

## **CAP 793**

# **Safe Operating Practices at Unlicensed Aerodromes**

**(Including Helicopter Landing Sites and Aerodromes Used for  
Flying Training)**



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ISBN 978 0 11792 421 5

Previously published as CAP 428

First Edition July 2010

Enquiries regarding the content of this publication should be addressed to:  
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The latest version of this document is available in electronic format at [www.caa.co.uk](http://www.caa.co.uk), where you may also register for e-mail notification of amendments.

Published by TSO (The Stationery Office) on behalf of the UK Civil Aviation Authority.

Printed copy available from:

TSO, PO Box 29, Norwich NR3 1GN  
Telephone orders/General enquiries: 0844 477 7300  
Fax orders: 0870 600 5533

[www.tsoshop.co.uk](http://www.tsoshop.co.uk)  
E-mail: [caa@tso.co.uk](mailto:caa@tso.co.uk)  
Textphone: 0870 240 3701

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## Revision History

**CAP 793 Issue 1****June 2010**

This CAP has been produced in order to update CAP 428. The title has been changed, which is why it has a new CAP number.

The CAP 428 text has been updated to take account of the change in the Air Navigation Order to allow some flying training to take place at unlicensed aerodromes.

Editorial changes, corrections and amendments have also been incorporated.

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## Glossary

AIP	Aeronautical Information Publication
AFIS	Aerodrome Flight Information Service
ANO	Air Navigation Order
AOC	Air Operator Certificate
ATC	Air Traffic Control
ATS	Air Traffic Services
ATZ	Aerodrome Traffic Zone
BCF	Bromochlorodifluoromethane
DAP	Directorate of Airspace Policy
FATO	Final Approach and Take-Off
FOD	Foreign Object Debris
FOI(GA)	Flight Operations Inspectorate (General Aviation)
FTO	Flight Training Organisation
HLS	Helicopter Landing Site(s)
ICAO	International Civil Aviation Organization
LPA	Local Planning Authority
MTOM	Maximum Take-Off Mass
NOTAM	Notice To Airmen
ORA	Off-Route Airspace
PPL	Private Pilot's Licence
PPR	Prior Permission Required
RF	Registered Facility
RoAR	Rules of the Air Regulations
SMS	Safety Management System(s)
TLOF	Touchdown and Lift-Off Area

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## Chapter 1 Introduction

- 1 Whilst perhaps a majority of aviation activity in the UK takes place at licensed aerodromes, there are a large number of unlicensed facilities, ranging from large airfields to private farm airstrips and helicopter landing sites. In April 2010 the Air Navigation Order (ANO) 2009 was amended to allow some flying training to take place at unlicensed aerodromes. The aim of this document is to provide guidance and advice on setting up and operating an unlicensed aerodrome, including one to be used for flying training.

**NOTE:** There are some circumstances in which it may not prove feasible to carry out training from an unlicensed aerodrome, and readers may wish to consider the information in the CAP carefully before making any decision either to 'unlicense' their existing licensed aerodrome or to set up an unlicensed aerodrome for flight training purposes.

- 2 The contents of this CAP are not mandatory, nor do they purport to be exhaustive. However, they do provide what can be considered as sound practice that has been developed in consultation with industry representative bodies. Throughout the document the word 'aerodrome' has been used as a generic term to refer to all unlicensed flying sites, including helicopter landing sites. The ANO 2009 Article 255 legal definition of an aerodrome is:

'Aerodrome'–

- a) means any area of land or water designed, equipped, set apart or commonly used for affording facilities for the landing and departure of aircraft; and
  - b) includes any area or space, whether on the ground, on the roof of a building or elsewhere, which is designed, equipped or set apart for affording facilities for the landing and departure of aircraft capable of descending or climbing vertically; but
  - c) does not include any area the use of which for affording facilities for the landing and departure of aircraft has been abandoned and has not been resumed.
- 3 Whether an unlicensed aerodrome is a "farm strip", a helicopter landing site or a hard runway equipped airfield, the physical characteristics and operating standards should provide a safe operational environment. This publication provides guidance to the owners of, and those who operate or fly from, unlicensed aerodromes to enable safe operating practices to be met.
  - 4 When an aerodrome is being used privately by qualified pilots, who should be well aware of the performance characteristics of their aircraft, then the aerodrome dimensions and operating practices should be appropriate and proportionate to that private activity. **However, where flying training is taking place additional safety margins should be considered.** It is emphasised that the commanders of aircraft, and the operators of aerodromes, being used for flying training, including those covered by JAR-FCL requirements, are required to satisfy themselves that the aerodrome is safe for that purpose. It is recommended that adequate risk assessments are made and documented before flying training takes place. Such documented risk assessments may be necessary to prove to the CAA and other authorities in the event of an accident or incident that an aircraft commander or aerodrome operator has had sufficient grounds to be satisfied that the aerodrome is safe for flying training. Safety Management Systems (SMS) are being implemented into the aviation industry to provide a framework for the identification and management of risk. The CAA has published a guidance document on the subject.

Although intended for Air Operator Certificate (AOC) holders and maintenance organisations, it has specific advice for small operators, to which operators of aerodromes and non-JAR-FCL flying training providers may wish to refer. It can be found on the CAA website via:

[www.caa.co.uk/sms](http://www.caa.co.uk/sms) > CAA Safety Management Systems Guidance Material.

## 5 Legal Provision for Training at Unlicensed Aerodromes

- 5.1 The ANO makes provision for flying training to be carried out from unlicensed aerodromes using aeroplanes under 2730 kg and helicopters/gyroplanes under 3175 kg provided that both the aerodrome operator and the pilot in command of the aircraft are satisfied on reasonable grounds that the aerodrome is suitable for the purpose. Definitive legal obligations are detailed in Article 208A of the ANO 2009, which reads as follows:

### **Aerodromes – use for purposes of flying instruction and testing**

- 208A (1) The operator of an aerodrome which is not a licensed aerodrome must not permit an aircraft flying or intended to fly for a purpose specified in paragraph (3) to take off from or land at the aerodrome unless satisfied on reasonable grounds that the aerodrome has adequate facilities for the safe conduct of such flights.
- (2) The commander of an aircraft must not take off from or land at an aerodrome which is not a licensed aerodrome on a flight for a purpose specified in paragraph (3) unless satisfied on reasonable grounds that the aerodrome has adequate facilities for the safe conduct of such flights.
- (3) A flight is for a purpose specified in this paragraph if it is for the purpose of—
- a) instruction in flying given to any person for the purpose of becoming qualified for the grant of a pilot's licence or the inclusion of an aircraft rating, a night rating or a night qualification in a licence; or
  - b) carrying out flying tests for the grant of a pilot's licence or the inclusion of an aircraft rating, a night rating or a night qualification in a licence.

- 5.2 Guidance material in this CAP sets out the aerodrome characteristics and features that the CAA considers suitable for various purposes. If the aerodrome has the characteristics set out in this CAP for flying training, then this may form a basis for the aerodrome operator and the pilot in command of the aircraft to be satisfied on reasonable grounds that the aerodrome is suitable for training purposes.

