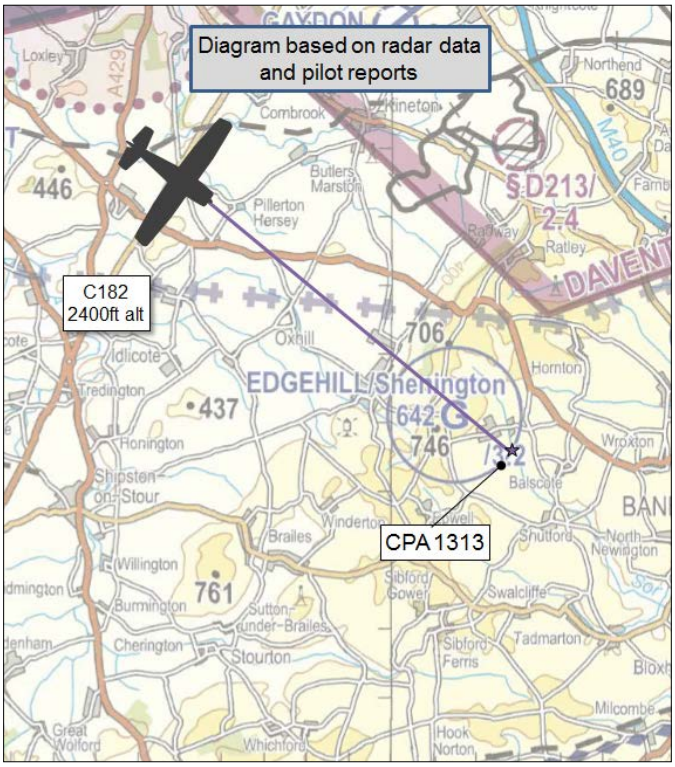
AIRPROX REPORT No 2016253

Date: 30 Nov 2016 Time: 1313Z Position: 5205N 00128W Location: Shenington

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASK 13 glider	C182
Operator	Civ Club	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider		Birmingham
Altitude/FL	NK	2400ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White, Yellow	NR
Lighting	Nil	NR
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1200ft	2400ft
Altimeter	QFE (1012hPa)	QNH (1034hPa)
Heading	350°	160°
Speed	55kt	140kt
ACAS/TAS	Not fitted	TCAS II
Alert	N/A	None
Separation		
Reported	300ft V/10m H	500ft V/0.5nm H
Recorded	NK	



THE ASK13 PILOT reports that he was at the final stages of a winch launch and almost at the top of the launch at 1200ft, on RW35, when a C182 flying on a reciprocal path passed directly overhead the glider, 200-300ft above. The climbing attitude of the glider meant that it was impossible to see the approaching aircraft until it was too late to take any action. The incident was witnessed by another glider pilot and several people on the ground. The C182 continued in a south-easterly direction without appearing to change course or altitude.

He assessed the risk of collision as 'High'.

THE C182 PILOT reports that the glider was seen briefly abeam his aircraft, to his left and below, heading west north westerly. No action needed to be taken.

He assessed the risk of collision as 'None'.

Factual Background

The weather at Oxford was recorded as follows:

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METAR EGTK 301250Z 23005KT 8000 NSC 05/01 Q1034=
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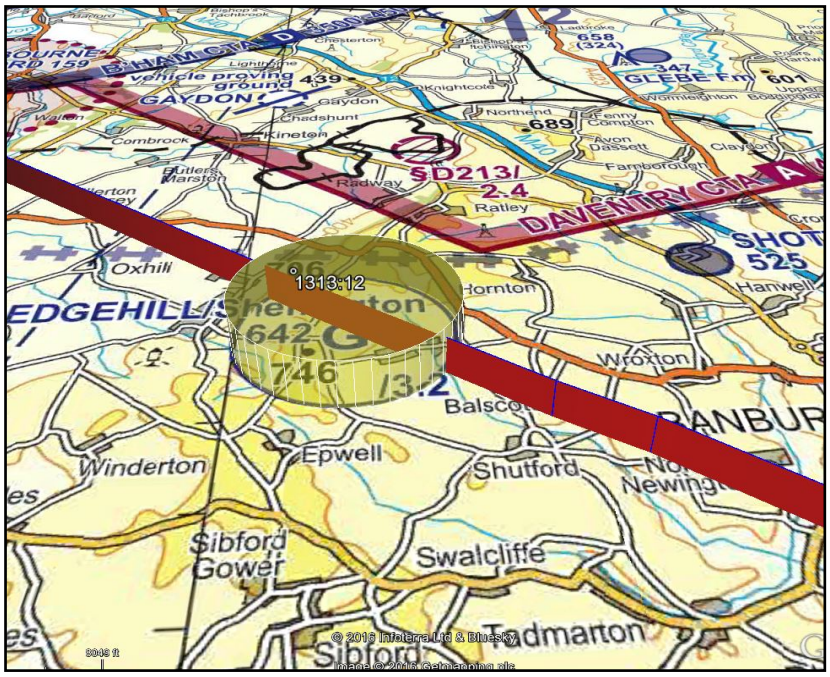
Analysis and Investigation

