AIRPROX REPORT No 2014211

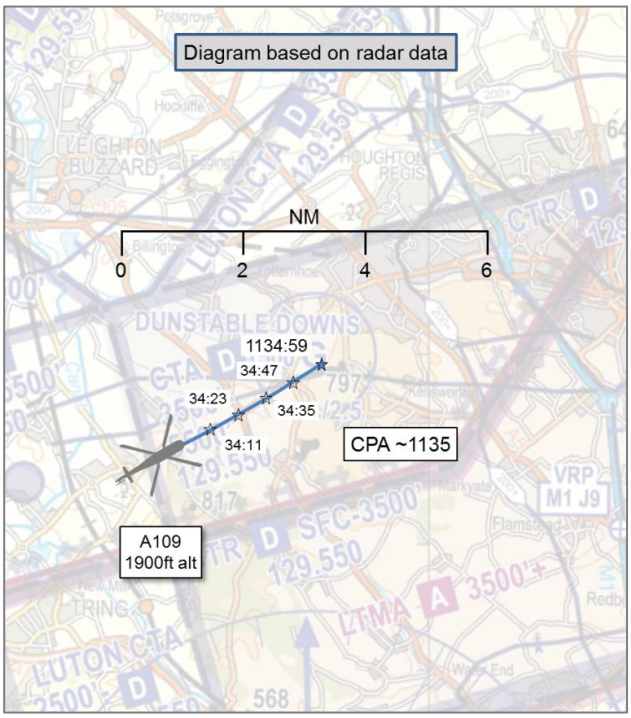
Date/Time: 8 Nov 2014 1135Z (Saturday)

Position: 5152N 00033W (Dunstable Downs Gliding Site - elevation 500ft)

Airspace: Luton CTR (*Class*: D)

	Aircraft 1	*Aircraft 2*
Type:	ASK21	A109
Operator:	Civ Trg	Civ Exec
Alt/FL:	↑1100ft QFE (NK hPa)	1900ft QNH (NK hPa)
Conditions:	VMC	VMC
Visibility:	25km	NK
Reported Separation:	0ft V/35m H	150ft V/150m H

Recorded Separation: NK



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE ASK21 PILOT reports instructing on a student flight, conducting a winch launch. The white glider was not equipped with lighting, an SSR transponder or a TAS. The pilot was operating under VFR in VMC, listening out on 'Dunstable Radio'. Near the top of the winch launch, heading 140° at 70kt in an approximately 45° nose-up attitude, and as the nose was lowering, the instructor caught sight of a dark blue 'jet' helicopter at the same level, in level flight and on a converging course from a position slightly right of the nose. It had previously been obscured from view due to the attitude of the glider. The instructor took immediate avoiding action by diving and turning.

He assessed the risk of collision as 'High'.

THE A109 PILOT reports transiting between private landing sites, occupying the right-hand seat. The black helicopter had navigation lights and top and bottom red strobes selected on, as was the SSR transponder with Modes A, C and S. The aircraft was equipped with a TAS. The pilot was operating under VFR in VMC, in receipt of a Radar Control Service from Luton Radar. On approaching the Dunstable Down area, the helicopter was straight-and–level, heading 063° at 130kt with the autopilot engaged in 'Heading' and 'Altitude' modes. ATC informed him that Dunstable was notified as active. On hearing the information, he looked at Dunstable glider site and noted a cable-tow and 2 gliders on the ground. He scanned visually for any airborne gliders and became visual with one in the left 9.30 position at about 200m in a right turn below his altitude. It was positioned between the lower left corner of the cockpit, behind the instrument panel, and the forward door pillar. He assessed that the glider radius of turn appeared constant, and noted that this would take its track inside his own. When the glider was in about the 9 o'clock position, he flashed the landing lights twice to acknowledge that he had visual contact with the glider. The pilot noted that the glider had not been visible in the 10-12 o'clock position because it was below him. The pilot stated that his personal procedure was to avoid gliding sites and, when passing nearby, to look for ground movement activity (tugs, 'cable tow machines' and gliders), whilst also keeping a good lookout for airborne gliders, which he generally noted to be upwind of landing sites and near hilly areas. Due to the poor weather and wind conditions that day, he had expected that gliding would not be taking place at Dunstable and, although he normally avoided or routed around it, had consequently requested routing via Dunstable direct OFFLEY VRP for the transit of Luton airspace. He noted that there were a number of lessons to learn. Firstly, even if the weather was 'not great', gliders may still be flying in conditions you would not expect them normally to be in, and it was best to avoid them at all times irrespective of weather.

