

AD 1 AERODROMES/HELIPORTS - INTRODUCTION**AD 1.1 AERODROME/HELIPORT AVAILABILITY****1 GENERAL CONDITIONS****1.1 General Conditions under which Aerodromes/Heliports and Associated Facilities are Available for Use**

1.1.1 Civil aircraft are not permitted to land at aerodromes in the United Kingdom other than those mentioned in this publication, except in cases of genuine emergency in flight or where special permission has been obtained from the aerodrome operator.

1.1.2 All values described in AD 2.2 section 5 (Magnetic Variation/Annual change) are decreasing.

1.2 Applicable ICAO Documents

1.2.1 The Standard Recommended Practices and Procedures contained in the following ICAO documents are applied with the Differences noted hereunder:

Annex 14 Volume 1	Aerodrome Design and Operation
Annex 14 Volume 2	Helicopters
DOC 7030	Regional Supplementary Procedures
DOC 7754	ANP - EUMED Region

1.3 Prior Permission Requirements

1.3.1 There are two classes of civil aerodromes at which landings require the prior permission of the owner or the authority concerned. The persons in charge of most of these aerodromes require application for permission to land to be made by telephone prior to take-off; in cases where permission by RTF is acceptable or where application in writing is required this is indicated in AD 2 or AD 3 as appropriate.

The two classes of aerodrome are as follows:

(a) Licensed Aerodrome (Ordinary Licence)

- (i) Prior arrangements with the person in charge are necessary as these aerodromes are licensed only for the use of the licensee or by persons specifically authorised by him.

(b) Unlicensed Aerodromes

- (i) Prior arrangements with the owner or person in charge are necessary.
- (ii) Unlicensed aerodromes are not inspected by the Civil Aviation Authority.

1.3.2 Use of Government aerodromes is also subject to prior permission. (See section 2).

1.4 Availability of Ground Services

1.4.1 Details of the various ground services available at an aerodrome (ie fuel, hangarage, repair facilities, etc) may be found at AD 2 and AD 3.

1.4.2 It should be noted, however, that as some of the services are not the direct responsibility of the aerodrome management, the hours during which such services are available do not necessarily coincide with the hours during which the aerodrome is open to visiting aircraft.

1.4.3 It is the responsibility of the aircraft operator to ensure, before departure for an aerodrome, that such services are available.

1.5 Noise Abatement Requirements

1.5.1 Section 78(1) of the Civil Aviation Act 1982 enables the Secretary of State for Transport to publish a notice imposing a duty on operators of aircraft at designated aerodromes to comply, after take-off or before landing, with specified requirements for the purpose of limiting or mitigating the effect of noise and vibration connected with the taking-off or landing of aircraft. Notices under Section 78 are set out in AD 2.21 for London Gatwick, London Heathrow and London Stansted.

1.5.2 In order to ensure that NPRs continue to reflect the intended track over the ground, it is sometimes necessary to adjust the published bearings. This may be due to changes in magnetic variation or may be the result of a recalibration of a radio navigation aid.

1.6 Operational Hours

1.6.1 The hours indicated against AD 2.3/3.3 item 1 (AD/Heliport) are to be considered as the aerodrome/heliport operating hours or hours of availability unless otherwise stated. Note that revised operating hours may be notified by NOTAM.

1.6.2 All times are in UTC unless otherwise stated. Where 'SS' or 'SS+..' is shown as an alternative closing time, the aerodrome service closes at whichever time is earlier, unless otherwise stated.

1.6.3 The commencement and cessation of the Summer Period (UTC + 1 hour) and the Winter Period (UTC) is shown at GEN 2.1.

1.7 Closure of Aerodromes

1.7.1 Pilots will not be refused permission to land or take-off at public-licensed aerodromes (AD 1.4 refers) solely because of bad weather conditions. Pilots of public and non-public transport aircraft should bear in mind, however, that Articles 47, 48 and 49 of the Air Navigation Order 2005, require that they do not infringe the applicable aerodrome operating minima.

