

AIRPROX REPORT No 2013125

Date/Time: 4 Sep 2013 1606Z

Position: 5121N 00133W
(Rivar Hill Glider Site
- elevation 730ft)

Airspace: London FIR (Class: G)

Reporting Ac Reported Ac

Type: ASW15B B206
JetRanger

Operator: Civ Club Civ Pte

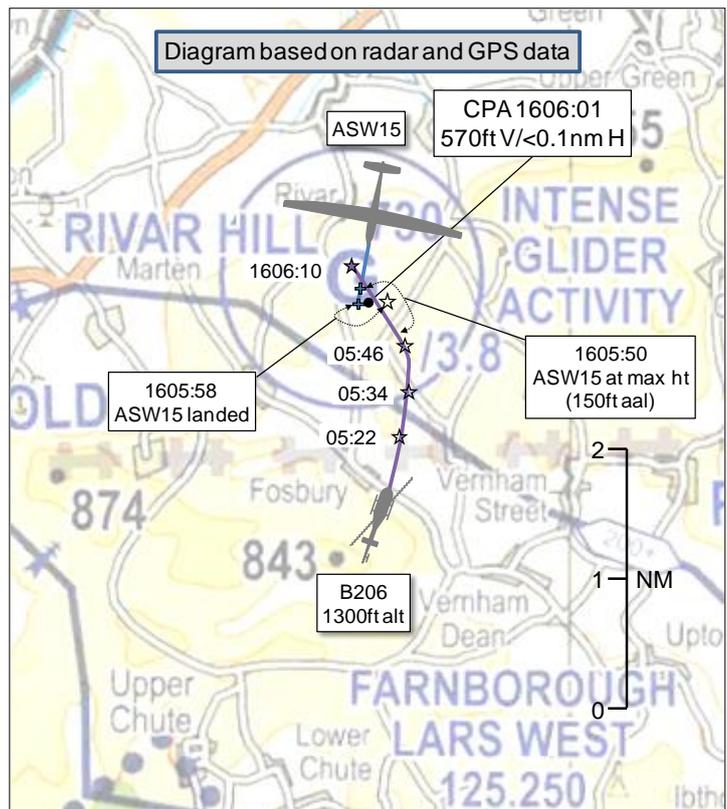
Alt/FL: 150ft 1300ft
QFE (NK hPa) NK (1017hPa)

Conditions: VMC VMC

Visibility: >20km >10km

Reported Separation:
600ft V/0m H 300ft V/1nm H

Recorded Separation:
570ft V/<0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE ASW15 PILOT reports commencing a winch launch at Rivar Hill gliding site. The white glider was not fitted with external lighting, a radio or an SSR transponder. The aircraft was equipped with FLARM. The pilot was operating under VFR in VMC and had just entered the full climb, heading 190° at 65kt with a nose-up attitude of 40°-50°. He glimpsed a helicopter in his left 10 o'clock at a range of 1nm, heading from the southeast towards the airfield at a height well below his expected cable release, and which he considered likely to reach the airfield before the winch-launch was completed. He released the cable immediately and landed ahead in the remaining part of the airstrip. His flight logger indicated the launch was aborted at a height of about 150ft. The pilot stated that had he not aborted the launch the helicopter would have passed over the airfield with a winch cable in the air, with a high probability of colliding either with his aircraft or the cable. The pilot noted that witnesses on the ground reported seeing the helicopter continue on its course and pass over the airfield at a height of about 700ft.

He assessed the risk of collision as 'High'.

THE B206 PILOT reports transiting to a private site. The dark blue and white helicopter had the strobe selected on, as was the SSR transponder with Mode A. He reported that Mode C was selected off; the state of the Mode S was not reported. The aircraft was not equipped with a TAS or ACAS. The pilot was operating under VFR in VMC in receipt of a Basic Service from Boscombe Down and noted that a 12kt tailwind gave a groundspeed of 117kt. He tracked northeast-bound from his departure airfield and contacted Boscombe to obtain 'MATZ transit and a Basic Service'. On looking up, after setting the squawk, and having turned on to a more northerly heading, he saw a 'glider and tractor unit' in his 2 o'clock position about 1-2nm away, in a left hand turn, and another glider beyond. The pilot, heading 015° at 105kt and level at altitude 1300ft¹, realised he was 'close to Rivar Hill' and immediately turned left. On passing the glider site he saw a glider landing. He stated that his workload was low and visibility was good.