Secondly, transponder and FLARM technology had improved vastly in recent years for certified and non-certified aircraft and, being light, low power and more compact, he opined that they could be fitted to all aircraft including gliders and were not prohibitively expensive for the benefit of the extra safety. He commented that this would have helped in this particular situation by indicating airborne activity by TAS, FLARM systems or by radio from ATC for transponder equipped aircraft. He observed that this in turn would have prompted him to reroute at an earlier stage of the flight to avoid the area, enhancing safer operations for both glider and helicopter, which are both by their nature of size and shape harder to see and be seen in the air by both parties.

He assessed the risk of collision as 'Low'.

THE LUTON CONTROLLER did not file a report.

Factual Background

The weather at Luton was recorded as follows:

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METAR EGGW 081120Z 17014G24KT 140V210 9999 -RA BKN015 BKN022 12/10 Q0999
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The UK AIP promulgates Dunstable (Winch and Tug launching) as being active during daylight hours with an upper winch launch altitude limit of 2500ft. For VFR flights - paragraph 8g, taken from the AIP page EGGW AD 2.22 (6 Mar 2014) states:

> (g) Pilots of aircraft operating under VFR, or on a Special VFR clearance are advised to avoid these areas if at all possible. In addition, pilots operating on a Special VFR clearance are advised that due to the nature of these activities they cannot be given separation from gliders, aircraft towing gliders, hang-gliders, paragliders or microlights within these designated areas. Traffic information will NOT be passed by ATC.

Dunstable Downs gliding site is located 6.6nm west of Luton Airport, under CTA-3 of the Luton CTA which has a base altitude of 3500ft

Analysis and Investigation

CAA ATSI

CAA ATSI had access to Luton Radar RTF and area radar recording together with written reports from the pilots of both aircraft. The Stansted 10cm single source radar was used to provide radar recordings. The Glider pilot was operating under VFR from Dunstable, in communication with Dunstable Radio but not in receipt of an Air Traffic Service. The A109 pilot departed from a private site about 10nm to the southwest of Luton Airport en-route to Ipswich, and was operating under VFR in receipt of a Radar Control Service from Luton Radar. Luton Radar reported that Dunstable glider site was notified as being active. An extract taken from UK AIP AD 2-EGGW-4-1 dated 28 Jun 12 is shown together with the route of the A109 at Figure 1.