AD 1.1 AERODROME/HELIPORT AVAILABILITY (continued)

1.7.2 The only circumstances in which a public-licensed aerodrome will be closed to normal air traffic during its published hours of availability are:

- (a) When the surface of the landing area is unfit;
- (b) at times and in conditions specified in NOTAM or AIP Supplements;
- (c) if essential aerodrome facilities are unserviceable.

1.7.3 In an emergency, pilots will be allowed to land regardless of the conditions of the aerodrome and aerodrome facilities.

1.8 Operations Outside Published Operating Hours

1.8.1 Aerodromes/Heliports may not be used outside the published hours of availability (see AD 2.3/3.3) without the prior permission of the appropriate authority. This applies not only to aerodromes of origin and destination but also to alternates.

1.8.2 Any application for operations outside published operating hours should be made to the authority controlling the aerodrome/heliport.

1.9 Declared Distances

1.9.1 The distance shown for Take-off Run Available, Accelerate Stop Distance Available, Take-off Distance Available and Landing Distance Available in Items AD 2.13 and AD 3.13, are notified for the purposes of the Air Navigation (General) Regulations 2006 Part 3.

1.9.2 'Take-off Run Available' (TORA) is defined as the length of runway which is available and suitable for the ground run of an aeroplane taking-off.

1.9.3 'Accelerate-Stop Distance Available' (ASDA) is defined as the length of the declared take-off run plus the length of stopway available.

1.9.4 'Take-off Distance Available' (TODA) is defined as the length of the declared take-off run plus the length of clearway available.

1.9.5 'Landing Distance Available' (LDA) is defined as the length of runway (or surface, when this is unpaved) which is available and suitable for the ground landing run of the aeroplane commencing at the landing threshold or displaced landing threshold.

1.10 Obstacles

1.10.1 For the purposes of ICAO Type C Charts, operators should assume that, in addition to the obstacles listed in the AD Section of the UK AIP and those which are shown on any ICAO Type A Charts, obstacles of up to 300 ft above ground level may exist:

- (a) outside the coverage of any ICAO Type A Chart; and
- (b) beyond 4 nm from the Aerodrome Reference Point.

1.10.2 Information for licensed aerodromes is limited to significant obstacles and the lists are not comprehensive, they do not necessarily include all shadowed obstacles.

1.10.3 To determine the existence of obstacles 400 ft or more above aerodrome level, operators should thus combine the above advice on the possible existence of obstacles with the detailed contour information which is given on the Ordnance Survey 1:50 000 Maps; relating the outcome to the published aerodrome elevation.

1.11 Visual Ground Aids

1.11.1 Details of visual ground aids, lighting, runway markings and self manoeuvring stand markings are given in Civil Aviation Publication CAP 637.

← 1.12 Runway Utilisation

1.12.1 Procedures are detailed at GEN 3.3.

1.13 Runway Surface Condition Reporting

1.13.1 The following paragraphs describe the method by which the presence, or otherwise, of water and other contaminants on a runway is reported at UK aerodromes. Additional information relating to runways affected by frost, snow, slush and ice can be found at AD 1.2.2 Snow Plan and guidance on the risks and factors associated with aircraft operations on runways contaminated with frost, snow, slush and water is published in an Aeronautical Information Circular.

1.13.2 The presence or otherwise of surface water on a runway will be reported on RTF using the following descriptions:

Reporting Term	Surface Conditions
DRY	The surface is not affected by water, slush, snow or ice. <i>Note: Reports that the runway is dry are not normally passed to pilots. If no runway surface report is passed, pilots will assume the surface to be dry.</i>
DAMP	The surface shows a change of colour due to moisture. <i>Note: If there is sufficient moisture to produce a surface film or the surface appears reflective, the runway will be reported as WET.</i>

