

AIRPROX REPORT No 2013072

Date/Time: 14 Jul 2013 1119Z (Sunday)

Position: 5203N 00034W
(OH Ridgewell Gliding Site)

Airspace: London FIR (Class: G)

Reporting Ac **Reported Ac**

Type: ASW20 Glider Aquila A210

Operator: Civ Club Civ Trg

Alt/FL: 500ft 1200ft
agl NK

Weather: VMC NK VMC NK

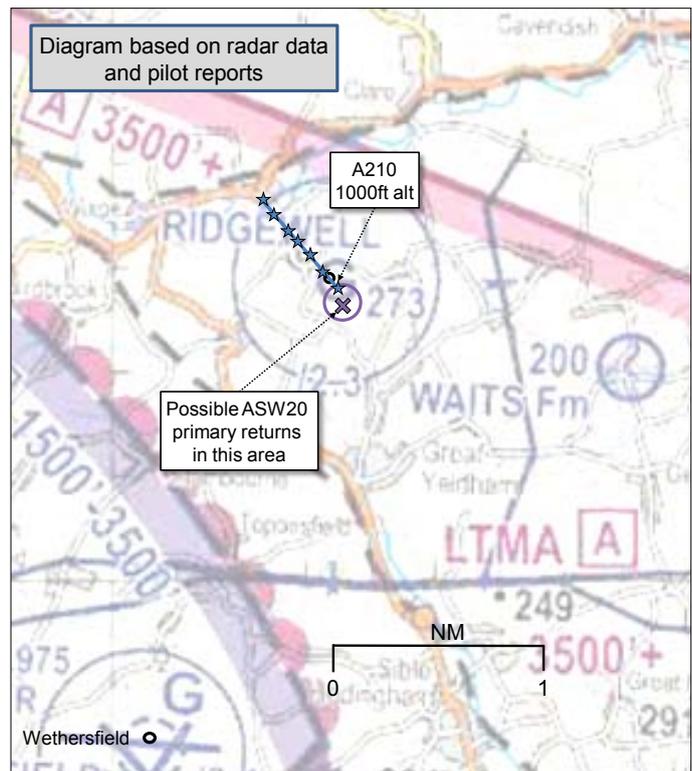
Visibility: 5nm >10km

Reported Separation:

200ft V/0ft H NK

Recorded Separation:

NK



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE ASW20 PILOT reports flying his white, mid-wing, glider, with no lights fitted from Ridgewell gliding site. Five minutes after a winch-launch to 800ft he was in a continuous left-hand turn, 300m south of the landing strip, passing north, with 45° of bank, at 50kts, overhead the airfield, staying level at 500ft in weak rising air. He saw the A210 heading approximately 140°, crossing the landing strip and heading directly toward his glider. Approximately 4sec after the first sighting, the A210 passed 'about 200ft' above the ASW20; the glider pilot reports that his aircraft takes several seconds to roll from a 45° left-bank to a 45° right-bank, consequently he decided there was insufficient time for him to reverse his turn and he assessed that 'an emergency dive was not justified'. He lost sight of the other aircraft and then regained visual contact as his glider passed through south and he was able to see the other aircraft continue on a straight, south-easterly course. Other members of the gliding club, observing from the ground, were not able to read the A210's registration but were able to note its 'crescent' shaped leading edge.

THE A210 PILOT reports flying a mainly white aircraft VFR at 1200ft, he thought, but did not report his pressure setting. He was cruising at 100kt squawking Mode 3/A 7000 with Mode C turned on but he did not see the glider, and so was unable to describe the circumstances of the Airprox.

Factual Background

The METAR for Cambridge (15nm west-north-west of Ridgewell) at 1120 was:

METAR EGSC 141120Z VRB05KT 6000 BKN013 21/16 Q1024

Ridgewell gliding site is notified as a gliding site in the UK AIP en-route 5.5 and is also indicated on the 1:250,000 and 1:500,000 series maps by a standard gliding site symbol which shows the site elevation as 273ft amsl and the maximum altitude of the winch launch as 2300ft amsl (UKAB Note 1: approx 2000ft agl).



