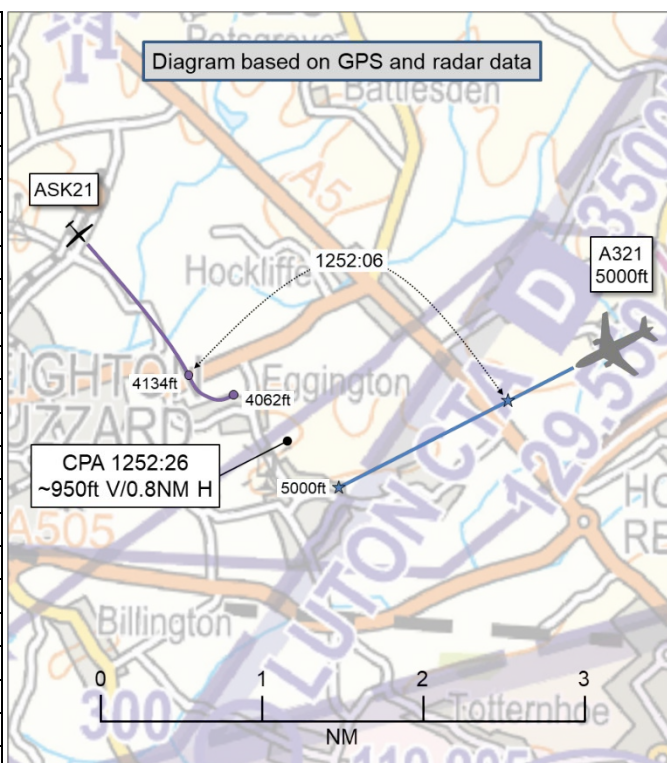


AIRPROX REPORT No 2026059

Date: 27 Apr 2026 Time: 1252Z Position: 5155N 00036W Location: 2NM E Leighton Buzzard

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	A321	ASK21
Operator	CAT	Civ Gld
Airspace	Luton CTA 6	London FIR
Class	D	G
Rules	IFR	VFR
Service	Radar Control	None
Provider	Luton Approach	N/A
Altitude/FL	5000ft	4062ft
Transponder	A, C, S+	Not fitted
Reported		
Colours	Company	White
Lighting	NR	None
Conditions	"Intermittent IMC"	VMC
Visibility	<5km	>10km
Altitude/FL	5000ft	3822ft
Altimeter	QNH (1023hPa)	SPS
Heading	245°	009°
Speed	220kt	63kt
ACAS/TAS	TCAS II	PowerFLARM
Alert	None	None
Separation at CPA		
Reported	0ft V/100-500m H	"not seen"
Recorded	~950ft V/0.8NM H	



THE A321 PILOT reports that they were being vectored for the ILS approach to RW07 at Luton. During the approach briefing/TEM, they had specifically identified that the good weather could increase the likelihood of GA/gliders in the area. As a mitigation, the landing lights were selected on below FL100. They were downwind for RW07 on heading 245° and cleared to slow, when ready, to 220kt. At that stage, they still had sufficient track distance remaining, approximately 30 track miles, and had not yet needed to reduce speed further. At approximately 15 DME I-LTN, the First Officer visually acquired a glider on the right-hand side, at approximately the same level, and estimated it to be within approximately 1NM laterally. No TCAS traffic indication or alert was received. The traffic appeared to be non-transponding/not electronically conspicuous to TCAS. The First Officer then looked out of the right-hand window and observed at least three additional gliders in close proximity [reported in their 3 o'clock within 800-1600m]. The traffic was close enough for visual details to be identifiable. The gliders appeared to be operating in, or very close to, controlled airspace at the same level as their aircraft while they were IFR and under radar vectors. There was intermittent IMC at that altitude with a layer of cumulus/stratocumulus. The glider traffic was briefed and monitored by the crew. No avoiding action was taken as the initially-sighted traffic was assessed to be on a divergent track by the time it was visually acquired, and there was no TCAS alert or electronic traffic information available. They reported the traffic to ATC and continued to a safe approach and landing. A crew debrief was conducted after landing.

[The pilot of the A321 opined that,] in their assessment, the risk was increased by the presence of non-transponding/electronically non-conspicuous glider traffic at the same level while they were IFR, radar vectored in controlled airspace, with no TCAS indication or alert. The main safety concern was the reduced detection margin and reliance on visual acquisition in an IFR/radar-vectored environment.

The pilot assessed the risk of collision as 'Medium'.

THE ASK21 PILOT reports that they did not sight the [A321] and nor did the pilot under training (just pre skills-test) whose lookout they were monitoring and had assessed as good. All three secure barometric loggers carried on board the glider place it at the same location in Class G airspace, more than 400ft vertically below the base of Luton CTA 6.

THE LUTON CONTROLLER reports that they were the Luton Final Director and had been in position for about 20min. The sector had spilt because traffic had gone around from RW25 and there were multiple arrivals running towards the hold. The wind had gone round to the northeast and was approximately 030°/7kt gusting 13kt. Due to Dunstable Downs being active with the '25 airspace' and CTA 8, they needed the Group Supervisor Airports (GS) to call [the Dunstable Downs operation] and give them the 15min notice, as laid out in the Letter of Agreement (LoA), to give them time to clear the airspace of non-radio equipped gliders. For context, the shift started on RW07 and, mid-morning, they had been advised by the Tower that engineers wanted to work on the RW07 ILS and they would have to vector for Surveillance Radar Approaches to RW07. The duration was approximately 2hr.

[A representative from] Dunstable Downs called and requested the airspace soon after. [The Luton Final Director] told the GS to say 'no' on the grounds of safety, and that they would give them the airspace as soon as they could due to the volume of traffic due to arrive, the RT coverage to the northwest, and the workload/complexity of an SRA to RW07. [The Luton Final Director], and the other Luton controllers, all agreed this was the safest and best course of action. [The representative from] Dunstable Downs was not happy and said something along the lines of 'escalating the matter further'.

[Uninvolved A321(A) C/S] had gone around on RW25. They were vectored southwest, before being turned further left and taken east of Luton. A 'Check all' was in place as this is done automatically following a missed approach. That was the point that [the Luton controller] opened FIN and spilt the sector. They took the [uninvolved A321(A)] on a northbound heading and climbed them to 5000ft, to ensure they stayed inside controlled airspace. They advised [the pilot] that they were in the process of changing to RW07 but were unable to start vectoring them for an approach because of the gliding activity. [The controller] said that, once they had confirmation that the gliders were clear of the associated airspace, they could commence their approach for RW07. They had seen that the ILS had been switched to RW07, and they just needed positive confirmation from the GS that the Dunstable '25 airspace' and CTA 8 had been vacated.

Background: Due to the nature of the delegated airspace and the associated runways, when Dunstable Downs has the '25 airspace' that encompasses a large amount of airspace on the RW07 approach, this means that they needed positive confirmation that they were clear of the '25 airspace' so they could safely vector for RW07. The MATS Pt.2 states that they cannot vector through the airspace (when active with gliders) IFR at any level.

