GLIDING AWARENESS

This short article aims to help pilots become more aware of gliding activity and is based on Aeronautical Information Circular (AIC) Yellow 027/2023 linked from the NATS Aeronautical Information Service website. That AIC is highly recommended reading!

Introduction

Gliding is a weather dependent air sport and although most active from March – October the activity takes place throughout the year during daylight hours. The vast majority of gliders launch from sites clearly marked on half and quarter mil maps. Details of gliding sites are also available at <u>http://www.gliding.co.uk/findaclub/ukmap.htm</u>

Pilots whose exposure to gliding was flying circuits in post-war gliders may not know what gliders can now achieve. In the UK, the longest single flight distance is 1100km, gliders routinely fly closed circuit 300 km cross country flights at average speeds of around 100 kph and gliders routinely climb above FL100 near mountains and hills. There are around 7000 glider pilots operating some 2300 gliders at 86 clubs flying around 130,000 hours and covering about 1M kms per year. In addition, our Air Cadet colleagues carry out a huge amount of training in winch and self-launched gliders from a number of sites throughout the UK.

How to See and Avoid?

By design and similarly to other composite aircraft, most gliders have a small frontal area and are usually white in colour. It's a fact that in certain conditions any low frontal area, white aircraft can be difficult to spot. It's been found that the apparently tempting idea of applying patches of colour sometimes just breaks up the shape and doesn't in reality help with airborne detection. This puts a real premium on effective lookout technique (CAA Safety Sense Leaflet No 13). However gliders rarely fly wings level for long periods and when manoeuvring they become easier to see.

Likely places

Lookout is also enhanced a lot by knowing where gliders are most likely to be:-

- within a © 5nm radius of a gliding site (intense training activity and winch cables!)
- below cumulus clouds (in particular under lines of cumulus clouds)
- on the windward side of ridges (often at low level)
- upwind of or above lenticular clouds (mostly at high level)

Electronic Aids

A significant number of gliders are equipped with FLARM, an electronic aid to effective lookout that provides visual and aural warnings of closing traffic that is equipped with the same technology. This relatively low cost equipment has to date been almost exclusively fitted to gliders – but can be fitted to any aircraft. The RAF are fitting FLARM to some of their aircraft. The recent development of Powerflarm allows any aircraft to detect both FLARM and transponder equipped traffic on a single instrument.

Summary

To improve your own as well as glider safety there are three big things you can do;

- Lookout skills can be dramatically upgraded (CAA Safety Sense Leaflet No 13)
- Be aware of when and where gliders frequent (AIC Y 027/2023)
- Consider fitting an electronic aid to effective lookout that is FLARM compatible.