- 5.3 Registered Facilities (RFs) (i.e. those training for the issue of a JAR-FCL Private Pilot's Licence (PPL)) and Flight Training Organisations (FTOs) (i.e. those also training for Multi-Engine ratings, Flight Instructor ratings, Instrument Ratings etc.) must meet the requirements laid down in JAR-FCL regarding airfields. For fixed-wing aircraft these are at Appendix 1 to JAR-FCL 1.125 and Appendix 1a to JAR-FCL 1.055 respectively; for rotary-wing aircraft they are at Appendix 1 to JAR FCL 2.125 and Appendix 1a to JAR-FCL 2.055. These are essentially the same but RFs only require air/ground communications and FTOs require Air Traffic Service or other means acceptable to the CAA.

- 6 Advice on the standards required of licensed aerodromes is contained in *CAP 168 Licensing of Aerodromes* (available via [www.caa.co.uk/cap168](http://www.caa.co.uk/cap168)) and that document may be used in conjunction with this CAP to provide detailed information on aerodrome physical characteristics, lighting standards, signs and signals, etc.

- 7 The guidance offered in this publication is, of necessity, non-specific in certain areas since the range of aerodrome types is so wide. Should more specific guidance be required, the reader should contact:  
  
Flight Operations Inspectorate (General Aviation)  
Safety Regulation Group  
Civil Aviation Authority  
Aviation House  
Gatwick Airport South  
West Sussex  
RH6 0YR  
  
e-mail: [ga@caa.co.uk](mailto:ga@caa.co.uk)
- 8 The fact that an aerodrome is unlicensed does not preclude compliance with the ANO or the Rules of the Air Regulations (RoAR). In particular, care should be taken to meet the requirements of Rule 5 of the RoAR 2007. Further information regarding the amendment of the ANO 2009 and the RoAR 2007 to allow flight training at unlicensed aerodromes can be found at Appendix A.
- 9 This publication is written primarily to cover unlicensed aerodromes used by aeroplanes. Less demanding criteria may apply to aerodromes solely used by helicopters, gyroplanes or microlights. Appendix B details where guidance can be found, and again specific advice for helicopter-only operations can be sought from Flight Operations Inspectorate (General Aviation) (FOI(GA)) at the above address.
- 10 The ANO and the RoAR may be found at: [www.caa.co.uk/cap393](http://www.caa.co.uk/cap393).

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## Chapter 2 Planning Considerations

- 1 The regular use of an area of land or water for aircraft take-offs and/or landings amounts, in law, to the establishment of an aerodrome. The extent to which this use is made public is a matter of choice, but aeroplanes disappearing below hedge height will cause bystanders to believe they have witnessed an accident if there is no visible clue that an aerodrome exists. When such bystanders report what they believe to be an aircraft accident to the emergency services, it is not uncommon for police, ambulance and fire services to be sent to the scene. For this reason alone operators should let local police and emergency services know that their aerodrome exists.

### 2 Planning Permission

- 2.1 If the aerodrome is to be used for more than 28 days in a calendar year (and this might be expected for flying training operations) it is likely that specific planning permission will be required. Whether or not this is the case, it is usually helpful if a constructive dialogue with the local authority's planning department is established as early as possible. Planning law is complex and there are many significant cases giving guidance on the nature of development, the special status of agricultural land and buildings and other such issues. The advice of a specialist planning consultant may be needed.

### 3 Safeguarding

- 3.1 'Safeguarding' is a term used in planning departments to describe the process whereby the effects of planning permissions on other interests can be assessed.
- 3.2 A process of consultation between a Local Planning Authority (LPA) and consultees, which is made obligatory by Statutory Direction, safeguards some aerodromes and aeronautical technical sites in the United Kingdom. This is called 'statutory' or 'official' safeguarding. Other aerodromes are safeguarded by privately agreed consultation with the LPA. This is called 'unofficial' safeguarding and is not obligatory under Statutory Direction. HM Government advises that aerodrome owners should take steps to safeguard their operations.
- 3.3 Safeguarding will assist the planning authority to make reasonable decisions in response to local development proposals. It is a basic principle that, in order to be clearly reasonable, a planning decision has to be taken in the knowledge of how it will affect the interested parties in the area in question. It is therefore advantageous for both an aerodrome operator and a planning authority to co-operate with safeguarding, but the degree to which this is achieved will depend upon negotiation.
- 3.4 It is sometimes possible to supply planners with a map that can be used to determine the effect of decisions. Aerodromes are advised (in government planning guidelines) to provide maps as the basis of a consultation process. Such a map would normally be used as a trigger for discussion rather than to indicate areas where development should be ruled out.
- 3.5 There is no official format for an aerodrome-safeguarding map but guidance is given at Appendix A to *CAP 738 Safeguarding of Aerodromes* (available at [www.caa.co.uk/CAP738](http://www.caa.co.uk/CAP738)). Its purpose is simply to indicate the areas in which development could affect aerodrome operations. Consultation about such development proposals will allow the aerodrome operator to explain how aviation interests might be affected.

## 4 Planning Authority Liaison

- 4.1 A constructive dialogue with the LPA can provide the basis of a general 'good neighbour' policy which will establish the aerodrome as a valued asset within the local community. If the safeguarded area is likely to include more than one local authority, contact should be made with all the affected planning departments.

## 5 Local Engagement

- 5.1 Any aerodrome is likely to suffer some degree of opposition, although this can often be minimised by the operator engaging with the local community. Where flying training is concerned an increase in airfield activity due to circuit flying and other training activities is likely to generate more opposition from local people who might perceive an increase in the frequency of noise disturbance and overflight. Further guidance on noise at GA Aerodromes can be found in the document *DAP Guidance – Noise Considerations at GA Aerodromes*, available via the CAA website at:

[www.caa.co.uk/dappolicystatements](http://www.caa.co.uk/dappolicystatements).

- 5.2 Dialogue with neighbours is always to be encouraged, indeed it is essential if good relations are to be achieved and maintained. Aerodromes that have a local consultative group committee that meets regularly and involves local councillors and representatives of residents appear to cope better with local opposition to their activities than those that don't.
- 5.3 The manner in which aircraft are flown is important. For example, the use of sideslip approaches to maximise available runway length may be perceived as recklessness. If the reason for such an approach is explained to neighbours, emphasising that it is flown for safety, local anxieties can be reduced.
- 5.4 Environmental factors are a common cause of complaint to the operator or the planning authority. Temporary hangers (such as polytunnels), mobile homes, caravans and tents used as temporary aerodrome accommodation may not require specific planning permission, depending on the extent of their use, but their proliferation may cause local opposition. Car parking may similarly become a sensitive issue. The supply of water, electricity and other services may involve the digging of trenches or the erection of poles etc. that may themselves become aerodrome obstructions. If the aerodrome operator is always seen to be reasonable when such issues are discussed, confidence may be increased.

## 6 Obstructions

- 6.1 If it is discovered that an obstruction has been positioned in the path of aircraft the affected operations must be suspended if there is a risk it might endanger aircraft. Planning enforcement is, to some extent, a matter of expediency and early dialogue with the relevant planning authority is recommended.

## 7 Rights of Way

- 7.1 The question of rights of way on the aerodrome and on adjacent land is often complex and can be the cause of conflict. Right of access to the site is obviously crucial and may involve negotiation with neighbouring landowners. For example, an aerodrome operator might be asked to contribute a proportion of the costs of maintaining a roadway for vehicular access.

