



The General Aviation Awareness Council

President: The Lord Rotherwick

**AN INTRODUCTION TO
AIRFIELD SAFEGUARDING
FOR
LOCAL PLANNING AUTHORITIES**

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GAAC.LPA.SG.LtAF

The General Aviation Awareness Council (GAAC) was formed in 1991 to promote the interests of the wide range of General Aviation (GA) activities in the UK as a national body representing the general and light aviation movement. It has assisted Government and the CAA in preparing policies offering a co-ordinated approach to major issues. It aims to explain the nature of GA, promote its purpose and value, protect its facilities and ensure its future. The GAAC has the support of some 60+ Aviation Associations and is able to speak with one voice on matters affecting Airfields and other landing and take off places.

This introduction to safeguarding has been prepared for Local Planning Authorities (LPAs) in order to heighten their awareness of flight safety issues in relation to the protection of smaller airfields. Although the principles of safeguarding apply to all licensed airfields, this briefing document mainly, but not exclusively, addresses the smaller, unlicensed airfields in UK. Note that, in this document, the terms airfield, aerodrome and airport are interchangeable.

Safeguarding Legislation and Planning Policy

1. Safeguarding is a term in planning law meaning to safeguard an established land-use. It is achieved by a process of checking proposed developments so as to, inter alia:
 - a. Protect the blocks of air through which aircraft fly, by preventing penetration of surfaces created to identify their lower limits.
 - b. Avoid any increase in the risk to aircraft of a birdstrike by preventing an increase in hazardous bird species in the vicinity of the airfield and, whenever the opportunity arises, to reduce the level of risk.

And for larger airfields:

 - c. Protect the integrity of radar and other electronic aids to air navigation, by preventing reflections and diffractions of the radio signals involved.
 - d. Protect visual aids, such as Approach and Runway lighting, by preventing them from being obscured, or preventing the installation of other lights which could be confused for them.
2. In practical terms, this translates into protecting aircraft in the vicinity of an airfield by doing nothing that will endanger flight safety.
3. There is planning legislation on aerodrome safeguarding for England and Wales (The Town and Country Planning (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) Direction 2002), and an equivalent Direction for Scotland. Stated within that planning legislation is the following:

“Operators of licensed aerodromes which are not officially safeguarded, and operators of unlicensed aerodromes and sites for other aviation activities (for example gliding or parachuting) should take steps to protect their locations from the effects of possible adverse development by establishing an agreed consultation procedure between themselves and the local planning authority or authorities.”

4. Northern Ireland has separate legislation covering safeguarding.
5. In policy terms, the requirement for private airstrips and other flying sites for recreational, business, training and emergency services use has been reflected in the earlier Planning Policy Guideline 13 (PPG13), and today in the National Planning Policy Framework (NPPF):

“Local planning authorities should consider the role of small airports and airfields in serving business, recreational and emergency services’ needs”.

“In formulating their planning policies and proposals, and in determining planning applications, local authorities should take into account the economic, environmental and social impacts on local and regional economies.”

“Local authorities should avoid development at or close to an airport or airfield which is incompatible with any existing or potential aviation operations.”

6. In particular, the NPPF, in a footnote to paragraph 97, makes specific reference to “aviation impacts” where wind energy development is concerned. This has been recognised as being a valid and important consideration. In addition Footnote 17 at page 23 of the NPPF specifically directs decision makers to the Overarching National Policy Statement for Energy Infrastructure (EN-1) which, at paragraph 5.4.2 states:

“It is essential that the safety of UK aerodromes, aircraft and airspace is not adversely affected by new energy infrastructure.”

Airfields that are Safeguarded

7. All CAA-licensed civil aerodromes are safeguarded, some 40 of which are by statute. All military airfields are statutorily safeguarded. Under the terms of their licence, civil aerodromes are required to take all reasonable steps to ensure the aerodrome and its airspace are safe for use by aircraft. **All civil unlicensed airfields, including those used for gliders and microlights, are strongly recommended by HMG and the CAA to take measures to safeguard themselves.**

