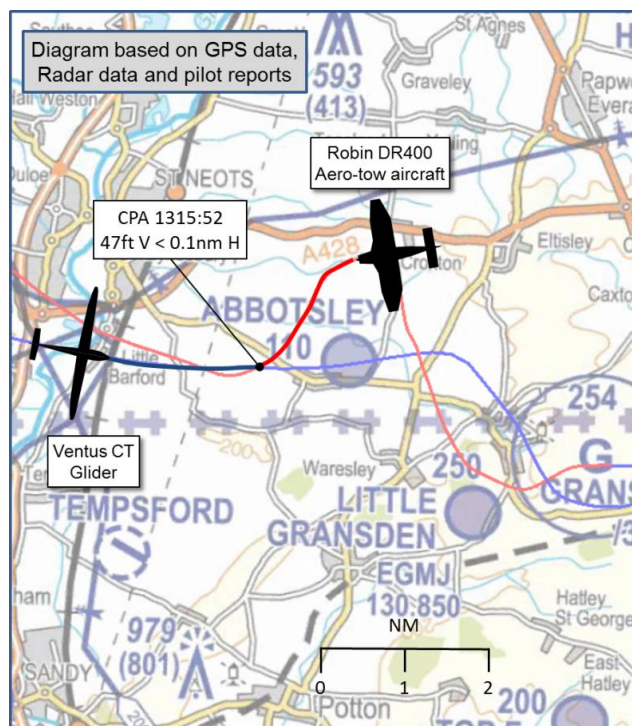


AIRPROX REPORT No 2014042Date/Time: 14 Apr 2014 1315ZPosition: 52 11N 000 13W
(3.8nm W of Gransden Lodge)Airspace: London FIR (Class: G)Aircraft 1 Aircraft 2Type: Ventus CT Robin DR400Operator: Civ Club Civ ClubAlt/FL: 2430ft 2000ft
QFE (1014hPa) NKConditions: VMC VMCVisibility: >10km 10nmReported Separation:

50ft V/50m H NK

Recorded Separation: 47ft V/<0.1nm H**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

THE VENTUS GLIDER PILOT reports flying a white glider, with FLARM¹ fitted, on a straight glide, at 'high speed' towards Gransden Lodge; he was listening out on 131.275² but was not in receipt of an Air Traffic Service. His FLARM emitted 'one alert beep' and he then saw the Robin, trailing a tow-rope, on a reciprocal heading, slightly above and to the left of his glider. The Ventus pilot 'pushed and rolled right' to avoid the aircraft and the tow-rope, and attempted to contact the tug aircraft on the Gransden Lodge frequency without success. The pilot submitted his GPS logger files with his report.

He assessed that there was 'some risk' of collision.

THE ROBIN PILOT reports flying a FLARM equipped, red-and-white aircraft with a strobe light illuminated on its 'top decking' and squawking transponder Mode 3/A with Mode C turned off. The pilot had aero-towed a glider from Gransden Lodge glider site and released it at 2000ft overhead Abbotsley before turning onto a heading of around 270° to retrieve another glider from Sackville Farm. He settled the Robin at 2000ft and 80kt but did not see the Ventus or receive any warning of its presence from the FLARM. The pilot submitted his GPS logger files with his report.

Factual Background

The weather at Cambridge at 1250 was recorded as:

METAR EGSC 141250Z 30009KT 260V010 9999 SCT042 14/00 Q1024

Analysis and Investigation**UKAB Secretariat**

The aircraft were converging almost head-on: notwithstanding the overall requirement of both pilots to avoid collisions by manoeuvring to the right in such circumstances³, the Robin pilot was also required to give way to the glider.⁴

¹ Flight Alarm: a co-operative traffic and collision-warning system designed for general aviation and recreational flying

² Gransden Lodge Radio

³ Rules of the Air 2007, Rule 10, Approaching Head-on

⁴ Rules of the Air 2007, Rule 9, Converging

Summary

An Airprox was reported 3.8nm to the west of Gransden Lodge Glider Site, in Class G airspace, between a Ventus CT glider and a Robin DR400-180R, which was trailing a tow-rope having been engaged in aero-tow duties. The Ventus pilot saw the Robin and took avoiding action; the Robin pilot did not see the Ventus. The radar replay and GPS logger files indicated a CPA of <0.1nm and 47ft.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both aircraft, radar photographs/video recordings and GPS logger data from both aircraft.

The Board first considered the actions of the Ventus pilot and was informed by the gliding members that 'high speed' for this type of glider meant that it would be flying at 80-140kt during its final glide towards its destination. In making his approach to Gransden Lodge, the Board noted that the Ventus pilot was required to conform to the pattern of traffic formed by other aircraft intending to land at that aerodrome⁵ and, in the process of doing so, pilot members opined that he might have been better served by making a call on 131.275 rather than just listening out; this would have alerted the Robin pilot, and others, to his presence and intentions.

Turning to the Robin pilot, the Board noted first that the Mode C on the Robin's transponder had been turned off: although not directly pertinent to this particular Airprox, it was agreed that this is not a good practice because TCAS and Power-FLARM equipped aircraft use Mode C data to generate warnings and calculate deconfliction solutions. Having just released a glider, and now setting course for his next destination nearby, the Board wondered whether the Robin pilot had, to an extent, become task-focussed to the detriment of his lookout.

The Board noted that both aircraft were equipped with FLARM, but that it had only activated briefly in one aircraft. A discussion then ensued about possible causes such as aerial masking, technical failure or incorrect operation of the unit but, in the end, members were at a loss to understand why the FLARM units had not operated as expected. All agreed that this served as a reminder to all that electronic traffic alerting and collision warning devices should only be considered as supplementary to, and not a replacement for, good pilot look-out in Class G airspace. Given the aspect and location of this occurrence, the Board would have expected both pilots to be alert to other gliding related activity and agreed that, although the Ventus would have been the more difficult aircraft to see given its small head-on cross-section, both aircraft were there to be seen. After a short discussion, it was unanimously agreed that the cause of the incident was a late sighting by the Ventus pilot and a non-sighting by the Robin pilot. Given the close CPA, the Board initially thought that the degree of risk might be an A; however, although safety margins had undoubtedly been much reduced, members agreed in the end that the actions of the Ventus pilot, in what is an extremely responsive glider, had been taken just in time to improve the separation, and so a risk of B was agreed.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by the Ventus pilot and a non-sighting by the Robin pilot.

Degree of Risk: B

ERC Score⁶: 20

⁵ Rules of the Air 2007, Rule 12, Flight in the vicinity of an aerodrome, and Regulatory Article 2307(1) Para 16

⁶ 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.