## **8 Usage Levels**

- 8.1 It sometimes happens that an aerodrome is granted a temporary planning permission, so that the effect of operations can be assessed before a permanent consent is granted. In such cases, neighbours may feel misled if the level of activity is low during the period of temporary permission but then rises significantly after permission is granted. It is therefore better to be frank about plans from the outset and thus demonstrate that aviators are responsible and trustworthy. This is particularly important when flying training is to take place.

## **9 Planning Conditions**

- 9.1 Planning permissions are often granted subject to conditions.
- 9.2 Such conditions might include restrictions on where aircraft may fly in particular areas or definition of circuit patterns to reduce noise pollution. This is of particular relevance to airfields used for flying training, where aircraft will fly repeated circuits during a pilot's initial training.
- 9.3 Similarly, some local authorities may insist on a noise survey being carried out in advance of granting planning permission. This can result in the permission being limited to the aircraft type(s) used in the survey.
- 9.4 The RoAR further limit aircraft activity over congested areas (any area substantially used for residential, industrial, commercial or recreational purposes) and the net result may be that all aircraft movements are concentrated along fairly narrow corridors. It is important to consider this aspect and identify suitable methods of mitigating noise disturbance accordingly.
- 9.5 Planning conditions may be applied to impose limits to the operating times, dates, the frequency of flights, noise and other considerations. Aircraft weight is often perceived as an indicator of noise and planning permissions may state maximum aircraft weights in an attempt to contain noise levels.

## **10 Use of Aerodromes for Other Activities**

- 10.1 Specialised activities may involve a need for particular considerations. For example, parachutists may occasionally overshoot their intended landing area in a certain direction, dependent on the prevailing wind. Insofar as such mishaps are predictable it may be advisable to ensure that the LPA is aware; for example, advanced warning of proposed development on open land downwind of the drop zone would be useful to the aerodrome operator.

## **11 Insurance**

- 11.1 Aerodrome operators and flying training providers should obtain professional advice on the insurance that will be required to cover any liabilities to which their operation may expose them.

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## Chapter 3 Aeronautical Notification

- 1 If regular operations are to take place it is highly advisable to publicise the location of the aerodrome and to ensure that flying activity is co-ordinated with other nearby civil and military aviation activity. It is UK policy that unlicensed aerodromes will not be included in the Aerodrome (AD) section of the UK Aeronautical Information Publication (AIP). However, Aerodrome Traffic Zones (ATZs) at aerodromes that are not licensed are promulgated at ENR 2-2-2-1/5 and portrayed on NATS 1:500,000 and 1:250,000 series of Visual Flight Rules (VFR) charts. The Directorate of Airspace Policy (DAP) (ORA5) (see contact details below) will co-ordinate related promulgation, deletion or amendment.
- 2 In accordance with paragraph 1, the aerodrome briefing series of NOTAM (series A) will not be available to unlicensed airports. Unlicensed airports requesting NOTAM for the notification of unusual air activities may do so using the 'Navigation Warnings' series of NOTAM (series H). Unlicensed airports with an ATZ may also request NOTAM, in respect of the ATZ, under the 'Aerodromes listed in UK AIP' (series L).
- 3 DAP ORA5 is able to notify both civil and military users of the location of an aerodrome. The address is at paragraph 5 below.
- 4 Operators may also wish to notify their aerodrome for publication in one of the general aviation guides such as:
 

AFE VFR Flight Guide	<a href="mailto:enquiries@afeonline.com">enquiries@afeonline.com</a>	
Bottlang	<a href="mailto:fra-services@jeppesen.com">fra-services@jeppesen.com</a>	+44 (0)1293 842400
Pooley's Flight Guide	<a href="mailto:editor@pooleys.com">editor@pooleys.com</a>	+44 (0)208 2070171
Lockyer's Guide to Farm Strips	<a href="http://www.flightstore.co.uk">www.flightstore.co.uk</a>	+44 (0)1924 509273
British Helicopter Association	<a href="http://www.britishhelicopterassociation.org">www.britishhelicopterassociation.org</a>	+44 (0)1276 856100
- 5 Any aerodrome may apply for an ATZ to be allocated to provide a degree of protection for aircraft operating in the immediate vicinity of the aerodrome; ATZ dimensions are set out at Article 258 of the ANO 2009. However, notwithstanding the ANO amendment to allow flying training at unlicensed aerodromes, the level of Air Traffic Control (ATC), Aerodrome Flight Information Service (AFIS) or air/ground support that an aerodrome requires to support an ATZ remains unchanged (RoAR 2007 Rule 45). In respect of non-Government aerodromes, the level of ATC, AFIS or air/ground support that an aerodrome requires to be considered for the establishment or retention of an ATZ will depend upon its licensed status. Whereas a licensed aerodrome need only be served by a 'means of two-way radio communication' (air/ground) to support an ATZ, an unlicensed aerodrome requires the support of an ATC or AFIS unit. The difference is associated with regulatory oversight. An unlicensed aerodrome and an unregulated 'service' (air/ground) would result in a lack of regulatory oversight to ensure that the airspace was being appropriately managed. In order to prevent such a situation an unlicensed aerodrome will need a minimum of AFIS for the establishment or maintenance of an ATZ to be considered. Unless supported by ATC or AFIS, an existing ATZ will necessarily be withdrawn on revocation of the aerodrome licence. Further advice on these requirements can be obtained from DAP at:

Off Route Airspace 5  
Directorate of Airspace Policy  
Civil Aviation Authority  
CAA House  
45–59 Kingsway  
London WC2B 6TE  
Tel: +44 (0)207 453 6545  
Fax: +44 (0)207 453 6565

## Chapter 4 Aerodrome Physical Characteristics

- 1 The physical characteristics of an unlicensed aerodrome will depend on its location and how much space is available. At one end of this spectrum will be found farm strips and helicopter landing sites, whilst at the other will be aerodromes such as the privately operated ex-military airfield with hard runways. Hence the type of aircraft operating from the aerodrome and the nature of the operations at the aerodrome may vary widely.
- 2 The physical characteristics required of a licensed aerodrome are detailed in *CAP 168 Licensing of Aerodromes*, available via [www.caa.co.uk/cap168](http://www.caa.co.uk/cap168). While the licensing criteria may not be necessary for safe operation of every type of aircraft, they can be used as guidance on which the layout of an unlicensed aerodrome may be based.

### 3 Runways

- 3.1 Terrain and obstacles will affect runway design and length but the runway should be of sufficient length and width for the type of aircraft being operated.
- 3.2 Runways suitable for use by qualified or experienced pilots, for example on farm strips, may not be suitable for flying training. Suggested runway dimensions and safety factors are shown at Appendix B.
- 3.3 The runway surface condition is very important and should be kept as smooth and well drained as possible. Hard surfaces should be regularly inspected for debris (at least once a day before flying commences) and natural surfaces should be mown, rolled and kept debris free.
- 3.4 Anyone laying a grass runway should consider the use of seed mixtures which will give slower growth and reduced rolling resistance. It is recommended that grass be kept to a maximum of 10 cm (4 in.) high.
- 3.5 It is essential to mark any obstacles, potholes and bad ground. Runway markers and runway numbers will help line up for both take-off and landing.
- 3.6 The runway should, wherever possible, be designed such that trees, power lines, high ground or other obstacles do not obstruct its approach and take-off paths. It is recommended that there are no obstacles greater than 150 ft above the average runway elevation within 2,000 m of the runway mid-point.
- 3.7 The runway orientation in relation to the prevailing local wind should be considered carefully. It may be possible that a slight re-orientation by 10 or 20 degrees could reduce a prevailing crosswind. This is particularly important for tailwheel aircraft where the maximum permissible crosswind component may be 10 knots or less. Anyone designing a runway should also bear in mind the possible effect of buildings, trees and other natural features on the local surface wind.
- 3.8 Runway slope should always be considered. Taking off or landing up or down a slope is acceptable, whereas taking off and landing across the slope is dangerous. Anyone designing a runway should ensure that the orientation of the strip eliminates excessive lateral slope. It is recommended that lateral and longitudinal gradients are limited to 1:50 (2%) maximum.

