Aerodrome Safety

IAA

Risk from Obstacles at Aerodromes

Fencing Post

AED 1

Analysis of accidents and serious incidents over the last five years have highlighted an ongoing risk from obstacles at aerodromes. In some cases the primary cause of the accident was not the aerodrome obstacles, however, they have played a significant role in the severity of the outcome.

Hedges in Ireland can grow quite quickly. The alder (*Alnus glutinosa) and* common ash (*Fraxinus excelsior)*, common in boundary hedges can grow anywhere from 12 – 30 inches per annum. This growth may seriously impinge on the climb and approach path of your aircraft if left unchecked for a number of years.

Typically aerodromes will have overhead wires, either electrical or communications wiring, near their location and these will pose a hazard to operating at the aerodrome.

Additionally there is typically little you can do to have them re-routed or placed underground to completely remove the risk they pose.

When an aircraft experiences a runway excursion for whatever reason it ideally needs a run-out area free from obstacles. Concrete boundary fences, stone walls, tree trunks, solid pillars and general loose rocks at the boundary can add to the severity of accidents.

Some of the relevant accidents listed on the AAIU site are:
- » Accident: Piper PA12, EI-CMN, Birr Airfield Co. Offaly, 27 April 2008: Report 2008-016
- » Accident: Mainair Blade 912S, EI-EHR, near Shinrone Co. Offaly, 27 December 2009: Report No 2010-021
- » Accident: Laverda SpA Super Falco IV, EI-BMF, Powerscourt Airfield Co. Wicklow, 10 April 2010: Report No 2010-004
- » Serious Incident: Cessna 180K, N71763, Private Airfield Co. Meath, 9 August 2009: Report No 2010-015
- » Serious Incident: Cessna P210N, N6593W, Brittas House Airfield, Co. Limerick, 12 Aug 2005, Report No 2006-005
- » Accident: Mainair Blade 912 Microlight, G-CCFM, Nunstown, Aghadoe, Killarney, Co. Kerry, 27 September 2007: Report No 2009-007
- » Accident: Schleicher ASK 13, EI-GLD, near Gowran Grange Airfield, Co. Kildare, 6 March 2010
- » Accident: UFMXXL, OK-MUA 78, Clonbullogue Airfield Co. Offaly, 31 May 2008: Report No 2008-020
- » Accident: Pilatus PC-6/B2-H4, EI-IAN, Clonbullogue Airfield, Co. Offaly, 4 May 2008: Report No 2008-031
- » Accident: Luscombe 8A, N2837K, Navan Airfield, 7 May 2006: Report No 2007-023

Methods to Reduce the Risk:

If you have an aerodrome:
- Check you have a suitable obstacle free area. The following diagram provides guidelines. The check should be repeated regularly, at least once per year, to ensure tree growth, etc has not started to impinge into the obstacle free zone.
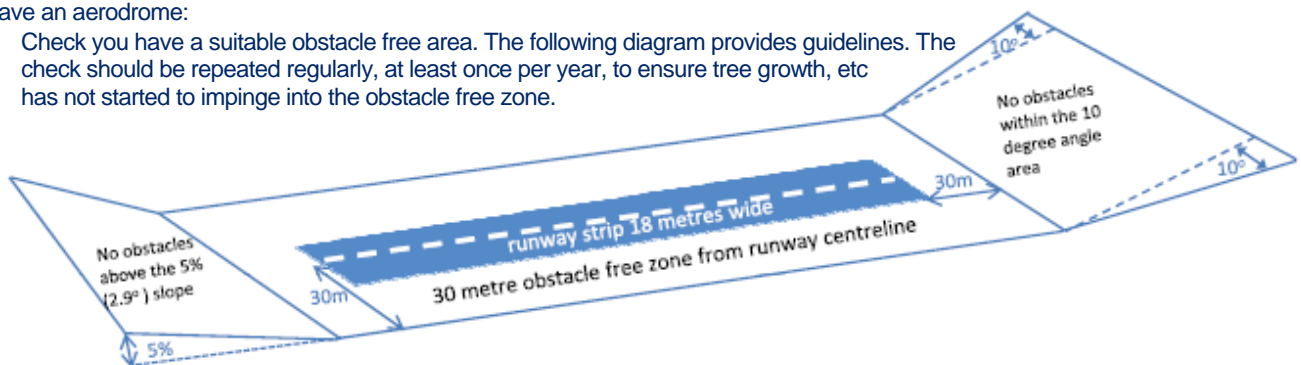
- Check the entire site adjacent to your established obstacle free zone and remove all solid objects where possible. Concrete and heavy timber posts, rocks, stone walls should be removed when possible to reduce the risk of collision.
- Where obstacles exist that cannot be removed ensure that these are well documented and all pilots are briefed prior to using the aerodrome.
- Try to engage with electricity and communication providers to relocate overhead wiring or, at least, have them more visible when they are in the flight path to and from your aerodrome.
- Keep runway surfaces reasonably level and firm. Unpaved surfaces should be regularly mown and inspected daily when in use.

If you are planning to use an aerodrome for the first time:
- familiarise yourself with the location and ensure you are aware of any obstacles.
- Make sure the runway is adequate for your aircraft. Flight manuals for most aircraft give minimum runway lengths based on paved level surfaces. Pilots should apply appropriate corrections for grass runway surfaces and make additional allowances for any slopes and wind .
- Obtain the appropriate permission to use the aerodrome in advance of starting your flight.

IAA Contacts:

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