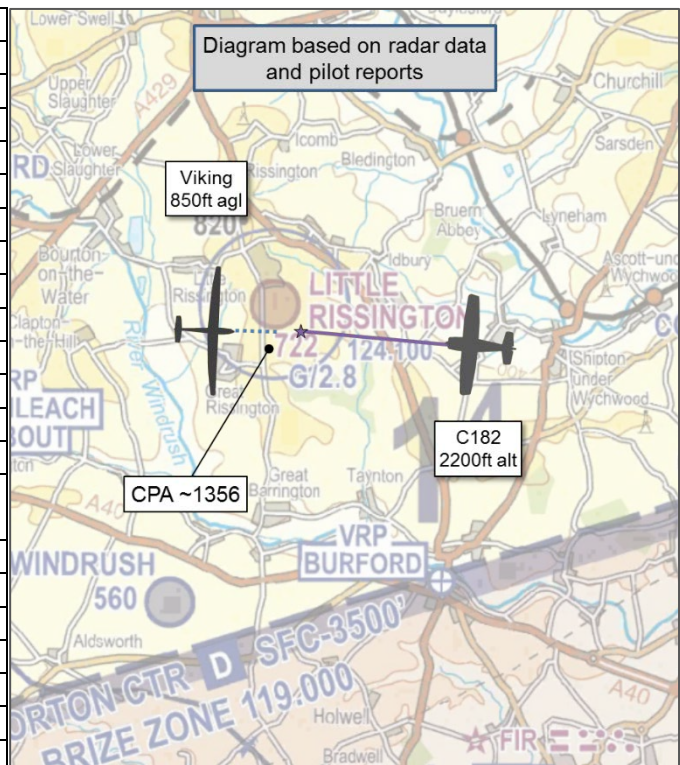


AIRPROX REPORT No 2018269

Date: 29 Sep 2018 Time: 1356Z Position: 5151N 00141W Location: Little Rissington

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|-------------|----------------------------|----------------------|
| Aircraft | Viking | C182 |
| Operator | HQ Air (Trg) | Civ FW |
| Airspace | London FIR | London FIR |
| Class | G | G |
| Rules | VFR | VFR |
| Service | AGCS | Traffic ¹ |
| Provider | Little Rissington | Oxford |
| Altitude/FL | NK | 2200ft |
| Transponder | Not fitted | A, C, S |
| Reported | | |
| Colours | White, Orange | |
| Lighting | Nil | |
| Conditions | VMC | VMC |
| Altitude/FL | 850ft agl (1570ft amsl) | 2300ft |
| Altimeter | QFE | QNH |
| Heading | 090° | 270° |
| Speed | 50kt | 130kt |
| ACAS/TAS | FLARM | Not fitted |
| Alert | None | N/A |
| Separation | | |
| Reported | 200ft V/1500m H | Not Seen |
| Recorded | NK | |



THE VIKING PILOT reports that he was late downwind for RW27 at 850ft. The cadet was in control from the rear seat, practising straight-and-level (although there was slight lift of about 200ft per minute) when a C182 was noticed during a lookout scan by the instructor. It approached from the 12 o'clock and was about 200ft above. The instructor took control to take avoiding action of a 180° turn to the right, followed by a 180° turn to the left to ensure safe separation. They landed without any further issues. The glider pilot produced a diagram of his version of the encounter (Figure 1).