- 3.9 The runway at an aerodrome provided at an event – e.g. a race meeting - and/or where large numbers of visitors are expected, should be positioned so that the overflight of assembled spectators, car parks or other areas likely to attract large numbers of people is avoided.
- 3.10 Where possible, the runway should be oriented to avoid overflight of population, houses, stables, and other sensitive areas during take-off and approach to land. It must be remembered, however, that the fact that an aerodrome is unlicensed does not preclude compliance with the ANO or the RoAR.

**Further information regarding the amendment of the ANO 2009 and the RoAR 2007 to allow flight training at unlicensed aerodromes can be found at Appendix A.**

- 3.11 The usable parts of hard runways (if all of the hard area cannot be used) and of grass runways may be edged with white rectangular paint markings or marker boards, flush with the runway surface, each 3 m long and 1 m wide, at intervals of not more than 90 m. Alternatively, suitable elevated frangible markers (such as traffic cones) at the same spacing may be used. The ends of the usable runway may be indicated with similar paint or markers at right angles to, and adjoining, the end lateral markers.
- 3.12 Where operations are not confined to marked, paved or unpaved runways, the limits of the usable area may be marked in a similar way, i.e. 3 m by 1 m markers spaced at intervals of not more than 90 m around the perimeter. If any area within this perimeter is temporarily or permanently unfit for use by aircraft, it should be outlined by similar-sized orange and white raised markers or traffic cones.

## **4 Wind Indication**

- 4.1 A wind sleeve or wind sock, clearly visible from the air, and positioned so as to indicate a representative direction and strength, should be provided. The aerodrome owner should avoid locations close to trees or buildings or where terrain may cause an unrepresentative indication, and ensure it will not interfere with aircraft taking off or landing.

## **5 Obstacles**

- 5.1 Anything that, because of its height or position, could be a hazard to an aircraft landing or taking off should be conspicuously marked if it cannot be practicably removed or minimised.
- 5.2 The height of the highest obstacle within 4 nm of the centre of the aerodrome, together with any potentially hazardous obstacles outside the aerodrome boundary, over which the aerodrome operator cannot exercise control, should be mentioned in any aeronautical information publications in which the aerodrome is included. Consideration should also be given to displaying this information on a chart or map on a notice board within the clubhouse, in the training or briefing room and on the aerodrome website to raise awareness of these obstacles.
- 5.3 It is sometimes possible to have local power lines and telephone lines moved at personal expense.
- 5.4 If the aerodrome does not feature in any aeronautical publications, a procedure should be developed whereby visiting pilots are warned of hazards prior to arrival. A requirement to obtain prior permission before landing will facilitate such hazard warning by allowing visiting pilots to be briefed. Such information may also be usefully included on the aerodrome's website, if one exists.

## **6 Roads, Buildings and Other Structures Outside the Aerodrome Perimeter**

- 6.1 The location of roads, buildings and other structures outside the aerodrome perimeter should be considered when aligning runways to allow safe approaches and departures without hazarding people or vehicles using such roads, buildings and other structures.

## **7 Aerodrome Lighting**

- 7.1 The majority of unlicensed aerodromes will operate without lighting but there is no limitation on its employment.
- 7.2 CAA permission is not required for the installation of aeronautical ground lighting at an unlicensed aerodrome. However, if the aeronautical ground lighting is considered to be a hazard which is liable to endanger an aircraft, the CAA has the right to request the lighting be extinguished or screened in accordance with Article 221 of the ANO 2009.
- 7.3 It is recommended that on aerodromes used at night, the runway should be provided with threshold, edge and end lighting and, if possible, approach slope guidance.
- 7.4 Airfield lighting and approach slope guidance can be permanent or portable. Examples of lighting characteristics, standards and layouts appropriate for small, licensed aerodromes are detailed in CAP 168, Chapter 6.
- 7.5 Runway edge lighting, if used, should be placed along, or within 3 m of, the outside edge of the runway with the lights spaced at intervals of  $60 \pm 6$  m. If circuit training is envisaged, omnidirectional lights should be used. Threshold and end lighting, if used, should consist of six lights evenly spaced at intervals of not more than 9 m across the threshold and runway end respectively.
- 7.6 It is essential that any approach slope guidance is correctly installed and properly maintained. Owners and operators are encouraged to seek advice from the lighting equipment manufacturers prior to installation.
- 7.7 Taxiways, if provided, should be identified at least on one edge by reflective markers or on the centre line by the use of lights. If the lighting system does not adequately illuminate apron edges they should be marked in the same manner as taxiways.
- 7.8 Obstacles should be lit with steady red low-intensity obstruction lights (see CAP 168, Chapter 6, Appendix 6A, Table 6A.1).
- 7.9 Further advice can be obtained from:  
Aerodrome Standards  
Safety Regulation Group  
Civil Aviation Authority  
Aviation House  
Gatwick Airport South  
West Sussex  
RH6 0YR  
e-mail: [aerodromes@caa.co.uk](mailto:aerodromes@caa.co.uk)

## **8 Lighting of Helicopter Landing Sites**

- 8.1 The International Civil Aviation Organization (ICAO) recommends the display of green Touchdown and Lift-Off Area (TLOF) lights and/or white TLOF floodlighting for night operations. Where the Final Approach and Take-Off (FATO) area is not self-evident, or is not nearly coincidental with the TLOF, white FATO lights are also required – see ICAO Annex 14, Volume II, paragraphs 5.3.6 and 5.3.8.

## **9 Aircraft Parking**

- 9.1 If designated parking areas are provided, they should not be sited under aircraft flight paths or within the runway strip, and should have barriers and notices warning against unauthorised entry. Suitable fire extinguishers should be available in areas where aircraft engines are started.