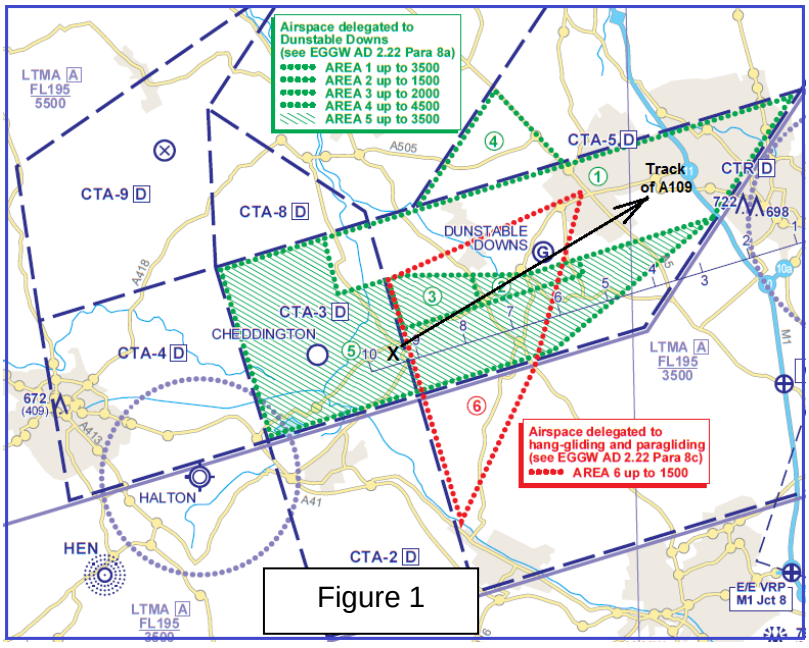

Figure 1

At 1119:42, the A109 pilot contacted Luton Radar and reported inbound to land at a private site north of Cheddington followed by a flight routeing north through the Luton control zone en-route to Ipswich. The TC Luton Radar controller passed the Luton QNH (999hPa) and a squawk of 4672. At 1120:35, the following RTF exchange occurred:

Radar *"*[A109 C/S] *what service do you require outside controlled airspace-s say again your next destination"*
A109 *"Er just a Basic Service please, were just down at one thousand feet nine nine nine, letting down private site just south of Cheddington and then routeing over to Ipswich er pres -via Dunstable if we can please, then Offley, then right turn Graveley direct to Ipswich"*
Radar "[A109 C/S] *that's understood and you can anticipate that routeing, report final for your site"*
A109 *"That's brilliant thanks we'll call you final for the site* [A109 C/S]*"*
Radar [transmission to another aircraft]
Radar *[1121:18] "*[A109 C/S] *it is a Basic Service, er the surface wind at Luton one seven zero at one six knots"*
A109 *"Copied the wind thanks for that* [A109 C/S]*"*
Radar *[1122:02] "*[A109 C/S] *just be aware Dunstable Downs Gliding Site are notified as being active"*
A109 *"Ok we've copied that, we're en-route north er once we get the clearance and keep a good lookout but hopefully today ????? might be a help*"
Radar *"I was about to say I haven't seen too much activity there yet"*
A109 *[1123:07]"* [A109 C/S] *two and a half miles to run to site south of Cheddington er should be on the ground about ten to fifteen minutes, we'll call you when we're back airborne"*
Radar *"*[A109 C/S] *that's understood, you can maintain the squawk and I'll speak to you outbound, the wind at Luton is still one seven zero at one six"*
A109 *"Copied that, talk to you shortly* [A109 C/S]*"*

The A109 approached the landing site and faded from radar at 1125:18. At 1132:27, the A109 pilot reported airborne and the controller asked him to squawk ident before passing a clearance:

Radar "[A109 C/S] cleared to transit the Luton control zone, VFR not above altitude two tousand feet, routeing Dunstable Offley Gravely"
A109 "Dunstable Offley Gravely, not above two thousand VFR [A109 C/S] nine nine nine"
Radar "[A109 C/S] affirm, just confirm your passing level"
A109 "????? at one thousand four hundred feet, we'll stop the climb at one thousand seven hundred ????? [A109 C/S]"
Radar "Thank you"

At 1134:16, the A109 was shown 2.1nm southwest of the gliding site tracking northeast, indicating an altitude of 1800ft (Figure 2).

