Aviation Safe Operating Environment Manual (ASOEM)

(For Non-MOD Aerodromes, Helicopter Landing Sites or when Recreational Flying is the Sole Activity at MOD Aerodromes)





Military Aviation Authority

**Notes for completion**

1. ►The Aviation Safe Operating Environment Manual (ASOEM) aims to provide Aviation Duty Holders (ADHs), Accountable Managers (Military Flying) (AM(MF)) and Heads of Establishment (HoEs) at relevant tiers of establishment[[1]](#footnote-2), a tool to utilize in assessing that a Safe Operating Environment (SOE) is being provided. The ASOEM can be used by a HoE to provide Assurance of their Aerodrome (where appropriate) or for deployments to fixed bases or austere field sites. Where relevant and when appropriate, the ASOEM can be handed over to subsequent deployments.
2. The ASOEM is a living document and will therefore be subject to regular review. Amendments may be developed and staffed with stakeholders, as required. Where existing documents, such as Flying Order Books (FOBs) or Flight Information Publications, cover the information required in the ASOEM, duplication of information is not required and a simple reference to the source document may be inserted.
3. As the ASOEM template caters for a broad range of uses, not all sections will be relevant for every unit. Where this is the case, it may be explained in the corresponding section to evidence that it has been considered. Equally, additional sections and information may be inserted, where it is deemed to be relevant.◄
4. Where concurrent or adjacent exercises / operations are being conducted from the same location full details of the event and the key points of contact need to be recorded in the ASOEM. If the event becomes complex with multiple platform types and different chains of command, then separate ASOEMs may be required.
5. **Administration Section.** To include:
	1. **Location Data**. Location data will include details of an appropriate senior Host Nation / Local ►or◄ Liaison Officer based at, or local to the location who can provide suitable liaison with key post holders and is suitably connected and knowledgeable to provide information on the location Hazards and facilities. A local area map ►that details the Aerodrome access points and any major routes in the vicinity of the Aerodrome can◄ be included ►◄. Organizational structure may identify any Duty Holder posts or Safety organizations that operate from within the ►establishment.◄ Where mixed Civilian - Military installations exist, a consultation structure may be established to foster coordination and to determine limits of responsibilities. Details of concurrent or adjacent exercises may be sought. The ASOEM may contain copies of all formal agreements between user and location.
	2. **Overseas Location**. Details of the Defence Attaché within the British Embassy to the Host Nation may be recorded; especially in the crash plan and immediate contact list. Every effort ►is to◄ be made to communicate with other allied / national airspace users to deconflict air operations. Details of other local and foreign airspace activity may be sought from the Embassy and the Liaison Officer.
6. **Operations (Ops) Section**. To include:
	1. **Aircraft Ops**. Some of this data may be available in other publications and ►does not◄ therefore need ►to◄ be repeated in the template. However, it may be referenced, and details of the latest amendment date may be included.
	2. **Airfield / Helicopter Landing Site (HLS) / Field**. ►Not all categories within this section may be applicable or suitable and where this is the case, they are to be annotated as such. However, whenever there is a concern relevant to a category, it is to be documented and, when relevant, the associated mitigations annotated.◄
	3. **Air Traffic Control**. ►To assist in the safe conduct of operations, local ATC operating procedures and any specific airspace restrictions are to be referenced. The inclusion of information such as radio / transponder requirements and if the navigational aids are available and calibrated is to be considered.◄
	4. **Fire and Rescue Services**. HLS, ►particularly those that are◄ temporary in nature, are unlikely to have Rescue or Firefighting Services. Consequently, ADHs, ►AM(MF)s or◄ HoEs may conduct a Risk Assessment and provide direction about the level of Rescue and Firefighting Services required. The Risk Assessment must be recorded and the decision on the appropriate level of Aerodrome Rescue and Fire Fighting (ARFF) cover documented in local orders. Where Fire and Rescue Services are available, the relevant Aircraft Hazard Data Sheets may be made available either electronically or in hard copy[[2]](#footnote-3). The distribution of the data is to be confirmed and recorded in the ASOEM.
	5. **Medical**. Details of medical facilities may be included along with plans if local medical services do not exist or are not considered suitable.
	6. **Meteorological (Met)**. Details of any Met services, if available, may be documented along with details of actions to be carried out in the event of adverse weather conditions, such as excessive heat, lightning or strong winds.
	7. **Post-Crash Management (PCM)**. ►When operating outside of the United Kingdom (UK) the contact details of the individual who will be acting as the UK National Representative, that has a valid Overseas Aircraft Post Crash Management Incident Officer (APCMIO) qualification, is to be annotated here. Typically, the Host Nation will provide PCM iaw North Atlantic Treaty Organization (NATO) Standardization Agreement (STANAG) 3531[[3]](#footnote-4), and a reference to their local plan is to be clearly annotated. Where an external organization is not providing PCM a local PCM plan is to be created and as a minimum, include details on the process for deploying an Incident Officer and what PCM equipment may be required, for example, Aircraft jacks and bespoke lifting slings.◄
7. **Technical Section**. To include:
	1. **Engineering, Services and Facilities**. Local orders / agreements may be referenced here.
	2. **Petrols, Oils and Lubricants (POL)**.Arrangements for POL may be referenced here, along with details of Assurance processes to ensure ►that◄ they are of a suitable quality if any doubt exists. Other parts in this section may be covered by FOB / Standard Operating Procedures (SOP) and therefore referenced.
8. **Hazard Log Section.** A Location Hazard Log may be maintained and ►is to◄ clearly indicate ►what the Hazard is and the implications it may cause, including how it will be mitigated.◄ To ensure that published Hazard logs remain standard, the format in the template is to be employed, however additional columns may be added if required.
9. The ASOEM Template supports and must be read in conjunction with the following:

►RA 1010(6): Aviation Duty Holder / Accountable Manager (Military Flying) Safe Operating Environment Responsibilities◄

RA 1030 – Defence Aeronautical Information Management

►RA 1032 – Aviation Duty Holder-Facing Organizations and Accountable Manager (Military Flying)-facing Organizations – Roles and responsibilities◄

RA 1200 – Air Safety Management

RA 1400 – Flight Safety

RA 1410 – Occurrence Reporting and Management

RA 1430 – Aircraft Post Crash Management and Significant Occurrence Management

DSA02 DFSR – Defence Aerodrome Rescue and Fire Fighting (ARFF) Regulation

Manual of Air Safety (MAS)

Manual of ►Aircraft ◄ Post-Crash Management ►(MAPCM)

Aircraft Post Crash Management (APCM) Aide Memoire◄

**Safe Operating MANUAL**

**For**

**(INSERT Exercise or Operation NAME or Location)**

(Insert badge / logo here)

|  |  |
| --- | --- |
| Compiled by (Name and Rank) |  |
| Role |  |
| Signature |  |
| Date |  |
| [Insert Air System] Delivery Duty Holder Approved |  |
| Signature |  |
| Date |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Amendment No. | Amendment Date | Date of Incorporation | Name | Role | Signature |
|  |  |  |  |  |  |
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**SECTION 1 – ADMIN**

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| --- |
| **LOCATION DATA** |
| **Location** |  |
| Address |  |
| Telephone / Fax |  |
| E-mail |  |
| Web Site |  |
| Airfield Liaison Officer |  |
| Address |  |
| Telephone / Fax |  |
| E-mail |  |
| Concurrent / Adjacent Exercises (full details below). | YES / NO |
| Formal Agreements |  |
| Operating Hours |  |
| Security |  |
| Organizational Structure |  |
| Remarks |  |
| Concerns / Issues |  |

|  |
| --- |
| **Concurrent / Adjacent Exercises (Ex) / OPERATIONS (Op)** |
| Ex / Op Name  |  |
| Ex / Op Officer Commanding  |  |
| Location (Local) |  |
| Telephone / Fax |  |
| E-mail |  |
| Web Site |  |
| Ex / Op Liaison Officer  |  |
| Location (Local) |  |
| Telephone / Fax |  |
| E-mail |  |
| Aircraft Number and Type |  |
| Personnel Numbers |  |
| Vehicle Total Numbers |  |
| Specialist Vehicles / Equipment |  |
| Formal Agreements |  |
| Operating Hours |  |
| Organizational Structure |  |
| Remarks |  |

**SECTION 2 - OPERATIONS**

| **OVERSEAS LOCATIONS** |
| --- |
| British Embassy Contact Details |  |
| Point of Contact (POC) |  |
| Address |  |
| Telephone / Fax |  |
| Email |  |
| Adjacent British Military |  |
| POC |  |
| Address |  |
| Telephone / Fax |  |
| Email |  |
| Adjacent Foreign Military  |  |
| POC |  |
| Address |  |
| Telephone |  |
| Fax |  |
| Customs and Immigration |  |
| Remarks |  |
| Concerns / Issues |  |

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| --- |
| **AIRCRAFT OPERATIONS** |
| Aeronautical Information Service / Flight Planning Office Hours and Contact Details |  |
| Arrangements for Allocating Aircraft Parking Positions |  |
| Arrangements for Initiating Engine Start |  |
| Electrical Ground Power |  |
| Flight Following Procedures |  |
| Foreign Object Damage Prevention and Orders |  |
| ‘Follow-Me’ Orders |  |
| Marshalling Services |  |
| Passenger Handling |  |
| Noise Abatement Procedures |  |
| Overdue Action Procedures |  |
| Snow and Ice Plan |  |
| Taxi Plan |  |
| Temporary Obstructions Orders |  |
| Remarks |  |
| Concerns / Issues |  |
| **AIRFIELD / HLS / FIELD** |
| Airfield / HLS / Field Elevation |  |
| Airfield Obstacles |  |
| Approach Lighting |  |
| Armed Aircraft Safe Headings |  |
| Dispersal Dimensions |  |
| Dispersal Lighting |  |
| Dispersal Markings |  |
| Dispersal Surfaces |  |
| Hours of Operation and Contact Details |  |
| Identification Beacon |  |
| Obstruction Lighting |  |
| Runway / Hardened Landing Surface (Heli) Lighting |  |
| Runway / ►HLS◄ Markings |  |
| Runway / ►HLS◄ Surfaces |  |
| Taxiway Lighting |  |
| Taxiway Markings |  |
| Taxiway Surfaces |  |
| Remarks |  |
| Concerns / Issues |  |