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Reporting Term	Surface Conditions
WET	The surface is soaked but no significant patches of standing water are visible. <i>Note: Standing water is considered to exist when water on the runway surface is deeper than 3 mm. Patches of standing water covering more than 25% of the assessed area will be reported as WATER PATCHES.</i>
For JAR-OPS performance purposes, runways reported as DRY, DAMP or WET should be considered as NOT CONTAMINATED.	
WATER PATCHES	Significant patches of standing water are visible. <i>Note: Water patches will be reported when more than 25% of the assessed area is covered by water more than 3 mm deep.</i>
FLOODED	Extensive patches of standing water are visible. <i>Note: Flooded will be reported when more than 50% of the assessed area is covered by water more than 3 mm deep.</i>
For JAR-OPS performance purposes, runways reported as WATER PATCHES or FLOODED should be considered as CONTAMINATED.	

- 1.13.3 When reported, the presence or otherwise of surface water on a runway will be assessed over the most significant portion of the runway. Details of the assessed area should be available from the aerodrome authority.
- 1.13.4 Runway surface condition reports will be given sequentially for each third of the runway to be used, for example, 'Runway surface is WET, WATER PATCHES, WET' or 'Runway surface is WET, WET, WET'.
- 1.13.5 A brief description of any water patches greater than 13 mm in depth, which may affect engine performance, will be appended to a runway surface condition report. In such conditions, further information on the location, extent and depth of the water patches will be available from the aerodrome authority.
- 1.13.6 A brief description of any notable quantity of water outside the assessed area (eg: water collected at the runway edge) will be appended to a runway surface condition report.
- 1.13.7 When the runway surface is affected by dry or compacted snow or ice a braking action report (see AD 1.2.2 SNOW PLAN paragraph 5.4.1) will normally be available.
- 1.13.8 When a runway is contaminated by water (ie more than 3 mm), wet snow or slush, a braking action report will not be available due to the limitations of existing friction measuring equipment (See AD 1.2.2 SNOW PLAN, paragraph 5.4.2). However, a narrative runway surface condition report will normally be available (see paragraph 13.2 for runways contaminated with water and AIP AD 1.2.2 paragraph 5 for other contaminants), location/area stating the type of contaminant and its respective depth (See AD 1.2.2 SNOW PLAN, paragraph 5.2 and 6).
- 1.13.9 At Government aerodromes, runway surface conditions will be described in plain language, and where a braking action measuring device has been used, braking action will be described as GOOD, MEDIUM or POOR. The report may also include the type of measuring device used and the Mu value.

1.14 Runway Friction Assessment

- 1.14.1 Full details of this procedure can be found in CAP 683, The Assessment of Runway Surface Friction Characteristics.
- 1.14.2 Aerodrome authorities are required to conduct periodic surveys of the friction characteristics of their runway surfaces. The purpose of these surveys is to predict the need for maintenance of the runway surface to prevent an unacceptable deterioration of grip as detailed in Table 1. The recognised Continuous Friction Measuring Equipment (CFME) devices in the UK are the Mu Meter, GripTester and ASFT.

Table 1: Mu-Meter and Grip Tester and ASFT Friction Levels

Continuous Friction Measuring Equipment (CFME)	Design Objective Level (DOL)	Maintenance Planning Level (MPL)	Minimum Friction Level (MFL)
Mu-Meter	0.72 or above	0.57	0.50
Grip Tester	0.80 or above	0.63	0.55
ASFT	0.82 or above	0.60	0.50
<i>Note: Friction Levels correspond to the CAP 683 procedure.</i>			

- 1.14.3 If a survey indicates that the runway surface friction characteristics have deteriorated below the specified Minimum Friction Level (MFL), then that runway will be notified by NOTAM as a runway that 'may be slippery when wet'.
- 1.14.4 When a runway is notified as 'may be slippery when wet', aircraft operators may request additional information relating to that notification from the aerodrome operator. However, any performance calculations or adjustment made as a result of this information is the responsibility of the aircraft operator.