Analysis and Investigation

UKAB Secretariat

The radar recording showed the A210 passing directly overhead Ridgewell gliding site at 1119:10, squawking Mode 3/A 7000, tracking south-east, indicating an altitude of 1000ft and a ground-speed of 103kt. Given that Ridgewell gliding site is 273ft amsl, this indicates that the A210's height was approximately 727ft, which is commensurate with the ASW20 pilot's report of around 200ft minimum vertical separation. A primary radar return can be observed intermittently in the Ridgewell overhead just prior to the Airprox but it cannot be positively identified as the ASW20; consequently, there was no recorded vertical or horizontal separation.

Summary

An Airprox occurred in Class G airspace overhead Ridgewell gliding site between an ASW20 glider and an A210; both aircraft were flying VFR.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

The gliding and GA members opined that the A210 pilot appeared to have either planned his flight to pass over the gliding site (through the circuit and well below the winch height), or that he had not planned well enough and was unaware of the gliding site. Both options were seen as equally dangerous and a fatal crash would almost certainly have been the result of his aircraft hitting the winch cable or a launching glider. The gliding member advised that pilots should always plan to keep well clear of gliding sites, keeping a good lookout for gliders and tugs which can be launching gliders or returning to the site with trailing tow-ropes. The Board opined that the annotation of Glider RTF on VFR charts and within the AIP ENR5.5, would greatly assist in this respect by providing a readily available contact frequency for those GA pilots who planned to fly close to glider sites, and who wished to determine their levels of gliding activity.

When aircraft are converging, powered aircraft are required to give way to gliders¹. When flying in the vicinity of what pilots ought reasonably to know is an aerodrome, they are required to conform to the pattern of traffic intending to land, or keep clear of the airspace in which the pattern is formed². The patterns flown by gliders can vary substantially from those of other aircraft, and the gliding members advised that the best way to comply with this Rule is to avoid notified gliding sites by a wide margin. When wishing to fly past gliding sites at lower altitudes, the gliding member advised that pilots should consider ensuring sufficient horizontal distance from the site to remain below an average glide angle of 30:1 (about 200ft per nm, which would be achievable at the minimum 500ft separation from the ground at a distance of 2.5nm from the site). It was also noted that many of the larger gliding sites can have winching up to 3000ft agl.

Ridgewell is marked as a gliding site on the 1:250,000 and 1:500,000 series charts and so it is reasonable to expect the A210 pilot to have known of its presence; he would have been prudent to have given the site a wider berth, especially as he was flying at around normal circuit height. In addition, the onus was on the A210 pilot to give way to the glider, although the lack of any enhanced conspicuity features on both aircraft would have made visual acquisition by both pilots more difficult. Although there was likely to have been around 200ft between the aircraft, the A210 flew directly over the gliding site and over the ASW20, whose pilot had few options to avoid the other aircraft. The A210 pilot did not see the glider; the glider pilot saw the A210 and assessed that his flight path would keep him clear, albeit with safety margins much reduced below the normal. The Board concurred and assessed the Risk as B.

The barriers pertinent to this Airprox were: 'Aircrew rules and procedures', 'visual sighting' and 'aircrew action'. Because the A210 pilot did not see the ASW20, and so could not give way, and the

¹ Rules of the Air 2007 (as amended), Rule 9 (Converging).

² Rules of the Air 2007(as amended), , Rule 12 (Flight in the vicinity of an aerodrome).

ASW20 pilot saw the A210 so late that his only remaining course of action would have been to make an avoiding action dive, the remaining barriers were assessed at being 'minimally' effective. The A210 had 2 POB and the ASW20 had 1 POB so the ERC score was assessed as 20.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The A210 pilot flew over a promulgated and active glider site, below the notified winch-launch altitude, and into conflict with the ASW20, which he did not see.

Degree of Risk: B

ERC Score³: 20

Recommendations:

1. The CAA reviews annotation of gliding RTF on VFR charts and the AIP ENR5.5.
2. The CAA reviews the education of GA pilots regarding overall awareness of gliding operations with specific emphasis on flight in the vicinity of glider sites.

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.