Shortly after, the GS came down and confirmed that Dunstable Downs had vacated the '25 airspace'. This allowed [the controller] to start vectoring for the ILS RW07. [Uninvolved A321(A)] was first, followed by [uninvolved A321(B)] and [the Airprox A321] was number three in the sequence.

[The Airprox A321] was just south of Leighton Buzzard when the [pilot] reported a glider at the same level to the north of them. They think their response to this was 'roger'. They could not believe what [the pilot] had just said, and it took them a while to process. A second controller had plugged-in as their watch was just finishing. They, and the other controller, looked at one another in disbelief. They turned the [A321] left onto a base leg and asked the [pilot] to confirm that it was a glider, same level. The [pilot of the A321] said "yes, 5000ft". They thanked them.

The incoming controller advised Luton INT of the report, and they widened out the next arrival to remain clear of that piece of airspace. They had already vectored two aircraft through this airspace ahead of the [A321 whose pilot had] reported the glider. They do not know if they came close to the same traffic as it was non-transponding and intermittent on radar.

After they unplugged, they advised the Supervisor of what had just happened. They sought confirmation (once again) that Dunstable Downs had confirmed they had cleared the '25 airspace' and at what time. [The GS] checked the sheet and said 1241 and subsequently rang Dunstable Downs again and asked

for confirmation that they were in the 07 airspace and spin training area alone. They said 'yes' and confirmed for a second time they had the 07 airspace and the time of the change was 1241. [The pilot of the A321] reported the glider at approximately 1253.

The piece of airspace where the [pilot of the A321] reported the glider at the same level was CTA 8, northwest of Luton Airport. CTA 8 can be used by Dunstable Downs in accordance with the LoA when the '25 airspace' is delegated to them under the following conditions:

"Radio equipped gliders operating under the auspices of the London Gliding Club may operate within CTA 8 provided that the pilot has been suitably approved by London Gliding Club. Such pilots will ensure that the glider's radio is serviceable and will obtain prior confirmation from Dunstable Radio on 119.905MHz that CTA 8 has been activated before entering the area".

CTA 8 is only available on RW25, with permission from Terminal Control and is only available up to 4500ft for gliders. The [pilot of the A321] reported the glider at 5000ft, 500ft higher than the delegated operating altitude.

The change of airspace procedure, in this instance, is as follows:

RW25 changing to RW07.

"If it is necessary to change from Dunstable 25 Airspace to Dunstable 07 Airspace, TC Luton shall request that the GS A notifies the DLO accordingly. In this event, the DLO will ensure that all gliders operating within Gliding Area 5 and CTA 8, if activated, are notified by RTF to vacate this airspace. This will be completed within 15 minutes. The DLO will call the GS A to confirm when Gliding Area 5 and CTA 8 is vacated. TC Luton shall not vector aircraft through Gliding Area 5 or CTA 8, if activated, until positive confirmation has been received that the airspace is vacated".

All these steps were taken and confirmed a second time but there was a glider 500ft above the delegated airspace that they had confirmed was clear.

[The controllers] trust what they are being told by Dunstable Downs as they have no visibility on most of their traffic. Most of the gliders do not carry transponders so, in an instance like this, it was the flight crew that saw them! For a flight crew to see a glider, they would have had to have been close.

[The Luton controller opined that] they have had safety concerns for years over how Dunstable Downs operates: Traffic without radios or transponders operating just over half-a-mile north of the RW07 approach. As radar controllers, they are unable to differentiate between gliders operating under the LoA and infringing traffic. There is an assumption that they were associated with Dunstable Downs. If they do infringe without a transponder, they have no fail-safe mechanism for the inbound/outbound traffic. They are reliant on the crews seeing them, assuming they can and will. The workload on the approach for the crews is high, so see-and-avoid cannot be the only line of defence. In Class D airspace, the flight crews expect [the controllers] to know what traffic is where, but they do not. Also, the crews have no real awareness as to how much airspace is delegated to Dunstable Downs. [The controllers] advise of intense gliding activity to the north and below the final approach, but what does that mean to them? Do they know the vertical confines? It is in the UK AIP but is it on their approach charts? With the fact that Luton also has SRA approaches when the ILS is taken out of service (which happens regularly for grass cutting in the summer). A non-precision approach to RW07, with intense gliding activity north of the approach, scares [the controller], especially if they end up north of track.

[The controllers] have no visibility of [glider pilots'] altitude or if they remain within the vertical confines of their delegated airspace. Again, [the controllers] trust all their members are adhering to the LoA. Trust is not a safety barrier.

[The Luton controller commented that] the report they had from the crew of [the A321] shook them. It is their responsibility to ensure they keep their traffic safe. Luton is getting busier. They did not see the glider, and they could not help the crew. This [incident] has affected them and something needs to be done to aid the safe integration of gliding traffic if they are to operate so close a busy London airport.

Factual Background

The weather at Luton Airport was recorded as follows:

METAR EGGW 271250Z AUTO 01005KT 320V120 9999 NCD 20/02 Q1023

Analysis and Investigation

CAA ATSI

ATSI has nothing to add to the NATS Safety Investigation.

NATS Safety Investigations

Executive summary:

The Luton Approach function had changed runway configurations for wind direction, recently changing to RW07 with confirmation received that gliders from the London Gliding Club at Dunstable had vacated defined RW25 airspace for gliders. [The A321] was maintaining altitude 5000ft on left-hand downwind for RW07 when they reported they had a confliction with four gliders at the same level north of their position by less than 1NM.

Description of the event:

At 1153:44, NODE radar displayed an aircraft displaying Mode A 7010 become airborne from Dunstable Downs airfield. This was assessed to be the Dunstable Downs tug aircraft (Mode A only displayed) tracking to the lateral boundaries of CTA 6 (Figure 1), with primary contacts appearing in this area, believed to be resultant gliders. A further aircraft (Europa C/S) was displayed at 1208 with Mode A (7010) and Modes C and S.

Luton airfield had initially been operating on RW07 earlier that morning prior to changing the runway configuration to RW25; maintenance was being carried out on the ILS/DME. At 1234:16, the TC Group Supervisor Airports (GS AIR) telephoned Dunstable Downs to inform them that the Luton runway configuration was changing to RW07 again and requested a call when CTA 8 and Area 2 were vacated (Figure 1). The Dunstable Duty Instructor (DDI) stated *"yes, that's what we've got at the moment, right, I'll ring you back in five minutes when I've cleared the area"*.

At 1239:57, the GS AIR was informed by the Luton Tower Supervisor of the requirement to switch to RW07. The GS AIR advised they were still waiting to hear back from Dunstable Downs regarding their activity. The Dunstable DDI had not called back, therefore the GS AIR telephoned Dunstable Downs at 1241:49 to confirm. Dunstable confirmed *"yes, I've got everybody clear now"*. The GS AIR clarified *"...so we'll go with runway seven in use at Luton"*. That was confirmed, followed by a request for *"the spin training area?"*. The GS AIR stated *"standby, let me get back to you, one moment... yes you can have the spin training as well"*. (Figure 2).