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2 USE OF MILITARY AIR BASES/GOVERNMENT AERODROMES

- 2.1 The term Government Aerodrome is applied to those aerodromes in the United Kingdom which are in the occupation of any government department or visiting force. Therefore all UK military aerodromes are so designated.
- 2.2 It is the Ministry of Defence policy to encourage the use of active Government aerodromes by United Kingdom civil aircraft on inland flights, provided this is consistent with defence requirements and local interests. Those aerodromes available to civil aircraft are listed in AD 1.3, but permission to use any government aerodrome must be obtained from the operating authority at the aerodrome concerned before take-off (in this connection filing of a flight plan does not constitute prior permission). Unless there are special circumstances, permission will not normally be given for flights outside normal working hours of the aerodrome concerned.
- 2.3 Where permission is sought to use an inactive Government aerodrome, or for overseas flights, at least three weeks notice should be given, except where the flight is of a humanitarian nature or is for agricultural aviation.
- 2.4 Foreign aircraft are not normally permitted to use UK Government aerodromes. However, those aerodromes identified as Military Emergency Diversion Aerodromes in GEN 3.6 may be used by foreign aircraft when the destination aerodrome, as indicated in the flight plan, is unusable because of adverse conditions.
- 2.5 The pilot of a civil aircraft wishing to use a military aerodrome will be required to comply with the following instructions:
- (a) Prior to flight departure, to obtain permission to land there from the authority at the aerodrome concerned; in this connection the filing of a flight plan does not constitute obtaining prior permission; also to provide details of the aircraft, crew and passengers. Permission to use an aerodrome may be withheld for operational or administrative reasons; rejection of a request for such reasons must be accepted as final;
 - (b) all aircraft must comply with the ATC procedures in force at the aerodrome. Aeronautical information which is not published in the UK AIP may be obtained from: N° 1 AIDU, RAF Northolt, West End Road, Ruislip, Middlesex, HA4 6NG. Tel: 020-8845 2300, Ext 7209, Fax: 020-8841 7510;
 - (c) if making an instrument approach, pilots of civil aircraft should calculate their Aerodrome Operating Minima in accordance with AD 1.1.4;
 - (d) after landing, to report personally to Air Traffic Control and give details of the aircraft, crew and passengers. Note that control of entry precautions normal to a particular military aerodrome will, in the interests of security, be applied to all persons arriving or departing by civil aircraft;
 - (e) before taking-off, to report personally to Air Traffic Control and give particulars of flight crew and passengers, and obtain taxiing instructions. The pilot is responsible for deciding whether or not to proceed after receipt of clearance to taxi and take-off.
- 2.6 Hangarage for civil aircraft may be provided subject to agreement and, if provided, will be entirely at the owners risk.
- 2.7 Fuel, oil, or similar products, may be provided at the Commanding Officer's discretion but servicing or loading of civil aircraft cannot be undertaken except in cases of distress or exceptional circumstances. Pilots may make their own arrangements with civil petrol agents to refuel their civil aircraft on the aerodrome, provided that they furnish adequate cover against damage or loss arising from the presence of the agent's equipment and that prior permission for such arrangements is obtained from the Commanding Officer of the station. No permanent positioning of civil refuelling equipment or parties will be permitted, unless the approval of the Ministry of Defence has been obtained.
- 2.8 Liability will not be accepted by the controlling Department, its servants or agents, or by any servant or agent of the Crown for the loss or damage, by accident, fire, flood, tempest, explosion or any other cause to aircraft, or for loss or damage, from whatever cause, arising to goods, mail or other articles belonging to any person, even if such loss or damage is caused by or arises from negligence on the part of the Department's servants or agents or any servant or agent of the Crown. The use of military aerodromes will be permitted only upon the understanding that the controlling Department and the Crown will be held indemnified against all claims whatsoever made by third parties in respect of personal injuries (whether fatal or otherwise), damage to or loss of property howsoever caused, which may arise as a result of the facilities granted.
- 2.9 The use of any apparatus such as tractors, cranes, chocks, starter trolleys, etc, belonging to or under the charge of the controlling Department, by the personnel of aircraft or other persons making use of the aerodrome, will be entirely at the risk of the person using such apparatus, and no liability will be accepted for any loss, damage or injury caused by or arising from the use of any such apparatus (whether under the control or management of any servant or agent of the controlling Department or of the Crown or otherwise) other than liability for personal injuries or death caused by or arising from negligence on the part of any servant or agent of the controlling Department or the Crown. The use of such apparatus will be permitted only upon the understanding that the controlling Department and the Crown will be held indemnified against all claims whatsoever which may result from such use. It must, further, be clearly understood that the controlling Department does not in any way guarantee the safety or fitness of any such apparatus or of any equipment, petrol or oil, or similar products, supplied.
- 2.10 The civil use of Government aerodromes is, in addition to the limitations referred to above, subject to the appropriate charges being paid at the time. Use is also subject to the availability of appropriate Air Traffic Control and crash/rescue services as laid down by Ministry of Defence regulations.
- 2.11 The Government aerodromes listed in paragraph 2.12 are hereby notified for the purposes of the Air Navigation Order 2009, subject to the conditions so specified as available for the take-off and landing of aircraft engaged on flights for the purpose of the public transport of passengers or for the purpose of instruction in flying.
- 2.12 These aerodromes do not necessarily comply with the specifications of ICAO Annex 14 because of their military use. However, the safety of civil registered aircraft operations is regulated by the UK CAA, while the UK Ministry of Defence (MoD) retains