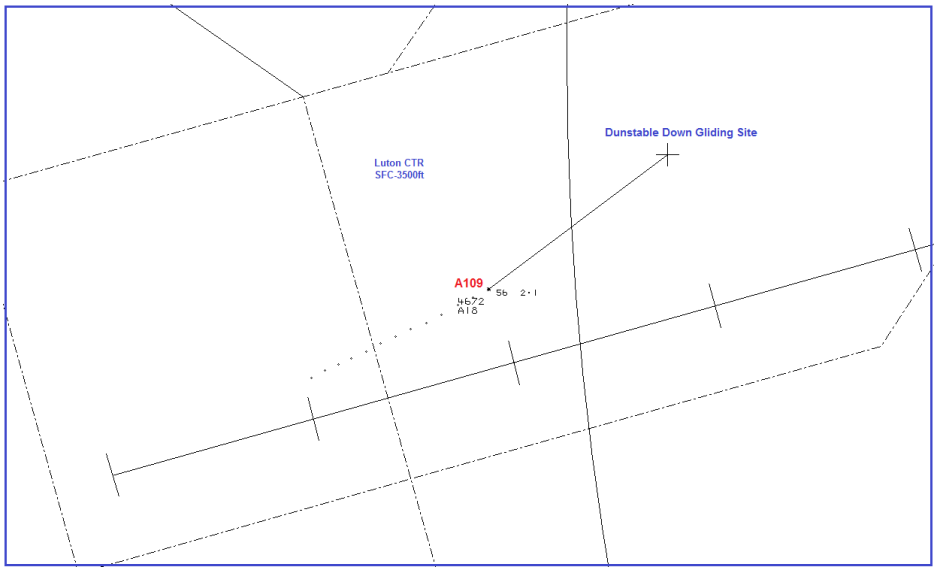

Figure 2 – Stansted single source radar at 1134:16

At 1135:00, the A109 was shown to be approaching the gliding site at an altitude of 1900ft. This was believed to have been when the Airprox occurred, however, no other returns were apparent (Figure 3).

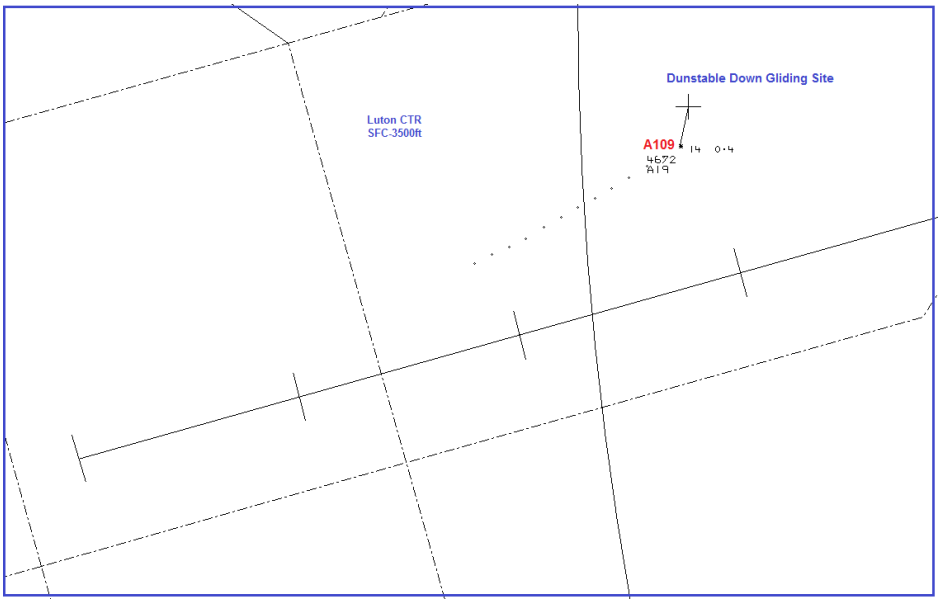

Figure 3 – Stansted single source radar at 1135:00

At this point the A109 pilot reported:

A109 "There is some activity at er Dunstable Down there's one airborne two on the ground"
Radar "Ah thanks for that there's nothing showing on my er radar at the moment."

At 1135:27 (Figure 4), the controller passed Traffic Information on another contact in the A109 pilot's 12 o'clock and radar showed the start of a track to the southwest of Dunstable gliding site (Figure 4).

