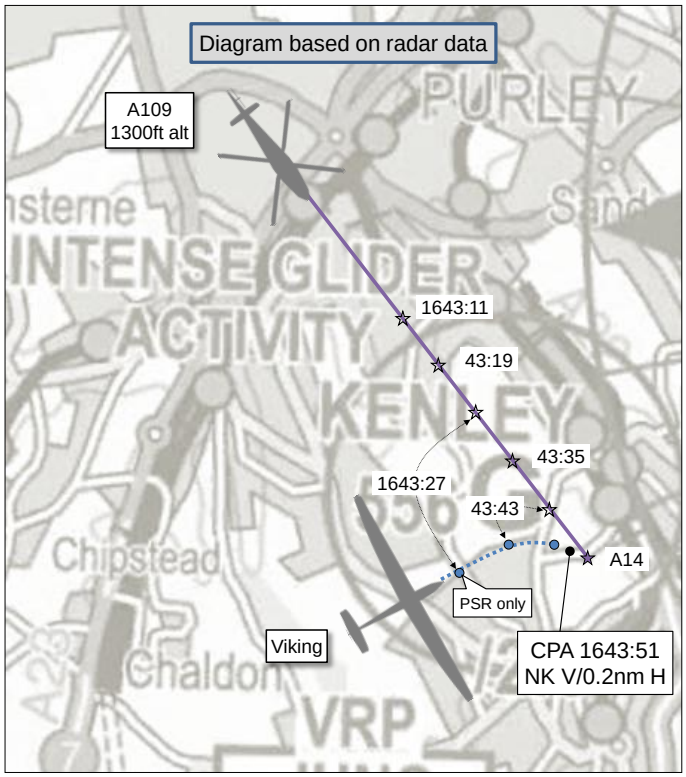
AIRPROX REPORT No 2013152

Date/Time: 29 Oct 2013 1644Z

Position: 5118N 00005W (Kenley Glider Site - elevation 556ft)

Airspace: Lon FIR (*Class*: G)

	Aircraft 1	*Aircraft 2*
Type:	Viking T1 (Grob 103)	A109
Operator:	HQ Air (Trg)	Civ Exec
Alt/FL:	650ft QFE (997hPa)	1500ft NK
Conditions:	VMC	VMC
Visibility:	10km	>10km
Reported Separation:	0ft V/150m H	'1000ft'
Recorded Separation:	NK V/0.2nm H	



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE VIKING PILOT'S report was completed by the Unit Flight Safety Officer. The Viking pilot was in the left hand RW25 visual circuit at Kenley Glider Site. The white and orange striped aircraft was not fitted with lights, an SSR transponder, a TAS or an ACAS. The pilot was operating under VFR in VMC in receipt of an A/G Service from 'Kenley Radio'. He was established downwind to land on RW25, heading 070° at 50kt, when an Agusta A109 flew through the circuit at approximately 650ft agl. The Viking pilot was alerted to the helicopter's presence as it approached from the north and acknowledged that he was in visual contact with it, first seen at a range of 2nm, in the left 9.30 position. He had seen the aircraft about 1min previously but had assessed that it was tracking north. It tracked southwards and passed directly in front of the Viking pilot, maintaining straight and level flight, at a range of approximately 4-500ft (120m - 150m) and at the same level. The Viking pilot stated that the A109 pilot had clearly made no attempt to avoid the circuit, or to contact Kenley Radio.

He assessed the risk of collision as 'Low'.

THE A109 PILOT reports conducting a transit flight. The black and white helicopter had navigation lights and red strobe lights selected on, as was the SSR transponder with Mode A[1]. The aircraft was not fitted with either a TAS or ACAS. The pilot was operating under VFR in VMC, in receipt of a Basic Service from 'Farnborough East'. He overflew Kenley in level cruise at 1500ft, he thought, heading 150° at 140kt. He saw a white and orange aircraft turning final, 1000ft below and too far away to see the registration, and another glider being 'pushed into the hangar', despite there being no lights and it being after sunset. He stated that 'there was no Airprox' and questioned the sense in 'gliding that time of day after sunset'.

He assessed the risk of collision as 'None'.

[1] The Mode C and S status was not reported but it was clear from the radar replay that these Modes were selected as well.

Factual Background

The weather at Biggin Hill and Gatwick Airport were recorded as follows:

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METAR EGKB 291650Z 26005KT 230V290 CAVOK 08/02 Q1014
METAR EGKK 291650Z 25007KT 9999 FEW042 09/04 Q1014
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Kenley is notified in the UK AIP ENR 5.5-9, dated 22 Aug 1013, as follows:

KENLEY GLIDER SITE, SURREY (AD) (W) 511820N 0000537W	Upper limit: 1700 ft	Phone: 615 VGS 02086-459784, 07920-782194/ 07764-578781 (Mobile). Surrey Hills Gliding Club 020-8763 0091	**Strictly PPR.** **Freq:** 129.975 MHz. **Site elevation:** 556 ft amsl. Hours: HJ

Sunset at Kenley Aerodrome occurred at 1639 on 29th October 2013[2].