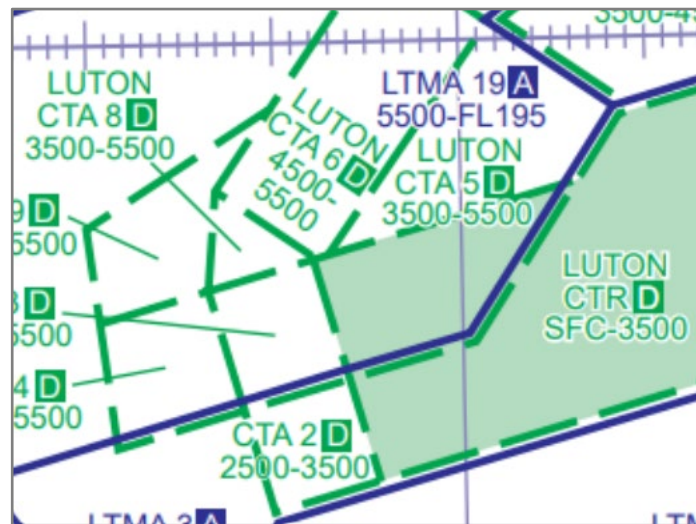


Figure 1

Gliding activity in this area would therefore be expected to up to a maximum of 4500ft as detailed in Figure 2

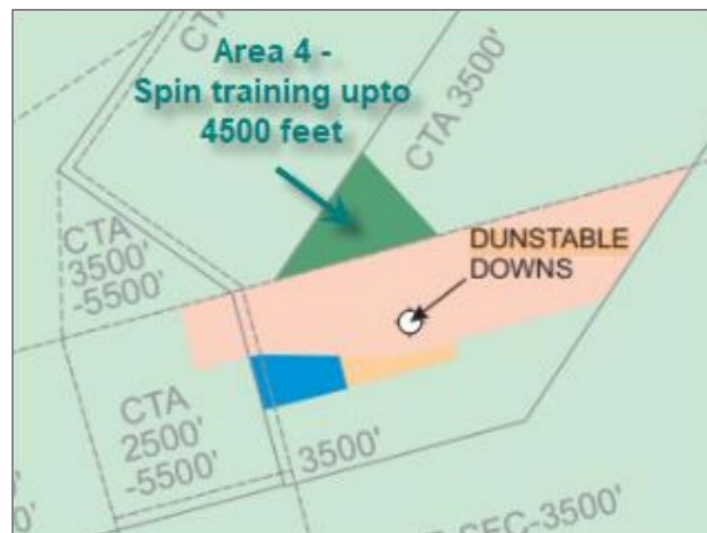


Figure 2

The Luton Approach function was split to Intermediate (GW-INT) and Final (GW-FIN) Directors prior to the RW07 change. [The A321] was the third aircraft in trail, maintaining altitude 5000ft on a left-hand downwind leg for RW07. With assistance from NATS Surveillance Asset Investigations review, it was confirmed there were four primary contacts correlating with glider activity within the vicinity of the [A321] track (Figure 3).

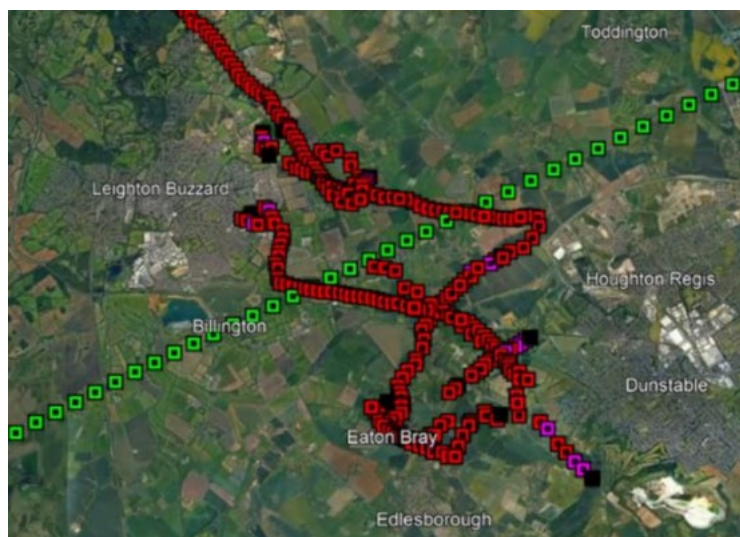


Figure 3. The green track is [the A321]. The red tracks are four primary-only contacts.

The closest primary contact to [the A321] from Surveillance Asset review (Figure 4) correlated with the only primary contact displayed on the NODE multi-track radar at the time of confliction (Figure 5).

Closest Point of Approach between [the A321] and the glider activity occurred at 1252:27 and was recorded on the NODE multi-track radar as 0.7NM [and 0ft] according to the [A321] pilot's report.



Figure 4



Figure 5

At 1253:11, [the pilot of the A321] broadcast on GW FIN frequency: “*..for your information, there is gliders at our, mayday, one mile north of our position, five thousand feet*”. This was acknowledged by the GW FIN controller, who then provided a right turn to [uninvolved C/S], the following aircraft, to ensure their downwind leg tracked further north of the primary contacts observed on radar (Figure 6).



Figure 6

The GW-FIN subsequently requested clarification from the pilot of [the A321] that the gliders were at the same level (5000ft), which the pilot confirmed. Further descent was issued on base leg with no further issues on final approach. A following aircraft inbound to Luton was also turned right.

Note: Although the pilot of [the A321] articulated the word “*mayday*”, no further pilot RT or subsequent reports indicated this was a Mayday situation.

Investigation:

Dunstable Downs gliding site is located approximately 7NM west of Luton Airport. It is located wholly within the Class D airspace of the Luton CTR and extends into the CTA. Several gliding areas were designated for the use of London Gliding Club and Dunstable Hang Gliding and Paragliding Club. Different areas are available to Dunstable gliders dependent on Luton Runway configuration and approval from Luton Approach via the TC GS Air (Figures 7 and 8).

