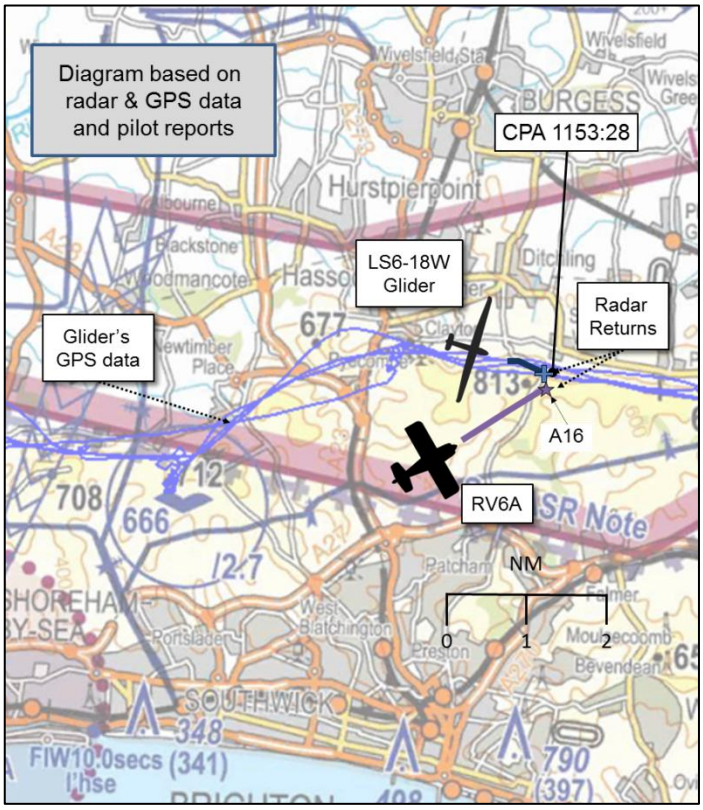
AIRPROX REPORT No 2014094

Date/Time:	17 Jun 2014 1153Z	
Position:	5054N 00005W (8.5nm NE of Shoreham)	
Airspace:	London FIR	(*Class*: G)
	Aircraft 1	*Aircraft 2*
Type:	LS6-18W Glider	VANS RV6A
Operator:	Civ Club	Civ Pte
Alt/FL:	1500ft QNH (NK hPa)	15-1800ft (NK hPa)
Conditions:	VMC	VMC
Visibility:	20km	>10km
Reported Separation:	20ft V/0ft H	NK V/NK H
Recorded Separation:	NK V/NK H	



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE GLIDER PILOT reports flying a predominantly white aircraft, with no lights or transponder fitted, VFR on a cross-country navigation flight, listening out on one of the 'general gliding cross-country' frequencies. Whilst flying east along the South Downs Ridge at around 1500ft QNH, he recalls maintaining a good lookout. When he was roughly abeam the Ditchling Beacon, he was 'shocked to see a powered aircraft' appear from behind and beneath his right wing. The other aircraft was crossing from right-to-left on an approximate 'Shoreham to Rochester' track, and he estimated that it was 'no more than 20ft' below him, and 'just under the nose' of the glider. He did not take any avoiding action because the incident 'was over so quickly that no avoiding action was relevant'.

He assessed the risk of collision as 'High'.

THE RV6A PILOT reports flying a white aircraft, in receipt of a Basic Service from Shoreham ATC, with a single strobe on the fin illuminated, and squawking transponder Modes 3/A, C and S. He was level at around 1500-1800ft, at 130kt, heading 070° on a track between the SHM and MAY NDBs. The pilot reported that he was in VMC with more than 10km visibility but he did not see the glider.

Factual Background

The weather at Shoreham at 1150 was recorded as:

METAR EGKA 171150Z 04012KT 9999 SCT032 18/10 Q1026

Analysis and Investigation

CAA ATSI

The Shoreham controller was operating a combined Aerodrome and Approach position without the aid of surveillance equipment. The controller's workload was assessed as medium. The RV6 departed from Shoreham at 1143:00 VFR. At 1151:00 the Shoreham controller broadcast the new QNH of 1026hPa and, at 1155:00, the RV6 was instructed to squawk 7000 and was

transferred to Farnborough LARS. The RV6 was in receipt of a Basic Service from Shoreham, and the controller was not aware of the Glider and was not in a position to assist the RV6 pilot with traffic information or a warning. In Class G airspace pilots are ultimately responsible for their own collision avoidance.