## Chapter 5 Flying Operations

- 1 While this Chapter details issues for both pilots and aerodrome operators to consider, it is possible that the operator may be a pilot too so they have not been separated. Where there is both an aerodrome operator and a pilot involved, it will be necessary to agree on the division of duties so there is no misunderstanding over where responsibilities lie.
- 2 If there are no permanent buildings such as a hangar on the site, the aerodrome operator or pilot should consider siting a small hut, or caravan, on the aerodrome to store fire appliances, first aid equipment and a movements log. A notice board displaying aerodrome information is also useful. The building/caravan should be marked clearly with a large black letter 'C' on a yellow background to show visiting pilots where the movements log is kept. Procedures should be put in place to ensure pilots always complete the movements log. The local police and Customs may wish to check on flights in and out, as may the local planning department if the aerodrome is operating under the 28-day rule. Aerodromes used for flying training should have a suitable briefing room or area to allow pre-flight and post-flight briefings.
- 3 A visual inspection of the airfield including checking the runway, and taxiways if available, should be conducted each day before the start of flying and again if there are reports of Foreign Object Debris (FOD) on the runway.
- 4 A further inspection (which should include a check of the aerodrome ground lighting) should be conducted prior to starting night flying. For hard runways particular attention should be paid to debris. Damaged areas should be repaired as soon as possible.
- 5 Grass runways also need regular maintenance: regular cutting and rolling together with the elimination of potholes and rabbit and other animal excavations. The surface of a grass runway can be considered smooth enough if a car can be driven over it at 30 mph without undue discomfort. A programme of planned maintenance should help to improve the quality and longevity of the runway.
- 6 The aerodrome operator or pilot should ensure that ruts, soft ground or other problems are marked, particularly if visiting pilots are allowed to use the aerodrome. Requiring visiting pilots to obtain Prior Permission Required (PPR) will provide an opportunity to ensure they are made aware of such problems.
- 7 To prepare for the event of an aircraft overrunning the end of a runway, overrun areas may be provided, either directly beyond the runway or slightly to either side if the ground in these areas would reduce the hazard arising from an overrun. Aerodrome operators and pilots should remember that, in the event of an overrun, stopping the engine will considerably reduce the distance travelled, and may reduce damage to the aircraft if contact is made with hedges or other objects beyond the end of the runway.
- 8 Aerodrome operators and pilots should consider options available following an engine failure soon after take-off. They should remember that in such a situation wing bank angles must be limited to 30° or less and heading changes to less than 30° either side of the aircraft's nose.
- 9 Aerodrome operators and pilots should consider the effect of runway surface state (e.g. wet or longer than usual grass) and/or contamination (e.g. recent rain, standing water or mud) on aeroplane take-off and landing performance. Appendix B details the necessary safety factors.

- 10 If the aerodrome is accessible to the public or to livestock, aerodrome operators and pilots should always ensure that both are clear of the runway or operating surface before commencing operations. Public footpaths should be clearly marked with warning signs advising of flying operations.
- 11 Aerodrome operators and pilots should investigate and be aware of the effect of various wind directions on operations, considering wind shear, roll over from trees and buildings on the aerodrome.
- 12 Birds are a hazard at all aerodromes but can be particularly so at small strips where roosting sites can be very close to the runway. Therefore awareness of the hazard must be high and procedures should be in place should some bird control activity be necessary. Reasonable attempts should be made to remove birds from the aerodrome. Guidance on techniques and systems to help reduce the risk of a bird strike can be found in *CAP 772 Bird Strike Risk Management for Aerodromes*, available via [www.caa.co.uk/cap772](http://www.caa.co.uk/cap772).
- 13 Before each flight, aircraft commanders must consider the Maximum Take-Off Mass (MTOM) of their aircraft, its loading, the prevailing weather conditions and the condition of the runway. Where appropriate, the aircraft commander must carry out a mass and balance calculation and a performance calculation to confirm that they can still safely operate from the aerodrome. The performance calculation will need to take into account the condition of the runway, obstacles, wind direction and strength and weight of the aircraft prior to commencing flying (see Appendix B). Appropriate weather reports for the planned flight must be obtained.

## Chapter 6 Aircraft Fuelling

- 1 Operators of unlicensed aerodromes who also have the facilities to store and dispense AVGAS 100LL, Jet A1 or MOGAS should be aware of the requirements specified in Article 217 of the ANO 2009.
- 2 The storage and dispensing of AVGAS 100LL and MOGAS from an aerodrome requires the operator or owner of the installation to hold the appropriate Petroleum Licence issued by their local Unitary Authority or branch of the Environment Agency. Fuelling procedures and guidance are contained in *CAP 748 Aircraft Fuelling and Fuel Installation Management* (available via [www.caa.co.uk/cap748](http://www.caa.co.uk/cap748)).
- 3 While primarily aimed at licensed aerodromes, this guidance is also relevant for fuelling arrangements at unlicensed aerodromes.

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## Chapter 7 Low Flying

- 1 It is a pilot's responsibility to comply with the Rules of the Air. Nevertheless, aerodrome operators must be aware of the limitations imposed on their operations by the Rules, in particular those governing low flying – Rule 5 of the RoAR 2007. Further information regarding the amendment of the ANO 2009 and the RoAR 2007 to allow flight training at unlicensed aerodromes can be found at Appendix A.
- 2 Rule 5 of the RoAR 2007, amongst other requirements, prohibits flights below 1,000 ft over 'congested' areas except when aircraft are taking off or landing in accordance with normal aviation practice. It is an important safety consideration that climb out, approach and circuit paths at unlicensed aerodromes do not overfly built-up areas, but see Appendix A also. These Congested Areas are legally defined in Article 255 of the ANO 2009 as 'in relation to a city, town, or settlement, any area which is substantially used for residential, industrial, commercial or recreational purposes;...'.
- 3 Operators should also be aware that military low flying, down to 200 ft above surface level, typically takes place from Monday to Friday (excluding Bank Holidays) over most of the UK away from congested areas. It is recommended that the Military Low Flying Organisation be notified (either directly or through the DAP) of all unlicensed aerodromes so that military crews can be made aware of their location. Notification does not mean that military traffic will not overfly or fly close to an aerodrome.
- 4 The Military Low Flying Organisation can be contacted on:  
Tel: +44 (0)1780 783838 ext 7448  
e-mail: [cas-aslfosops1fwo01@wittering.raf.mod.uk](mailto:cas-aslfosops1fwo01@wittering.raf.mod.uk)
- 5 DAP ORA5 can be contacted at the address given in Chapter 3, paragraph 5.

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## Chapter 8 Emergency Services

- 1 The emergency procedures at an unlicensed aerodrome will depend upon the amount of flying and types of aircraft expected to use the aerodrome. At a farm strip this may, of necessity, be limited to a fire extinguisher for self-help use. At larger unlicensed aerodromes greater provision would be prudent, particularly when flying training is taking place.
- 2 In developing emergency procedures the following should be considered:
  - A competent person should conduct an assessment of the hazards and risks.
  - Arrangements for calling fire, police or ambulance.
  - Liaison with local Emergency Services to visit the aerodrome so that they can brief their personnel on suitable routes for their vehicles and the nature of any hazards, such as fuel in aircraft tanks or in storage and types of aircraft likely to use the aerodrome.
  - Ensuring suitable first aid and fire-fighting equipment is available and can be transported to an accident or incident which occurs up to the aerodrome boundary.
  - Providing written instructions on the action to be taken should an emergency occur.
  - Informing the local emergency services of any ballistic parachute devices fitted to any aircraft operating from the aerodrome. Warning stickers for aircraft equipped with such devices are available from FOI(GA).
- 3 Further guidance will be found in CAP 168, Chapter 8, Appendix 8C, due to be published in July 2010.
- 4 Guidance on fire-fighting and first aid equipment can be found at Appendix C.