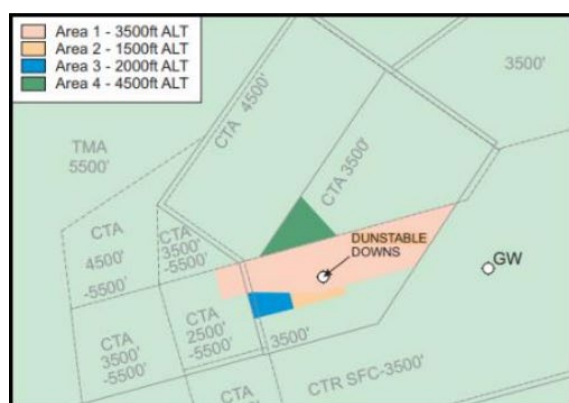


Figure 7 – RW07 areas

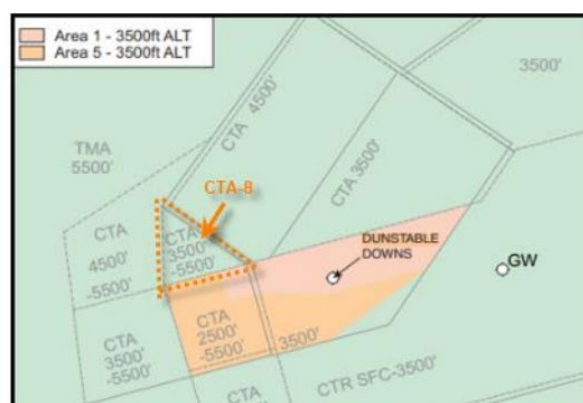


Figure 8 – RW25 areas

Note: CTA 8 is also available on request only during RW25 operations (Figure 8)

MATS Part 2 Procedures:

In order to change from RW25 to RW07 operations, as occurred in this scenario, LTC LTN MATS Part 2 10.5.8.2 stipulates:

‘If it is necessary to change from Dunstable 25 Airspace to Dunstable 07 Airspace, TC Luton shall request that the GS A notifies the DLO (also referred to as DDI) accordingly. In this event, the DLO will ensure that all gliders operating within Gliding Area 5 and CTA 8, if activated, are notified by RTF to vacate this

airspace. This will be completed within 15 minutes. The DLO will call the GS A to confirm when Gliding Area 5 and CTA 8 is vacated. TC Luton shall not vector aircraft through Gliding Area 5 or CTA 8, if activated, until positive confirmation has been received that the airspace is vacated'.

The Letter of Agreement (LoA) matched these MATS Part 2 stipulations. In this scenario, the Dunstable DDI requested use of the Area 4 Spin Training Area; LTN MATS Part 2 10.5.2.2 details:

'Radio equipped gliders operating under the auspices of the LGC may operate within Dunstable Gliding Area 4 (Spin Training Area) provided that the pilot has been suitably approved by LGC. Such pilots will ensure that the glider's radio is serviceable and will obtain prior confirmation from Dunstable Radio on 119.905MHz that Gliding Area 4 (Spin Training Area) has been activated before entering the Area'.

LoA Stipulations:

The LTC MATS Part 2 LTN 10.5.1 states:

'A letter of agreement exists between TC Luton, the London Gliding Club (LGC), the Dunstable Hang Gliding and Para Gliding Club (DHPC) and the Joint Services Adventurous Training (Gliding)/RAF Gliding and Soaring Association Chilterns Centre (JSAT(G)/RAFGSA) regarding operations at, and in the vicinity of Dunstable Downs. There are also agreed rules of operation between the LGC, DHPC and JSAT(G)/RAFGSA'

Due to the proximity of the Dunstable gliding area to the Luton Zone and approach tracks, specific procedures exist to ensure safe integrated use with the Luton Approach function.

The latest LoA (signed 01/08/2025) states:

A.2.2.2.3 Pilots flying under the auspices of DHPC must have attained, as a minimum, the BHPA Club Pilot qualification. Until a pilot has gained at least 10 hours experience post Club Pilot qualification, the pilot will only fly after having first discussed their flight plan with a DHPC Club Coach. All such flights will be confined to within the Chiltern Ridge Soaring Area.

A2.2.2.4 DHPC will ensure that all pilots carry an altimeter in accordance with the DHPC's Site Rules. The DHPC will provide pilots with the details of altimeter calibration sites including elevation information. All pilots will ensure that their altimeter is calibrated with reference to such a site before flight.

A.2.4.2 Radio equipped gliders operating under the auspices of LGC are also permitted to operate within Dunstable Gliding Area 4 (Spin Training Area) subject to the following specific conditions:

A.2.4.2.1 The pilot has been briefed and has been approved to operate within Dunstable Gliding Area 4 (Spin Training Area) by the Dunstable Chief Flying Instructor (CFI) or his nominated deputy.

A.2.4.2.2 Such a suitably approved pilot will ensure that the glider is equipped with a serviceable radio and shall obtain prior confirmation from Dunstable Radio on 119.905 MHz that Dunstable Gliding Area 4 (Spin Training Area) has been activated before entering the airspace.

A.2.4.2.3 The pilot will maintain a listening watch on 119.905 MHz at all times when within this airspace

The Event:

The Luton Airfield ILS had required maintenance resulting in the DME taken out of service. As a result, Surveillance Radar Approaches (SRA) and/or visual approaches were required for arriving IFR aircraft.

At 0932:27, The Dunstable Duty Instructor (DDI) requested use of their airspace. As Luton was on RW07, with SRA approaches, this was denied *"on safety grounds, we are about to lose the ILS"*. The GS AIR requested the DDI call back at 1130 to make the request again. The Dunstable DDI questioned this decision, stating they would *"need to raise that further as this doesn't usually happen"* and the call was ended.

The CA4114 from the GW-FIN stated 'I told the GS to say no on the grounds of safety and that we would give them the airspace as soon as we could. Due to the volume of traffic due to arrive, the RT coverage to the northwest and workload/complexity of an SRA and RW07. Myself and the other Luton controllers all agreed this was the safest and best course of action'.

The Dunstable DDI (a different voice) subsequently called the GS AIR at 1013:59 to request a *"couple of aircraft just using the Chiltern Ridge soaring area and not going into any other airspace"*. Following GS AIR consultation with the in-situ Luton Approach controller, this was agreed at 1021:18 not above 1000ft. The GS AIR telephoned the Dunstable DDI at 1115:47 to inform they were now permitted to use the RW07 airspace and spin training area. It was highlighted this may change due to further ILS outage. The GS AIR subsequently called the Dunstable DDI again at 1120:13 to inform that Luton TWR had a requirement to change to RW25. It was confirmed all aircraft were already clear of the spin training area and there was nothing to affect a change to RW25. This was co-ordinated at 1138:00.

At 1234:16, the GS AIR telephoned Dunstable Downs to inform that the Luton Runway configuration was changing to RW07 again and requested a telephone call when CTA 8 and Area 2 were vacated (Figure 1). The Dunstable DDI stated *"yes, that's what we've got at the moment, right I'll ring you back in five minutes when I've cleared the area"*. At 1239:57, the TC Group Supervisor Airports (GS AIR) was informed by Luton Tower Supervisor of the requirement to switch to RW07. The GS AIR advised they were still waiting to hear back from Dunstable Downs regarding their activity. The Dunstable Downs DDI had not called back, therefore the GS AIR telephoned Dunstable Downs at 1241:49 to confirm. Dunstable confirmed *"yes, I've got everybody clear now"*. The GS AIR clarified *".. so we'll go with runway seven in use at Luton"*. That was confirmed, followed by a request for *"the spin training area?"*. The GS AIR stated *"standby, let me get back to you, one moment ... yes you can have the spin training as well"*.

