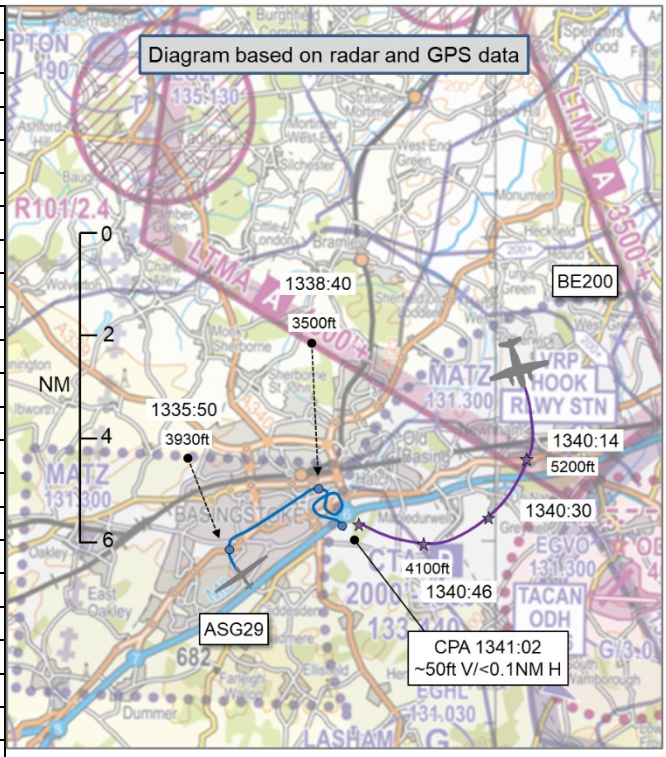
AIRPROX REPORT No 2025086

Date: 17 May 2025 Time: 1341Z Position: 5115N 00103W Location: Basingstoke

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASG29	BE200
Operator	Civ Gld	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	IFR
Service	Listening Out	Traffic
Provider	Lasham	Farnboro' Radar
Altitude/FL	~3685ft	~3635ft
Transponder	None	A, C, S
Reported		
Colours	White	White
Lighting	None	NR
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2500ft	2500ft
Altimeter	QFE	QNH
Heading	*'turning'*	*'turning'*
Speed	50kt	200kt
ACAS/TAS	FLARM	Not fitted
Alert	None	N/A
Separation at CPA		
Reported	0ft V/60m H	1000ft V/1NM H
Recorded	~50ft V/<0.1NM H	



THE ASG29 PILOT reports that they had been thermalling in a tight left turn. They completed a few circles and, as they came around and looked down towards Odiham, they had seen a small jet aircraft [they thought] quickly approaching from below. [They report that they had] rolled hard right, but were so close they only just got a little beyond wings level before [the 2 aircraft] passed. The ASG29 pilot believes that the jet had its right wing down aiding the separation.

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

THE BE200 PILOT reports that they had been radar-vectored from London to Farnborough with a late handover on frequency, glider activity noted and informed of by Farnborough. In the turn, which had been almost 360° change of heading, onto final for [destination airfield] whilst still under Farnborough control, a glider was sighted but [deemed] no real threat as it had been higher than them and in a (left hand) turn and [had] changed course by turning to the right. [The BE200 pilot's estimated separation had been] approximately 1NM [horizontal] distance and [toward their] 11 o'clock high from the Aircraft Commander's position in the BE200. The pilot did not deem the glider to be a threat as their BE200 had been in a turn onto final and then handed over to […] for landing.

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

THE FARNBOROUGH RADAR CONTROLLER reports that they have no recollection of this event. They do not believe the pilot had called an Airprox over the RT, or [the controller believes that] they would have filed a report.

Factual Background

The weather at Odiham Airfield was recorded as follows:

METAR EGVO 171320Z AUTO 34007KT 9999 NCD 17/06 Q1022=

Analysis and Investigation

NATS Safety Investigation

The BE200 had been an IFR arrival into […] under a Radar Control Service, following the Farnborough CPT1V STAR.

At 1333:30, the TC SW Departures controller instructed the pilot of the BE200 to route direct GOBNU, with a further subsequent instruction to descend to altitude 5000ft to be level by DIXIB as per the STAR. The BE200 pilot was instructed to contact Farnborough Approach frequency at 1339:03. The pilot contacted the Farnborough Approach frequency at 1339:16. The controller responded by issuing "*turn right, right, with a good rate, heading two seven zero degrees … that's for a visual approach, runway zero seven at […]*". The controller then advised "*just avoiding the Odiham gliders, if you take the right turn and descend to altitude 4000ft*". Note: An IFR Visual approach into […] requires the aircraft to be positioned outside Controlled Airspace.