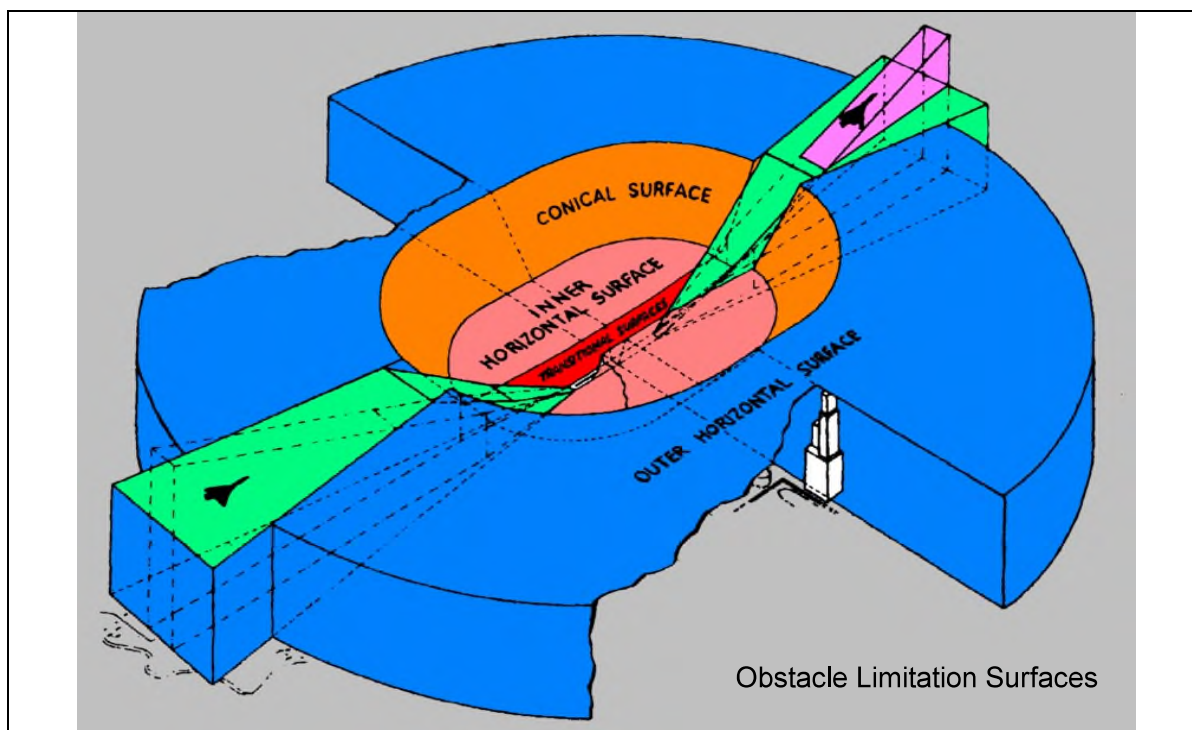
Unlicensed Civil Airfields

8. The CAA gives guidance how smaller airfields should be operated in CAP 793 (available from the CAA website, as are all CAPs). It gives suggested minimum criteria when an airfield is being established which are often interpreted by LPAs as safeguarding criteria for existing airfields. However, as CAP 793 acknowledges, there are many types and levels of flying operations, and that the criteria for licensed airfields (contained in CAP168, Licensing of Aerodromes) can be used as “*guidance on which the layout of an unlicensed aerodrome may be based.*”

9. An unlicensed airfield operator may choose to use any criteria that protects flying operations. However, those in CAP 168 are internationally agreed, varying with airfield/runway size and type of operations: they are recommended by the GAAC. Typically, for an airfield with runways less than 800m long, the safeguarded area extends to a radius of 2700m from the centre. These protected areas are known as obstacle limitation surfaces (OLS).



10. Although the diagram below illustrates the OLS for a large airfield, it shows the principles involved. Small airfields would not have an outer horizontal surface and the OLS would be circular. OLS represent the lower limit of the blocks of protected airspace around an airfield. They take the form of a complex set of 3-Dimensional surfaces, which extend upwards and outwards from the runway(s). The OLS completely surround the airfield, but those surfaces aligned with the runway(s) used to protect aircraft landing or taking-off will be more limiting than those surrounding the rest of the airfield, particularly closer to the airfield.



Planning Applications and the Safeguarding Process

11. The first thing an airfield operator should do is to establish contact with the LPA and, hopefully, establish the site's interests in the 'Statement of Community Involvement'. It is important for the LPA to encourage such contact and to understand what needs to be done to maintain flight safety.

