terms and Conditions. The AO shall not be liable for any loss or damage (whether direct or indirect) arising out of any change in the Terms and			
8.15.3	All Civilian protocols.	Users are to operate in accordance with extant DfT NASP and wider ATSy			
8.15.4	Opening hours for civilian operators (Including weekdays and public holidays)				
8.15.5	Declared I	CAO Crash Category of the Aerodrome.			
8.15.6	Confirmation	on if Charter [Airline] operations are permitted to operate from the aerodrome			
8.15.7	Confirmation aerodrome	Confirmation if Scheduled Air System operations are permitted to operate from the			
8.15.8	Confirmation if the aerodrome is a designated Port of Entry, and if it has permanent HM Revenue and Customs (HMRC), UK Border Agency or SO15 (CTC) presence.				
8.15.9	Declaration that in the event of a Local or National Emergency whether declared or not the aerodrome may be closed to civilian operators.  A non-exhaustive list of potential circumstances includes.				
	8.15.9.1	Loss of appropriate Fire of Crash cover.			
	8.15.9.2	Repatriation of troops.			
	8.15.9.3	Loss of power to all, or parts, of the aerodrome.			
	8.15.9.4	Interruptions in communications both within the aerodrome and with external agencies.			
	8.15.9.5	Unforeseen natural disaster (Flooding, etc).			
	8.15.9.6	Unforeseen national epidemics (swine flu/bird flu).			

<sup>&</sup>lt;sup>8</sup> Will need to be made available to civil operators on request.

**Note:** In the event of such closure all access to the aerodrome for any reason whatsoever may be restricted and no liability is accepted for any loss or damage (whether direct or indirect) arising.

- 8.16 **Breach of Terms and Conditions. Orders**, contained at Annex GG. are to be produced to cover the eventuality of a breach of terms and conditions. Any breach of Terms and Conditions could constitute grounds for the privilege of operating at the aerodrome being withdrawn temporarily or permanently.
- 8.17 **Safeguarding Requirements. Waivers and Exemptions**. The procedures involved in safeguarding the operational environment of military aerodromes is explained in greater detail in Chapter 16 of the Manual of Aerodrome Design and Safeguarding (MADS) and depends upon whether the proposed obstacle is sited within or outside MOD property. All Safeguarding activities are to be conducted in accordance with extant regulations and any waivers or exemptions issued by the MAA are to be promulgated at <a href="Annex G">Annex G</a> to the manual and a corresponding record of the validity recorded in the DAAF.
- 8.18 **Standards Checks / SQEP (Qualified personnel).** All personnel involved in activities on or around the aerodrome, are to be suitably trained, standardized and assured (SQEP)<sup>9</sup>. The below list is not exhaustive and will expand or contract dependent upon what the AO wishes to maintain assurance of. Details of the assurance process and associated reports related to each role should be contained within the DAAF.

Standard	Standards Checks / SQEP (Qualified personnel)			
8.18.1	ATC/ABM Controllers (If present).			
8.18.2	ATC/ABM/FOA/ASO (If present).			
8.18.3	Aircrew.			
8.18.4	Ground Radio Engineers (Or equivalent).			
8.18.5	Firefighters			
8.18.6	Medics.			
8.18.7	Armourer / Supply & Movement Staff/Aerodrome Electrician (Or equivalent) etc.			
8.18.8	Expand as required.			

- 8.19 **Safety Management System.** A functioning Safety Management System, which is reviewed and updated and is based upon the lead FLC document is to be evident.
- 8.20 **Thunderstorm & Strong Wind Procedures.** Orders, contained at <u>Annex HH</u> are to be produced to cover Air System operations during thunderstorm (lightning risk) warning periods and periods of forecast strong winds. The following should be considered as a minimum:

Thunder	Thunderstorm & Strong Wind Procedures		
8.20.1	Strong wind and gale procedures.		
8.20.2	Use of vehicles to protect /shield ac vulnerable to strong winds.		
8.20.3	Pax loading/unloading limits in strong winds.		
8.20.4	Lightning Risk Orders.		

8.21 **Electrical Ground Power Procedures.** Orders, contained at Annex II, for electrical ground power procedures are to be produced. The following areas should be considered as a minimum:

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<sup>&</sup>lt;sup>9</sup> The assurance processes detailed in the DAAF should be related to a role and not related to specific individuals i.e the assurance process for ATC staff is carried out through complying with BM STANEVAL (ATM) orders.

Electrical Ground Power Procedures			
8.21.1	Use of fixed electrical ground power.		
8.21.2	Use of mobile ground power units.		
8.21.3	Use of auxiliary Power units (APU's).		
8.21.4	Use of 28 Volt conversion units.		

8.22 **Aviation Fuel Management Procedures.** Orders, contained at <u>Annex JJ</u>, for aviation fuel management including policy guidance are to be produced. The following areas should be covered as a minimum:

Aviation	Aviation Fuel Management Procedures		
8.22.1	Management of Bulk Fuel installations.		
8.22.2	Fuel storage, quality and delivery.		
8.22.3	Safety procedures.		
8.22.4	Fuelling zone procedures.		
8.22.5	Bonding and grounding of ac and fuelling equipment.		
8.22.6	Fuelling with passengers on board.		
8.22.7	Fuelling with engines running.		
8.22.8	Fuelling and de-fuelling in hangers.		
8.22.9	Fuel spillage procedures.		

- 8.23 **Jettison Area.** There is no Jettison area at MOD St Athan and this is replicated at Annex KK.
- 8.24 **Compass Swing Area.** The Certificate is contained at <u>Annex LL</u> as are the Orders for booking the area.
- 8.25 **Explosive Ordnance Disposal area.** If present, orders, contained at <u>Annex MM</u>, for the use and access of EOD areas are produced.
- 8.26 **FOD Prevention, Training and Awareness.** Orders, contained at Annex NN, are produced with regards to FOD prevention, training and awareness. Guidance and instructions are contained within RA 1400.
- 8.27 **Dangerous Goods (DG) Procedures. Loading / Unloading**. Orders, contained at Annex OO, are to be produced for the control and management of DG in accordance with extant regulations.
- 8.28 **Hydrazine (H70) Leak**. Where required, Orders, contained at Annex PP, are to be produced to cover the eventuality of potential Hydrazine (H70) leaks from visiting ac.
- 8.29 **Air System Arresting Mechanisms.** This is not applicable as there are no Arresting Systems at MOD St Athan.

#### **CHAPTER 9: SNOW & ICE OPERATIONS**

9.1 **Operation Blacktop.** During the winter months, falls of snow or the formation of ice may be sufficiently severe to prevent the operation of aircraft at MOD St Athan and hinder the movement of personnel and vehicles on the station and adjoining roads. Operation Blacktop enables the station to keep the airfield, essential access and station roads open. Operation Black top is formed by 1 Nov each year, or earlier if the weather decrees and remains in place until 30 Apr, but may be extended if the weather conditions dictate. In adverse weather conditions, the airfield will be closed to vehicular traffic. Signs will be displayed at the entry to the airfield and runway crossing lights will remain at red. Service vehicles, on essential tasks connected with Air Systems or snow clearing ops, will have access. Contractor vehicles must seek permission from ATC and no access will be given to private vehicles and cyclists. Further details are at Annex RR.

#### **CHAPTER 10: FORCE PROTECTION RESPONSIBILITIES**

- 10.1 **Force Protection Responsibilities.** Force Protection (FP) Orders, contained at Annex SS, are kept separately to this document and are held with the RAFP at MOD St Athan; this document is classified 'Official-Sensitive' and can be made available to 2<sup>nd</sup> / 3<sup>rd</sup> Party Auditors on request.
- 10.2 **National / Multinational Security Responsibilities.** In the event that the Aerodrome, either due to its geographical position, or its strategic importance, has host nation or multi nation aerodrome security responsibilities; a comprehensive formal agreement, which clearly describes each countries Force Protection roles and responsibilities, is to be produced to assure the AO that the level of Force Protection is sufficient to accommodate the safe operation of the Air Systems within his AoR. It is suggested that the formal agreement is signed off at FLC SRO level. Note: FP activities will have DHF responsibilities.

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ANNEX A TO DAM DATED MAR 18

From

Wing Commander K J Pescott MBE NA MSc BEng CEng MIMechE RAF Commanding Officer



Mr S Thomas Airfield Manager MOD St Alhan BARRY Vale of Glomergon CF62 4WA

#### MOD St Athan

EARRY
Vale of Glamorgen
CF82 4WA
Tel: 01446 797900 DFT8: 95421 7090
Fax: 01446 797200 DFT8: 95421 7526
Email: SANSU-STNCOR@mod.uk

Reference:

Date: 01 April 2016

AERODROME OPERATOR ST ATHAN - LETTER OF APPOINTMENT

Reference

- A. MAA Regulatory Article 1026.
- 1. In accordance with Reference A, you are appointed as the Aerodrome Operator (AO) for St Athan Airfield on behalf of MOD St Athan HoE. As the AO you carry certain responsibilities, detailed at Reference A, and must ensure compliance. You are responsible for managing an aerodrome environment in a way that facilitates the safe operation of aircraft and for providing necessary assurance; the production and maintenance of a Defence Aerodrome Manual io important. In the event that you are unable to fulfill your responsibilities, you are to bring the matter to my attention at the earliest opportunity.
- 2. This letter of authority supersedes all previous versions and will be reviewed annually.
- You are to personally acknowledge your acceptance of the role of AO and associated responsibilities to me.

(Return to Annexes)

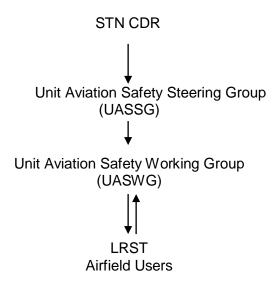
New Issue Mar 18

ANNEX B TO DAM DATED MAR 18

Owner: Aerodrome Operator

KSH: CO

#### **MOD ST ATHAN SAFETY MEETING STRUCTURE**



(Return to Annexes)

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ANNEX C TO DAM DATED MAR 18

Owner: Aerodrome Operator

KSH: CO

#### MOD ST ATHAN AERODROME OPERATORS ORGANISATIONAL STRUCTURE

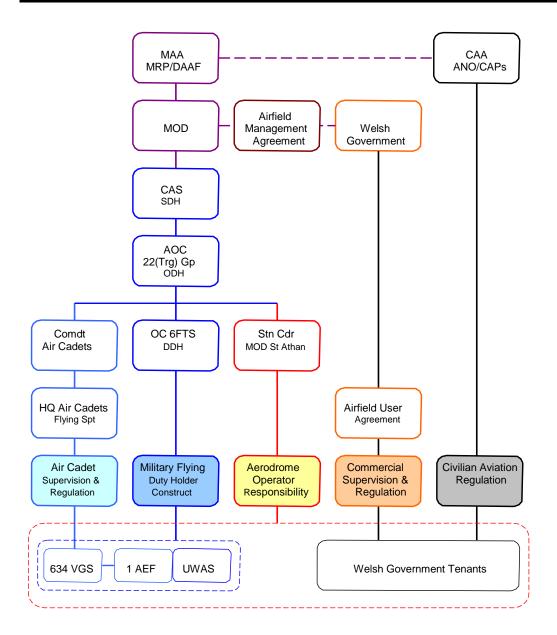


Figure C-1 – Aerodrome Operators Organisational Structure.