CAA ATSI

Following a review of the Swanwick MRT no radar contact relating to the Glider was observed on the radar replay, and therefore CPA could not be determined.

An aircraft identified as a C182 was observed on the radar replay on a track which took it over the gliding site at Shenington. The C182 maintained an indicated altitude of 2400ft. The aircraft had been in communications with Birmingham Radar, and at 1304:33 the aircraft was advised that the gliding site at Snitterfield was notified as active, which was acknowledged by the pilot, who advised he would be on the lookout for gliders.

Snitterfield is a gliding site located 13nm north-west of Shenington Gliding site and operates under the terms of a Letter of Agreement (LoA) with Birmingham ATC, and who are therefore aware of when the site is active. No such LoA exists between Birmingham ATC and Shenington Gliding Site. An illustrative graphic showing the track of the C182 is included below.



UKAB Secretariat

The ASK 13 and C182 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[1]. The C182 pilot was required to give way to the glider.[2] An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation[3].

Comments

BGA

It is disappointing to see yet another direct overflight of an active winch site significantly below the promulgated maximum launch altitude, despite recent efforts to publicise the associated risks. The rate and angle of climb of a glider on a winch launch combined with the poor visibility over the nose of many light aircraft means that they would be unlikely to sight each other if they were on a collision course.

Only a small lateral deviation is necessary to avoid the possibility of flying right through a winch launch in progress and the half-mile or so of high-tensile steel cable associated with it. The consequences of such an intersection don't need much imagination to realise.

[1] SERA.3205 Proximity.
[2] SERA.3210 Right-of-way (c)(2) Converging.
[3] SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Summary

An Airprox was reported when an ASK13 and a C182 flew into proximity at 1313 on Wednesday 30th November 2016. Both pilots were operating under VFR in VMC, the ASK13 pilot was at the top of a winch launch and not receiving an ATS. The C182 was receiving a Basic Service from Birmingham.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, and reports from the appropriate ATC and operating authorities.

The Board first looked at the actions of the C182 pilot. Members were very concerned that it appeared that the pilot had planned to fly directly through Shenington gliding site at 2500ft, despite it having a promulgated winch launch height of 3200ft; some members opined that it appeared that better pre-flight planning could easily have prevented this Airprox. In this respect, members noted that information about glider site winch-launch heights is readily available in the UK AIP and on the VFR charts. Had the pilot flown just 1nm or so either side of his track he would not have overflown the glider, but a greater separation was recommended to ensure that sufficient account was taken of gliders that might be soaring nearby having just released from the winch. Members noted that Shenington was notified as capable of winch launching up to 3200ft but, fortunately in this case, the glider was only at 1200ft QFE (1900ft amsl) at the time; by good fortune only, this had provided about 500ft of separation between the 2 aircraft.

Commenting that many of the electronic navigational aids available these days would give a warning when approaching gliding sites, members thought that the C182 pilot probably wasn't using one, but should still have had recourse to his VFR chart which would have clearly indicated the glider site and its potential danger. The C182 pilot had been warned about gliders operating at another site by Birmingham ATC, but it seemed that they didn't have any information regarding activity for Shenington. Some members wondered whether the C182 pilot had assumed it wasn't active because he hadn't specifically been warned about it. This started a prolonged debate about whether glider sites should notify local ATC units about their activity and whether these ATC units should then pass information about every glider site known to them to aircraft on a Basic Service. As ever, there was a balance to be had; although it was clearly impractical (and undesirable) for ATC to transmit generic Traffic Information for multiple gliding sites to all aircraft under a Basic Service, some members felt that the UKAB sees too many of these sorts of incidents and that the gliding community could usefully promulgate some of their activity to other airspace users. This could be as simple as ringing around local ATSU on each morning of activity to advise of gliding times that day. However, this was not to take away from the fact that other aviators should always assume that glider sites (and parachuting sites) were active unless positively informed to the contrary. Even in poor weather days gliders may be launching and so glider sites should always be given a wide berth.