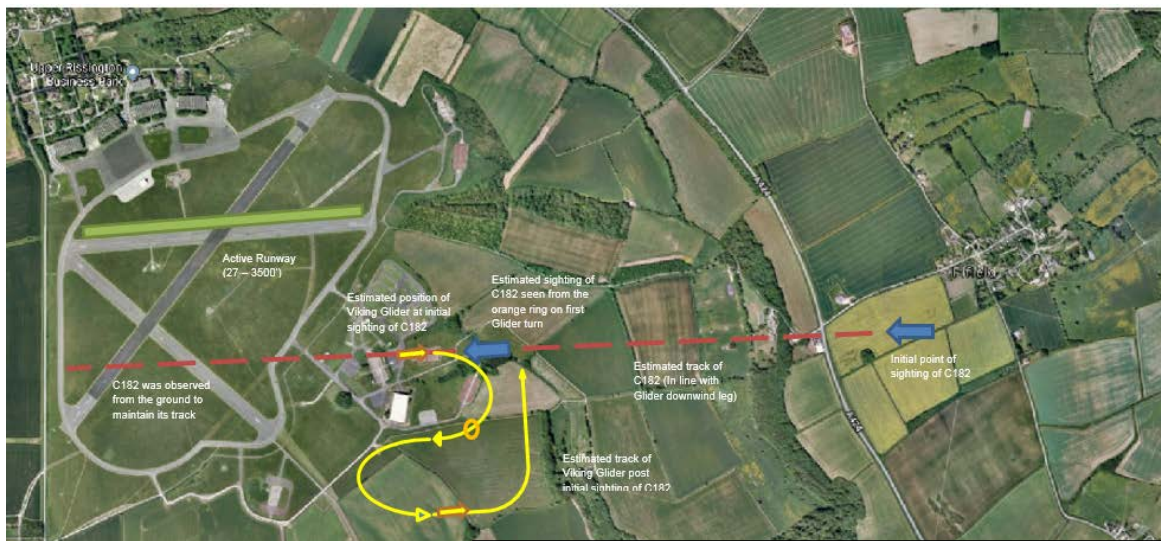


Figure 1 – Glider Pilot’s perception of the encounter

¹ He reported.

With help from Brize ATC, the C182 was traced to Gloucester by the gliding centre and the pilot was contacted. He reported being a regular flyer in the area and had never before seen gliding activity at Little Rissington. He believed he was flying closer to 2000ft than the 1200ft suggested by the glider pilot and he suggested that he had not seen the glider. When advised not to fly over any airfield with a G on the chart below 2000ft agl, he appeared adamant that he was not in the wrong. The conversation ended politely, but later he phoned again to say that the 1:500,000 chart that he had did not show Little Rissington as a gliding site, with only military charts to hand, they could not contradict him.

He assessed the risk of collision as 'High'.

THE C182 PILOT reports that he was informed about the Airprox after landing. He noted that Little Rissington is shown on the charts as a 'government airfield' with no opening times and no ATZ. He stated that he always checks for NOTAMs for para or gliding activity and there was none for that day. He also commented that he had flown through the Little Rissington airspace earlier that day and there was no sign of activity then either. He believed he was receiving a Traffic Service from Oxford at the time and they had not informed him about any hazards on his flight path. [UKAB note: the C182 was squawking 7000 at the time of the incident and was therefore unlikely to have still been receiving a Traffic Service from Oxford because they would have allocated one of their own transponder codes had he been under a service.]

Factual Background

The weather at Brize was recorded as follows:

METAR EGVN 291350Z 23005KT CAVOK 16/04 Q1027 BLU NOSIG=
 METAR EGVN 291450Z 25005KT CAVOK 16/03 Q1025 BLU NOSIG=

Little Rissington's AIP entry at ENR 5.5-12 dated 24 May 2018 is as follows:

| | | | |
|--|--|---|--|
| LITTLE RISSINGTON GLIDER SITE (MIL), GLOS (AD) (W AND T) 515200N 0014136W | Upper limit: 2000 FT Lower limit: SFC | Phone: RAF 2 FTS 01400-264526. Ops 637 VGS 01451-810078, 07786-504892 (Mobile). | Strictly PPR. Freq: 124.100 MHz (Rissington Radio). Site elevation: 722 FT AMSL. Hours: SR to SS+15 Fri, Sat, Sun & PH or as notified by NOTAM. |
|--|--|---|--|

Analysis and Investigation

UKAB Secretariat

The Viking and C182 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard². If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right. An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation³.

Figure 2 is a screenshot from the NATS radars which shows the C182 indicating 2200ft altitude as it passes Little Rissington at the time of the incident. The glider cannot be seen on the radar.

² SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

³ SERA.3225 Operation on and in the Vicinity of an Aerodrome. MAA RA 2307 paragraph 15.