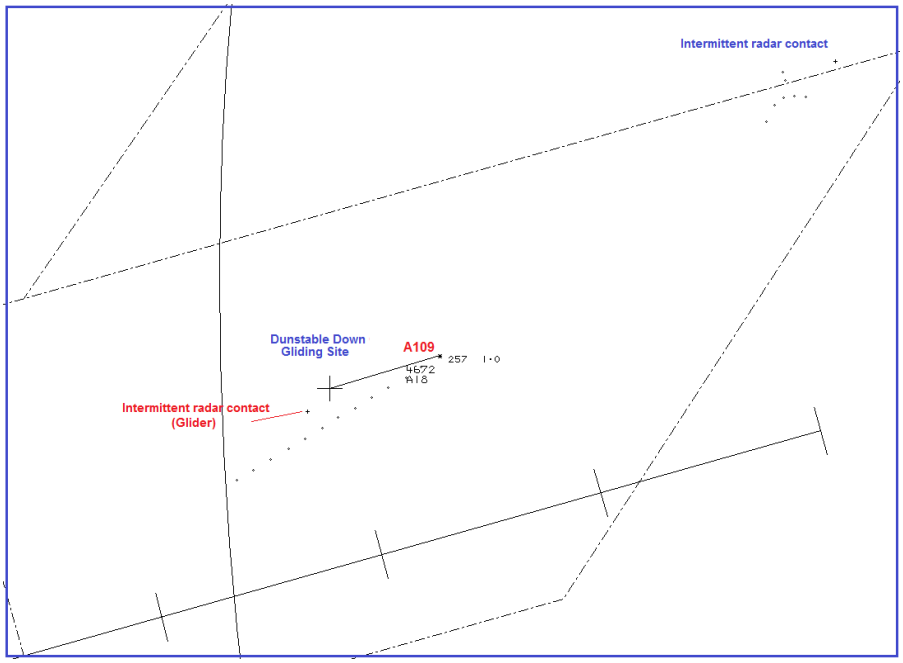

Figure 4 – Stansted single source radar at 1135:27

At 1136:03, the A109 was 2.9nm northeast of the gliding site with the newly formed track indicating the likely position of the Airprox (Figure 5).

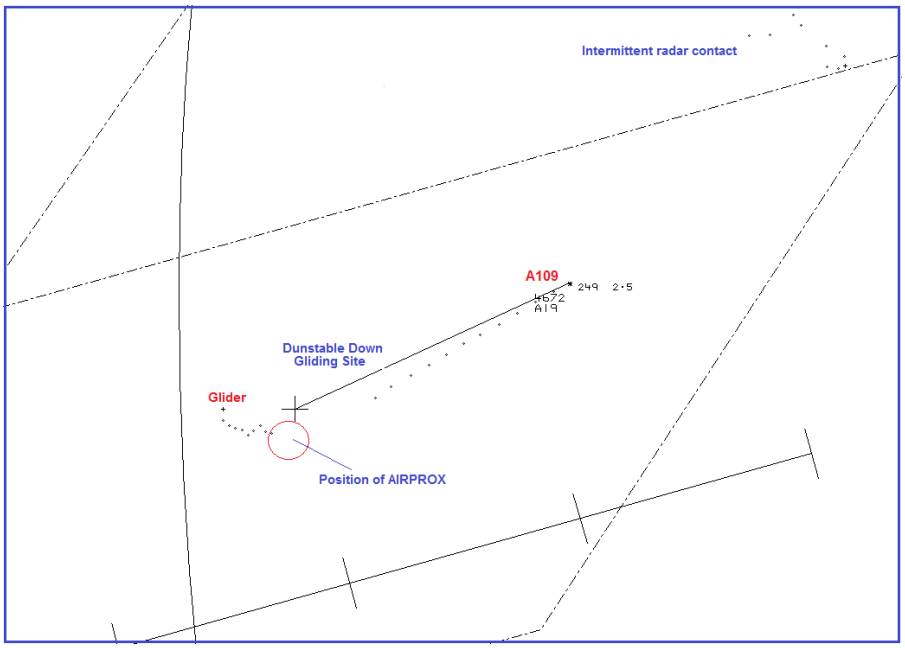

Figure 5 – Stansted single source radar at 1136:03

Prior to the A109 landing at a private site outside controlled airspace the pilot indicated that he would be calling to request a routeing through the Luton zone via Dunstable, Offley and Gravely to Ipswich. The Luton TC controller had advised the A109 pilot that Dunstable gliding site was notified as active and the pilot indicated that he would keep a good lookout. The Luton TC controller added that they 'haven't seen too much activity there yet'. The A109 pilot elected to route via Dunstable and the controller cleared him to transit the control zone via Dunstable. The Luton MATS Part 2[1] states that if a VFR transit is likely to route through any delegated airspace TC Luton shall notify the pilot of the intense gliding activity and, if necessary, shall advise the pilot to avoid the immediate vicinity of Dunstable Downs. TC Luton shall pass generic traffic information based on reported or observed activity.