At 1149:42 radar recording showed the RV6 climbing just north of Shoreham tracking east-northeasterly displaying the Shoreham VFR conspicuity code 3763. At 1151:44 the RV6 was 5.1nm northeast of Shoreham indicating an altitude of 1000ft. Two radar contacts are shown manoeuvring in the vicinity. The Glider was considered to be in the RV6's half-past-ten at a range of 2.2nm in a right turn onto a converging heading - Figure 1.

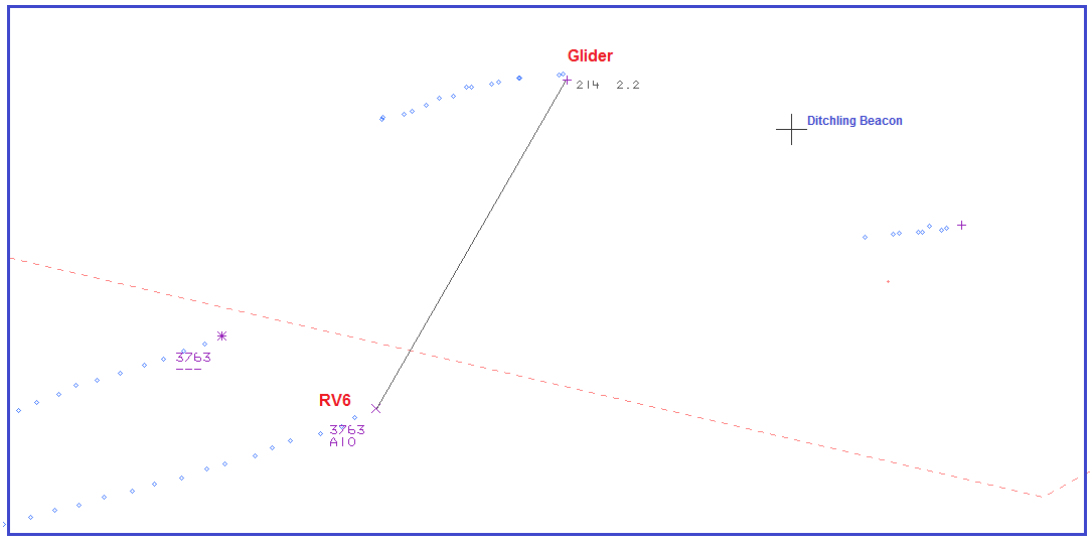


Figure 1 – Gatwick 10cm single source at 1151:44

The radar recording showed the tracks of the two aircraft converging until, at 1152:50, the Glider faded from radar when the lateral distance between the two aircraft was 0.9nm - Figure 2.