12. The legislation says that one step in the safeguarding procedure, recommended by the CAA, is for the airfield to prepare a safeguarding chart and lodge it with the LPA. The chart should show areas where the erection of structures could affect the safety of flying operations, enabling the LPA to determine if a planning application could affect the airfield's operations and when they need to consult the airfield operator. Such a chart can vary in complexity and style. In the example, height restrictions are colour-coded. However, the most important thing is that the LPA can interpret and use it.



13. **Wind Turbines.** Wind turbines pose more than a potential height infringement problem. The CAA publishes guidance in CAP 764 (CAA Policy and Guidelines on Wind Turbines), downloadable from its website, within which it refers to the possible effect of turbulence up to **16 rotor diameters downstream**. This is, of course, variable in direction, and can pose a significant hazard, particularly for smaller aircraft and gliders.
14. Within CAP 764 the CAA states that it should be anticipated that any wind turbine development within 3km of an unlicensed airfield with a runway length up to 800m might have an impact upon civil aerodrome-related operations. Thus, there could well be safety concerns for airfield operators when turbines are planned within, or near, safeguarded zones. In such circumstances, the advice of the operator should be sought. Additional information relating to Wind Turbines(CAP764) and managing their impact is available on the CAA Website. The links are:

<http://www.caa.co.uk/docs/33/cap764.pdf>

<http://www.caa.co.uk/default.aspx?catid=1959>

15. **Birdhazard.** Collisions between birds and aircraft cost the aviation industry hundreds of £millions per year in damage and delays to aircraft, and are a major hazard. Over 80% of birdstrikes occur on or close to airfields and their operators should take necessary steps to ensure that the birdstrike risk is reduced to the lowest practicable level.
16. In addition to structures, any planning application that is likely to attract increased bird activity should also be referred to the aerodrome operator. This includes rubbish tips, lakes and landscaping that could encourage roosting. If in doubt, ask the airfield operator.

17. **Referral.** If, after checking a planning application against the safeguarding chart, the LPA believes it may have an effect on the airfield's safeguarding, it should be referred to the operator. To enable an accurate assessment of a proposed development, the airfield operator requires certain information about the proposals to be provided:
- a. The location as an OS Grid Reference (preferably to 6 figures for each of eastings and northings).
 - b. The elevation of the site [to an accuracy of 0.25m Above Ordnance Datum (AOD)].
 - c. The layout, dimensions and, particularly, heights of the proposed development. If appropriate, the diameter of wind turbines.
 - d. Other information as may be necessary, for example, landscaping details to enable the birdstrike potential to be assessed.

NOTE: Heights "Above Ordnance Datum (AOD)" are those shown on Ordnance Survey maps as "above mean sea level" (amsl).

18. The airfield will assess a Planning Application with reference to:
- a. The OLS.
 - b. Effect of any wind turbines.
 - c. The potential to attract birds.
19. Following assessment, the reply from the airfield to the LPA will state one of the following:
- a. No objection
 - b. No objection subject to certain stated conditions.
 - c. Objection (with reasons given).

This should be taken into account, together with all the other responses, when the LPA determines the outcome of the Planning Application.

20. Certain forms of development are permitted under the Town & Country Planning (General Permitted Development) Order, or comparable regulations, and there are specific safeguarding arrangements provided for relevant airfields. Where an LPA is consulted by a developer regarding the exercise of a permitted development right under these regulations, the LPA should refer the developer direct to the airfield operator for safeguarding advice.

Advice on Airfield Safeguarding

21. Prior to a formal Planning Application being made, the airfield may be prepared to offer informal advice on how to comply with the safeguarding requirements. The airfield's advice will depend on the level of detail provided, but it is likely to be limited to lighting, landscaping and height limits. If it believes a detailed study is required in relation to specialist aspects, it may just advise that a suitable consultant be engaged so that their report(s) can be included with any subsequent Planning Application. Any advice would be informal and without prejudice to detailed consideration of any future Planning Application(s). The absence of any safeguarding concerns should not be construed as support for any proposed development(s).

22. In addition, the GAAC is pleased to offer impartial, informal and, if required, confidential advice to planning officers facing any planning issues concerning flying sites. In the first instance, please contact GAAC Vice-Chairman, Stephen Slater at planning@gaac.org.uk if you think we may be able to help.

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