AIRPROX REPORT No 2013097

Date/Time: 4 Aug 2013 1141Z (Sunday)

Position: 5219N 00014W (Huntingdon)

Airspace: Lon FIR (*Class*: G)

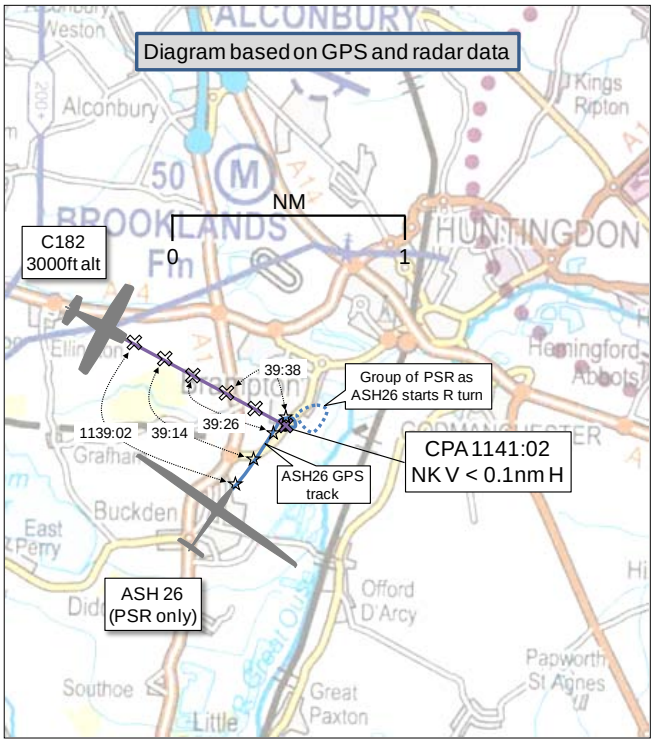
	Reporting Ac	*Reported Ac*
Type:	ASH 26	C182
Operator:	Civ Pte	Civ Pte
Alt/FL:	3140ft QNH (NK hPa)	2800ft QNH (1019hPa)
Weather:	VMC CLBC	VMC CLBC
Visibility:	>50km	10km

Reported Separation:

<50ft V/2-300m H 0ft V/<½nm H

Recorded Separation:

NK V/<0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE ASH 26 PILOT reports established in a right-hand orbit in a thermal. The white glider was not fitted with lights or an SSR transponder; it was fitted with PowerFLARM. At the time of the Airprox the display was only capable of displaying returns from other FLARM and PowerFLARM units; it could not display other aircraft transponding Modes C or S or those transmitting ADS-B out. The pilot was operating under VFR in VMC, listening out on 130.100MHz[1]. On turning through heading 310°, at 50kt and altitude 3140ft, he saw a 'mainly white', high-wing, single-engine 'Cessna like' aircraft straight ahead, at a range of 300-500m, crossing his nose from left to right. He estimated it was on a track of 110°-120°. He dived to the right and, shortly after, the other pilot started a turn to his right.

He assessed the risk of collision as 'Medium' to 'High'.

THE C182 PILOT reports conducting a local flight from his home base. The white and brown aircraft had wingtip strobes selected on, as was the SSR transponder with Modes A, C and S. He was operating under VFR in VMC without an ATS, listening out on the Cambridge APP frequency, just prior to making initial contact. When just south of Huntingdon, heading 100° at 120kt and altitude 2800ft, he saw a glider at a range of 1.5-2nm ahead, at a similar altitude, initially flying straight-and-level on a southerly heading. He commented that it was very difficult to see, being at a similar altitude and 'having such a low profile'. He initially tried to assess its 'direction and manoeuvering' before taking any avoiding action since he did not want to turn into its flight-path; he was also reluctant to turn to the left because he would have lost sight of the glider. At about the same time that he decided to turn steeply to the right to take avoiding action the glider pilot turned to his right, towards the C182. He stated that he assumed the glider pilot then saw him as the glider pilot 'continued with a steep turn' to his right.

He assessed the risk of collision as 'High'.

[1] BGA Laws and Rules for Glider pilots, Edition 18 including v1.2 amendments, dated November 2012. This RTF is one of 5 allocated to the BGA by the CAA. Its stated primary use is 'Competition start and finish lines' and secondary use 'Local and other flying, Training (lead and follow)'.

Factual Background

The Cambridge weather was recorded as follows:

```
METAR EGSC 051120Z 17012KT 140V220 9999 FEW035 23/13 Q1011
```

Analysis and Investigation

UKAB Secretariat

Both pilots were equally responsible for collision avoidance[2] and the C182 pilot was required to give way[3]. The C182 pilot turned steeply to his right to avoid the glider; the glider pilot also took avoiding action by diving steeply to his right.

Summary

An ASH 26 glider and a C182 flew in to conflict in Class G airspace, 1nm south-west of Huntingdon, at 1141 on 4th August 2013. Neither pilot was in receipt of an ATS; the pilots saw each other and each took avoiding action.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar video recordings and a GPS track log.

The Board first considered the C182 pilot's actions and his reported initial sighting of the glider at a distance of 1.5-2nm. Correlating his comment about seeing the glider first when it was on a southerly heading to the glider pilot's GPS track log, it was felt that the C182 pilot had probably first seen the glider about 150° into the glider's first right turn, and at the much closer range of about 1/3nm. At the C182 pilot's reported speed of 120kt, this would have reduced the time to CPA to about 10sec. Members noted that it was often difficult to gain and maintain visual contact with gliders, and it was also sometimes hard to determine their attitude and aspect; the C182 pilot was therefore right to be concerned that a change to his flight path might have exacerbated the situation. Nevertheless, in the event, he was the one who was required to give way and members felt that, on first sighting the glider, a change in altitude and a positive turn would have increased the miss-distance without significantly increasing risk. In his case, sitting on the left-hand side of a high-wing aircraft, a climb and turn to the right would have been of benefit, whilst also allowing him to then subsequently look into the area he had first seen the glider, giving the best chance of maintaining visual contact.

The ASH 26 pilot saw the C182 only as it was crossing his nose; some members opined that the sighting would probably have been too late to have had any effect in avoiding the collision if the C182 had been closer.

Finally, members noted that mitigation against midair collision in Class G airspace was ultimately based on pilots looking out, seeing other traffic and manoeuvring appropriately to avoid; early action to resolve conflictions was essential and should not be delayed until the last minute. Very often, a climb will be the best course of action for a powered aircraft when approaching a co-altitude glider.

The Board opined that the Airprox was caused by the late sighting by both pilots; they spent some time discussing the risk. Ultimately, it was decided by a majority that, although avoiding action was taken by both pilots, safety margins had been much reduced below normal.

[2] Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).
[3] ibid. Rule 9 (Converging).

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by both pilots.

Degree of Risk: B.

ERC Score[4]: 4.

[4] Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.