In interview, the GW-FIN explained they had just returned to split the FIN position from the combined Approach configuration with RW25 in operation. [The pilot of an uninvolved A321(A)] had performed a missed approach and was positioned as the first aircraft to change onto RW07, with [the pilot of an uninvolved A321(B)] and then [the pilot of the Airprox A321] following.

[The Airprox A321] was positioned downwind on the same track as [the previous two A321's] ahead. Primary contacts were visible on radar tracking towards the southeast of Leighton Buzzard (Figure 9). In interview, the GW-FIN explained that this was a common occurrence, and these were often mentally filtered out as these were assumed to be operating within the vertical limitations of Dunstable gliding areas in accordance with the LoA.

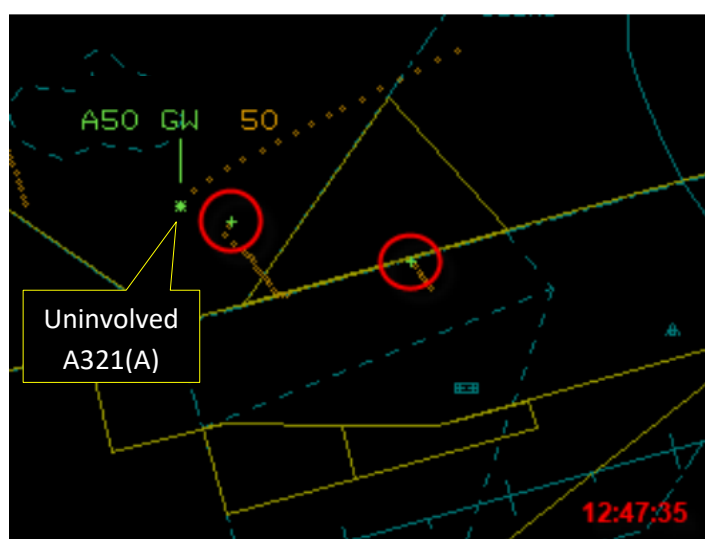


Figure 9

The pilot of [the A321] subsequently reported at 1253:11; *"... for your information, there is gliders at our, mayday, about four, one mile north of our position, five thousand feet"*.

In interview, the GW-FIN stated they had perceived the gliders were within the lateral boundaries of CTA 8 due to the position of [the A321] at the time (Figure 5). Assistance from NATS Surveillance Asset investigation ascertained the confliction had occurred within CTA 6 at approximately 1252:27 (Figure 4). Due to the primary only nature of the only track displaying on NODE, the time of [perceived] infringement could not be ascertained. Based on [the A321 pilot's] feedback, and Surveillance Asset radar analysis, it was established that separation minima was [believed to have been] eroded between [the A321] and all four gliders who [were believed to have] infringed controlled airspace. The closest confliction occurred at 1252:27 and was recorded on the NODE multi-track radar as 0.7NM and 0ft (altitude according to the [A321 pilot's] report) where 3NM or 3000ft separation was required (in line with unknown aircraft).

At 1254:02, the GS Air called the Dunstable DDI to highlight; *"we've just had a pilot report of a glider up at five thousand feet, quite close to where they were flying by, they were inbound to zero seven, don't know if you're able to get a message out to be careful about the altitude, the levels there?"*. The DDI responded: *"uhh [unintelligible] (background voice) [glider c/s] can you hold a minute I've got LATCC [TC Swanwick] on the phone again ... where was this glider?"*. The GS AIR clarified; *"just north of Leighton Buzzard"*. The DDI responded; *"I've got one at Bletchley, just south of Bletchley [northwest of Leighton Buzzard] .. he's above sea level height is currently four two [altitude 4200ft]"*. The GS Air requested clarification that was the only glider in the area. At 1256:17, the DDI stated: *"Got nobody north of Leighton Buzzard at anything near five thousand foot"*.



Figure 10

The information passed to the Dunstable DDI that the conflicting glider was 'north' of Leighton Buzzard was inaccurate due to the perception of where the pilot reported the conflict, with the confliction occurring to the east of Leighton Buzzard. At the time of that call, NODE radar displayed two primary contacts tracking southeast away from the Leighton Buzzard area toward the Area 4 Spin training (Figure 2), crossing the previous [A321] track (Figure 10).

Pilot of [the Airprox A321]:

The pilot of [the A321], at the request of the TC Operations Supervisor, telephoned Luton TWR to provide further information immediately after the event. This phone call stated: *"We were downwind, five thousand feet, [the glider] was exactly the same altitude, probably less than a mile I'd say, just doing circles, and there was at least three more within half a mile of him, all at the same altitude, most definitely in controlled airspace. I can even tell you [the pilot] was wearing an orange hat. Not obviously ideal, but that's about it. But it definitely wasn't the Dunstable ones, it was another site because they were off to the right when we were downwind, just before we turned base basically"*.

[UKAB Secretariat note: The pilot of the ASK21 confirmed that they had been wearing an orange hat during the flight in question].

Note: The pilot perception of 'definitely wasn't the Dunstable ones' was based on gliders operating outside the designated Dunstable gliding areas.

NATS Safety Investigations subsequently received a feedback request from [the operator of the A321] regarding this event. The pilot narrative stated: 'At around 15 miles on the DME to I-LTN we very narrowly missed a glider that was no more than a mile laterally away and same level. This glider was significantly north of the Dunstable gliding site and so were the other three gliders. This traffic was non-transponding so we got no TCAS feedback at all. I looked out the right window and could see at least 3 more gliders in very close proximity. It was that close I could even see the colour of the pilot's hat'. The pilot report estimated that separation 'was a maximum of 1NM lateral and 0ft vertical separation'.

Conclusion:

The Luton Approach function was operating at times with SRA and/or visual approaches due to ILS/DME maintenance. This had resulted in an initial refusal of Dunstable Gliding Area activation, with subsequent activation of co-ordinated areas. Due to changes in the wind direction, Luton runway configuration was alternated on a number of occasions. Prior to the scenario occurring, RW25 was active with Dunstable Areas 1 and 5 and CTA 8 active. A change to RW07 required area 5 and CTA 8 to be vacated by Dunstable gliders. Areas 1 to 4 inclusive of the Spin training area were activated in accordance with RW07 Dunstable procedures. The Approach function was split with Intermediate and Final Directors due to imminent workload. Confirmation from Dunstable Downs that gliders had vacated the relevant airspace was received and RW07 approaches commenced. [The Airprox A321] was the third aircraft to be positioned for RW07. On downwind approach, maintaining 5000ft, the pilot reported; *"there is gliders at our, mayday, about four, one mile north of our position, five thousand feet."* This was acknowledged by the GW-FIN controller with the 5000ft altitude of the gliders confirmed. The base of CTA 6, where the confliction took place, was 4500ft, therefore [it was perceived that] an infringement of controlled airspace occurred. Intermittent primary radar contacts indicated the closest lateral separation resulted in a loss of separation minima, with Radar Surveillance Asset review displaying four primary tracks in the vicinity of [the A321] correlating with the pilot report of four gliders. Altitudes of these primary tracks could not be accurately determined by radar data. The GW-FIN and GW-INT controllers vectored subsequent Luton inbounds north of the reported confliction area to mitigate. The GS-AIR highlighted the pilot report to the Dunstable DDI to mitigate any further potential infringements.