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ANNEX D TO DAM DATED MAR 18

#### MOD ST ATHAN LIST OF KEY POST HOLDERS

Owner: Aerodrome Operator

KSH: CO, OC Spt Sqn, SATCO, DSATCO, Senior ATSA.

POST	NAME	TELEPHONE NUMBER
CO / STN CDR	Wg Cdr Steve Rowley	Civ: 01446 797001 Mil: 95421 x7001
AERODROME OPERATOR	Mr Steve Thomas	Civ: 01446 798281 Mil: 95421 x8281
OC Spt Sqn	Mr Glynne Cheshire	Civ: 01446 797155 Mil: 95421 x7155
SATCO	Mr Malcolm Bradbury	Civ: 01446 798718 Mil: 95421 x8718
SENIOR ATSA	Mrs Paula Clough	Civ: 01446 798717 Mil: 95421 x8717

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ANNEX E TO DAM DATED MAR 18

#### MOD ST ATHAN AERODROME OPERATING HAZARD LOG (AOHL)

Owner: Aerodrome Operator – AO Ext 8281 KSH: Site Flight Safety Officer – SFSO Ext 8394.

1. The AOHL for MOD St Athan can be accessed via the Aerodrome Operator's MOSS page and is linked here: MOD St Athan AOHL (Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

	Aerodrome Operating Hazard Log					
Nature of hazard.	Position of hazard.	Permanence of hazard. Temporary / Permanent?	Is the hazard affected by season / light or time?	What mitigation has been employed, if any, to reduce its impact?		
Incursion by Vehicle and Pedestrian	Airfield Access Points: Thresholds Taxiways	Permanent	No	Signage. Traffic lights. Barriers at threshold. Audible buzzer at threshold. Annual Airfield Driving Brief and examination. Station & Army Arrival Briefs. Restricted access to RRU. Site Control of Entry Policy. Airfield Access and Signage Surveys complete. Safety meetings. ATC 12 way comms. SMRE. 25 Threshold CCTV. Speed Limit. ATC procedures.		
FOD	Site	Permanent	No	Airfield Sweeping Plan. Site Sweeping Programme. Individual Client FOD Management Plans. Station FOD Management Plan. Integration meetings.		

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New Issue Mar 18

	T		1	1
				Daily ATC surface
				inspections.
				FOD Bins established on
				Airfield – contract
				with CarillionAmey. Serco Wildlife
				Management Plan.
				Daily BCU sweeps
				as required.
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				All ATSAs trained in
Wildlife	Airfield	Permanent	Yes	BCU.
Activity				BCU procedures
				included in ASMS.
				System in place to
				pass levels of
				activity to aircrew.
				Signage.
				Holding point
				markers.
Incursion by	Airfield	Permanent	No	FOB included in
Aircraft				DAM.
				ATC established
				during opening hours.
				Training.
				ATC Lamps.
SMRE Radio		_		Emergency Phones
Failure	Airfield	Permanent	No	at 08 Threshold.
				Published
				procedures.
				VFR Day & Night,
				ILS Approach MAA
				Waivers.
				Airfield category,
				operating
				restrictions and
				obstacles published
				in the DAM and other documents.
				Aircrew training i.e. MAPs.
Obstructions				Relevant
infringe the	Airfield	Permanent	No	obstructions fitted
AOLZ	Airieu	T emidnent		with red anti-
AOLZ				collision beacons.
				DDH acceptance of
				RtL for ops being
				Tolerable & ALARP.
				DDH acceptance of
				RtL with this hazard
				for 6FTS ops.
				Safeguarding
				Assessment
				complete and on-
			1	going.

				(IFR Waiver due for
				submission to the
				MAA Feb 18).
				Induction briefs.
				Barriers, traffic
Unauthorised				lights and signs on
personnel	Airfield	Permanent	Yes	the airfield.
personner				ATC manned.
				RRU access via
				external gate.
				Activity holder provides a risk
				assessment.
				Appropriate
				equipment fit for
				purpose.
Unusual				Trained personnel.
activity by				Necessary
visiting	Airfield	Temporary	No	supervision in place.
aircraft				Area for activity is
				assessed by activity
				organiser. Site users made
				aware of unusual
				activity.
				Medical cover in
				place as required.
				Operating Duty
	Airfield	Temporary	No	Holder of visiting air
				systems to provide
				acceptance of risk.
				Assurance that personnel are
				trained and
				authorised.
				Activity holder
'Field				provides a risk
Condition'				assessment.
operations				Appropriate
				equipment fit for
				purpose.
				Trained personnel. Area for activity is
				assessed by activity
				organiser.
				Site users made
				aware of unusual
				activity.
Autonomous				Published in Airfield
NPAS/SAR		Temporary (outside		Docs.
Rotary	Airfield	published ATC	No	Assurance that
Operations		hours)		personnel are
				trained and

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			<u>,                                      </u>
			authorised. Activity holder provides a risk assessment. Appropriate equipment fit for purpose. Trained personnel. Area for activity is assessed by activity organiser. Site users made aware of unusual activity.
Traffic Light Failure	Airfield	Permanent	Daily visual inspections of the traffic lights by ATC. Electrician on Site during airfield opening hours. Regular inspections carried out by the Airfield Electrician. Barriers and traffic fails to down and red. Traffic light display in VCR. ATC Lamps. Annual brief to all drivers. Aircraft under control of ATC.
Collision	Airfield	Permanent	Aircrew training and qualifications. MAA Waivers for Day/Night VFR and ILS Approaches. Aircraft on board warning systems. Airfield documents published. Obstacles listed in airfield documents. ATS provided by Cardiff Airport and St Athan controllers.
Airfield lighting failure	Airfield	Permanent	Daily ATC runway lighting inspections. Lighting inspections carried out prior to night flying. Regular inspections carried out by Airfield Electrician. Fault reporting

		system in place.

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ANNEX F TO DAM DATED MAR 18

#### MOD ST ATHAN FORMAL AERODROME RELATED AGREEMENTS

KSH: NATS Cardiff, SATCO, Welsh Government, CO, Aerodrome Operator, MD Cardiff Airport.

1. The MOD St Athan Formal Aerodrome Related Agreements are held with the Aerodrome Operator.

The Letter of Agreement (LOA) with Cardiff Airport can be found <u>HERE</u> and the signed Validity page can be found <u>HERE</u>.

(Note: If you do not have Dii access you will be unable to open the links above; please contact the Aerodrome Operator for further information.)

(Return to Annexes)

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ANNEX G TO DAM DATED MAR 18

#### AERODROME SAFEGUARDING WAIVERS AND EXEMPTIONS

Owner: MAA

KSH: CO, Aerodrome Operator, SATCO



Gp Capt C Muir BSc MBA MA RAF MAA Regulations Deputy Head Military Aviation Authority Abbeywood (North) Juniper (Wing 4) Mail Point #5104 MOD Abbey Wood BRISTOL BS34 80W Military Network: 9679 84232 Telephone: 0306 679 84232 Email: MAA-Reg-DepHd@mod.uk

Fit Lt A J Llewellyn Senior Air Traffic Control Officer Air Traffic Control Building 230 MOD St Athan Barry Vale of Glamorgan

CF62 4WA

Reference: 20130808-Waiver StA Infringements of OLS-U

19 Aug 13

### MAA FORMAL AUTHORISATION OF WAIVER APPLICATION (MAA/WAIVER/2013/26) – INFRINGEMENTS OF OBSTACLE LIMITATION SURFACES

- MOD St Athan sought<sup>1</sup> approval of a waiver to meet the published regulatory requirement to ensure that objects do not project into the airspace above defined limits (Obstacle Limitation Surfaces).<sup>2</sup>
- 2. A comprehensive safety assessment has been completed including supporting comments by ATM Force Command and acceptance by the DDH that the risk is tolerable and ALARP. All infringements are lit with obstruction lights and publicised within the relevant flight information publications. Furthermore, the runway is friction tested and inspected regularly to allow monitoring of the friction course thus limiting the risk of an aircraft slewing off the runway and colliding with the notified infringements. Therefore, I am content to approve the waiver.
- 3. All infringements of the Obstacle Limitation Surfaces must be fully briefed to all station based aircrew and included within the MOD St Athan Defence Aerodrome Manual. This waiver is valid for VFR, daytime only operations until 31 Mar 2018. SATCO is to review this waiver at least one month prior to the waiver expiry date. Any changes to details concerning this waiver approval should be immediately notified to the MAA.

Copy to:

AOC 22 Gp MOD St Athan Stn Cdr BM ATM AD Infra SO2 BM ATM OPS UK SO2 MAA Dep Hd O&A 1 MAA Dep Hd O&A 2 MAA Dep Hd Reg

 $<sup>^1</sup>$  20121122-Airfield Safeguarding Waiver Request Non-Precision Capability-U dated 22 Nov 12.  $^2$  RA 3016(3) and MADS Chap 5 Table 5.1.



Gp Capt C Muir BSc MBA MA RAF MAA Regulations Deputy Head Military Aviation Authority Abbeywood (North) Juniper (Wing 4) Mail Point #5104 MOD Abbey Wood BRISTOL BS34 8QW

Military Network: 9679 84232 Telephone: 0306 679 84232 Email: MAA-Reg-DepHd@mod.uk

Wing Commander R Balls MSc BEng CEng MIMechE RAF Station Commander MOD St Athan

Barry Vale of Glamorgan CF62 4W Reference: 20140214-Waiver StA Infringements of OLS Night VFR-U

Feb 14

## MAA FORMAL AUTHORISATION OF WAIVER APPLICATION (MAA/WAIVER/2014/04) – INFRINGEMENTS OF OBSTACLE LIMITATION SURFACES

- 1. MOD St Athan sought¹ approval of a waiver to meet the published regulatory requirement to ensure that objects do not project into the airspace above defined limits (Obstacle Limitation Surfaces)². This waiver authorises VFR flight at night and should be considered in conjunction with MAA/Waiver/2013/26 dated 19 Aug 13 which authorised VFR daytime only operations at MOD St Athan.
- 2. A comprehensive safety assessment has been completed including supporting comments by ATM Force Command and acceptance by the DH chain that the risk is tolerable and ALARP. In addition to the mitigations provided for waiver MAA/Waiver/2013/26, it is noted that appropriate runway/approach and taxiway lights, including IRDMs and holding point signs are provided. Furthermore, a long term plan to achieve compliance has been developed; therefore, I am content to approve the Waiver.
- 3. As per waiver MAA/Waiver/2013/26, all infringements of the Obstacle Limitation Surfaces must be fully briefed to all station based aircrew and included within the MOD St Athan Defence Aerodrome Manual. This waiver is valid for VFR night time operations until 31 Mar 2018. SATCO is to review this waiver at least one month prior to the waiver expiry date. Any changes to details concerning this waiver approval should be immediately notified to the MAA.