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## Chapter 9 Provision of Air Traffic Services

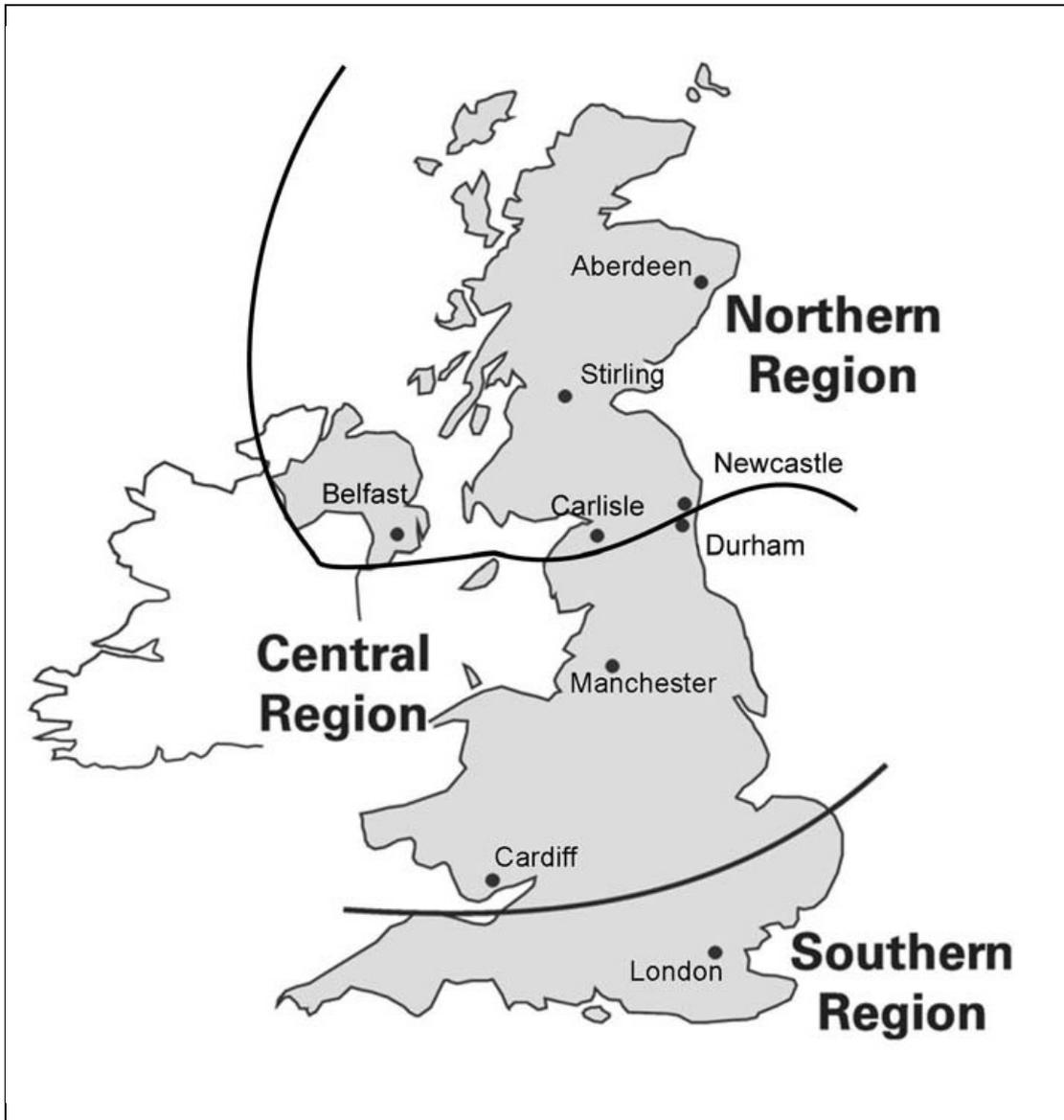
- 1 The provision of an air traffic service will depend on a number of factors. Aerodrome Operators should consider the following:
  - a) The anticipated number of aircraft that will use the airfield.
  - b) The movement rate including circuit traffic.
  - c) The type of aircraft that will use the airfield, fixed-wing, rotary-wing, microlights, vintage jets etc.
  - d) The complexity of the operation – cross-runway usage etc.
  - e) The proximity of other airfields and how that will affect the operation of the airfield.
  - f) Local airspace and complexity.

- 2 Advice on Air Traffic Services (ATS) matters may be sought from the appropriate CAA Regional Manager, Air Traffic Standards. Their addresses are:

Regional Manager ATS  
Southern Regional Office  
Floor 2W  
Aviation House  
Gatwick Airport South  
West Sussex RH6 0YR  
Tel: +44 (0)1293 573330  
Fax: +44 (0)1293 573974

Regional Manager ATS  
Central Regional Office  
First Floor, Atlantic House  
Atlas Business Park  
Simonsway  
Wythenshawe  
Manchester M22 5PR  
Tel: +44 (0)161 216 4500  
Fax: +44 (0)161 216 4549

Regional Manager ATS  
Northern Regional Office  
First Floor  
Kings Park House  
Laurelhill Business Park  
Stirling FK7 9JQ  
Tel: +44 (0)1786 457400  
Fax: +44 (0)1786 457440



**Figure 1** Air Traffic Services UK Areas

# Appendix A Supplementary Information Regarding the Amendment of the Air Navigation Order 2009 and the Rules of the Air Regulations 2007 to Allow Flight Training at Unlicensed Aerodromes

## 1 Constraints, additional measures and further amendments to the Rules of the Air associated with enabling training at unlicensed aerodromes

- 1.1 Following the publication of the final Letter of Intent to amend the ANO 2009 and the RoAR 2007 to allow flight training at unlicensed aerodromes, the CAA has received requests for clarification from flying training schools and aerodrome operators. The answers to some of these questions indicate that additional measures and further amendments to the Rules of the Air are necessary.
- 1.2 Two specific issues have been identified. These are:
- a) the need to make provision for conducting manoeuvres in helicopters below 500 ft over Training Aerodromes; and
  - b) the unintended effects of the amendment enacted in April 2010 relating to the alleviation of the Rule 5 Low Flying Prohibitions of the RoAR 2007.
- 1.3 These have been addressed by the CAA as set out below.

## 2 Manoeuvring Helicopters

- 2.1 Rule 6(i) of the RoAR 2007 makes provision for a helicopter to be exempt from the 500 feet rule 'if it is conducting manoeuvres, in accordance with normal aviation practice, within the boundaries of a licensed or Government aerodrome or, with the written permission of the CAA, at other sites'.
- 2.2 There has been a general permission in place for some years to allow such manoeuvring at places other than a licensed or Government aerodrome. To complement the amendment of the ANO 2009 and the RoAR 2007 to facilitate training at unlicensed aerodromes, the scope of the general permission is expanded with effect from 14 April 2010 to include any aerodrome designated as a Training Aerodrome in accordance with Rule 6(aa)(iv).

## 3 Low Flying Prohibitions

- 3.1 Rule 6(a) of the RoAR 2007 exempts any aircraft from the low flying prohibitions relating to congested areas if it is flying, in accordance with normal aviation practice, at a licensed or Government aerodrome. The new Rule 6(aa) that is in force from 14 April 2010 gives the same exemption at a Training Aerodrome. However, the (unlicensed) Training Aerodrome provisions, including the exemption from the low flying prohibitions, are valid only when the aircraft concerned is flown by a person under instruction. This means that, for instance, where an existing licensed aerodrome is in such close proximity to congested areas that use must be made of the Rule 6(a) exemption, the aerodrome **must remain licensed** if it is to be used by aircraft being flown by pilots who are not under instruction. Were such an aerodrome to become unlicensed it would lose the exemption from the low flying prohibitions

set out under Rule 6(a), and so would be usable only by pilots under instruction or performing flying tests who benefit from the equivalent exemption under Rule 6(aa), or by aircraft that are capable of using the aerodrome without flying below 1,000 feet over the congested area or being in breach of any other provision of Rule 5. Therefore, if a licensed aerodrome is close to a congested area, becoming unlicensed could close such an aerodrome to all non-training flights.