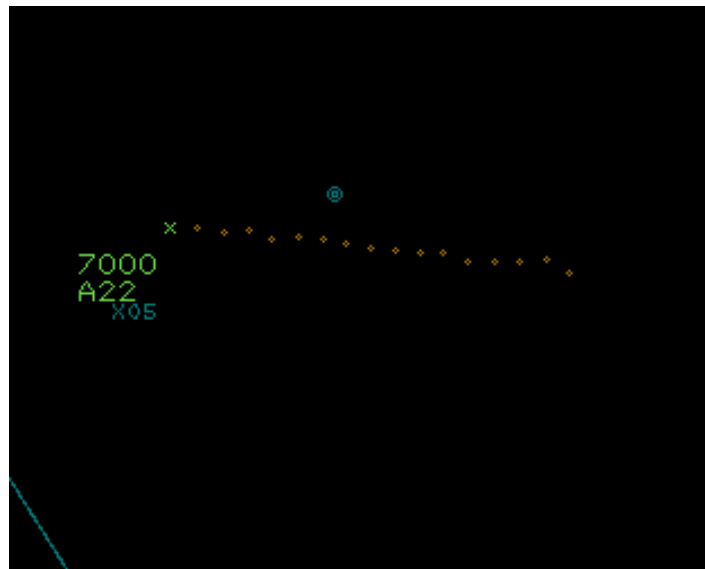


Figure 2: 1356:56

Comments

HQ Air Command

This Airprox occurred on a weekend, when activity at Little Rissington (LR) is at its highest. The UK AIP entry for LR states that the operating hours are 'SR to SS+15 Fri, Sat, Sun & PH or as notified by NOTAM' and gives the upper limit as 2000ft; however, it is not entirely clear whether this is AGL or AMSL. It is likely that the upper limit is AGL as the AIP entry also provides the site elevation and clarity has been sought in this regard from the publishers of the UK AIP, but it seems that there is room for interpretation thus it is entirely possible to fly below the upper limit of the site whilst believing that one is above it. That said, it is clearly printed on the CAA VFR chart that the top height of the winch launch is 2800ft, and so there is always the possibility of encountering gliders and/or the winch cable up to the vertical limit quoted in the UK AIP; in this case the Cessna pilot was recorded as flying at an altitude of 2200ft.

The glider was not visible on primary or secondary radar so there was no opportunity for the Oxford controller to provide TI, thus defeating the ATS barrier. This left see-and-avoid as the only means to avoid MAC. The glider pilot noticed the Cessna '*about 200ft above*' and took appropriate action to increase lateral separation. The Cessna pilot makes no mention of seeing the glider; indeed, he states that this was the second time that day that he had transited the airspace and had seen no sign of activity on his first transit, which may have led him to believe that LR was inactive that day (but that was not the case).

This Airprox reinforces the need to understand the airspace in which one is operating and also the limitations of a surveillance-based Air Traffic Service. Furthermore, if no activity is seen in the vicinity of a certain site, that does not mean that nothing is operating there.

Summary

An Airprox was reported when a Viking and a C182 flew into proximity at 1356hrs on Saturday 29th September 2018. Both pilots were operating under VFR in VMC, the Viking pilot was in receipt of an AGS and in the visual circuit, the C182 was probably not in receipt of an ATS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings and reports from the appropriate operating authority.

The Board first looked at the actions of the Viking pilot. Noting that he was instructing a student in the visual circuit and was not necessarily expecting to see traffic in the opposite direction, the Board wondered whether his surprise and perhaps consternation in seeing the other aircraft had caused him to assess it as being much closer than it actually was. The radar indicated that the C182 was at 2200ft amsl (about 1500ft agl) and therefore about 700ft above the glider pilot's own aircraft; this was considerably higher than the glider pilot's estimation of it being only 200ft above him. Notwithstanding this separation, even if it had been only 200ft above, gliding members were quite surprised at his subsequent avoiding action and couldn't understand why he would turn through 180°, which would then put the traffic behind him and out of sight. They commented that a right and then left 90° turn should have been sufficient avoiding action, and that this would also have ensured that he kept his landing options open rather than turning to face the wrong way downwind when he was at only 850ft in the circuit. Ultimately, they wondered whether this seeming overreaction was also indicative of his startlement at seeing the C182 when he did not expect to.

Turning to the C182 pilot, the Board acknowledged that the charts displayed Little Rissington in a different way to other pure gliding sites. Whilst a site with gliding as its primary activity would normally have the 'G' in the centre of the circle, airfields with other uses beyond just gliding were often indicated with the 'G' in the bottom right of the circle; this was the same for civil or military sites where gliding was the secondary activity. For Little Rissington, the 'G' indicating gliding activity was clearly visible in the bottom right of the circle, together with an indicated maximum winch-launch altitude of 2800ft, which takes into consideration the height of the ground.

With regard to activity levels, the Board noted that there had not been much military gliding activity at Little Rissington over the past 18 months, and wondered whether perhaps the C182 pilot had become somewhat complacent by having not seen any activity there for some time. Of more concern, his comments seemed to indicate a certain lack of pre-flight planning in that he was not aware of Little Rissington as a gliding site. That being said, the Board felt that there was a degree of abstruseness concerning the information available for glider sites within the UK AIP, which listed military gliding sites separately to civilian ones. Furthermore, the entries for upper limits simply stated a number (e.g. the Little Rissington entry stated the upper limit was 2000ft), but not overtly whether that was height (agl) or altitude (amsl) – in fact the figure is height (agl), but this is not immediately obvious; those reading the AIP could easily confuse this with altitude (amsl) and believe that they were flying above a site's maximum altitude when they were not. Despite these ambiguities, the Board felt that sufficient information was available for the C182 pilot to know that Little Rissington was an active gliding site. GA members commented that for those pilots in any doubt, electronic navigation aids such as SkyDemon had warnings about gliding sites that automatically popped up as they were approached.