Copy to:

AOC 22 Gp AOBM

<sup>&</sup>lt;sup>1</sup> 20140123 - Night VFR waiver-U email dated 23 Jan 14.

<sup>&</sup>lt;sup>2</sup> RA 3016(3) and MADS Chap 5 Table 5.1.



Keith Thomas
Airfield & Safeguarding Manager St Athan
Aviation Team Welsh Government
St Athan Project,
Department for Economy, Skills & Natural Resources, ,
Marketing Suite,
Building 271a, MOD St Athan,
CF62 4LZ

Air Commodore D G Cooper MA RAF MAA Head of Oversight and Approvals

#### **Military Aviation Authority**

Abbeywood (North) Juniper (Wing 4) Mail Point #5003 MOD Abbey Wood BRISTOL BS34 8QW

Military Network: 9679 84217 Telephone: 030 679 84217 Email: DSA-MAA-OA-Hd@mod.uk

Reference: 20170317-MAA\_AWE\_2016\_118\_Response

3 May 17

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#### MAA AUTHORISATION OF WAIVER IN RELATION TO RUNWAY STRIP AND APPROACH LIGHTING REQUIREMENTS FOR A PRECISION APPROACH RUNWAY AT MOD ST ATHAN

- 1. The Welsh Government (WG) on behalf of MOD St Athan requested a Waiver from the requirements of Regulatory Article (RA) 3016<sup>1</sup>, and specifically the Manual of Aerodrome Design and Safeguarding (MADS). The intent of the Waiver request is to enable the use of Category I ILS Approaches to Runway (Rwy) 25.
- 2. The MADS requires that:
  - a. A runway strip is provided 150m either side of the centreline of a runway greater than 1200m (3900ft) in length that is used for precision or non-precision instrument approaches<sup>2</sup>. 'An object situated on a runway strip which may endanger aeroplanes should be regarded as an obstacle and should, as far as practicable, be removed<sup>3</sup>.' Several buildings are situated within the 150m Runway Strip associated with Rwy 25 at MOD St Athan.
  - b. High Intensity Centreline and 5 Bar (HI CL5B) Approach Lighting is provided for Category I Precision Approaches to runways used in adverse visibility and at night<sup>4</sup>. Rwy 25 at MOD St Athan is provided with CL2B Approach Lighting.
- 3. I note that MOD St Athan is in an unusual position as an aerodrome that is owned by the WG, but operated by the MOD under 22 Training Group. I am also aware of the WG's intent to pursue Civil Aviation Authority (CAA) licencing for the aerodrome by 1 Apr 19, and for this reason the MAA has consulted closely with the CAA on this application.

<sup>&</sup>lt;sup>1</sup> RA 3016: Military Aerodrome Design and Safeguarding Criteria.

<sup>&</sup>lt;sup>2</sup> MADS Table 4-4. Rwy 25 at MOD St Athan is 1800m in length.

<sup>3</sup> MADS Ch 4 para 3c.

<sup>4</sup> MADS Table 6-4.

- 4. Further, the CAA has reviewed the National Air Traffic Services (NATS) designed procedure in order to facilitate its inclusion in the Aeronautical Information Publication (AIP).
- 5. The application represents a substantial body of work, and centres around 3 key mitigations relating to hazards presented by the obstacles and the approach lighting. These are:
  - a. A procedure Obstacle Clearance Height (OCH) of 500ft;
  - b. The introduction of Low Visibility Procedures (LVP);
  - c. The inclusion of visibility minima within the published procedure.
- 6. The proposal has been reviewed and endorsed by a number of aerodrome stakeholders, including commercial customers and Air Officer Commanding 22 Group as the Operating Duty Holder. I am therefore content to approve a Waiver against the MADS requirements to remove obstacles from the Precision Approach Runway Strip, and to provide CL5B Approach Lighting to Category I Precision Approach runways under the conditions specified in your application including the following requirements:
  - a. Implementation of 500ft OCH;
  - b. Implementation of LVP;
  - c. Implementation of visibility minima;

and the following additional requirements:

- d. Prior Permission Required (PPR) for use of the ILS;
- e. Use of the ILS only by aircraft not carrying passengers.
- 7. This Waiver must be published and promulgated as appropriate, including in the MOD St Athan Defence Aerodrome Manual, and as part of the PPR process. This Waiver is valid until 31 Mar 2019; it must be reviewed by 31 Mar 2018 and any changes to circumstances immediately notified to the MAA, including if it is no longer required.

Copy to:

**CAA Head Aerodromes** 

Air 22 Gp AOC Air 1 Gp BM Force Cdr



Gp Capt B Duncan MA RAF MAA Regulations Deputy Head

Military Aviation Authority Abbey Wood North Juniper Wing 4 Mailpoint 5104 MOD Abbey Wood, **BS34 8QW** 

Military Network: 9679 84232 Telephone: 0306 679 84232 Email: DSA-MAA-Reg-DepHd@mod.gov.uk

Wg Cdr S R Rowley MA MSc BEng BSc MCGI CEng FRAeS CMgr FCMI RAF Commanding Officer MOD St Athan Barry Vale of Glamorgan CF62 4WA

Reference: 20180125-Extension to MAA/Waiver/2013/26 and MAA/Waiver/2014/04

30 Jan 18

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#### MAA AUTHORISATION OF EXTENSIONS TO MAA/WAIVER/2013/26 AND MAA/WAIVER/2014/04 - VFR DAY AND NIGHT OPERATIONS WITH INFRINGEMENTS OF THE OBSTACLE LIMITATION SURFACES (OLS)

- Your team requested1 extensions to MAA/WAIVER/2013/26 and MAA/WAIVER/2014/04 from the requirements of Regulatory Article (RA) 3016 Military Aerodrome Design and Safeguarding, specifically the Manual of Aerodrome Design and Safeguarding (MADS). The original Waivers permitted VFR operations during the Day and Night with obstacles infringing the OLS.
- The initial Waivers are due to expire on 31 Mar 18. The Waivers have been reviewed by stakeholders and the Aviation Duty Holder who have accepted that there have been no adverse changes which would affect VFR day and night operations at St Athan.
- It is noted that St Athan is working hard towards gaining CAA Aerodrome licencing by 1 Apr 19 and as such I am content to approve the extension request until 31 Mar 19.
- These Waiver extensions must be published and promulgated as appropriate, including within the MOD St Athan Defence Aerodrome Manual. The MAA must be informed immediately, should any detail concerning the Waivers change, including if they are no longer required. The Waivers must be reviewed at least one month prior to expiry, and the MAA engaged at the earliest opportunity should a further extension be required.

Copy to

Air 22 Gp AOC

Air 1 Gp BM Force Cdr

<sup>1</sup> 20180119-Waiver Extensions-O.

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(Return to Annexes)

ANNEX H TO DAM DATED MAR 18

# **MOD ST ATHAN NOISE ABATEMENT AREA**

Owner: SATCO

KSH: Aerodrome Operator

1. The MOD St Athan noise abatement area is shown in the red box below:



Figure H-1 - Noise Abatement Area.

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ANNEX I TO DAM DATED MAR 18

# ORDERS FOR TEMPORARY OBSTRUCTIONS ON OR AROUND ANY MANOEUVRING AREA THAT ARE CONSIDERED TO BE A HAZARD TO EITHER AIR SYSTEMS OR VEHICLES

Owner: SATCO

KSH: Aerodrome Operator

- 1. Temporary obstructions on or around any manoeuvring area that are considered to be a hazard to either Air Systems or vehicles are marked in accordance with extant regulations (MADS Ch 7 Visual Aids for Denoting Obstacles) using approved high visibility markers, tape or fencing with additional red COREL light markers at night. NOTAMs are issued and taxi patterns controlled. If relevant, pilots are briefed on landing or when calling to start.
- 2. Contact the SATCO for further clarification.

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ANNEX J TO DAM DATED MAR 18

# ORDERS FOR THE MAINTENANCE AND SAFE OPERATION OF THE RHAG

1. There is no RHAG at MOD St Athan.

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ANNEX K TO DAM DATED MAR 18

# ORDERS FOR BOTH THE SAFE OPERATION AND MAINTENANCE OF THE BARRIER

1. There are no barriers at MOD St Athan.

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ANNEX L TO DAM DATED MAR 18

# ORDERS FOR THE SAFE PARKING, MANOEUVRING, REFUELLING AND SERVICING OF AIR SYSTEMS

Owner: SATCO

KSH: SATCO, Serco St Athan, Welsh Government (for Commercial Clients)

- 1. All planned visiting Air System movements into MOD St Athan shall be pre-booked <u>a</u> minimum of 24 hrs in advance and all bookings will be taken subject to other notified movements and airfield Air System handling capability<sup>10</sup>. All bookings shall be made via ATC on 95421 Ext 8717 or 01446 798717. Any requests to use the airfield outside of published opening times or any ac movements attracting a RFFS Category higher than ICAO Cat 4 are to be made directly to ATC.
- 2. Orders for Aircraft Refuelling Vehicles Operating Safety Instructions are contained in Aviation Engineering Standing Orders, Book 2, Part 1, Chapter 4, Order No 24:

AESOs Book 2, Part 1, Chapter 4, Order No 24

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

3. Servicing in accordance with individual companies within their demised areas.

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<sup>&</sup>lt;sup>10</sup> Routine airfield RFF Cat is ICAO Cat 4.

ANNEX M TO DAM DATED MAR 18

# **EMERGENCY ORDERS/AERODROME CRASH PLAN**

Owner: Aerodrome Operator

KSH: SATCO, Serco Fire Service, DPHC Med Centre, RAF Police, MGS, MPGS

1. The MOD St Athan Post Crash Management Plan is managed by the Aerodrome Operator and can be accessed via MOSS:

Aircraft Crash and Post Crash Management Plan

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

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ANNEX N TO DAM DATED MAR 18

#### ORDERS FOR DISABLED AIR SYSTEM REMOVAL

Owner: SATCO

KSH: Aerodrome Operator

1. It may be necessary to remove quickly and safely an Air System that has caused a temporary closure of a runway, taxiway or Aircraft Servicing Platform (ASP). The disabled Air System removal procedures are intended to deal solely with incidents that fall beneath the criteria of an accident, which is dealt with separately under the MOD St Athan ACPCMP. If there is any doubt as to the status of an incident, advice should be sought from the AAIB or MAAIB. Responsibility for aircraft removal will lie with the on-site aircraft operators. Visiting MOD Air Systems will be dealt with by MOD resources.

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ANNEX O TO DAM DATED MAR 18

# <u>AERODROME RESCUE AND FIRE FIGHTING ORDERS – SERCO ST ATHAN FIRE SERVICE ORDER BOOK (FSOB)</u>

Owner: Serco St Athan

KSH: SATCO, Aerodrome Operator

1. The St Athan Aerodrome Rescue and Fire Fighting Orders are managed and controlled by Serco. Copies of the document are held within MOSS and linked here:

Serco Fire & Rescue Service MoD St Athan Local Instructions

Serco St Athan Fire Service Order Book Part 1 - FSOB Part 1

Serco St Athan Fire Service Order Book Part 2 - FSOB Part 2

Serco St Athan Fire Service Order Book Part 3 – FSOB Part 3

<u>Serco St Athan Fire Service Order Book Part 4 – FSOB Part 4</u>

Serco St Athan Fire Service Order Book Part 5 - FSOB Part 5

(Note: If you do not have Dii access you will be unable to open the links above; please contact the owner of this Annex for further information.)