London Gliding Club Safety Report

Executive summary:

[The following] is the result of a safety investigation conducted by the London Gliding Club (LGC) following a reported Airprox involving one of its aircraft on 27th April 2026. It concludes:

- The aircraft seen by the reporting pilot was almost certainly [the] Schleicher ASK21 training glider.
- Contrary to the claim made by the reporting pilot, [the ASK21] was, at the reported time, at 4180ft AMSL, well inside Class G airspace and well clear of the Class D airspace being used by the [pilot of the] reporting aircraft.
- Although there were numerous changes to the airspace made available to the London Gliding Club in the run-up to the notification time, none of these were relevant to the incident: [the ASK21] was not infringing controlled airspace and was in unrestricted Class G airspace and not in airspace that is, from time to time, made available to the club under the Letter of Agreement between the club, NATS and other airspace users.
- Normal procedures and safety standards applied. There was no risk of collision and no degradation of safety.

The Event:

On 27th April 2026, an Airprox was reported by the flight crew of an Airbus A321 inbound to London Luton Airport (EGGW). LGC was formally notified of this incident on the morning of 28th April 2026 via correspondence from [the operator of the A321]. This followed operational enquiries by telephone on 27th April 2026 to confirm the position of LGC gliders following the report.

The initial notification from [the operator of the A321] advised that one of their flight crews reported a loss of separation between their aircraft and three gliders while being vectored for an approach to RW07. The initial report claimed the incident occurred “*at around 1300*” while the aircraft was level at 5000ft QNH downwind, with the crew estimating vertical separation at 0ft and lateral separation at less than 1NM.

Following an enquiry from the LGC Airspace Officer to clarify the aircraft involved, [the operator of the A321] confirmed the flight as [A321 C/S], operated by [A321 registration]. On further internal review of their flight data, the operator revised the timestamp of the encounter from the initial “*around 1300Z*” estimate to 1252Z.

Initial Analysis:

At around 1300, LGC had received a call from LLTC saying they had received a report of a glider at about 5000ft. The duty instructor checked the Open Glider Network terminal at the launch point. They confirmed that they could not see that any LGC gliders were at that height and reported that the controller seemed to accept this. There was no further conversation and no mention of an Airprox. Following the contact from [the operator of the A321], LGC then conducted a comprehensive data review. Secure flight recorder files were obtained from the devices that were fitted to all gliders that had launched from Dunstable that morning and were known to be airborne at 1252Z, including those on cross-country flights. This dataset was then analysed and only three gliders were found to be in the incident area around 1252Z. LGC provided NATS with a visual mapping snapshot detailing the exact location of each airborne LGC glider in the vicinity at the time of the reported encounter.

Through [proprietary] software, which is widely used for flight recorder analysis, [LGC] established the following:

- Identification: The analysis identified [the ASK21] as the glider in closest proximity to the Airbus A321 at 1252Z.
- Other gliders: The two other LGC-launched aircraft which were airborne in the vicinity at the time were both well below the level of [the ASK21] and are considered unlikely to be relevant though they may have been seen by the reporting pilot.
- Glider Altitude: The initial analysis placed [the ASK21] at an altitude of 4163ft QNH. This figure was derived by reference to take-off at the published airfield elevation of 500ft, rather than adjusting for QNH.
- Airliner Altitude: The [A321] was logged at 4725 ft (Standard Pressure Setting/QNE) using data from the FlightRadar24 application. This appeared consistent with the reported altitude of 5000ft QNH.
- Conclusion: This initial analysis demonstrated that [the ASK21] was not infringing airspace and was operating within Class G airspace, positioned well below the 4500ft AMSL base of the Luton CTA 6.

In corroboration of the identification above, the pilot of [the ASK21] confirmed that they were wearing an orange hat - as LGC had been informed the Airbus pilot had reported.

The horizontal distance between the aircraft at CPA was 0.81NM, corresponding closely in this case to the Airbus pilot report.

LGC checked with the pilots of the three gliders known to be in the vicinity and none had any recollection of non-LGC based gliders in the area. Because this specific location is utilised for soaring training, LGC pilots maintain a high degree of visual vigilance, actively tracking other gliders to identify thermal activity. Any visiting aircraft would have been readily identified. Additionally, the presence of a non-LGC glider in this sector is highly improbable; visiting cross-country pilots actively avoid routing beneath this low airspace ceiling, as the restricted vertical clearance prevents them from utilising the full altitude of the available thermals.

Follow up meetings and correspondence:

On 1st May 2026, NATS contacted the LGC Chair and referred to the 'serious' incident and requested that a meeting, already planned for 12th May, be brought forward to 5th May and held at Dunstable. The original 12th May meeting at Swanwick was kept in the diary.

- Initial Meeting (5th May 2026): In a meeting at Dunstable, NATS presented an initial risk assessment for the encounter, yielding a score of 16.5, which it categorized as 'Category C'. LGC presented its secure flight recorder analysis, which demonstrated that no LGC glider infringed controlled airspace. The initial analysis and full data set, together with a graphical representation, was provided to NATS via e-mail on 7th May.
- Follow-up Meeting (12th May 2026, Swanwick): NATS replayed the radar trace and audio from the event. The radar tracks were consistent with LGC's secure flight recorder information. As expected, the radar provided only primary targets lacking vertical height information because the gliders were not transponder-equipped. When queried as to whether NATS had used the verified secure flight recorder information provided by LGC to verify the glider's altitude, NATS stated they lacked the necessary software to do so and elected to defer that analysis to the UK Airprox Board.
- [Operator of the A321] correspondence: LGC formally shared the findings of this investigation with [the operator of the A321] on 27th May 2026, inviting a collaborative review. [The operator of the A321] acknowledged receipt but declined further discussion, noting they would await the UK Airprox Board's findings and deferring to NATS as the primary authority on the event's circumstances.

[LGC] must stress that information from the secure flight recorder was provided to NATS immediately after the 5th May meeting so that they could factor it into their own safety investigation.

Further Analysis:

As well as the flight recorder used in the initial analysis, [the ASK21] was additionally carrying both:

- A mobile phone running a commercial flight recorder app, logging data from the phone's consumer-grade pressure sensor and GNSS receiver, and;
- a specialist calibrated device (an Oudie N IGC) designed to assist glider navigation and provide a cryptographically secure record of the flight.

The uncalibrated phone software recorded an altitude of 4200ft QNH. This provides a cross-check on the other results.