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| **AIR TRAFFIC CONTROL** |
| Availability and Contact Details |  |
| ATC Orders Applicable |  |
| Arrival and Departure Procedures |  |
| Comms Failure / Missed Approach Procedures |  |
| Bird / Wildlife Control Availability |  |
| Local Traffic Regulations |  |
| Local Airspace Restrictions |  |
| Low Visibility Operations |  |
| Noise Abatement and Special Procedures |  |
| Radio and Navigational Aids |  |
| Remarks |  |
| Concerns / Issues |  |

| **RESCUE AND FIRE FIGHTING SERVICES** |
| --- |
| Availability and Contact Details |  |
| Crash Category |  |
| Capability for Removal of Disabled Aircraft |  |
| Fire Appliance / Rescue Equipment |  |
| Method of Raising Alarm |  |
| Number and Type of Fire and Rescue Vehicles |  |
| Aircraft Hazard Data Sheets Release |  |
| Remarks |  |
| Concerns / Issues |  |

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| --- |
| **MEDICAL** |
| Availability and Contact Details |  |
| Local Hospital / Med Centre Contact Details  |  |
| Local Hospital / Med Centre Capability and Capacity |  |
| Method of Raising Alarm |  |
| Number and Type of Medical Response Vehicles |  |
| Remarks |  |
| Concerns / Issues |  |

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| --- |
| **MET** |
| Contact Details |  |
| Hours of Service |  |
| Information Available for Briefing or Consultation |  |
| Adverse Weather Orders |  |
| Remarks |  |
| Concerns / Issues |  |

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| --- |
| **POST CRASH MANAGEMENT (PCM)** |
| Airfield / Site / Deployment PCM Plan |  |
| Local PCM Organization |  |
| ►Details of UK National Representative /◄ Incident Officers |  |
| PCM Equipment |  |
| PCM Table Top / Live Exercise Dates |  |
| Remarks |  |
| Concerns / Issues |  |

**SECTION 3 – TECHNICAL**

| **ENGINEERING, SERVICES AND FACILITIES** |
| --- |
| Armoury / Explosive Storage Area Procedures |  |
| Cargo Handling Facilities |  |
| Dangerous Goods Handling Procedures |  |
| De-Icing Facilities |  |
| Ground Support Equipment |  |
| Hanger Space |  |
| Repair Facilities |  |
| Safety Equipment Section |  |
| Remarks |  |
| Concerns / Issues |  |

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| --- |
| **POL** |
| Availability and Contact Details |  |
| Assurance Procedures |  |
| Fuel / Oil / Hydraulic Types |  |
| Fuelling Capacity |  |
| Fuelling Safety Procedures |  |
| Fuel Spillage Procedures / Plan |  |
| Fuelling with Engines Running |  |
| Fuelling with Passengers on Board |  |
| Fuelling with Rotors Turning |  |
| Remarks |  |
| Concerns / Issues |  |

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| --- |
| **HANDLING SERVICES & FACILITIES** |
| Cargo Handling Facilities |   |
| Fuel / Oil / Hydraulic Types |   |
| Fuelling Facilities / Capacity |   |
| Oxygen |   |
| De-Icing Facilities |   |
| Starting Units |   |
| Hanger Space for visiting ►Aircraft◄ |   |
| Repair Facilities for visiting ►Aircraft◄ |   |
| Remarks |   |

**SECTION 4 - LOCATION HAZARD LOG**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Nature of Hazard** | **Position of Hazard** | **Permanence of Hazard (Temporary / Permanent?)** | **How is the Hazard affected by season / light or time?** | **What mitigation has been employed, if any, to reduce its impact?** |
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1. ►Refer to RA 1010 - Head of Establishment Aviation Responsibilities and Aviation Duty Holder / Accountable Manager (Military Flying) Establishment Responsibilities.◄ [↑](#footnote-ref-2)
2. Training material is to be in accordance with (iaw) NATO STANAG 3896 – Aerospace Emergency Rescue and Mishap Response Information (Emergency Services). [↑](#footnote-ref-3)
3. ►Refer to NATO STANAG 3531 – Safety Investigation and Reporting of Accidents / Incidents involving Military Aircraft, Missiles and / or UAVs.◄ [↑](#footnote-ref-4)