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ANNEX P TO DAM DATED MAR 18

# AERODROME RESCUE AND FIRE FIGHTING TRAINING AREA ORDERS- (INCLUDING ARFF TRAINING AREA RISK ASSESSMENTS AND ORDERS)

Owner: Serco St Athan

KSH: SATCO, Aerodrome Operator

Aerodrome Rescue and Fire Fighting Training Area Orders

ARFF Training Area Risk Assessment

(Note: If you do not have Dii access you will be unable to open the links above; please contact the owner of this Annex for further information.)

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ANNEX Q TO DAM DATED MAR 18

## **AIR TRAFFIC CONTROL ORDERS**

Owner: SATCO

KSH: UWAS, HASL, CAL, eCube, NPASSA, Bristows, Aerodrome Operator

- 1. St Athan ATC (Operational) Orders can be found within the documents below:
  - a. ATM Force Orders Ed 1.8
  - b. STANEVAL Documents and Publications
  - c. Battlespace Management Safety Management Manual
- 2. The St Athan MATS Pt 2 is kept separately to this document and is held in Air Traffic Control.

## **FLYING ORDERS**

# Part 1 - Control of Flying

- 1-1 Authorised Airfield Users
- 1-2 Airfield Details

## Part 2 - Flying Operations

- 2-1 Weather Minima
- 2-2 Local Flying Area
- 2-3 Airfield Information
- 2-4 Departure Procedures
- 2-5 Recovery Procedures
- 2-6 Visual Circuit
- 2-7 Autonomous Operations
- 2-8 Fuel Warning
- 2-9 Bristows Orders

## Part 3 – Airfield Support

- 3-1 Refuelling
- 3-2 Visiting Air Systems
- 3-3 Airfield Snow and Ice Plan
- 3-4 Engine Ground Runs

### Part 4 – Air Safety

- 4-1 Airfield and Air Systems Incident Response
- 4-2 Airfield Crash and Emergency Organisation
- 4-3 Reporting of Aviation-related Incidents / Occurrences on the Airfield
- 4-4 Reporting of FOD

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#### STATION FLYING ORDERS

#### **PART 1 - CONTROL OF FLYING**

## 1-1 AUTHORISED AIRFIELD USERS (Return to Index)

- 1. The units authorised to conduct ops at MOD St Athan are detailed below:
  - a. **University of Wales Air Squadron (UWAS)/Air Experience Flight (AEF)** Monday to Friday during airfield opening hours, unless requested otherwise by OC UWAS.
  - b. **Horizon Aircraft Services Ltd (HASL)** Subject to the provisions of the Airfield Management Agreement (AMA). Extensions to normal airfield opening hours may be granted, subject to prior approval from ATC.
  - c. **eCube** Subject to the provisions of the Airfield Management Agreement (AMA). Extensions to normal airfield opening hours may be granted, subject to prior approval from ATC.
  - d. **Cardiff Aviation Limited (CAL)** Subject to the provisions of the Airfield Management Agreement (AMA). Extensions to normal airfield opening hours may be granted, subject to prior approval from ATC.
  - e. **National Police Air Service St Athan (NPAS)** NPAS operates H24, 7 days a week and are authorised to conduct Autonomous Operations when ATC is closed. (Order 2-7). When responding to a high priority call NPAS have priority over all other airfield users, with the exception of emergency aircraft.
  - f. **Bristows -** Operate in the same manner as NPAS.
- 2. **Independent Air Systems** There are private Air Systems which have been authorised to operate from HASL. The owners of these independent Air Systems are responsible to the Aerodrome Operator for ensuring that they operate in accordance with all rules or restrictions applicable to HASL and that they comply fully with insurance requirements set out in JSP 360.
- 3. **Visiting Air Systems** ATC acceptance of visiting Air Systems is subject to airfield opening hours and the flying programme. Non-UK Military Air Systems and civilian Air Systems acceptance is subject to JSP 360. Air Systems are not permitted to use the airfield when ATC is closed. Visiting Air Systems sponsors are to ensure that the visiting aircrew are fully briefed on MOD St Athan Flying procedures prior to their commencement of flying.
- 4. **UK Military Air Systems Autonomous Operations** Subject to the approval of the Station Commander MOD St Athan, UK Military rotary wing Air Systems may operate at MOD St Athan outside of published airfield opening hours and without the provision of airfield support services. Full details are found at Order 2-7.
- 5. **Customs and Immigration Requirements** Air Systems departing the UK mainland from MOD St Athan or arriving directly from outside the UK mainland to MOD St Athan are to inform the UK Border Agency 24 hours in advance of their intended arrival. Unscheduled arrivals originating outside the UK mainland are to be notified to the RAF Police and Special Branch.

## 1-2 AIRFIELD DETAILS (Return to Index)

1. **Airspace** – MOD St Athan Airfield is situated approximately 3m West of Cardiff Airport within Class D Controlled Air Space (CAS). A Local Flying Zone (LFZ) is established as below

- 2. **Airfield Opening Times** Airfield operating hours and services provided are published in References A and B. The airfield is open 7 days a week during the hours of 0900(L) and 1700(L). These hours may be extended in accordance with the AMA through ATC.
- 3. **Autonomous Operations** Outside of the published operating hours NPAS and Bristow helicopters will operate from the airfield. Autonomous use of the airfield by any other user is not permitted unless permission has been sought from Air Traffic Control, in accordance with Order 2-7.

#### **PART 2 – FLYING OPERATIONS**

#### 2-1 WEATHER MINIMA (Return to Index)

- 1. St Athan Airfield is delegated a portion of the Cardiff Control Zone, known as the St Athan Local Flying Zone (LFZ) to permit autonomous operations. Control of the LFZ will be delegated to St Athan ATC when all the following conditions are satisfied:
  - St Athan airfield and ATC is open;
  - St Athan reported met visibility is 5000M or more;
  - St Athan cloud ceiling is 1500ft or more;
  - St Athan Tower ATCO must obtain approval from the Cardiff Tower ATCO for activation of the LFZ
  - The LFZ is to be utilised by UKP, HEMS, Coastguard or Coastguard Training flights.
  - The Helicopter training areas (HTAs) are in use by coastguard training flights.
  - The LFZ is not available Special VFR flight.

#### 2-2 LOCAL FLYING AREA (Return to Index)

1. **Local Flying Zone (LFZ)** – A LFZ is established within the Cardiff CTR with a vertical limit of altitude 1700ft Cardiff QNH. Co-ordinates:

512524N 0033307W, 512456N 0032523W, 512406N 0032302W, 512247N 0032302W, 512124N 0033042W, 512209N 0033306W. Then clockwise by the arc of a circle radius 8nm centred on 512348N 0032036W from 512209N 0033306W to 512524N 0033307W.

DAM Issue 5 Q-3

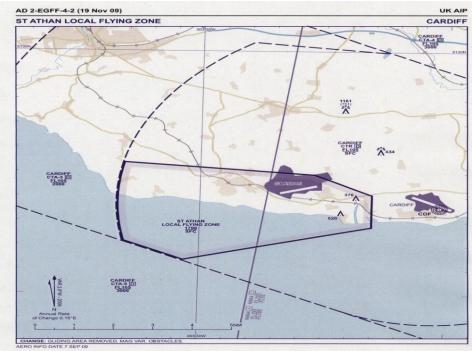


Figure Q-1 – St Athan Local Flying Zone (LFZ).

2. **UWAS/No 1 AEF Operating Areas** – Figure 2 shows the UWAS and No 1 AEF operating areas. These areas are deconflicted prior to departure or by Cardiff ATC.



Figure Q-2 – UWAS and No 1 AEF Operating Areas.

# 2-3 AIRFIELD INFORMATION (Return to Index)

1. Airfield Layout – The layout of the MOD St Athan Airfield is illustrated below at Figure Q-3.

2. Noise Abatement – Aircrew are to avoid over-flight of St Athan village whilst departing or recovering to the airfield. It is advised that aircraft maintain a track to the east of St Athan village and to the West of the power lines.

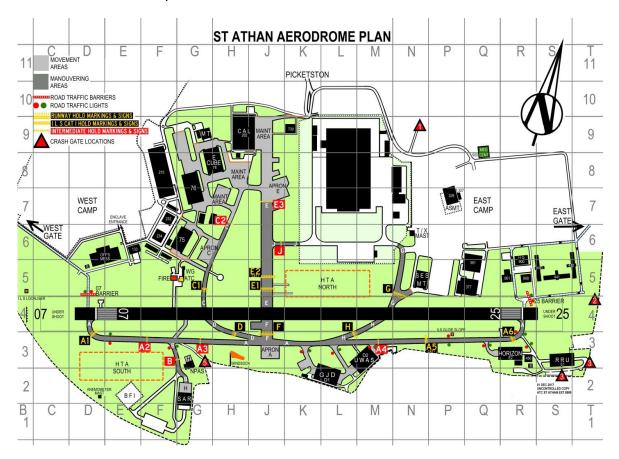


Figure Q-3 – Airfield Layout Map.



Figure Q-4 - St Athan Village Avoid Area.

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#### 2-4 DEPARTURE PROCEDURES (Return to Index)

#### **Ground Procedures**

- 1. **Warning Out** Departure details for all flights are to be passed to ATC before walking to the Air System. The following details are to be included:
  - a. Callsign
  - b. ETD
  - c. Flight Rules (VFR/SVFR/IFR)
  - d. Type of aircraft
  - e. Requested Routeing (Published VFR route)
  - f. Destination
  - g. POB
  - h. Time on route
  - i. Any other information pertinent to the departure eg, Engine checks north/south side, PFLs on recovery, circuit requirements, first solo, etc.

All departures are subject to mandatory ATC clearance which will be issued before take off.

- 2. **Ground Ops** ATC is to be contacted **prior to engine start** on the Tower Frequency (UHF 373.25/VHF 118.125). The VHF frequency is primary. The following information is required.
  - a. Callsign
  - b. Location
  - c. POB
  - d. ATIS Code
- 3. **Taxi Instructions** ATC clearance will be issued prior to taxi clearance being given.
- 4. **UWAS Specific Instructions** The following procedure applies to UWAS ops:
  - a. Prior to engine start a UHF check is carried out with ATC before switching to VHF 118.125 for start.
  - b. UWAS aircraft will normally conduct engine checks on taxiway Alpha at the appropriate holding point. Solo students (those with 3-digit callsigns) and formations will normally conduct engine checks at holding point Golf or Echo. A runway crossing clearance must be obtained prior to crossing the runway.
- 5. Departure Clearance The Tower Controller will pass the departure clearance when requested to do so by the pilot.