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responsibility for all aspects of military registered aircraft operations and for the physical and military operational conditions at these aerodromes. The MoD is also responsible for providing the necessary and appropriate flight and aerodrome safety information to the CAA and the operators of civil registered aircraft to enable them to fulfil their obligations in relation to civil registered aircraft safety. Civil registered aircraft operators are reminded of their obligations under Articles 87, 96 and generally of the Air Navigation Order 2009.

Boscombe Down (MoD)

Mildenhall (RAF)

Brize Norton (RAF)

Northolt (RAF) - Refer to AD 1.3

Leuchars (RAF)

Waddington (RAF)

Yeovilton (RNAS)

Aeronautical information in respect of these aerodromes may be obtained from RAF AIDU at Northolt.

- 2.13 UK Military Aerodromes are not subject to the requirements in EU Regulation 216/2008 as amended by EU Regulation 1108/2009, and EU Regulation 139/2014 (relating to aerodromes) and may not comply with the Annex 14 Volumes 1 and 2 of the ICAO Convention. Civil Operators requiring further information should contact the particular aerodrome in question; that unit will provide the requisite information and support.

3 LOW VISIBILITY PROCEDURES

3.1 CAT II/III Operations at Aerodromes

- 3.1.1 Promulgation of an aerodrome/runway as available for Category II or Category III operations means that it is suitably equipped and that procedures appropriate to such operations have been determined and are applied when relevant.
- 3.1.2 Promulgation implies that at least the following facilities are available:
- ILS - certificated to relevant performance category.
 - Lighting - suitable for Category promulgated.
 - RVR System - will be an automatic system for Category II and III.
- 3.1.3 Special procedures and safeguards will be applied during Category II and III operations. In general, these are intended to provide protection for aircraft operating in low visibilities and to avoid disturbance to the ILS signals. The details of any special taxi routes, runway turn-off points and runway holding points are shown in AD 2.
- 3.1.4 Protection of ILS signals during Category II or III operations may dictate that runway holding positions are more distant from the runway than the runway holding positions used in good weather. Taxiways lying within the ILS Sensitive Area are marked by colour coded taxiway centre-line (alternate yellow/green lights). Pilots should avoid stopping their aircraft within the ILS Sensitive Area and should make their 'Runway Vacated' call only after the aircraft is clear of the Sensitive Area.
- 3.1.5 In actual Category II or III weather conditions pilots will be informed by ATC of any unserviceabilities in the promulgated facilities so that they can amend their minima, if necessary, according to their operations manual. Pilots who wish to carry out a practice Category II or Category III approach are to request Practice Category II (or Category III) Approach on initial contact with Approach Control. For practice approaches there is no guarantee that the full safeguarding procedures will be applied and pilots should anticipate the possibility of resultant ILS signal disturbance.
- 3.1.6 Details of aircraft operator requirements for low minima operations, Category II and III, are contained within EASA Air Operations Regulation Part SPA Subpart E, which can be obtained from the EASA website.