The controller had reported little activity observed at Dunstable and his situational display would not have shown the glider involved in the Airprox, which was being launched as the A109 passed abeam Dunstable. Therefore, the controller would not have been able to pass Traffic Information on the glider.

The UK AIP EGGW AD 2.22, dated 6 Mar 2014, states that pilots of VFR aircraft are to avoid the Dunstable Gliding Site areas if at all possible. The A109 pilot was aware that the gliding site was active and whilst operating under VFR was responsible for his own collision avoidance.

UKAB Secretariat

The Rules of the Air set out responsibilities for collision avoidance and state who shall give way or have right of way under certain circumstances. However, the nature of a winch-launch is such that a glider is highly constrained in its flight path with little or no forward view for much of the launch. Therefore, in the Secretariat's opinion, it may be considered that the onus of responsibility to remain clear, give way or take collision avoidance action lies with the other pilot.

Comments

BGA

This incident demonstrates the wisdom of not flying directly over the top of a gliding site near or below the notified altitude of winch launching, especially when it is confirmed as active. With

[1] LTC MATS Part 2, Page LTN-64 Paragraph 11.5.9

modern winches, rates of climb of 3,000fpm are normal and, due to the angle of climb, the forward visibility of the glider pilot is very limited. Just avoiding flying inside the airfield boundary would eliminate the risk of unexpectedly meeting a glider or the steel cable that connects it to the winch.

Also, intensive gliding activities can take place in surprisingly poor weather, much of it training to operate safely in those conditions. It would be good practice to assume that a gliding site is active unless positively notified otherwise.

Summary

An Airprox was reported when an ASK21 and an A109 flew into proximity at 1135 on Saturday 8th November 2014. Both pilots were operating under VFR in VMC, the A109 pilot in receipt of a Radar Control Service from Luton Radar and the ASK21 pilot not in receipt of an Air Traffic Service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, radar photographs/video recordings and a report from the appropriate ATC authority.

The Board members turned first to the actions of the A109 pilot and noted that he had assumed that there would be no gliding activity at Dunstable Downs due to the inclement weather and high wind speed; they quickly agreed that this had been a contributory factor because he had allowed this assumption to direct his actions despite a warning from the Luton controller that the glider site was notified as active. In some mitigation, the Board considered that the Luton controller's unfortunate statement "… *I haven't seen too much activity there yet*" probably served to reinforce the A109 pilot's incorrect assumption, although it's intent could also be interpreted as there being at least some activity present. In either case, members agreed that the A109 pilot had not avoided the site *'… if at all possible*', as requested in the UK AIP entry for Luton. Members commended the A109 pilot for normally adopting a 'procedure' of avoiding gliding sites, and agreed that had he done so in this circumstance it would have contributed significantly to collision mitigation, especially considering that such action would have taken him clear of winch launching gliders whether he saw them or not. In the event, in this incident he saw a glider in the left 9.30 position in a right turn and, after some discussion, members agreed that this was probably the subject ASK21 just after its pilot had released from the winch cable.

As for the glider pilot, the Board commended him for his prompt actions at a difficult stage of flight. Some members wondered whether he could have delayed his launch if the approaching A109 had been detected, but agreed that this was highly unlikely given that winch-launch models showed that the launch had probably commenced some 90sec or so before CPA, when the A109 would likely have been about 3-3.5nm distant and therefore probably not visible.

Turning to the cause and risk, the Board agreed that the fundamental cause of the incident had been that the A109 pilot had flown close to a promulgated and active gliding site and into conflict with the ASK21. Because he had not planned to avoid the glider site and was not able to see the glider on the winch launch below him, and because the glider pilot, in a steep climb, could not see the A109 approaching from ahead, the Board determined that chance had played a major part in events and that nothing more could have been done to improve matters. Members agreed that, although the A109 pilot had taken responsible action in positively looking for activity on the ground and for airborne gliders, this entirely avoidable incident could have been resolved by simply avoiding the glider site, whether the conditions were marginal or not.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The A109 pilot flew close to a promulgated and active gliding site and into conflict with the ASK21.

Contributory Factor: The A109 pilot assumed that the weather conditions would preclude glider operations.

Degree of Risk: A.

ERC Score[2]: 20.

[2] 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.