#### **Departure Procedures**

6. VFR / SVFR departures – All departures will be notified to Cardiff ATC via St Athan ATC.

The available VFR / SVFR departures from St Athan are:

Route Designator	Runway	Rou	ite				Maximum Altitude (EGFF QNH)
VFR East	07 & 25	Air	Systems	remain	West	of	1500 Feet

		Aberthaw Power station over Water, clearance limit Aberthaw power station then as directed by Cardiff Tower.	
VFR South	07 & 25	Air Systems remain west of the quarry and leave CAS towards Minehead VRP	1500 Feet
VFR Nash Point	07 & 25	Air Systems remain within the confines of the LFZ and leave CAS to the west towards Nash Point VRP	1500 Feet
VFR Nash South	07	Right turn out after St Athan village but within the confines of the LFZ, track 250 to exit CAS via Nash South.	1500 Feet
VFR Nash South	25	Leave CAS via Nash South.	1500 Feet
VFR North	07 & 25	Leave CAS between the ST Hilary and Wenvoe TV Masts	1500 Feet

## 7. IFR Departures

St Athan is a VFR only airfield; however a VFR to IFR departure is available. An Abbreviated VFR to IFR Departure clearance (AVIC) shall be passed to all Air Systems intending to fly IFR outbound from St Athan regardless of their intended routing. The AVIC clearance is as follows:

**Runway 07 or 25** - Climb straight ahead to altitude 4000ft Cardiff QNH, squawk <xxxx> VFR. On passing altitude 2400ft flight becomes IFR.

Air Systems are operating VFR until passing altitude 2400' and VFR minima apply to their departure.

Airways joining clearance and en route instructions will be passed by Cardiff Radar.

## 2-5 RECOVERY PROCEDURES (Return to Index)

1. **General** – All Air Systems inbound to MOD St Athan are to contact Cardiff Approach, on the published frequency, for a clearance to enter controlled airspace. Cardiff Radar will initiate any necessary co-ordination with St Athan ATC. Air Systems are to maintain their assigned squawk on recovery unless instructed otherwise or their intention is to join for visual circuits. If the intention is to carry out visual circuits SSR Mode 3/A Code 7010 should be selected once directed by ATC.

All non-MOD St Athan based Air Systems will be subject to an approach to land only, unless prior approval has been granted from ATC.

2. **VFR Recoveries** – Due to airspace constraints and to de-conflict piston, fast jet and rotary traffic, the following VFR recoveries are to be followed;

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a. Fast Jet VFR Recoveries – All fast jet aircraft are to recover through the 'Jet Entry Point' at Nash South unless instructed otherwise by Cardiff Approach. All recoveries are to be made at 1300' QFE or as directed by Cardiff Approach and Air Systems should be at circuit height by Nash South.

Pilots are to request either:

- i. The Initial Point for a visual run-in and break at the runway mid-point
- ii. Downwind Join (Runway 25 only)
- iii. Straight In Approach
- b. All other Air Systems VFR Recoveries are to be in accordance with the table below or as instructed by Cardiff ATC;

Route Designator	Runway	Route	Maximum Altitude (EGFF QNH)
VFR East	07 & 25	From the North East route as directed by Cardiff ATC to hold East of Aberthaw Power station and as directed by St Athan ATC.	1500 Feet
VFR South	07 & 25	Enter CAS from the South, remain west of the quarry and as directed by St Athan ATC.	1500 Feet
VFR Nash Point	07 & 25	Enter CAS via Nash Point route eastbound along the coast over water <sup>11</sup> then as directed by St Athan ATC.	1500 Feet
VFR North Arrival	07 & 25	Enter CAS towards the St Hilary VRP to orbit and remain north of the mast then as directed by Cardiff Tower.	1500 Feet
VFR Nash South	07 & 25	Enter CAS via Nash South then as directed by St Athan Tower.	1500 Feet
VFR Straight IN	07 & 25	Enter CAS to position Straight in for the runway in use.	As directed by Cardiff.

3. **IFR Recoveries** – Published IFR instrument approaches available to runway 25 are ILS/DME or LOC/DME. There are no published instrument approach procedures for runway 07.

# 2.6 VISUAL CIRCUIT (Return to Index)

1. This order applies only when ATC is open (the orders for autonomous operations are contained at 2-7). Only MOD St Athan-based aircrew are routinely permitted to fly visual circuits.

<sup>&</sup>lt;sup>11</sup> UWAS are to descend to 800ft QFE once passing Nash Point.

Visitors may be permitted to conduct visual circuits provided that they have received the brief from St Athan ATC.

- 2. All circuits are flown to the south of the airfield. When HTA North is active, there is no 'Dead-side' available due to airspace limitations. In this instance, all 'go-arounds' are to be carried out by over-flying the runway and climbing to/maintaining circuit height.
- 3. **Circuit Height**. Dependent upon ac type and circuit profile, the following heights should be adopted:
  - a. Light piston Air Systems: Normal circuit height 800' QFE.
  - b. **Rotary Wing**: Normal circuit height for rotary is 800ft QFE but may be flown lower depending on traffic levels.
  - c. All other Air Systems (fast jet, turbo-prop, large multi-engine piston): Normal circuit height 1300' QFE.
  - d. 'Glide' Circuits: 1500' QFE.
  - e. **Low-Level Circuits**: 500' QFE. Low-level circuits are not to be flown simultaneously by light piston and other Air System types. Fixed-wing low-level circuits will not be permitted if the rotary circuit is active (see paragraph 4).
- 4. **Priorities** Except for ac in emergency and the NPAS on priority calls, IFR inbound traffic will take priority. When military aircraft are conducting circuit training oval circuits will be flown and civil aircraft should conform to a military oval circuit pattern.
- 5. **Circuit Capacity** When active, the maximum number of Air Systems permitted in the visual circuit is 3. A fourth aircraft may be permitted to join provided that the intention of at least one Air System is to land. When the rotary circuit is active, the maximum number of Air Systems allowed for circuits is 4.
- 6. **Going Around** Qualified pilots may descend to 100' QFE if not cleared to land or touch & go. Solo students are to execute a low approach/go around at no lower than 200' QFE.
- 7. **Initial Point** Air Systems joining through initial point for either runway are to join at the specific circuit height for the aircraft type. Subject to circuit traffic, pilots may request a low break (500ft QFE).
- 8. **SSR Procedures** Air Systems joining the visual circuit to land are to maintain their discrete assigned squawk into the circuit. Air Systems joining for multiple visual circuits are to assign the Mode 3/A Code 7010.

## **Practice Emergencies**

- 9. **Minimum Height** All operators of civilian Air Systems, including UWAS, are to be aware of the requirements of Ref D and ensure that when Flying a practice emergency they do not fly within 500 ft of any person, ship, structure or vessel. Operators of military Air Systems may fly practice emergencies to their authorised minima. All pilots are to ensure that they fly their Air Systems in such a manner as to minimise the nuisance to local residents. In particular pilots are to ensure their manoeuvres keep the Air Systems clear of St Athan village.
- 10. Practice Engine Failure After Take-Off (PEFATO) and Power Loss After Take Off (PLATO) PEFATOs and PLATOs do not need to be pre-noted to ATC. Air Systems should not

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be turned through more than 30° and pilots are not to attempt to convert the manoeuvre into a turn-back.

- 11. **Practice Forced Landing (PFL)** Due to the complexities associated with operating within the Cardiff CTR, all PFLs need ATC approval prior to departure and should be included when the sortie is booked out with ATC. For fast jet PFLs, a slot should be negotiated with Cardiff ATC to accommodate the increased amount of airspace needed to conduct a fast jet PFL.
- 12. For piston ac, High Key is routinely considered to be 3000' QFE abeam the touchdown threshold. High Key for fast jet PFLs will be determined through negotiation with Cardiff ATC and will be subject to traffic at Cardiff.
- 13. **Practice Turnback** A practice turnback must be requested from ATC prior to departure or on the downwind call of the circuit immediately prior to the intended manoeuvre. No notice practice turnbacks are not permitted; furthermore, the following conditions apply before a practice turnback will be approved:
  - a. Visual Circuit clear except for the Air System conducting the practice turnback.
  - b. No Air System on recovery for the notified Runway in use.
- 14. **St Athan 'Secure' Procedures** Due to the proximity of Cardiff Airport, it may be necessary to hold traffic operating within the St Athan visual circuit against IFR traffic departing from and arriving into Cardiff. To ensure lateral separation against IFR traffic and the integrity of the Critical Interface Point (CIP) are maintained, 'secure' procedures have been developed between Cardiff and St Athan ATC.

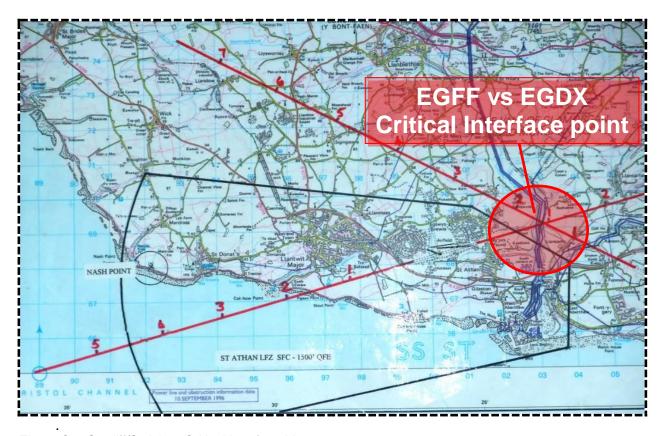


Figure Q-5 Cardiff/St Athan Critical Interface Map.

# 2-7 AUTONOMOUS OPERATIONS (FIELD CONDITIONS) (Return to Index)

Reference:

# A. LOA<sup>12</sup>

- 1. NPAS and Bristows are the only St Athan Units with permission to operate autonomously when the Airfield is closed. Detailed instructions for the conduct of Operations when ATC is closed are contained at 4.7 of the LOA.
- 2. **UK Military Aircraft Autonomous Operations** Subject to the approval of CO MOD St Athan, and the appropriate Duty Holder, autonomous operations by UK Military Rotary Wing aircraft at MOD St Athan, outside of published airfield operating hours, may be considered. The following conditions apply to autonomous operations;
  - a. **Availability** The approval of autonomous operations will only be considered when no other fixed wing operations are planned.
  - b. **Applicability** Multiple Air System operations will be discouraged due to the airspace complexities and potential impact upon other airfield users. Operationally essential taskings may be considered for approval by the MOD St Athan Operating Authority (HoE or Aerodrome Operator).
  - c. **Notification and DDH Approval** Any request to use MOD St Athan under autonomous operations is to be made via ATC (Ext 8717) <u>at least 24hrs</u> prior to the sortie. Any request will also require email acceptance of the risks of autonomous operations from an appropriate Duty Holder. The St Athan Head of Establishment has final say on approval of any request.
  - d. **ATC Briefing** Air Systems pilots must receive a brief from ATC outlining local procedures, available operating areas and airspace restrictions.

### 2-8 FUEL WARNING (Return to Index)

- 1. **Fuel Priority.** A 'Fuel Priority' call is to be made as soon as it becomes apparent to the ac captain that he will be landing with the minimum promulgated fuel. ATC is to take appropriate action to allow the pilot to land from his first approach. If the Air System captain is unable to land from this approach he is to declare an emergency to indicate 'Urgency' and the landing runway is to be made sterile until the ac lands or diverts.
- 2. **Landing Below Minimum Fuel.** An Air System captain who calculates that on recovery he would land with less than the promulgated minimum fuel is to declare an emergency condition (PAN).