Notwithstanding, the radar recordings showed that, in the event, the C182 pilot had remained to the south of the glider site and was 700ft above the actual visual circuit and therefore the pattern of traffic. Whilst members thought that he would have been better placed to avoid the glider site by a greater margin, they acknowledged that there was no ATZ as such for gliding sites and, although pilots were strongly advised to avoid flying through the overhead and the winch launch (which he did), there were no avoidance criteria as such for gliding sites other than to '*conform with or avoid the pattern of traffic formed by other aircraft in operation*'. In being 700ft above the pattern of traffic and not overhead the site, it could be argued that the C182 pilot had complied with this requirement.

Turning to the cause of the Airprox, the Board quickly agreed that the Viking pilot was concerned by the proximity of the C182. In assessing the risk, with about 700ft separation, the Board assessed that there had been no risk of collision. Notwithstanding, a brief discussion followed as to whether or not safety had been degraded given the incident's proximity to the glider site. In the end, by a small majority, the Board decided that the geometry and separation of the two aircraft was such that normal safety standards had pertained, Category E.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Viking pilot was concerned by the proximity of the C182.

Degree of Risk: E.

Safety Barrier Assessment⁴

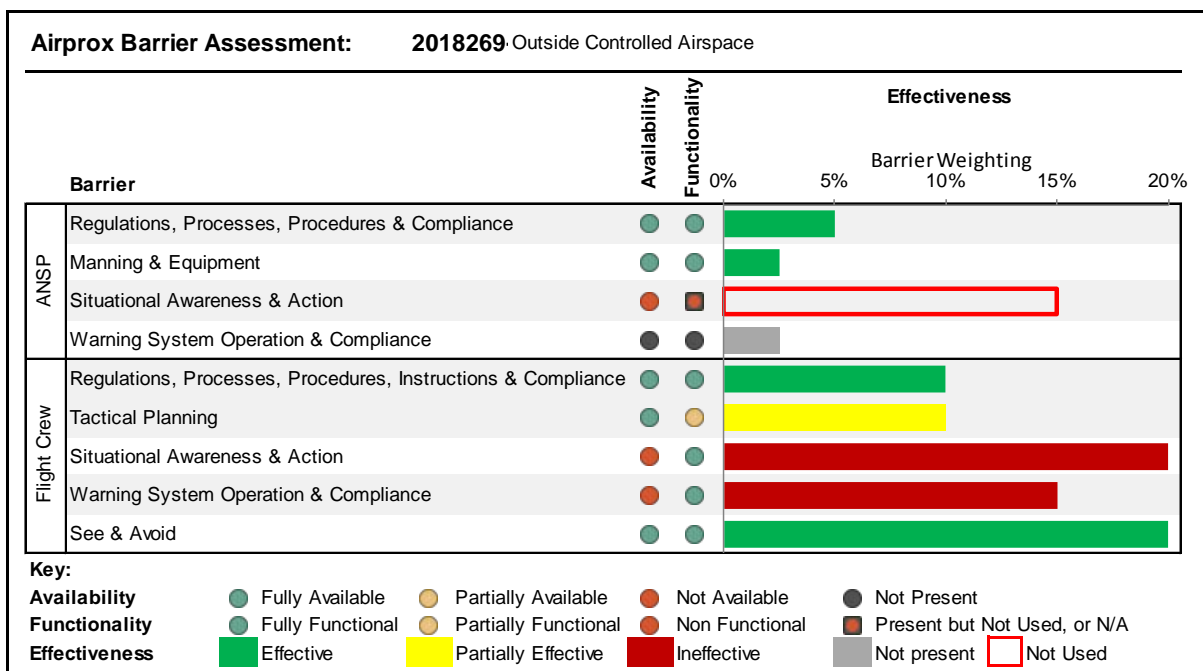
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Crew:

Tactical Planning was assessed as **partially effective** because the C182 pilot would have been better advised to have given the glider site a wider berth.

Situational Awareness and Action were assessed as **ineffective** because neither pilot had any prior situational awareness about the other.

Warning System Operation and Compliance were assessed as **ineffective** because the glider’s FLARM could not detect the C182.



⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).