

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE EA300 PILOT reports recovering to his home airfield, in formation with another aircraft of the same type. The orange and grey aircraft had wing-tip strobes and navigation lights selected on, as was the SSR transponder with Modes A, C and S. The aircraft was not fitted with a Traffic Advisory System. The pilot was operating under VFR in VMC, in receipt of an A/G Service from Sywell Information. Whilst straight-and-level at 2000ft, 3nm southeast of Sywell, he saw a white glider pass between the formation, about 100-200ft below them, apparently in straight-and-level flight and on a reciprocal heading. He did not have time to take avoiding action, and called the glider to the formation leader. Shortly afterwards he heard the glider pilot call Sywell Information and inform the Tower that he had just had a near miss with a formation of 2 aircraft.

He assessed the risk of collision as 'High'.

THE DISCUS PILOT reports routing in a generally southerly direction. The white glider was not fitted with lighting or an SSR transponder. It was fitted with FLARM Traffic Alerting System. The pilot was operating under VFR in VMC, not in receipt of an Air Traffic Service but listening out on the glider 'cloud flying and cross-country' frequency of 130.400MHz, with Sywell Information frequency selected 'on standby'. Whilst in straight flight, heading 185° at 60kt and an altitude of about 2800ft, he saw two aircraft in 'side-by-side' formation, inside a mile, in his 12 o'clock on a reciprocal heading. He estimated that without avoiding action each aircraft would pass very close on either side of him. He rolled right to 'make the glider a larger visible target' and to keep the formation clear on his left but realised that he was flying too slowly to move out of the way and would be in the path of the right hand aircraft, as seen by him, so he dived to go under it. The pilot stated he had been monitoring Sywell Information without making contact until he considered that he was well clear, and had then changed back to the gliding frequency. He therefore missed any radio calls which the formation members may have made. After the encounter, he switched back to Sywell Information and reported the Airprox. He also record the time and place of the event on his flight computer and GPS logger file. He commented that his planned route, if flown directly, would have taken him overhead Sywell but that he had routed to the east of the airfield in order to remain clear.

He assessed the risk of collision as 'High'.

THE SYWELL FISO did not submit a report.

Factual Background

The weather at Sywell was unofficially reported as >10km visibility in haze with FEW cloud at 3000ft.

Analysis and Investigation

CAA ATSI

Sywell reported that two EA300 aircraft departed Sywell at 1132 as part of a three-ship of EA300 aircraft, whose pilots planned to conduct a sortie in the local area. Soon after departure the pilots switched to their operating frequency. The pilot of the third EA300 returned and landed at 1147. At 1152, the first two EA300 pilots called for recovery from the southeast and were given joining instructions for RW23, QFE 1000hPa. Very shortly afterwards the Tower received a call, "Sywell Tower, Glider has just been passed very close by two aircraft". This was the first call Sywell had received from the glider pilot. One EA300 then asked "Have we had an Airprox?" with the other EA300 replying "He was about 100 feet below us". The glider pilot was asked to telephone Sywell on landing; he phoned a couple of days later. The reporting EA300 pilot telephoned the Tower on landing to report the position as 4nm southeast of Sywell, at 2000ft QFE. Radar recordings did not show the incident and Sywell did not record RT transmissions. Therefore, no transcript was available.

UKAB Secretariat

The EA300 and Discus glider pilots shared an equal responsibility for collision avoidance and not to fly into such proximity as to create a danger of collision¹. If the incident geometry is considered as head-on, then all pilots were required to turn to the right², which the Discus pilot did. Transponder altitude encoders are subject to error of up to +/- 200ft.

Comments

BGA

Effective lookout by the glider pilot appears to have worked in this case, with particularly difficult 'head on' geometry. As has been observed elsewhere, most collisions in Class G occur close to airfields, and monitoring an airfield frequency to aid situational awareness whilst in the area can only be beneficial.

Summary

An Airprox was reported when a 2-aircraft Extra 300 formation and a Discus 2cT glider flew into proximity at 1152 on Wednesday 30th July 2014. All pilots were operating under VFR in VMC, the EA300 pilots in receipt of an A/G Service from Sywell Information and the Discus pilot not in receipt of an Air Traffic Service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

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

¹ Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

² Rules of the Air 2007 (as amended), Rule 10 (Approaching head-on).

The Board observed that this was a typical encounter in Class G airspace with all of the pilots going about their business and fully entitled to be where they were. Members noted that the Discus pilot had listened in to the Sywell frequency and had, perhaps, been unlucky that he had switched to another frequency before the EA300 pilots contacted Sywell. Some members opined that the glider pilot may have been better served if he had reported his intentions and position to the Sywell FISO instead of simply 'listening-out', but it was agreed that it was good practice to switch to aerodrome frequencies when flying close by. Although the glider was equipped with FLARM, unfortunately the EA300s were not fitted with any sort of system that could interact with it and give the pilots earlier warning of a confliction. The Board observed that the fitment of P-FLARM to light aircraft had paid dividends in other Airprox, and encouraged all light aircraft owners to consider its use as a very effective cue for gliders close by. Observing that the EA300 pilot had not seen the glider in time to take any action, and that the Discus pilot had taken action but that the speed differential meant that it was too late to have had very much effect, the Board agreed that the cause was a late sighting by the Discus pilot and a effectively a non-sighting by the EA300 pilots. Because chance had played a major part, this incident had stopped just short of a collision and the degree of risk was assessed as Category A.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: A late sighting by the Discus pilot and effectively a non-sighting by the EA300 pilots.

- Degree of Risk: A.
- $\underline{\mathsf{ERC Score}^3}$: 20.

³ 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.