## 2-9 BRISTOWS ORDERS (Return to Index)

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<sup>&</sup>lt;sup>12</sup> LOA between Cardiff Airport and St Athan Airport can be made available on request.

<sup>&</sup>lt;sup>13</sup> International Urgency Condition: 'A condition concerning the safety of an aircraft or other vehicle, or of some person on board or within sight, but does not require immediate assistance'. Signified by the use of the phrase 'PAN, PAN' (repeated 3 times) followed by the ac callsign (once) - MMATM.

1. **SAR winch checks.** SAR helicopters hoists will occasionally require integrity checks. This involves hovering at 350ft agl while winching a 600lb weight to and from the aircraft. Exceptionally, winch checks will be flown next to Taxiway Bravo. Vehicular access to Taxiway Bravo will be permitted during a winch weight check in HTA South, but prohibited if Taxiway Bravo itself is in use for the check.

#### **PART 3 – AIRFIELD SUPPORT**

#### **3-1 REFUELLING** (Return to Index)

- 1. Refuelling services provided by Serco are not authorised to conduct Rotors running refuelling. Air Systems refuelling and replenishment is only to be carried out in the following areas:
  - a. UWAS Dispersal.
  - b. NPAS/Bristows Dispersals.
  - c. Apron Alpha.
  - d. Apron Charlie.
  - d. HASL Dispersal.
  - e. Apron Echo.
- 2. As the Aerospace Business Park develops, further areas will be approved for the purpose of fuelling activities, subject to extant business integration processes.
- 3. All St Athan-based units are to maintain a fuel spillage plan and are to review it regularly. Additionally, all areas within commercial operators' demised areas and where Air System movements are permitted when MOD St Athan ATC is closed<sup>14</sup>, are to be monitored and supervised in accordance with Ref A, specifically:
  - a. Ac operating companies should appoint a competent person to supervise the observance of correct Air System fuelling procedures, and to liaise with the fuel supplier's operatives. The Fuelling Supervisor should be instructed in the requirements, the responsibilities and the safety measures of the fuelling supervisory task, and should remain in the apron area while fuelling is taking place.
  - b. Vehicles (including fuelling vehicles) and equipment should be positioned so that:
    - i. They do not obstruct access by RFFS vehicles.
    - ii. They do not inhibit the rapid removal of the fuelling vehicle from the apron, or Air System fuelling or parking areas should this become necessary.
    - iii. They can easily and rapidly be removed.
    - iv. The deployment of escape slides and the egress of passengers from the area into which these slides would deploy are not obstructed.

<sup>&</sup>lt;sup>14</sup> Police ASU and 634 VGS conducting ground and aerial activities; commercial operators conducting stationery engineering activities only.

- v. The settling of the Air System as its weight increases with the uplift of fuel and payload does not impinge on them.
- c. The use of any equipment with the potential to create or induce a source of ignition should be identified and excluded from any Fuelling Zone. Equipment maintenance, repairs, and testing procedures, including the operation of switches, radios and other devices, with the potential to create a source of ignition within the Fuelling Zone, should be deferred until fuelling has finished.
- d. Procedures should be established to prevent fuel ignition from other heat sources e.g. Air System Auxiliary Power Unit exhausts, overheated wheel brakes, jet efflux from other ac etc.
- 4. Fuelling personnel are to inform ATC at the start and cessation of fuelling ops. When fuelling ops are in progress, the ADC shall not permit ac to start on or taxi to an Apron area where such activities are in progress, irrespective of the presence of a marshaller. Fuelling personnel are to report<sup>15</sup> all instances where safety barriers have been breached to the Airfield Operating Authority (ATC in the first instance).
- 5. Air System operators using semi-permanent fuel bowsers are to ensure that their use (including replenishment) is correctly supervised by a competent person in accordance with the guidance material contained at para 2, when ATC is unmanned. Fuelling activities to support commercial ground operations may be permitted when ATC is closed provided that:
  - a. The commercial operator complies with the guidance material contained at para 2.
  - b. Air Systems are not permitted to start or taxi.
- 6. Visiting Air Systems will be responsible for self fuelling unless pre-arranged through their sponsors.

#### 3-2 VISITING AIR SYSTEMS (Return to Index)

- 1. MOD St Athan Airfield has Prior Permission Only (PPO) status for both civilian and military visiting Air Systems.
- 2. All planned visiting Air System movements into MOD St Athan shall be pre-booked <u>a minimum of 24 hrs in advance</u> and all bookings will be taken subject to other notified movements and airfield Air System handling capability<sup>16</sup>. All bookings shall be made via ATC on 01446 798717 (civilian) or 95421 8717 (military). Any requests to use the airfield outside of published opening times or any ac movements attracting a RFFS Category higher than ICAO Cat 4 are to be made directly to ATC.

# 3-3 AIRFIELD SNOW AND ICE PLAN (Return to Index)

1. The policy at MOD St Athan for Snow and Ice clearance on the airfield consists of doing nothing but letting nature take its course. However, it is important that vehicles do not compact

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<sup>&</sup>lt;sup>15</sup> Reports are to be made via a Defence Aviation Safety Occurrence Report (DASOR). Confidential electronic reporting via ASIMS is available at ATC and via <a href="https://www.asims.r.mil.uk">https://www.asims.r.mil.uk</a>

<sup>&</sup>lt;sup>16</sup> Routine airfield RFF ICAO Cat 4.

snow and ice, thus prolonging the time it takes for the airfield to return to normal operations. The policy for snow and ice clearance recognises the needs for airfield operators (both mil and commercial) located on the south-side of the airfield to access their work locations, therefore the only area of the airfield which will be subject to active control / clearance measures will be the Alpha and Bravo Taxiways and the Runway 07 Threshold.

## 3-4 ENGINE GROUND RUNS (EGR) (Return to Index)

- With the majority of commercial operators conducting MRO activities, there is a requirement to conduct EGRs to test Air System engines. Potentially, this activity could pose a fire / explosion hazard, therefore control measures should be put in place to ensure that the risk of such hazards being released is mitigated to ALARP. The control measures implemented should be commensurate with the activity being conducted. Therefore the following guidelines should be followed to ensure that the correct control measures are adopted:
  - a. Approval. During Airfield opening hours approval for High Power EGR shall be sought from ATC and pilot or engineer is to be in communication with ATC on the Tower Frequency.
  - b. Locations. Aside from Light Piston ac (see below), all high-powered EGRs should take place at the nominated Engine Running Platform (ERP) locations. The 2 areas designated as ERPs are:
    - i. Apron Echo. Located adjacent to taxiway Echo at location J7 on the Station Crash Map and is a suitable location for all ac types.
    - ii. Apron Alpha. Located off the Southern Taxiway at location J3 on the Stationn Crash Map; suitable for FJ and piston ac only.

Operators may, at their own risk, use their demised areas for lower power EGRs, provided that suitable fire extinguishing equipment and appropriately trained personnel are in attendance for the duration of the EGR.

- c. Fire Cover. During opening hours RRFS can be provided by contacting the Fire Section on 01446 798392.
- d. Out of Airfield Opening Hours. Engine ground runs are not to take place on the airfield unless approved, through means of a safety assessment, by the Welsh Government.

## PART 4 - AIR SAFETY

# 4-1 AIRFIELD AND AIR SYSTEM INCIDENT RESPONSE (Return to Index)

The actions to be taken in the event of an Air System incident on the airfield involving a MOD St Athan-based or visiting Air Systems are detailed in the Aircraft Crash and Post Crash Management Plan<sup>17</sup> (ACPCMP). The ACPCMP is to remain in force until the incident is closed by the Incident Officer or until an MOD Incident Officer has been appointed and taken control of the Unit response.

## 4-2 AIRFIELD CRASH AND EMERGENCY ORGANISATION (Return to Index)

1. **SATCO**. SATCO is responsible to the Aerodrome Operator for:

<sup>&</sup>lt;sup>17</sup> ACPCPM

- a. Initiating the prompt and efficient deployment of the emergency services to an aircraft accident or incident.
- b. Regular testing of emergency communications including the crash telephone system and the Station PA system.
- c. Arranging regular practices of the crash and emergency services.
- d. Ensuring that Station Fire and Medical Services are advised of when UWAS/AEF flying is planned or taking place.

#### **Immediate Crash Action**

- 2. Immediate crash action is to be in accordance with MAA Regulations<sup>18</sup>. In brief, crash action is based on 3 states of readiness as follows:
  - a. State 1. A crash on or seen from the airfield.
  - b. **State 2**. An incident on the airfield where doubt exists about the safety of the Air System or its occupants, or to anticipate State 1. The crash vehicles and ambulance are deployed to the incident or to pre-arranged positions<sup>19</sup> on the airfield.
  - c. **State 3**. A precautionary measure to cater for possible incident on the airfield, or when an Air System has crashed off the airfield but the position is unknown. Crash rescue services are manned with engines running at their normal base locations<sup>20</sup>.
- 3. The standard emergency message is to be passed on the Crash Phone to the Fire Section and Medical Centre as soon as the Aerodrome Controller has clarified the details. When the Crash Phone has been notified as unserviceable, the ATCO IC is to ensure that the Fire Section and Med Centre are informed immediately by telephone and the Emergency Back-up Protocol initiated (Fire Section to be contacted first):
- 4. The standard format for Air System emergency messages is as follows:
  - a. Pre-words as appropriate to the incident:
    - (1) 'STATE 1, STATE 1, STATE 1' or,
    - (2) 'EMERGENCY STATE 2' or,
    - (3) 'EMERGENCY STATE 3'.
  - b. Type of aircraft and nature of emergency (e.g. Tutor fumes in the cockpit; Merlin crashed).
  - c. Location (Crash Map Grid Reference if appropriate).

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<sup>&</sup>lt;sup>18</sup> MAA RA3041 and MMATM, Chapter 36.

<sup>&</sup>lt;sup>19</sup> The Fire vehicles position at the Crash Access Lane leading from the Fire Section onto the rwy. The Medics position at the rwy holding point at Charlie (Grid Ref G5).

<sup>&</sup>lt;sup>20</sup> Fire vehicles at Fire Section

- d. Persons on board and whether any have ejected or baled out.
- e. Any complications (e.g. a crash involving buildings or vehicles).
- f. Whether the Air System is known to be armed and/or carrying hazardous cargo.

This message is to be repeated over MRE (Channel 2) when the emergency services have indicated they are mobile to the incident.

- 5. Crash or Emergency affecting the Railway Line. In the event of a crash or incident affecting the railway adjacent to the airfield, the ATCO IC is to contact Railtrack at Cardiff on telephone number **029 2064 4627** to stop all rail traffic.
- 6. **Crash and Fire Organisation** The airfield crash/fire organisation is established to cover the Flying Ops at MOD St Athan. The Station Fire Officer has overall responsibility for the Station crash/fire organisation and is to detail orders for the duty crash crew which are to include:
  - a. A requirement to ensure that all airfield crash gates are serviceable and able to be unlocked in an emergency.
  - b. A requirement to advise ATC of the serviceability of the crash/fire response vehicles by 0830(L) each Flying day.
- 7. **All First Solo Flights** Whenever a student is embarking upon his/her first solo flight the instructor is to inform ATC and the ATCO IC is to ensure that Emergency State 3 actions are initiated.