Analysis and Investigation

CAA ATSI

An Airprox was reported in the vicinity of Kenley glider site when a Grob Viking glider came into conflict with an Agusta A109E. The glider pilot was operating under VFR on a local flight from RAF Kenley and was in communication with Kenley Radio on frequency 129.975MHz. The A109 pilot was operating VFR on a transit flight from Battersea to an airfield abroad and was in receipt of a Basic Service from Farnborough LARS East on frequency 123.225MHz.

ATSI had access to reports from both pilots, recorded area surveillance and transcription of the Farnborough LARS(E) frequency.

At 1642:20, when the A109 was 3nm northwest of Kenley, the pilot contacted Farnborough LARS(E) climbing to 1400ft and requested a Basic Service. The Farnborough LARS(E) controller cautioned the pilot about Kenley, advising that it was southeast by 2nm and agreed a Basic Service with a squawk of 5020. The pilot replied that he was visual with Kenley. At 1643:09, the A109 was 1.2nm northwest of Kenley and a primary return appeared on the surveillance replay, 0.8nm to the southwest of Kenley (see Figure 1).

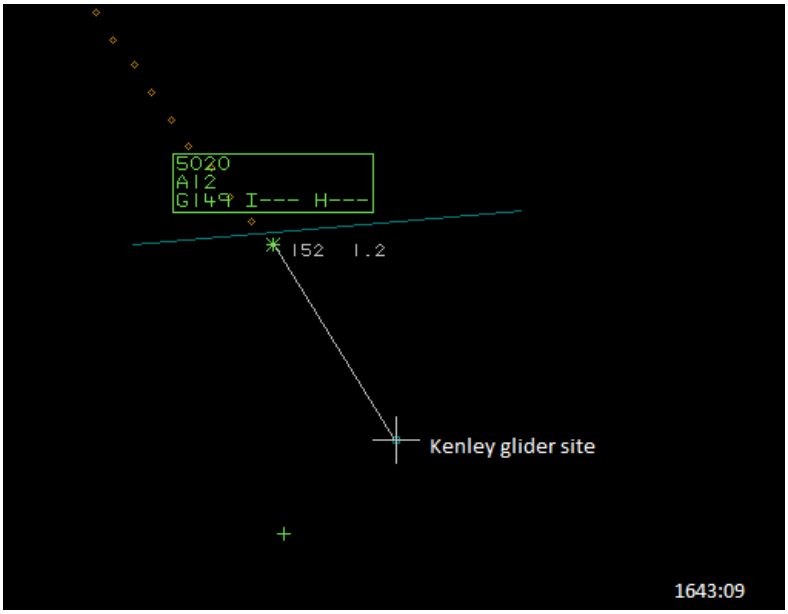

Figure 1

[2] HM Nautical Almanac Office

The primary return disappeared at 1643:25 when the two aircraft were 1nm apart (see Figure 2).

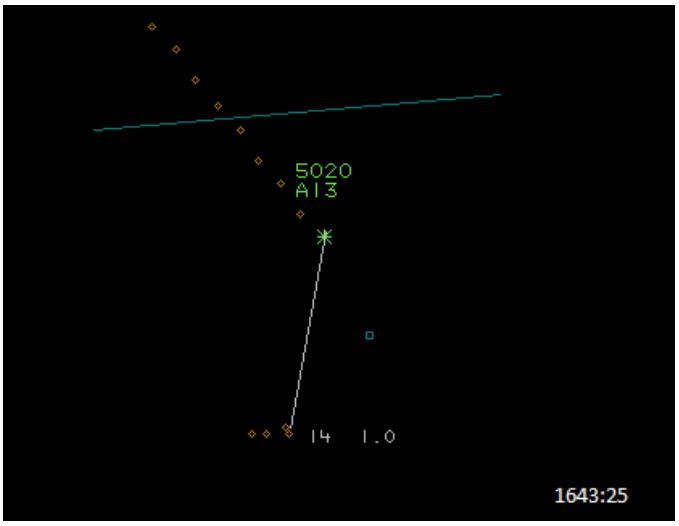

Figure 2

A primary return was also briefly visible at 1643:36, 0.4nm southwest of the A109 (see Figure 3).

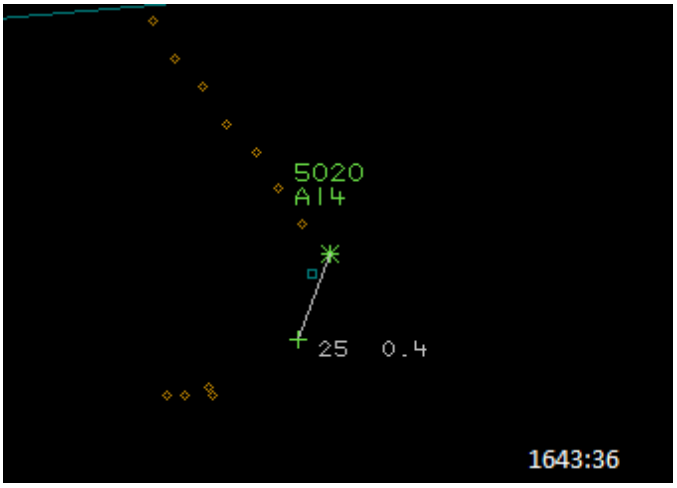

Figure 3

At 1656:20, the A109 pilot was instructed by Farnborough LARS to free-call London Information on frequency 124.6MHz.