He assessed the risk of collision as 'Low'.

¹ Equating to a height of 570ft above Rivar Hill gliding site.

THE BOSCOMBE ZONE CONTROLLER reports that he had no recollection of the event as it was not reported on RT. He stated that he was working primary radar only during the period of the incident and, with multiple tracks, that his workload was medium to high. He believed that he provided an appropriate duty of care through the provision of Traffic Information and Flight Safety Information to all aircraft receiving a service from him.

THE BOSCOMBE SUPERVISOR reports he was only subsequently made aware of the incident due to the pilot not reporting on frequency. He stated that the unit's workload was higher than normal due to scheduled SSR maintenance, and that they were operating primary radar only.

Factual Background

The weather at Boscombe Down was recorded as follows:

METAR EGDM 041550Z 17010KT CAVOK 26/11 Q1018 BLU NOSIG
 METAR EGDM 041650Z 15010KT CAVOK 25/12 Q1017 BLU

The Boscombe Down Zone RT transcript was recorded as follows:

From	To	Speech Transcription	Time
B206	Boscombe Zone (BZ)	Boscombe Zone Good afternoon helicopter [B206 C/S]	1601:59
BZ	B206	[B206 C/S] Boscombe Zone good afternoon stand by	1602:02
Other ac	BZ	Boscombe Radar [Other ac C/S] request Basic Service	1602:25
BZ	Other ac	[Other ac C/S] Boscombe Zone stand by number 2	1602:31
BZ	B206	[B206 C/S] Boscombe Zone pass your message	1602:45
B206	BZ	[B206 C/S] a Jet Ranger helicopter 1 on board out of [departure airfield] to a private site at [destination] currently 4 miles North of [departure airfield] 1300 1018 request zone transit through your zone please and Basic service	1602:51
BZ	B206	[B206 C/S] roger Basic Service squawk 7000 Portland pressure 1014 report changing en route	1603:04
B206	BZ	7000 1014 and wilco [B206 C/S]	1603:10
BZ	B206	Roger	1603:13
[No radio transmissions relevant to the Airprox]			
BZ	B206	[B206 C/S] Rivar Hill Gliding Site is notified as active today up to 4000 feet on the Portland pressure 1013, I have got a primary contact North of you 1 mile no height information	1609:23
B206	BZ	Copy the traffic, looking, negative visual [B206 C/S]	1609:35
BZ	B206	Roger	1609:38
BZ	B206	[B206 C/S] request your exact location	1609:44
B206	BZ	Currently crossing the M4 motorway 3 miles to the West of Membury mast 1500 feet 1014	1609:50
BZ	B206	[B206 C/S] roger squawk 7000 free call Brize LARS 124 decimal 275 good day	1609:59
B206	BZ	7000, I'll give Brize a call on 119 9	1610:05
BZ	B206	Roger	1610:08

Rivar Hill is a promulgated and active glider site employing winch launching up to a height of 3000ft aal, as stated in the UK AIP ENR 5.5-11 (dated 22 Aug 2013):

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral Limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
RIVAR HILL GLIDER SITE, WILTS (W) 512038N 0013235W	Upper limit: 3000 ft	Phone: Shalbourne Soaring Society 01264-731204	Site elevation: 730 ft amsl. Hours: HJ

Analysis and Investigation

Military ATM

This incident occurred in the vicinity of the Rivar Hill gliding site, at approx 1606 on 4th September 2013, between a glider and a Bell 206. The glider pilot was in the process of winch launching from Rivar Hill. The Bell 206 was operating VFR in receipt of a Basic Service from Boscombe Zone. NATS surveillance radars did not detect the glider; however, the Bell 206 was visible and, as it crossed through the Rivar Hill glider site, maintained an indicated altitude of 1300 ft, based on the London QNH of 1018hPa, as used on the radar replay. This correlates with the Bell 206 pilot's report of maintaining 1300ft on 1017hPa.