# 4-3 REPORTING OF AVIATION-RELATED INCIDENTS / OCCURENCES ON THE AIRFIELD (Return to Index)

- 1. The aim of Air Safety is to maximise operational capability by reducing those risks inherent in aviation to at least 'Tolerable' and ALARP<sup>21</sup>. Occurrence and incident reporting is a fundamental element towards achieving this aim and all reportable<sup>22</sup> occurrences shall be reported in accordance with Reference A. Safety is everybody's responsibility.
- 2. **ASIMS** All Air Safety related occurrences, any incident on the airfield, and hazards or observations pertinent to air safety or any specific specialist occurrence i.e. birdstrike are to be submitted on a DASOR through the <u>ASIMS</u> website.
- 3. **DAEMS** Is an MOD wide initiative to promote better air safety and operating efficiency by more effective reporting, better investigation and better lessons learned. Can be used to report any safety related issues, near misses, safety hazards or continuous improvement ideas. These can be submitted to the SFSO through an 'In-Form'.
- 4. Civilian Reporting Civilian reporting forms available at www.caa.co.uk<sup>23</sup>

## 4-4 FOREIGN OBJECT DEBRIS (FOD) DAMAGE PREVENTION (Return to Index)

<sup>&</sup>lt;sup>21</sup> ALARP – As Low As Reasonably Practicable

<sup>&</sup>lt;sup>22</sup> A guide to all reportable occurrences is contained at Annex C to MAA RA 1410.

Reporting alleged infringements of air navigation legislation (CA939); Mandatory Occurrence Reporting (SRG1601); ATS Engineering Occurrence Reporting Form (SRG1603).

- 1. The MAA guidance for the management of FOD prevention is contained in MAA RA1400(2)<sup>24</sup>. The local FOD Prevention organisation is detailed in the MOD St Athan FOD Management Plan<sup>25</sup>. All FOD management arrangements at MOD St Athan will be in accordance with these documents.
- 2. The FOD Officer at MOD St Athan is Flt Lt MacFarlane, Unit Safety and Assurance Cell, 01446 798394.

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ANNEX R TO DAM DATED MAR 18

# ORDERS FOR THE REPORTING PROCEDURES TO ADVISE NO1 AIDU OF ANY PERMANENT CHANGES TO AERODROME INFORMATION

Owner: Aerodrome Operator

KSH: Senior ATSA

1. The responsibility for advising No 1 AIDU of any permanent changes to MOD St Athan aerodrome information lies with the AO<sup>26</sup>; however, this can be delegated to the SATSA. The AO (or SATSA if delegated) is responsible for advising AIDU of any permanent changes to St Athan aerodrome information through the web address given in MMATM Ch 46.

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<sup>&</sup>lt;sup>26</sup> FM-AIPAD1 – Version 0.1 – 07/12/2017

ANNEX S TO DAM DATED MAR 18

### AERODROME SERVICEABILITY INSPECTION ORDERS

Owner: SATCO KSH: ATCO IC

- 1. **Aerodrome Serviceability Inspections.** Aerodrome inspections are to be carried out in accordance with RA 3201(1) Military ATM Para 1.g; ATM Force Orders.
  - a. The ATCO IC at St Athan is to ensure an airfield inspection is carried out each day as soon as light permits, but no later than 0845 hrs, to ensure that:
    - (i) The surfaces are fit for ac and vehicles.
    - (ii) The markings are not worn or obliterated.
    - (iii) The barrier and tannoy at 07 north is servicable.
    - (iv) The traffic lights at both runway thresholds, at Bravo Taxiway intersection, at D1W, D1E, D2W, D2E, E2W and E2E are serviceable.
    - (v) Any object found on the airfield is removed and a Foreign Object Debris (FOD) report is to be completed to accompany the item. If the object could have come from an ac it is to be taken to the each Station based company, engineering department immediately. All other objects are to be removed and have a FOD report raised in accordance with the St Athan FOD prevention policy.
    - (vi) Work in progress and obstructions are identified and marked.
    - (vii) The Apron Charlie is serviceable and clear of FOD.
  - b. Airfield and taxiway lighting is to be inspected during the aerodrome serviceability inspection and any un-serviceability should be reported to the duty electrician (Gadfly) by SMRE or 01446 751756.
  - c. The ATCO IC is to record that these inspections are complete in the Watch Log recording any un-serviceability. All information arising from the airfield inspection relevant to operations is to be highlighted at the morning brief for onward transmission to the appropriate agencies.

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ANNEX T TO DAM DATED MAR 18

## **AERODROME TECHNICAL INSPECTION ORDERS**

Owner: SATCO KSH: Carillion-Amey

1. As the Station maintenance contractor, Carillion-Amey, is required to carry out numerous tasks in accordance with DE Schedule C Tasks Booklet 4 (Planned Maintenance and Operation).

Aerodro	ome Technical Inspections - Orders
8.3.1	Routine inspections of the technical equipment (transmitters, receivers, ILS etc) with precision navigation aids being calibrated by a flight check aircraft accordance with AP 600-Royal Air Force Information CIS policy and relevant SPS.
8.3.2	Runway- Daily by ATC and inspected weekly or as required by Carillion-Amey.  Taxiway- Daily by ATC and inspected monthly or as required by Carillion-Amey.  Obstruction lights- Daily by ATC and inspected every 3 months or as required by Carillion-Amey.  PAPIs – Daily by ATC and inspected every 6 months or as required by Carillion-Amey.  Aerodrome traffic lights- Daily by ATC and inspected weekly, 6 & 12 monthly or as required by Carillion-Amey.
8.3.3	All earthing points are checked 12 monthly by Carillion-Amey.
8.3.4	Manoeuvring Areas and drainage are inspected, maintained and repaired in accordance with DIO guidance by Carillion-Amey.
8.3.5	All aerodrome signs are inspected daily by ATC and weekly by a Carillion-Amey.
8.3.6	The AGL "B" Centres and "A" Centre (ATC) are backed by Standby Power Systems. And checked Monthly, Yearly or as required by manufacturers recommendation. The switchover test is carried out each month.
8.3.7	All ARFF vehicles and equipment are inspected and tested in accordance with manufacture's instructions and MoD policy.
8.3.8	The Crash Ambulance and associated equipment is inspected and tested in accordance with manufacture's instructions and MoD policy.
8.3.9	The Bird Control Unit (BCU) equipment and vehicle is inspected daily with vehicle maintenance carried out in accordance with manufacturer's recommendations.
8.3.10	Traffic lights and road barriers for the control of airside vehicle control measures are inspected daily by ATC.
8.3.11	Annual review of Aerodrome Driving orders is carried out by ATC.

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ANNEX U TO DAM DATED MAR 18

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

Owner: Serco Principal Engineer

KSH: Serco Air Traffic Engineers (ATE)

#### References:

- A. AP216N-0213-6A Mascot Mincomms
- B. AP116C-0810-45 HRDF
- C. AP116E-0274-45 Transmitters
- D. AP116E-0766-45 Recievers
- E. AP116E-0280-45 Multi Ch Transmitters
- F. AP116E-0756-45 Multi Ch Receivers
- G. AP116P-0402-45 Electronic Tote
- H. AP119Q-0501-45 Station Crash Alarm
- 1. Preventative and reactive maintenance of all comms equipment is carried out iaw the References listed above.
- 2. Supervision of access or entry to all navigation aids is strictly controlled via the Serco Senior Air Traffic Engineer (SATE). Access will be granted to all ATE personnel, Serco Principal Engineer and any external agency that require access and are authorised to do so i.e. scheduled servicing by contracted engineers (Haysis Systems, Thales, Moog Fernau Ltd, Cobham Aviation, 90SU 3<sup>rd</sup> Line Teams and Aerial Erectors). Access is also granted to Station contractors such as Carillion-Amey and approved sub-contractors for building maintenance requests submitted.
- 3. Control of access is delivered through the ATE Health & Safety Book. This incorporates a generic Health & Safety Brief, specific Health & Safety information for each ATE site which must be read by any visiting agencies before entering any ATE site. The Visitors log will be signed by visitors as having read the Health & Safety Brief and drawing the keys for that building from ATE. Further Information is held with OC C4I due to its security classification.
- 4. Further to these procedures, each ATE site has an individual Site Log Book which is annotated accordingly whenever either ATE personnel and/or visitors enter and leave the site. ATE personnel and escorted visitors will be entered into the log with a date and these Log Books are archived at ATE when they are complete. Monthly inspections of the site to are carried out to determine the buildings integrity and standard of cleanliness by ATE personnel. Serco SATE also carries out checks every three months iaw AP 600 3rd Edition, Chapter 6.5, Integrity of Ground Radio Installations.

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ANNEX V TO DAM DATED MAR 18

## SURVEILLANCE EQUIPMENT MAINTENANCE AND MONITORING-ORDERS

1. There is no surveillance equipment at MOD St Athan

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ANNEX W TO DAM DATED MAR 18

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

1. St Athan is equipped with a dual Park Air Systems 7000B ILS comprising NM7013B dual frequency Localiser and NM7031B single frequency Glide Path equipment. The Localiser antenna is a NM3525 24-element LPD array. The Glide Path antenna is a NM3544 2-element Sideband Reference array. The DME equipment installed is a Thales ATM DME 415 dual transponder with omni-directional DME antenna zero ranged to the runway 25 threshold.

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ANNEX X TO DAM DATED MAR 18

### **AERODROME WORKS SAFETY ORDERS**

Owner: SATCO

KSH: Welsh Government.

Reference:

- A. CAP 493 Manual of Air Traffic Services, Section 2, Chapter 1, Para 28.
- 1. **Aerodrome Works Planning.** Planned works on the aerodrome are to be notified in advance to SATCO via the Welsh Government (WG). Where significant infrastructural works are required, WG and SATCO are to meet to discuss the intended works and possible impact on flying operations. Works that will affect elements of flying operations are to be briefed locally and NOTAMd. WG and SATCO are to agree on a CoA (in consultation with stn based Sqns where necessary) and brief the ATC Supervisors for the period of the works.
- 2. **Work in Progress (WIP) Records**. A plan of the aerodrome is to be prominently displayed in ATC for the purpose of marking all obstacles, nature of obstruction markings and work in progress. In ATC, it is the overall responsibility of the ATC Supervisor/ SATCO to ensure that the information displayed on the plan is always fully up to date.
- 3. **WIP Log.** A WIP Log book is to be maintained in ATC, in which the ATCO is to enter details of all planned WIP. In order to certify that the extent of the work area and ATC briefing has been fully understood, each entry is to be signed by the both the ATCO and supervisor of the working party. This is to be completed before any work commences.
- 4. **WIP Briefings.** ATCO is responsible for ensuring that supervisors of any working parties are to be briefed on their responsibilities in accordance with Ref C, prior to commencing any works on the aerodrome. ATC are to hold a WIP Log within which are the following mandated items for briefing:
  - a. Limits of the work area.
  - b. Direction of aircraft movements.
  - c. Route to be taken by works vehicles.
  - d. Parking area for works vehicles and equipment.
  - e. Control to be exercised over works vehicles and workmen.
  - f. Signals to be employed.
  - g. FOD prevention.
- 5. **Control Measures**. When work is to be carried out on the airfield and flying operations are to continue, special control rules are to be enforced to safeguard the working party. Following the WIP Brief within ATCO, the works supervisor is be issued with an MRE radio. Control and movement of the works party is via MRE to/from the ATCO. ATC are to ensure that the work party moves clear of the manoeuvring area prior to any air systems movement in their vicinity. Visiting air systems captains are to be informed by ATC of any work in progress that may affect air systems operations, including any unique taxi instructions or procedures. In addition, the works

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and revisions to flying operations are to be NOTAMd. All airfield work is to be clearly marked using approved high visibility markers and lit during hours of darkness.