4 AERODROME OPERATING MINIMA

4.1 Introduction

- 4.1.1 This section of the AIP specifies the notified method of calculating Aerodrome Operating Minima (AOM).

4.2 General Requirements

- 4.2.1 Under the provisions of the Air Navigation Order 2009, public transport aircraft shall observe AOM and aerial work and private aircraft shall observe AOM when conducting an approach to a runway with a notified Instrument Approach Procedure (IAP).
- 4.2.2 On 5 October 2012 the European Commission published Commission Regulation No. 965/2012 (EASA Air Operations Regulation). This regulation came into effect in the UK on 28 October 2014 and lays down the technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No. 216/2008 of the European Parliament and of the Council.

EASA Air Operations Regulation (EASA Ops) and associated Acceptable Means of Compliance and Guidance Material are available at:

<http://easa.europa.eu/regulations>.

- 4.2.3 All flight operations by aircraft within the UK Flight Information Region (FIR) are to operate with AOM no lower than calculated using EASA Ops. This is the same method as used to calculate minima published on commercially available flight guides.
- 4.2.4 For operations to AOM lower than Category 1 and the use of Enhanced Visual Systems to use reduced AOM values, advice should be obtained from Shared Services Centre, Civil Aviation Authority, Gatwick Airport South, West Sussex RH6 0YR.

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4.2.5 It should be noted that the privileges of pilot licenses, Rules of the Air and limitations in the aircraft Flight Manual can be more restrictive than the AOM contained in this section. In establishing the AOM that will apply, full account must be taken of:

- (a) the type and handling characteristics of the aircraft;
- (b) the composition of the flight crew and their competence and experience;
- (c) the dimensions and characteristics of the runway which may be selected for use;
- (d) the adequacy and performance of the available visual and non-visual ground aids;
- (e) the equipment available on the aircraft for the purpose of navigation and/or control of the flight path, as appropriate, during the take-off, the approach, the flare, the landing, roll-out and missed approach;
- (f) the obstacles in the approach, and missed approach and climb-out areas required for the execution of contingency procedures and necessary clearance;
- (g) the obstacle clearance altitude/height for the instrument approach procedures; and
- (h) the means to determine and report meteorological conditions.

4.3 Commercial Air Transport (CAT) Operations

4.3.1 For CAT operators, the method of calculating AOM should be in accordance with the most restrictive of their company operations manual or EASA Ops unless more restrictive minima are notified in respect of a particular aerodrome.

4.4 Public Transport Operations

4.4.1 For Public Transport aircraft registered in the UK the methods of calculating AOM in relation to 'specified' AOM in Article 107 shall be those in EASA Ops unless more restrictive minima are notified in respect of a particular aerodrome.

4.4.2 For Public Transport aircraft not registered in the UK the AOM in relation to Article 108(3) shall be the most restrictive of their company operations manual or EASA Ops unless more restrictive minima are notified in respect of a particular aerodrome.

4.5 Aerial Work and Private Aircraft

4.5.1 For Aerial Work and private aircraft operations the AOM in relation to Article 109 shall be no lower than published in EASA Ops unless more restrictive minima are notified in respect of a particular aerodrome.

4.5.2 The take-off minima selected for all flights by single-engine aeroplanes should be adequate to ensure a high probability of a successful forced landing being made should a failure of the engine occur after take-off.

4.6 Altimeter Error

4.6.1 When calculating Decision Height (DH), account must be taken of the errors of indicated height which occur when the aircraft is in the approach configuration. Details of the Pressure Error Correction (PEC) should be available from the aircraft Flight Manual or handbook. In the absence of this information a PEC of +50 ft has been found to be suitable for a wide range of light aircraft and should be used. This addition of 50 ft need only be applied to DH. The required RVR should be calculated prior to applying the PEC.