CAP774, UK Flight Information Services, Chapter 2, paragraph 5 states:

> 'Pilots should not expect any form of traffic information from a controller/FISO, as there is no such obligation placed on the controller/FISO under a Basic Service outside an Aerodrome Traffic Zone (ATZ), and the pilot remains responsible for collision avoidance at all times. However, on initial contact the controller/FISO may provide traffic information in general terms to assist with the pilot's situational awareness...'

The Farnborough LARS(E) controller warned the A109 pilot about the relative position of Kenley when he called on frequency.

The A109 pilot flew directly overhead Kenley at about 1643:40, some 4min and 40sec after sunset and the notified hours of operation of Kenley Glider Site.

UKAB Secretariat

Both pilots were equally responsible for collision avoidance[3] and the A109 pilot was required to conform to the pattern of traffic formed by aircraft intending to land at Kenley or to keep clear of the airspace in which the pattern was formed[4]. Analysis of the radar replay indicated that the A109 pilot crossed Kenley Aerodrome at a height of about 750ft agl.

Comments

HQ Air Command

The A109 pilot had been made aware of the proximity of Kenley Glider Site but, since his planned over-flight was after the published hours of operation of the aerodrome, was probably comfortable to continue tracking towards the overhead. This incident highlights the need for vigilance in the vicinity of aerodromes, even when they are believed to be inactive. Investigation has concluded that gliders regularly fly from Kenley up to 15 minutes after sunset and an urgent amendment to the AIP has been submitted to show the hours of operation of all military glider sites as "HJ+15", though this will certainly not address the question of glider conspicuity in low light levels. Of note, the glider pilot was visual with the helicopter at a range of 2nm but mis-assessed its track; once it became apparent that there would be a possible confliction then a more prudent course of action from the glider pilot would have been to take action to positively deconflict.

Summary

An Airprox was reported when a Viking glider and an Agusta A109 helicopter flew into proximity at 1644 on 29th October 2013. The Viking pilot was operating under VFR, downwind to land and in receipt of an A/G service. The A109 pilot was in level cruise, also operating under VFR and in receipt of a Basic Service from Farnborough LARS(E).

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar video recordings and a report from the appropriate ATC operating authority.

The Board first considered the actions of the Viking pilot. He was downwind in the visual circuit and had seen the A109 at range. He corrected his initial misassessment of its track and saw the helicopter transit through the glider site. The published hours of operation of the glider site were 'HJ' (sunrise to sunset) and the Airprox occurred about 5min after sunset. Board members discussed whether this was germane to the Airprox and concluded that several practical considerations were appropriate. Principally, although the glider was not legally required to display lighting until ½hr after sunset, the Board could find no evidence that any risk assessment had been conducted concerning unlit glider conspicuity in twilight. Furthermore, the Board opined that there was little point in publishing notified hours of operation if gliding was going to be undertaken beyond them.

Turning to the A109 pilot, the Board opined that the timing of the Airprox (5mins after the end of notified hours of operation) indicated that the A109 pilot was either: unaware of the precise location of Kenley glider site; highly aware of Kenley's location and hours of operation and had deliberately overflown the site under the assumption that it would have been inactive; had not been aware of the hours of operation but had simply assumed that there would be no activity given the reduced lighting levels; or was not concerned with flying through the glider site location irrespective of whether it was active or not. Whilst the A109 pilot was not required to avoid the glider site, he had been advised of its location by Farnborough LARS(E) and he subsequently flew overhead the airfield at about 100ft above the Viking pilot's reported altitude and close enough to cause concern.

[3] Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).
[4] ibid., Rule 12 (Flight in the vicinity of an aerodrome).

Overall, although the A109 pilot had reported seeing gliders on the airfield (reportedly 1000ft below him despite his height being approximately 750ft agl as he crossed the airfield), the Board were not convinced that he had seen the subject glider; they also noted that, although diminishing after sunset, there had existed a risk of collision with winch-launching cables even if he had seen every glider present. Although members felt that in the end safety margins had not been much reduced below the norm (due to the fact that the Viking pilot had seen the A109 at 2nm), the Board commented that the conduct of unlit glider operations after sunset in the busy airspace around Kenley was ill advised and that the A109 pilot would have been better served by making a small adjustment to his heading on take-off, in order to avoid the unnecessary over-flight of a promulgated glider site.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Whilst flying through a promulgated glider site, the Agusta A109 pilot flew close enough to cause the Viking pilot concern.

Degree of Risk: C.

ERC Score[5]: 2

[5] 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.