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ANNEX Y TO DAM DATED MAR 18

## **MOD ST ATHAN CONTROL OF ENTRY**

Owner: SSyO

KSH: CO, SWO, OC Admin Sqn, RAF Police, MGS, MPGS

1. The MOD St Athan Control of Entry Policy is contained with Station Standing Orders, Book 1, Part 7, Order No 56; this document is classified 'Official-Sensitive' and can be made available to  $2^{nd} / 3^{rd}$  Party Auditors on request.

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ANNEX Z TO DAM DATED MAR 18

### **VEHICLE AND PEDESTRIAN CONTROL ORDERS**

Owner: RAF Police

KSH: CO

1. Orders for the control of private cars, motor cycles, pedal cycles and pedestrians at MOD St Athan in contained within Station Standing Orders, Book1, Part 2, Order No 12:

#### Order for the Control of Vehicles and Pedestrians at MOD St Athan

2. Orders for the Control of Vehicular Traffic on the MOD St Athan Airfield are held within Station Standing Orders, Book 1, Part 10, Order No 93:

Owner: SATCO

KSH: RAF Police, MGS, MPGS

Orders for the Control of Vehicles and Pedestrians on the MOD St Athan Airfield

(Note: If you do not have Dii access you will be unable to open the links above; please contact the owner of this Annex for further information.)

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ANNEX AA TO DAM DATED MAR 18

## **WILDLIFE MANAGEMENT (BIRDS) ORDERS**

Owner: SERCO

KSH: SATCO, BCU, Welsh Government

1. Wildlife Management Orders are contained within the Serco Wildlife Control Management Plan (St Athan) which is in accordance with CAA CAP 772 'Wildlife Hazard Management at Aerodromes':

Wildlife Control Management Plan MOD St Athan

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

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ANNEX BB TO DAM DATED MAR 18

## **WILDLIFE MANAGEMENT ORDERS**

Owner: SERCO

KSH: SATCO, BCU, Welsh Government

1. Wildlife Management Orders, including Long Grass Policy, are contained within the Serco Wildlife Control Management Plan:

#### Wildlife Control Management Plan MOD St Athan

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

2. Grounds maintenance is carried out by Carillion-Amey, including grass cutting management requirements, iaw the Airfield Management Agreement between MOD and the Welsh Government:

AIRFIELD MANAGEMENT AGREEMENT (AMA) CLAUSE 6

#### 'Runway and Surfaces

Maintenance (including renewing) is carried out in respect of the runway, taxi-ways, hard surfaces and grass surfaces of the Airfield, in accordance with any appropriate Airfield dictated maintenance standards and at all times compliant with the Military Aviation Authority Regulatory Publications'.

3. DIO safeguarding team (94421 3656) is a mandatory planning consultee for flood attenuation ponds (and wind turbines) proposed by neighbouring planning councils: this mechanism is used to minimise risk of bird strike/other wildlife impacts from neighbouring developments.

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ANNEX CC TO DAM DATED MAR 18

### HANDLING OF HAZARDOUS MATERIALS (SPILLAGE RESPONSE PLAN) - ORDERS

Owner: OC SHSE&Q

KSH: CO, MGS, MPGS, MAB7, UWAS (Babcock), Carillion Amey RPC, Serco, Welsh

Government (for Commercial Tenants).

1. The Spillage Response Plan is managed by OC SHSE&Q and is accessed via the Site SHEF MOSS Page:

Unit Spillage Response Plan - Dated May 2017

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

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ANNEX DD TO DAM DATED MAR 18

## **AIRCRAFT PARKING**

Owner: SATCO

KSH: Serco, Welsh Government (for Commercial Tenants).

1. All visitors will be advised on parking by Air Traffic Control. Aircraft belonging to companies based at MOD St Athan have their own demised areas.

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ANNEX EE TO DAM DATED MAR 18

## **LOW VISIBILITY OPERATIONS (LVP) ORDERS**

1. LVP Orders are contained within St Athan MATS Part 2, Chap 05/17 and are linked HERE.

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

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ANNEX FF TO DAM DATED MAR 18

## **USE OF MOD AERODROMES BY CIVIL AIRCRAFT-TERMS AND CONDITIONS**

Owner: SATCO KSH: MAA, CAA

1. The use of MOD St Athan by British and Foreign Civil Aircraft is conducted IAW JSP 360 found at the link below, or by contacting the ATC +44 (0)1446 798889;

JSP 360 - Use of MOD Airfields by Civil Aircraft

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

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ANNEX GG TO DAM DATED MAR 18

### **BREACH OF TERMS AND CONDITIONS – ORDERS**

Owner: Aerodrome Operator KSH: SATCO, Welsh Government

- 1. Any breach of the Operating Agreement for the Civil (Flying) use of MOD Airfields can result in a Notice of Termination of Operating Agreement IAW JSP 360 Appendix 3.
- 2. A link to the agreement is found here, or by contacting the Aerodrome Operator; Notice of Termination

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

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ANNEX HH TO DAM DATED MAR 18

### THUNDERSTORM AND STRONG WIND PROCEDURES

Owner: SATCO

KS: Aerodrome Operator, Serco

- 1. On receipt of a Met Warning from the Met Office by ATC the following actions are to be carried out:
  - a. The warning is to be tannoyed by ATC during normal operating hours.
  - b. The Met Warnings are to be displayed in the Ops room and ET annotated.
  - c. Tanker Pool are to be informed immediately in regards to Thunderstorm Warnings.
  - d. Crane operators are to be informed of any Met warnings.

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ANNEX II TO DAM DATED MAR 18

## MOD ST ATHAN AERODROME ELECTRICAL GROUND POWER PROCEDURES

Owner: SATCO, Welsh Government

**KS**: Aerodrome Operator

- 1. Electrical ground power procedures are in accordance with the orders of individual companies at MOD St Athan.
- 2. Regular aerodrome electrical Inspections are carried out iaw Annex T.

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ANNEX JJ TO DAM DATED MAR 18

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

Owner: Serco Principal Engineer KSH: OC Eng Flt, MOD St Athan

1. Aviation Fuel Management Procedures can be found in JSP 317, MOD Defence Fuels Policy, Organisation and Safety Regulations:

JSP 317, Part 1 – Defence Fuels Policy, Organisation and Safety Regulations, Directive JSP 317, Part 2 – Defence Fuels Policy, Organisation and Safety Regulations, Guidance

2. Orders for Aircraft Refuelling Vehicles – Operating Safety Instructions are contained in Aviation Engineering Standing Orders, Book 2, Part 1, Chapter 4, Order No 24:

Owner: OC Eng Flt, MOD St Athan

AESOs Book 2, Part 1, Chapter 4, Order No 24

(Note: If you do not have Dii access you will be unable to open the links above; please contact the owner of this Annex for further information.)

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ANNEX KK TO DAM DATED MAR 18

## **JETTISON AREA-ORDERS**

1. There is no jettison area at MOD St Athan.

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ANNEX LL TO DAM DATED MAR 18

## **COMPASS SWING ORDERS**

Owner: SATCO

KSH: Welsh Government

- 1. The Compass Swing area is to be booked through ATC.
- 2. Aircraft under their own power are to be in R/T contact with ATC.
- 3. Aircraft being towed are to be in contact by MRE.
- 4. The area is certified iaw the Certificate of Compass Base Calibration, dated 18<sup>th</sup> January 2016 and can be viewed HERE.

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

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ANNEX MM TO DAM DATED MAR 18

## **EXPLOSIVE ORDINANCE DISPOSAL AREA ORDERS**

- 1. There is no explosive ordinance disposal area at MOD St Athan.
- 2. There is an explosive ordinance storage area at MOD St Athan; for details contact the ESA on 01446 798826.

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ANNEX NN TO DAM DATED MAR 18

#### FOD MANAGEMENT PLAN, PREVENTION AND REPORTING

Owner: SFSO (FOD Prevention Officer)

KSH: CO, OC Spt Sqn, Serco, Aerodrome Operator

1. The FOD Management Plan, Prevention and Reporting, is managed by the SFSO. The FOD Prevention and Recovery Plan currently stands at AL 1, dated 5 Jan 17 and can be accessed via MOSS:

## FOD Prevention and Recovery Plan dated Mar 18

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

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ANNEX OO TO DAM DATED MAR 18

# DANGEROUS GOODS (DG) PROCEDURES - LOADING/UNLOADING ORDERS

	1.	There are no dangerous	aoods	procedures	at MOD	St Athar
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2.	There are both Radiation and Explosives Procedures which are managed by the MOD St
Athan	USHEFO; if necessary, these can be obtained by contacting the USHEFO on Tel: 01446
79825	50.

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ANNEX PP TO DAM DATED MAR 18

# **HYDRAZINE (H70) LEAK- ORDERS**

1. There are no hydrazine leak orders at MOD St Athan.

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ANNEX QQ TO DAM DATED MAR 18

# AIRCRAFT ARRESTING MECHANISMS (ROTARY HYDRAULIC ARRESTOR GEAR (RHAG)/PORTABLE HYDRAULIC ARRESTOR GEAR (PHAG)/BARRIERS ETC-ORDERS

1. Not applicable. See Annex J to DAM.

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ANNEX RR TO DAM DATED MAR 18

#### **DIO MOD ST ATHAN SNOW AND ICE CLEARANCE PLAN**

Owner: DIO

KSH: SATCO, Serco, MTO, OC SHSE&Q

1. The DIO MOD St Athan Snow and Ice Clearance Plan is managed by DIO and a copy is held on the MOD St Athan SHEF MOSS page:

## DIO MOD ST ATHAN SNOW AND ICE CLEARANCE PLAN

(Note: If you do not have Dii access you will be unable to open the link above; please contact the owner of this Annex for further information.)

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ANNEX SS TO DAM DATED MAR 18

## FORCE PROTECTION RESPONSIBILITIES - FORCE PROTECTION (FP) ORDERS

Owner: OC RAFP KSH: SSyO

1. FP orders are kept separately to this document and are held with the RAFP at MOD St Athan, this document is classified 'Official-Sensitive' and can be made available to  $2^{nd}$  /  $3^{rd}$  Party Auditors on request.

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