Members also thought that electronic conspicuity could also have helped prevent this event. If the glider had had a transponder then not only would the local ATSU perhaps have been able to see the squawk, but in this case the C182 had a TCAS and therefore would also have received an alert. Finally, some members also postulated that the airspace around a glider site should be more akin to a formal avoidance rather than advisory. However, it was quickly agreed that this was probably undesirable given that it would encourage a proliferation of avoidance areas that would probably not be to the benefit of anyone in the GA community, including glider pilots.

Turning to the cause and risk, members quickly agreed that the cause of the incident had been that the C182 pilot had flown directly over a promulgated and active gliding site, below the maximum winch launch altitude, and into conflict with the ASK 13. However, the level of risk was the subject of some debate. Some members were concerned that neither pilot had effectively seen each other until they had passed, and that the fact that they had missed each other was purely down to providence. Others acknowledged that providence had played a part, but that the actual miss distance was such

that with 500ft vertical separation there had been no actual risk of collision. In the end, the latter view prevailed and the risk was assessed as Category C, no risk of collision.

PART C: ASSESSMENT OF CAUSE, RISK AND SAFETY BARRIERS

Cause: The C182 pilot flew directly over a promulgated and active gliding site, below the maximum winch launch altitude, and into conflict with the ASK 13.

Degree of Risk: C.

Safety Barrier Assessment[4]:

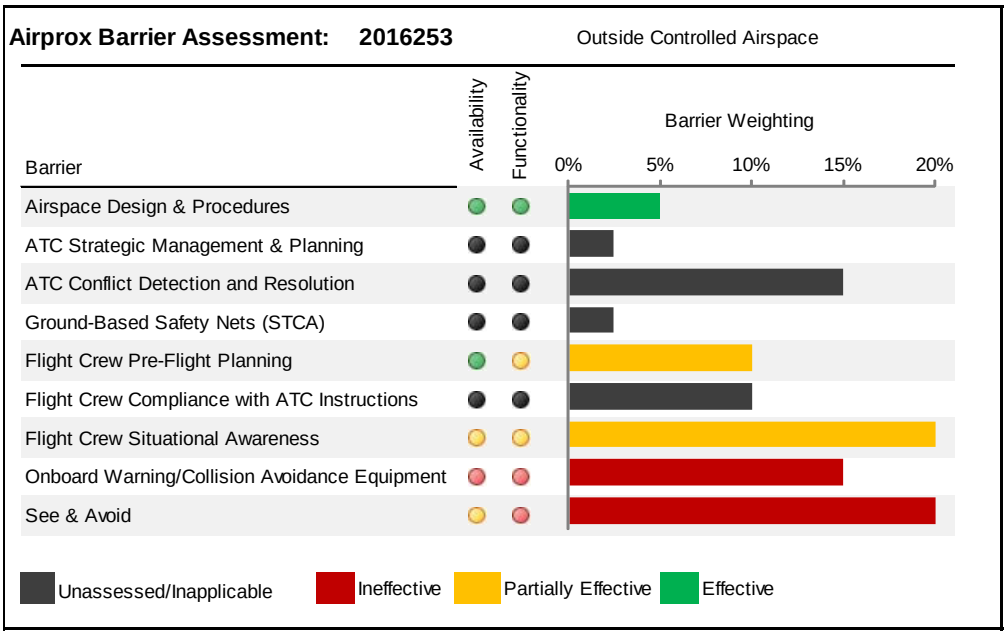
The Board decided that the following key safety barriers were contributory in this Airprox:

Flight Crew pre-flight planning was at best only **partially effective** because the C182 pilot had flown through the gliding site.

Flight Crew Situational Awareness was only **partially effective** because neither pilot had been aware of the other, although the C182 did have general awareness of gliders in the vicinity.

Onboard Warning/ Collision Avoidance Equipment was **ineffective** because the glider was not transponding and was therefore invisible to the C182's TCAS.

See and Avoid was **ineffective** because neither pilot saw the other until CPA.



[4] Modern safety management processes employ the concept of safety barriers that prevent contributory factors or human errors from developing into accidents. Based on work by EASA, CAA, MAA and UKAB, the table depicts the barriers associated with preventing mid-air-collisions. The length of each bar represents the barrier's weighting or importance (out of a total of 100%) for the type of airspace in which the Airprox occurred (i.e. Controlled Airspace or Uncontrolled Airspace). The colour of each bar represents the Board's assessment of the effectiveness of the associated barrier in this incident (either Fully Effective, Partially Effective, Ineffective, or Unassessable/Inapplicable). The chart thus illustrates which barriers were effective and how important they were in contributing to collision avoidance in this incident. The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.