- 3.2 The CAA has considered this particular scenario and has concluded that allowing pilots under instruction at an unlicensed Training Aerodrome to be exempted from all of the low flying prohibitions relating to congested areas is an unintended effect of the introduction of Rule 6(aa). It is considered that the requirements, under Article 211 of the ANO 2009, applied to licensed aerodromes do mitigate the risks covered by Rule 5 and therefore the exemption from all of the low flying prohibitions should not be available at unlicensed Training Aerodromes. It is intended to correct this by amending Rule 6(aa), at the next available opportunity, to reduce the exemption from the low flying prohibitions at unlicensed Training Aerodromes to exemption from the 500 feet rule only. Therefore, any licensed aerodrome that wishes to support operations that will continue to make use of the exemption to all of the low flying prohibitions that are given at Rule 6(a) should remain licensed.

## Appendix B Deciding Minimum Runway Dimensions, Take-Off and Landing Safety Factors

### 1 Understanding and Using Aircraft Performance Data

- 1.1 The key to safe aircraft operations at unlicensed aerodromes is to understand and use the performance data available for the type of aircraft to be used. This will allow the minimum distances required for take-off and landing to be calculated and will allow safety factors to be included for variations in aerodrome altitude, runway slope, runway surface, wind direction and other meteorological conditions. Performance data can be found in the manufacturer's manual or in the Pilot's Operating Handbook, as applicable, for each aircraft type.
- 1.2 A useful guide to this subject for microlight pilots, which explains how the calculations are made (with some worked examples), will also be of use to light aeroplane pilots. It can be accessed on the British Microlight Aircraft Association website at the following link:  
[www.bmaa.org](http://www.bmaa.org) > Aircraft Operation > Engineering and Flight Testing > TILs – Technical Information Leaflets > 006 – Understanding Performance Data.
- 1.3 For helicopter operators, guidance on setting up an unlicensed helicopter site can be found on the British Helicopter Association website at:  
[www.britishhelicopterassociation.org](http://www.britishhelicopterassociation.org) > Guidelines > A Simple Guide for Setting Up an Unlicensed Helicopter Site.

### 2 Aerodromes (Including Helicopter Sites) to be Used for Flying Training

- 2.1 Clearly when student pilots are receiving *ab initio* instruction towards the grant of a licence, it would be inadvisable to expect them to be able to operate from short strips or confined area sites that would challenge experienced pilots. For aeroplane and helicopter training sites where training for JAR-FCL licences and ratings is given, the criteria given in JAR-FCL should be heeded. For fixed-wing aircraft these are at Appendix 1 to JAR-FCL 1.125 and Appendix 1a to JAR-FCL 1.055 respectively; for rotary-wing aircraft they are at Appendix 1 to JAR-FCL 2.125 and Appendix 1a to JAR-FCL 2.055. JAR-FCL 1 and JAR-FCL 2 are available via:  
[www.jaato.com](http://www.jaato.com) > Corporate > JAR Publications > JARs > Section 1.
- 2.2 For helicopter training Appendix 1a to JAR-FCL 2.055 paragraph 27 states:  
'The base aerodrome, and any alternative base aerodrome, at which training is being conducted shall meet the following requirements.
- a) Have at least one runway or take-off/landing area that allows training helicopter to make a normal take-off or landing at the maximum take-off or maximum landing mass authorised, and touch down in autorotation as appropriate:
    - i) under calm wind (not more than four knots) conditions and temperatures equal to the mean high temperature for the hottest month of the year in the operating area;
    - ii) clearing all obstacles in the take-off flight path by at least 50 feet;
    - iii) with the powerplant operation and the landing gear (if applicable) recommended by the manufacturer; and

- iv) with a smooth transition from lift-off to the best rate of climb speed without exceptional piloting skills or techniques.
- b) Have a wind direction indicator that is visible at ground level from the ends of each runway, take-off/landing area.
- c) Have adequate runways/take-off/landing area lights if used for night training.
- d) Have an air traffic control service except where, with the approval of the Authority, the training requirements may be satisfied safely by another means of air/ground communications.'

2.3 Additionally Appendix 1a to JAR-FCL 2.055 paragraph 28 states that:

'Sites shall be available for:

- confined area operation training
- simulated engine off autorotation
- sloping ground operation.'

### 3 Aircraft other than Helicopters

#### 3.1 Recommended Minimum Runway Dimensions

Aircraft Type	Runway Length	Runway Width	Obstacles
Microlight (<450 kg MTOM) Gyroplanes	250 m.	10 m (15 m if within crop above 33 cm high).	No vertical obstacles within 25 m either side of centre line. Runway end obstacles (hedges etc.) not above 2 m high.
Light Aeroplane (<2730 kg MTOM)	The greater length of 1.25 x Take-Off Distance Required or 1.43 x Landing Distance Required, as detailed in Pilot's Operating Handbook.	18 m.	No vertical obstacles within 25 m either side of centre line. Runway end obstacles (hedges etc.) not above 2 m high.
Self-Launching Motor Gliders	See the British Gliding Association Motor Gliding Handbook at: <a href="http://www.gliding.co.uk/bgainfo/documents/mghandbooked1.pdf">www.gliding.co.uk/bgainfo/documents/mghandbooked1.pdf</a> .		
Gliders	Gliding usually takes place at sites operated by gliding clubs or on existing aerodromes.  Anyone wishing to establish a gliding site should contact the British Gliding Association at: <a href="http://www.gliding.co.uk">www.gliding.co.uk</a> .		

### 3.2 Fixed-Wing Safety Factors

#### Take-Off

Condition	Increase in take-off distance to 50 feet	Factor
A 10% increase in aeroplane weight.	20%	1.20
An increase of 1,000 ft in aerodrome altitude.	10%	1.10
An increase in 10°C in ambient temperature.	10%	1.10
Dry grass <sup>1</sup> – Up to 20 cm (8 in.) (on firm soil).	20%	1.20
Wet grass <sup>1</sup> – Up to 20 cm (8 in.) (on firm soil).	30%	1.30
A 2% uphill slope <sup>1</sup> .	10%	1.10
A tailwind component of 10% of lift-off speed.	20%	1.20
Soft ground or snow <sup>1</sup> .	25% or more	1.25 +

1. The effect on ground run/roll will be proportionally greater.

#### Landing

Condition	Increase in landing distance from height of 50 ft	Factor
A 10% increase in aeroplane weight.	10%	1.10
An increase of 1,000 ft in airfield altitude.	5%	1.05
An increase of 10°C in ambient temperature.	5%	1.05
A wet paved runway.	15%	1.15
Dry grass <sup>1</sup> – Up to 20 cm (8 in.) (on firm soil).	15%	1.15
Wet grass <sup>1</sup> – Up to 20 cm (8 in.) (on firm soil). See Note 3.	35%	1.35
A 2% downhill slope.	10%	1.10
A tailwind component of 10% of the landing speed.	20%	1.20
Snow <sup>1</sup> .	25% or more	1.25 +

1. The effect on ground run/roll will be proportionally greater.

- NOTES:**
- 1** After taking account of the above variables it is recommended that a normal safety factor of 1.25 for take-off and 1.43 for landing be applied.
  - 2** Any deviation from normal operating techniques is likely to result in an increase in the distances required.
  - 3** When grass is very short, the surface may be slippery and distances may be increased by up to 60% (a factor of 1.60).