4.6.2 The use of a radio altimeter is only applicable to approved Category 2 and Category 3 operations. For an aircraft flying a Category 1 or non-precision IAP, DH/Minimum Descent Height (MDH) is indicated on the pressure altimeter. At DH/MDH any readings from a radio altimeter may be unreliable because of the large area of terrain providing return signals to the instrument.

4.6.3 Temperature Error. Pressure altimeters are calibrated to indicate true altitude under International Standard Atmosphere (ISA) conditions. Any deviation from ISA will therefore result in an erroneous reading on the altimeter. The altimeter will over-read for temperatures below ISA and the following table details the values to correct this error.

Aerodrome	Altitude Above Altimeter Source Elevation (ft)													
	(normally destination elevation)													
Temp °C	200	300	400	500	600	700	800	900	1000	1500	2000	3000	4000	5000
0°	20	20	30	30	40	40	50	50	60	90	120	170	230	280
-10°	20	30	40	50	60	70	80	90	100	150	200	290	390	490
-20°	30	50	60	70	90	100	120	130	140	210	280	420	570	710
-30°	40	60	80	100	120	140	150	170	190	280	380	570	760	950
-40°	50	80	100	120	150	170	190	220	240	360	480	720	970	1210
-50°	60	90	120	150	180	210	240	270	300	450	590	890	1190	1500
Values to be added to published altitudes (ft)														

4.7 Obstacle Clearance Height (OCH)

4.7.1 The DH/MDH for an approach is determined in part by considering obstacles that could affect the approach of a particular aircraft. In broad terms, the more accurate the aid supporting the approach to be flown and the slower the approach speed of the aircraft, the smaller the area in which obstacles need to be considered. The height which is calculated to clear all obstacles by a defined margin within a particular area is called Obstacle Clearance Height and is the lowest height above the elevation of the relevant runway threshold or above the aerodrome elevation used in establishing compliance with the appropriate obstacle clearance criteria.

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- 4.7.2 The OCH is listed for individual aerodrome approaches on the relevant Instrument Approach Chart in section AD 2. For the purposes of calculating OCH helicopters are categorised as Aeroplane Category A.

4.8 Determination of DH/MDH**4.8.1 Instrument Rating Holders in Current Practice**

- 4.8.1.1 A pilot with a valid instrument rating and who is in current practice may use the minima calculated in accordance with this section.

4.8.2 IMC Rating / IR (Restricted) Holder in Current Practice

- 4.8.2.1 Pilots with a valid Instrument Meteorological Conditions (IMC) Rating or Instrument Rating (Restricted) (IR(R)) are recommended to add 200 ft to the minimum applicable DH/MDH, but with absolute minima of 500 ft for a precision approach and 600 ft for a non-precision approach. The UK IMC Rating / IR(R) may not be valid outside UK territorial airspace, therefore such pilots should check the validity of their rating for the State in which they intend to fly. If the rating is not valid pilots must comply with the basic licence privileges, subject to the regulations of that State.

4.8.3 Pilots not in Current Practice

- 4.8.3.1 A pilot not in current practice should try to avoid having to make an instrument approach in poor weather conditions. If pilots have to make such an approach, even if they are fully confident of their abilities, they are advised to add 100 ft to their calculated DH/MDH. Further increments should be added depending on when the pilot was last in full practice, and their familiarity with the aircraft, the procedure and the aerodrome environment.

4.9 Approach Ban - All Aircraft

- 4.9.1 The requirements for the commencement and continuation of an approach (approach ban) applicable to all CAT operations is given in CAT.OP.MPA.305.

- 4.9.2 The approach ban requirements for public transport operations, aerial work and private operations are defined in Articles 107, 108 and 109 of the Air Navigation Order 2009. The 'specified' minima are detailed below and reflect EASA Ops.