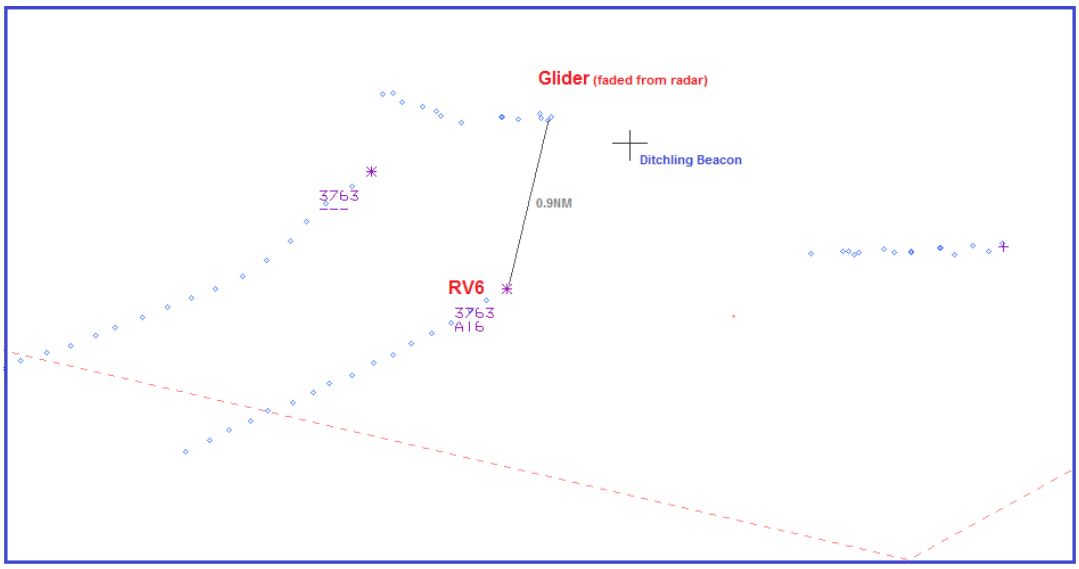


Figure 2 – Gatwick 10cm single source at 1152:50

At 1153:20 the Glider re-appeared on radar in the RV6's 11 o'clock at a range of 0.3nm crossing from left-to-right and at 1153:28 was at a range of 0.1nm (Figure 3). The RV6 was indicating 1600ft and the Glider pilot's written report indicated that he was at 1500ft.

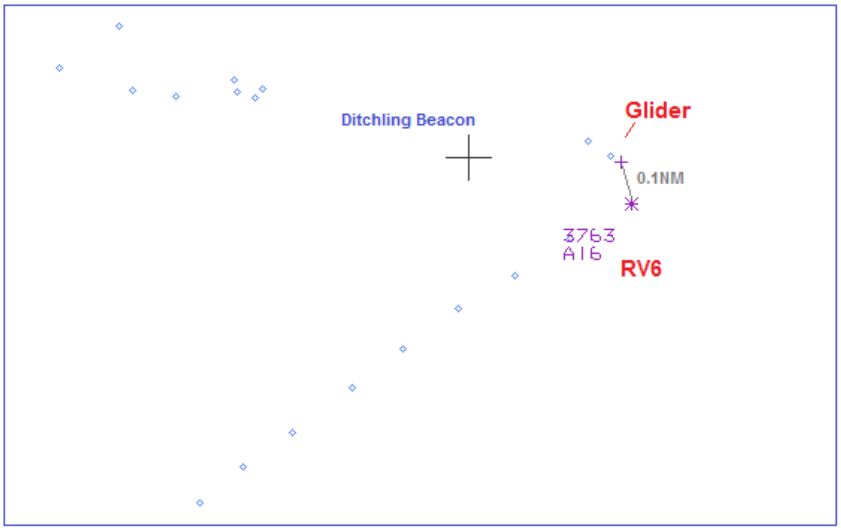


Figure 3 – Gatwick 10cm single source at 1153:28

The Glider then faded from radar and it was not possible to show the exact geometry of the encounter.

UKAB Secretariat

The powered aircraft (the RV6) was required to give way to the glider[1]; furthermore, if the RV6 was considered to be overtaking, the glider had right of way and the RV6 pilot was required to keep out of its way by altering course to the right.[2]

Summary

An Airprox was reported in Class G airspace between an LS6-18W glider and a VANS RV6A. The RV6 pilot was in receipt of a Basic Service from Shoreham ATC without the aid of surveillance equipment. The glider pilot saw the RV6 too late to take any avoiding action; the RV6 pilot did not see the glider.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

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

The members with considerable gliding experience informed the rest of the Board that the wind direction at the time would have created good lift conditions along the South Downs ridge, and it was likely that a lot of gliders would have been flying in that area at the time, meaning that increased vigilance from all pilots would be advisable. However, the prevailing wind does not routinely favour this particular glider's route and so pilots and controllers may not be used to such intense gliding activity in that area. Members wondered if there could be a way to better inform airspace users about popular gliding routes and a gliding member informed the Board that the British Gliding Association was developing a map of popular gliding routes and areas that, when complete, would be published for the benefit of all airspace users.

Whilst the RV6 pilot was required to avoid the glider, this was not possible because he did not see it at any point. For his part, the glider pilot did see the RV6 but it was so late that no effective avoiding action could be taken. The Board agreed that the cause of the Airprox was a non-sighting by the

[1] Rules of the Air 2007, Rule 9, Converging
[2] Rules of the Air, 2007, Rule 11, Overtaking

RV6 pilot and, effectively, a non-sighting by the LS6 pilot. Although the radar recording did not capture the CPA, it was clear from the combination of the pilots' reports, radar data and GPS data that separation was <0.1nm H and uncomfortably close vertically; the Board noted that neither pilot had been able to take any effective avoiding action, and concluded that separation had been reduced to the minimum, chance had played a significant part, and that the degree of risk was therefore Category A.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A non-sighting by the RV6 pilot and, effectively, a non-sighting by the LS6 pilot.

Degree of Risk: A.

ERC Score[3]: 100.

[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.