The Oudie N IGC is certified to FAI (World Airsports Federation) standards for accuracy and security to provide altitude and position data to support claims for international and national records. Full details of the validation of the integrity of the file and the calculation of altitude AMSL from the

recorded pressure altitude are contained in a separate report which has been provided to the UK Airprox Board.

The approved, calibrated secure flight recorder in the Oudie N IGC recorded an altitude of 4180ft QNH. This is what the altimeter in [the ASK21] would have read if set to the Luton QNH of 1023hPa.

The analysis of the calibrated, secure flight recorder data from the Oudie N IGC confirms that [the ASK21] was not infringing and was in Class G airspace, 320ft below the base of Luton CTA-6. The data underlying this analysis is tamperproof because of its cryptographic security and no plausible challenge can be made to its validity.

Conclusion:

All LGC-based gliders in the vicinity of [the A321] at the reported time have been accounted for. Their secure flight recorders each show that none came into proximity with [the A321], and none were infringing controlled airspace. There is no evidence of any other, non-LGC-based glider being in the area at the relevant time. The LGC-based glider closest to [the A321], identifiable from the [A321] pilot's statement, was 0.81NM horizontally and 820ft vertically separated from [A321] at CPA. Normal safety standards and parameters applied throughout. There was no infringement of controlled airspace, no risk of collision and no degradation of safety.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the A321 could be positively identified from Mode S data. The A321 was depicted on the replay with an altitude based on a QNH of 1023hPa. GPS track data from the flights of the three gliders shown in Figure 12 was kindly supplied by a representative from the club at which the gliders are based. The (QNH) altitudes of the three gliders have been calculated by converting the recorded (SPS) altitudes and cross-checked against an independent data source (CAA Airspace Analyser Tool).

The diagram was constructed and the separation at CPA determined by combining the data sources.

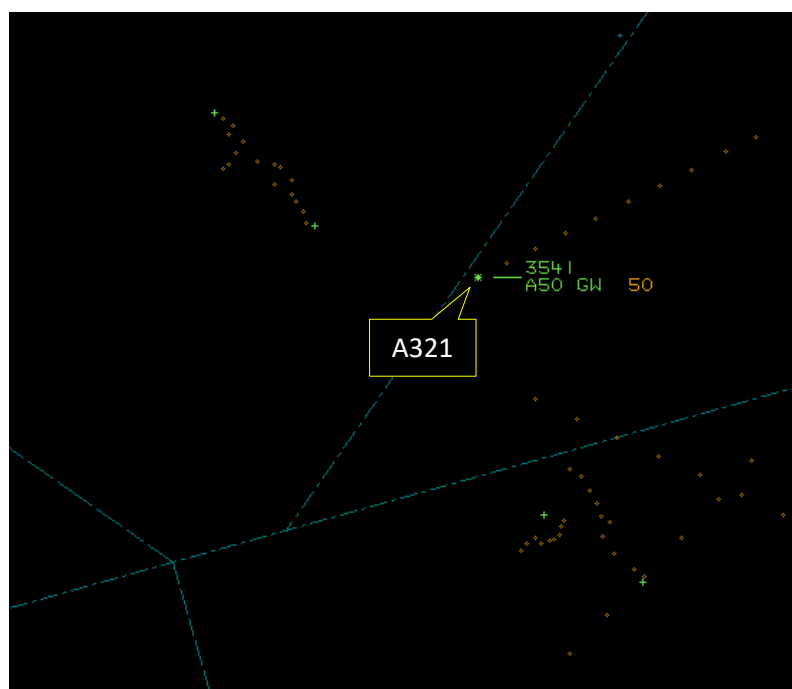


Figure 11 - Aircraft positions at 1252:18, 8sec before CPA (NATS radar data).



Figure 12 – Aircraft positions at the moment of CPA (FLARM, MLAT and ADS-B data).

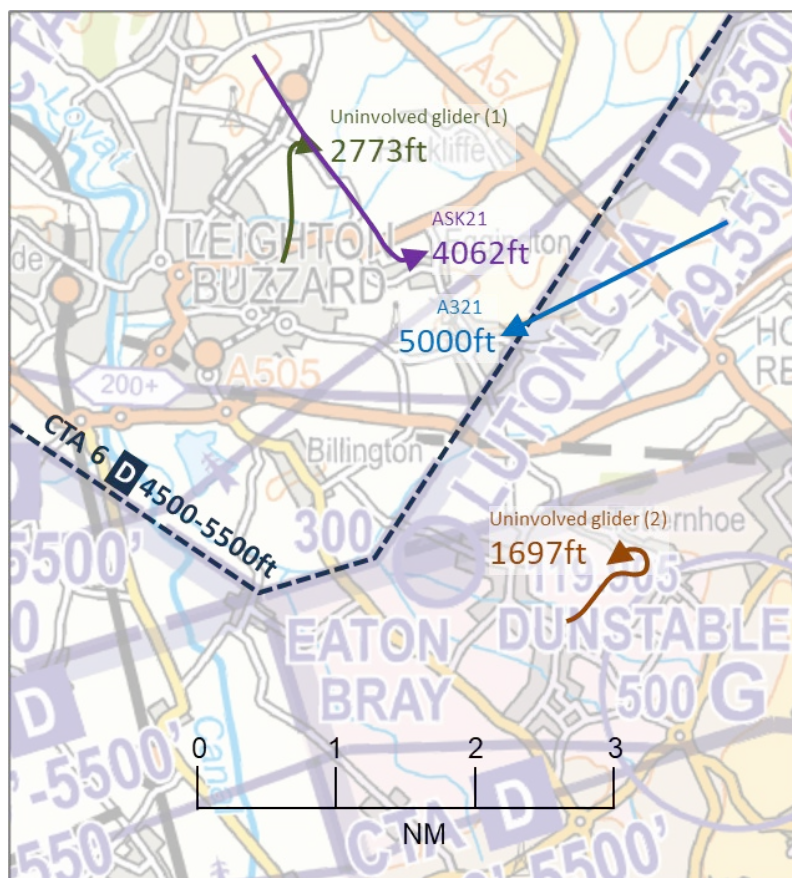


Figure 13 - The arrowheads represent the aircraft positions at the moment of CPA.

The A321 and ASK21 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.¹

Comments

BGA

There is no objective evidence of any deviation from normal safety standards and operating parameters during this incident. The glider pilot observed normal procedures and maintained a safe and appropriate separation from the nearby controlled airspace where the Airbus was operating.

The comprehensive analysis of secure flight recorder information by the London Gliding Club (LGC) shows without reservation that the ASK21 with its orange-hatted pilot was at 4180ft QNH in unrestricted Class G airspace and about 820ft below the Airbus. Consequently, much of the discussion in the NATS safety report which references the Letter of Agreement between LGC, other local airspace users, and NATS is inapplicable. The glider was not in the Class D airspace that is, from time to time, delegated to LGC. Additionally, the NATS [investigation] report makes no mention of the independent, objective and secure data provided to it, showing the alleged infringement had, by a large margin, simply not happened.