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## Appendix C Fire-Fighting and First Aid Equipment

- 1 Determination of the appropriate level of emergency equipment is dependent on the level of operations at the aerodrome. At a farm strip where small aeroplanes are operated privately, provision of a fire extinguisher may be all that is required. However, where training is being conducted, if a number of aircraft are to be flown from an aerodrome or significant numbers of visiting aircraft are the norm, then the provision of a wider range of equipment would be recommended.
- 2 As an indication of the range of equipment that might be provided, the following is the minimum scale of equipment that should be required for immediate use at a licensed aerodrome operating a fleet of Cessna 150/172 or PA 28 type aircraft:
  - a) A vehicle or vehicles with cross-country capability and capable of carrying the equipment and personnel specified, either on the vehicle or on a suitable trailer connected to the vehicle.
  - b) A foam extinguisher containing not less than 90 litres of a foam meeting performance Level B with a discharge rate of not less than 60 litres/minute through one or more hose lines. Complementary fire-fighting media in the form of 14 kg of dry powder or bromochlorodifluoromethane (BCF), or 25 kg of CO<sub>2</sub> should be available.
- 3 Details of Level B requirements will be found in Appendix 8C of CAP 168, due to be published in July 2010, available via [www.caa.co.uk/cap168](http://www.caa.co.uk/cap168).
- 4 For helicopter operations, 'minimal' scales of emergency equipment appropriate to private flying operations involving single spot/single aircraft would not be considered adequate for a situation where one or more helicopters are operating in a training environment. For further guidance as to the appropriate level of equipment for helicopter operations, the aerodrome operator should refer to CAP 789, Annex 3 to Chapter 21, which refers primarily to AOC helicopter operators but will be useful to other operators too.
- 5 In the event of an aircraft accident or an incident on the aerodrome that involves anything other than very minor injuries, the most important action is to immediately telephone the appropriate emergency services. For minor injuries a first aid kit should be obtained and placed in a prominent position where it can be accessed easily when the aerodrome is operating.

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## Appendix D Helicopter Landing Sites Where Flying Training is Not Being Conducted

- 1 This Appendix summarises the information that is pertinent to helicopter operators that are NOT conducting flying training.
- 2 The relevant requirements of the ANO 2009 and the RoAR 2007 must be complied with in full when operating at an unlicensed site.
- 3 Helicopter Landing Sites (HLS) are unlicensed aerodromes which are used exclusively by helicopters (see note below). Thus a private site in a field to the rear of a domestic property is an aerodrome (but not a training aerodrome) whilst a helicopter is using it. The content of this CAP therefore applies to such HLS.  
**NOTE:** ICAO Annex 14 uses the term 'heliport' – that is an aerodrome or defined area on a structure used wholly or in part for the arrival, departure and surface movement of helicopters.
- 4 The document 'Helicopter Site Keepers – Guidelines' can be viewed from the British Helicopter Association website at:  
[www.britishhelicopterassociation.org/guidelines.asp](http://www.britishhelicopterassociation.org/guidelines.asp).  
This website also has a simple guide for setting up an unlicensed helicopter site together with a code of conduct for pilots.
- 5 Further guidance on Helicopter Activities and Private Landing Sites is also available on the CAA website at:  
[www.caa.co.uk/dappolicystatements](http://www.caa.co.uk/dappolicystatements) > Aviation Related Environmental Enquiries > 06. Helicopter Activities and Private Landing Sites.
- 6 Guidance on Helicopter Activities in the London Control Zone and over Central London is available on the CAA website at:  
[www.caa.co.uk/dappolicystatements](http://www.caa.co.uk/dappolicystatements) > Aviation Related Environmental Enquiries > 07. Helicopter Activities in the London Control Zone and over Central London.
- 7 Prior permission must be obtained from FOI(GA) before:
  - a) using an unlicensed site within a Congested Area, as defined in Article 255 of the ANO 2009 (Rule 5(3)(c) of the RoAR 2007);
  - b) using an unlicensed site by landing from the published Helicopter Routes in the London Control Zone (Rule 6(c) of the RoAR 2007); or
  - c) using an unlicensed site within 1,000 m of an assembly of more than 1,000 persons (Rule 5(3)(f) of the RoAR 2007). This includes attending race meetings, concerts and shows.
- 8 Applications for permissions may be made on CAA Form SRG 1304 Special Events and Unusual Aerial Activity – Application, available via:  
[www.caa.co.uk/SRG1304](http://www.caa.co.uk/SRG1304).  
There is a fee to pay for Permissions and Exemptions. The current fee, payable on application, can be found from the CAA Official Record Series 5 at:  
[www.caa.co.uk/ors5](http://www.caa.co.uk/ors5) > General Aviation.

- 9 HLS Operators may wish to publicise their site details by having them published in the AFE, Bottlang or Pooley's Flight Guides, which are commonly used by general aviation pilots, and in the British Helicopter Association Handbook. Contact details for these publications are given below.

AFE VFR Flight Guide	<a href="mailto:enquiries@afeonline.com">enquiries@afeonline.com</a>	
Bottlang	<a href="mailto:fra-services@jeppesen.com">fra-services@jeppesen.com</a>	+44 (0)1293 842400
Pooleys Flight Guide	<a href="mailto:editor@pooleys.com">editor@pooleys.com</a>	+44 (0)20 8207 0171
BHA	<a href="http://www.britishhelicopterassociation.org/contact.aspx">www.britishhelicopterassociation.org/contact.aspx</a>	+44 (0)1276 856100

## Appendix E Associated and Complementary Documentation

Accessible from: [www.caa.co.uk/publications](http://www.caa.co.uk/publications)

- CAP 168 – Licensing of Aerodromes
- CAP 738 – Safeguarding Aerodromes
- CAP 748 – Aircraft Fuelling and Fuel Installation Management
- CAP 789 – Requirements and Guidance Material for Operators

Accessible from: [www.caa.co.uk/safetysense](http://www.caa.co.uk/safetysense)

- CAA Safety Sense Leaflet No. 7 – Aeroplane Performance
- CAA Safety Sense Leaflet No. 10 – Bird Avoidance
- CAA Safety Sense Leaflet No. 12 – Strip Sense
- CAA Safety Sense Leaflet No. 18 – Military Low Flying

Accessible from: [www.gaac.org.uk](http://www.gaac.org.uk)

- GAAC Leaflet – Considerate Flying
- GAAC Leaflet – A Guide to Improving the Natural History of Small Airfields
- GAAC Leaflet – Your Local Aerodrome

Accessible from: [www.caa.co.uk/dappolicystatements](http://www.caa.co.uk/dappolicystatements) > Aviation Related Environmental Enquiries

- DAP Environmental Information Sheet – Number 5 – Aerodrome Operations
- DAP Environmental Information Sheet – Number 6 – Helicopter Activities and Private Landing Sites
- DAP Environmental Information Sheet – Number 9 – General Aviation

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