The Boscombe Zone controller reported a high to moderate workload, with moderate task complexity; a fact borne out by the RT transcript. However, given that Boscombe Zone was not notified of the incident until 9 days had passed, the controller had little recollection of their time on console, except that they were busy. Analysis of the RT transcript demonstrated that Boscombe Zone was providing an ATS to at least 5 aircraft, at least one of which was in receipt of a Traffic Service. Critically, in terms of this incident, the unit's SSR was unserviceable, hence the instruction to the Bell 206 pilot to select SSR Mode 3A 7000. The Boscombe Zone controller's attention would have been rightly focussed on maintaining track ident on those ac in receipt of a surveillance based ATS. Finally, Boscombe Zone had received a number of free-calls from aircraft in the local area requesting an ATS and was involved in a near constant exchange of RT throughout the incident sequence.

There were no further military ATM aspects of this incident that required examination.

UKAB Secretariat

Both pilots were operating under VFR in Class G airspace, with an equal responsibility for collision avoidance² and the B206 pilot was required to give way to the glider³. The B206 pilot was also required to conform to the pattern of traffic formed by other aircraft intending to land at Rivar Hill, or to keep clear of the airspace in which the pattern was formed⁴.

Summary

An ASW15 glider and Bell JetRanger helicopter flew into conflict at 1606 on 4th September 2013. Both pilots were operating under VFR, in VMC, in Class G airspace, the B206 pilot in receipt of a Basic Service and the ASW15 pilot in the process of winch launching from a promulgated and active glider site.

² Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions)

³ *ibid.*, Rule 9 (Converging)

⁴ *ibid.*, Rule 12 (Flight in the vicinity of an aerodrome)

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, a transcript of the relevant RT frequency, radar video recordings, reports from the air traffic controllers involved and a report from the appropriate ATC authority.

The Board first considered the actions of the ASW15 pilot. He had just entered the full climb of a winch launch when he saw the helicopter approaching. Glider members noted that this was a critical stage in the winch launch process with the glider being rotated to a steep nose-up attitude whilst still close to the ground. A release from the cable in these circumstances required careful management of aircraft energy, with the potential for airspeed to be rapidly lost in the steep nose-up attitude and during the process of pitching back down to a flying attitude if not completed promptly. In the event, the glider pilot saw the helicopter approaching; was able to assimilate its likely track; made an assessment of whether that would present a hazard to the helicopter pilot or himself; decided that there was a significant likelihood of the helicopter colliding with either the glider or the cable; and released from the winch launch during a critical phase of flight. The Board highly commended him for his lookout, presence of mind and subsequent actions. Glider members also noted that a launch party routinely clears 'above, ahead and behind' before giving the signal to commence the winch launch. However, in this case, it was likely that the helicopter was at an altitude that made visual acquisition unlikely before launch. Notwithstanding, this incident serves as a reminder that a thorough all-round lookout is required by the launch team on behalf of the launching glider pilot, given that many glider sites do not have an ATZ around them⁵ and potentially conflicting traffic can approach from any direction and altitude.

Turning to the B206 pilot, the Board suspected that his reference to precise tailwinds and groundspeed may have indicated an over-reliance on a GPS-based electronic display as opposed to reference to a map. He was apparently not aware of the location of Rivar Hill gliding site, and his avoiding-action left turn, taken against the gliders he first saw, took him directly over it. This displayed either a disappointing lack of prior flight planning or positional awareness in the air, or both. Members concluded that he had not remained clear of a promulgated and active glider site, and had flown into conflict with the winch-launching glider.

Members agreed that the glider pilot took effective and timely action, thereby averting the risk of not only aircraft collision but also of the helicopter pilot potentially colliding with the cable, which he would not have been able to see; notwithstanding the seriousness of the event in overall safety terms, they therefore assessed the Airprox risk as Category C. The Board agreed that it was fortunate for the B206 pilot that the glider pilot had seen him and taken action, albeit thereby placing himself at increased risk during a critical phase of launch.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The B206 pilot flew through a promulgated and active Glider Site and into conflict with a winch-launching glider.

Degree of Risk: C.

ERC Score⁶: 4

⁵ The circle on the CAA VFR chart merely highlights the presence of the site.

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.