The Pilot In Command of the glider did not see the Airbus and neither did their student. The student will soon undertake their Skills Test for a Sailplane Pilot's Licence and was being assessed across all skills, including lookout. The Airbus pilot reports intermittent IMC and was at or around cloudbase at CPA, which may account for the non-sighting.

If the glider had been able to receive the ADS-B transmissions from the Airbus, the glider pilots might have had the cues to spot the Airbus in breaks between clouds. However, the presence of the Airbus would not have caused them any concern, [it] being inside Class D airspace.

Pilots of LGC-based gliders do not routinely call Luton controllers for a service when soaring in the local area. It is understood that such calls on a mass basis would be unwelcome. In fact, the Letter of Agreement requires most gliders flying locally to monitor the Dunstable Downs airfield frequency so that they can respond expeditiously to airspace changes required by Luton.

If the Luton Approach controller had been able to see the glider's GNSS derived transmissions using the almost universally fitted SRD860-based glider electronic conspicuity system (either direct or via the numerous remote, networked receivers), it would have been able to dismiss the pilot report as erroneous and avoid some inconvenience to Luton inbound traffic.

Summary

An Airprox was reported when an A321 and an ASK21 flew into proximity 2NM east of Leighton Buzzard at 1252Z on Monday 27th April 2026. The A321 pilot was operating under IFR in intermittent IMC in receipt of a Radar Control Service from Luton FIN Director. The ASK21 pilot was operating under VFR in VMC, not in receipt of a FIS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, GPS track data with barometric altitude from the flight of the ASK21, radar photographs/video recordings, a report from the air traffic controller involved and reports from the appropriate operating authorities. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

The Board first considered the actions of the pilot of the A321, and members noted that they had reported that they had sighted a glider on their right-hand side, at approximately the same level, and

¹ (UK) SERA.3205 Proximity.

within 1NM laterally. Members agreed that they had not had situational awareness of the ASK21 until it had been visually acquired (**CF2**). It was noted that the A321 pilot had transmitted their call 45sec after CPA, by which time they had transited from CTA 6 into CTA 8. Members pondered the wording of their message: “*..there is gliders at our, mayday, one mile north of our position, five thousand feet*”. Members noted that subsequent radio transmissions did not suggest that it had been a Mayday scenario. One member wondered whether the word ‘Mayday’ could have actually been the word ‘maybe’ which may have been mis-heard during transcription.

Members noted that the A321 pilot had recalled an unusual distinguishing feature during their sighting of the (closest) glider that they had witnessed, the pilot’s orange hat, and members were satisfied that the correct glider had been identified for their analysis of the encounter. From the GPS data provided by the pilot of the ASK21, which correlated with the primary-only radar returns observed on the NATS radar replay, it was ascertained that the ASK21 had been 0.8NM horizontally from the A321. The vertical separation was determined to have been approximately 950ft. Consequently, members calculated that the ASK21 had been sighted when it had been around 11° below the A321. The A321 pilot’s perception that the glider had been at “*approximately the same level*” could not be readily explained, other than to highlight that, if there had not been a discernible horizon, a declination of 11° may have been difficult to recognise.

The Board next turned its attention to the actions of the pilot of the ASK21, and members agreed that they had not had situational awareness of the A321 (**CF2**) and had not sighted it at any stage during the encounter. Indicating that there had been little more to consider, members next turned their attention to the actions of the Luton controller. Members noted that, following a change to the direction of the active runway, the Airprox A321 had been positioned downwind on the same track as two previous airliners ahead of it. Members noted that primary-only contacts had been visible on the controller’s radar display. However, members noted that the controller had described that these had been “*mentally filtered out as these were assumed to be operating within the vertical limitations of Dunstable gliding areas*”. It was appreciated by members that the controller had been somewhat startled when the A321 pilot had transmitted that they had sighted a glider at “*five thousand feet*”. Members agreed that the controller had had generic situational awareness of the presence of gliders and, as a consequence of their assimilation of the information provided by the pilot of the A321, had constructed an incorrect mental model of the traffic in the area (**CF1**). Members commended the actions of the controller, and their colleagues, in reacting swiftly to the new information to ensure the safe passage of several airliners, in trail of the A321, through the area. Members remarked on the particularly complicated airspace structure and the extensive considerations provided in the Letter of Agreement between TC Luton and the London Gliding Club (and other parties). However, it was acknowledged that the encounter had taken place outside the areas described in the LoA.

Concluding the discussion, members summarised their thoughts. It was agreed that neither pilot would have expected the electronic warning systems fitted to their respective aircraft to have alerted them to the presence of the other aircraft. Similarly, members were in agreement that the principle of see-and-avoid had not been applicable in this scenario. It was noted that the A321 pilot had perceived that the ASK21 had been at approximately 5000ft and within 1NM horizontally of their position, and that that had placed the glider within Class D controlled airspace. From analysis of the cryptographically secure pressure-based instruments carried in the ASK21, in addition to the GPS track data and information from the NATS radar replay, it was determined that the ASK21 pilot had not flown inside the bounds of Luton CTA 6.

Ultimately, it was agreed that, although the A321 pilot had been concerned by their perceived proximity of the ASK21 (**CF3**), members were satisfied that normal safety margins had pertained. The Board determined that there had not been a risk of collision and assigned Risk Category E to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2026059			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification

Ground Elements				
• Situational Awareness and Action				
1	Contextual	• Traffic Management Information Action	An event involving traffic management information actions	The ground element had only generic, late, no or inaccurate Situational Awareness
Flight Elements				
• Situational Awareness of the Conflicting Aircraft and Action				
2	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness
• See and Avoid				
3	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft

Degree of Risk: E.

Safety Barrier Assessment²

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

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had situational awareness of the presence of the other aircraft.

Electronic Warning System Operation and Compliance were assessed as **not used** because neither pilot would have expected to have received an alert from the EC device fitted to their aircraft.

See and Avoid were assessed as **not used** because neither pilot would have been expected to have applied the principles of see-and-avoid in this encounter.

Airprox Barrier Assessment: 2026059		Within Controlled Airspace				
		Barrier	Provision	Application	Effectiveness Barrier Weighting	
					0%	20%
Ground Element		Regulations, Processes, Procedures and Compliance	✓	✓	100%	
		Manning & Equipment	✓	✓	15%	
		Situational Awareness of the Conflication & Action	⚠	✓	15%	
		Electronic Warning System Operation and Compliance	⊖	⊖	10%	
Flight Element		Regulations, Processes, Procedures and Compliance	✓	✓	5%	
		Tactical Planning and Execution	✓	✓	5%	
		Situational Awareness of the Conflicting Aircraft & Action	✗	✓	10%	
		Electronic Warning System Operation and Compliance	⚠	⊖	15%	
		See & Avoid	⚠	⊖	5%	
Key:		Full	Partial	None	Not Present/Not Assessable	Not Used
Provision		✓	⚠	✗	⊖	
Application		✓	⚠	✗	⊖	⊖
Effectiveness		■	■	■	■	■

² The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).