- 4.9.3 An aircraft may commence an instrument approach regardless of the reported RVR/Visibility but the approach shall not be continued below 1,000 ft above the aerodrome if the relevant RVR/Visibility for that runway is at the time less than the specified minimum for landing.

- 4.9.4 If, after passing 1,000 ft in accordance with paragraph 4.9.3, the reported RVR/Visibility falls below the applicable minimum, the approach may be continued to DA/H or MDA/H.

- 4.9.5 The approach may be continued below DA/H or MDA/H and the landing may be completed provided that the required visual reference is established at the DA/H or MDA/H and is maintained.

- 4.9.6 The touchdown zone Runway Visual Range (RVR) shall always be controlling.

4.10 Military aerodromes in UK Territorial Airspace

- 4.10.1 Military aerodromes in the UK are in the process of changing the design criteria for their approach charts from APATC-1 to PANS-OPS. For those aerodromes that have already changed to PANS-OPS the method of determining AOM will be as outlined above. For charts designed using APATC-1 the method for determining AOM is as outlined below.

- 4.10.2 For those approach charts using APATC-1 the Procedure Minimum for each IAP is shown on the Royal Air Force Approach Chart in a Table of Aircraft Categories; however, the words 'Procedure Minimum' are not shown. The Procedure Minimum shown in bold print is a minimum height (minimum with QFE set on the altimeter) with the minimum altitude shown in light print beside to the left. The Procedure Minimum (minimum height) will also be passed by ATC who will request the pilot's DH/MDH and intentions. The Procedure Minimum can be converted to an equivalent OCH by following the procedures in the following paragraphs. This equivalent OCH can then be used to calculate the DH/MDH and RVR in the normal way in accordance with the procedures above.

- 4.10.3 Precision Approaches, ILS and PAR, for which the absolute minimum is 200 ft above touchdown elevation, are normally based on a 3° glidepath. The glidepath angle, also shown on the chart, may be as low as 2.5°. The following increments should be made to the given Procedure Minimum to obtain the equivalent of OCH. There is no provision for the use of radio altimeters.

Nominal Glidepath Angle°	Aeroplane Categories (ft)			
	A	B	C	D
2.5	Nil	10	20	30
2.6	10	20	30	40
2.7	10	20	30	40
2.8	20	30	40	50
2.9	20	30	40	50
3.0	30	40	50	60

- 4.10.4 For non-precision approaches the Procedure Minimum may be taken to be the OCH.

- 4.10.5 DH/MDH should then be determined as previously described and the related RVR obtained from EASA Ops.

AD 1.1 AERODROME/HELIPORT AVAILABILITY (continued)

- 4.10.6 For Circling, the OCH should be determined by adjusting the published Royal Air Force values, shown on the Approach Charts, as follows:

Aeroplane Categories	Increment (ft)
A and B	Zero
C and D	+ 100

The minimum visibility should be determined as described in EASA Ops.

- 4.10.7 OCH information will not be used at British Military Aerodromes.
- 4.10.8 Instrument Approaches and landings at UK Military Aerodromes are usually flown on QFE, as is flying in the visual circuit. Aircraft that are unable to comply with the above procedure should inform ATC and will be accommodated wherever possible.

4.11 Overseas Aerodromes

- 4.11.1 AOM at overseas aerodromes should not be lower than those published as State minima or permitted by the privileges of the pilot's licence by the UK or overseas State.

4.12 Aerodromes Without Published Instrument Approach Procedures

- 4.12.1 For an aircraft landing at an aerodrome without an instrument approach procedure either:
- (a) a descent should be made in VMC until in visual contact with the ground, then fly to the destination; or
 - (b) an IAP at a nearby aerodrome should be flown and proceed as in (a); or
 - (c) if neither (a) nor (b) is possible, first obtain an accurate fix and then descend not lower than 1,000 ft above the highest obstacle within 5 NM (8 km) of the aircraft. If visual contact (as at (a) above) has not been established at this height, the aircraft should divert to a suitable alternate with a published instrument approach procedure.

5 OTHER INFORMATION