At 1340:14, the pilot was informed that they had been "*leaving Controlled Airspace, Traffic Service, continue your right turn heading zero two zero degrees*." This was acknowledged by the pilot, with further descent to altitude 3000ft instructed. The LF-APP controller advised the BE200 [pilot], at 1340:41, "*pop up contact, southwest of you by two and a half miles, slow moving, believed to be a glider*". The pilot reported visual. Further descent to 2400ft was issued at 1340:56. The closest point of approach between the BE200 and a primary target, potentially the ASG29, had occurred at 1341:04 and was displayed on the Heathrow 10 radar as 0.09NM laterally, with vertical separation not determined. The primary radar target could not be identified as the ASG29, however the location correlated with the UKAB notification. A confliction was not reported on the frequency.

The NATS4118 stated that easterly operations had been in use at Farnborough and Farnborough Group airfields. The Approach function was split from West and Zone with the co-ordinator position closed. Traffic levels were light with the BE200 being the only aircraft on the Approach frequency. The NATS4118 further stated the 'Farnborough Eye was active up to altitude 4000ft in LF CTA2 and LF CTA3 due to EGVO [Odiham] gliding', requiring IFR aircraft to transit above that portion of airspace at 5000ft or higher. Several intermittent primary contacts were operating in the vicinity of Lasham gliding site. The BE200 was operating under IFR on a CPT1V STAR for a standard visual approach into […] as stipulated in the UKAIP. This procedure has an expectation for the aircraft to vacate Controlled Airspace in order to facilitate an expected 4NM final to ensure separation against potential VFR traffic within the […] circuit.

Farnborough MATS Part 2 APR 3.6.1:

> Farnborough Radar shall vector traffic for a visual approach to […], leaving controlled airspace at a suitable time, with an appropriate UK FIS being provided until transfer of frequency to […] Information. Descent within the Farnborough CTR will be to a level compliant with the Farnborough ATSMAC, and further descent will only be possible if the pilot is outside controlled airspace (with suitable terrain warning and service provision) or operating with visual reference to the ground and cleared for a visual approach, subject to MATS Part 1 restrictions on Visual Approach availability.'

Farnborough MATS Part 2 APR 4.2.4.4 stated:

> Arriving flights are required, by means of the […] UK AIP flight procedures section, to expect to arrive on a suitable Farnborough STAR, and will be positioned either within or outside controlled airspace to obtain visual reference to the ground to complete a visual approach into […].'

The […] airport website provided further information to pilots of IFR arrivals. The BE200 pilot, and the LF-APP controller complied with all required procedures for this scenario. The LF-APP controller requested the pilot of BE200 to enact a "*turn right, right, with a good rate, heading two seven zero degrees*". This good rate turn was to ensure greater distance from Lasham gliding activity to the south. Information was then provided regarding "*just avoiding the Odiham gliders*".

Farnborough Radar displayed multiple intermittent radar returns that correlated with potential glider activity. The intermittent nature of the radar contacts precluded any significant Traffic Information to be passed, however specific Traffic Information was passed at 1340:41, "*pop up contact, southwest of you by two and a half miles, slow moving, believed to be a glider*." The pilot reported visual. The NATS4118 stated: '*given the number of intermittent contacts in the area, it is not possible to establish which contact the pilot had been visual with and whether the contacts were real or spurious*.' The pilot of the BE200 did not report a confliction on the RT.

Due to the disparity of the event recollection between the two pilot reports, and that NATS radar data could not establish the veracity of the conflict data, NATS Safety Investigations could not accurately determine the distance between the two aircraft.

Conclusion

The BE200 was positioned by the Farnborough Controller for a standard procedure of a visual approach into […]. This would require the BE200 to vacate controlled airspace in the descent. Multiple primary tracks were visible in the vicinity of Lasham and Odiham, perceived to be glider activity. The LF-APP controller passed Traffic Information on a pop-up primary contact on the track of the BE200, with the pilot reporting visual with the traffic. It could not be determined if this traffic was the ASG29, that the Traffic Information was passed on, or that the pilot of the BE200 was visual with. The two aircraft subsequently came into confliction, with the ASG29 pilot reporting that they had been required to enact an avoidance manoeuvre.

CAA ATSI

ATSI has reviewed all the reports and has nothing to add to the NATS investigation report.

UKAB Secretariat

The BE200 was tracked by radar and identified through Mode S data. The ASG29 did not show on radar or via ADS-B tracking tools but was identified and tracked using its EC equipment. The diagram at page 1 is constructed using a combination of radar and GPS files with the altitudes corrected to allow direct comparison.

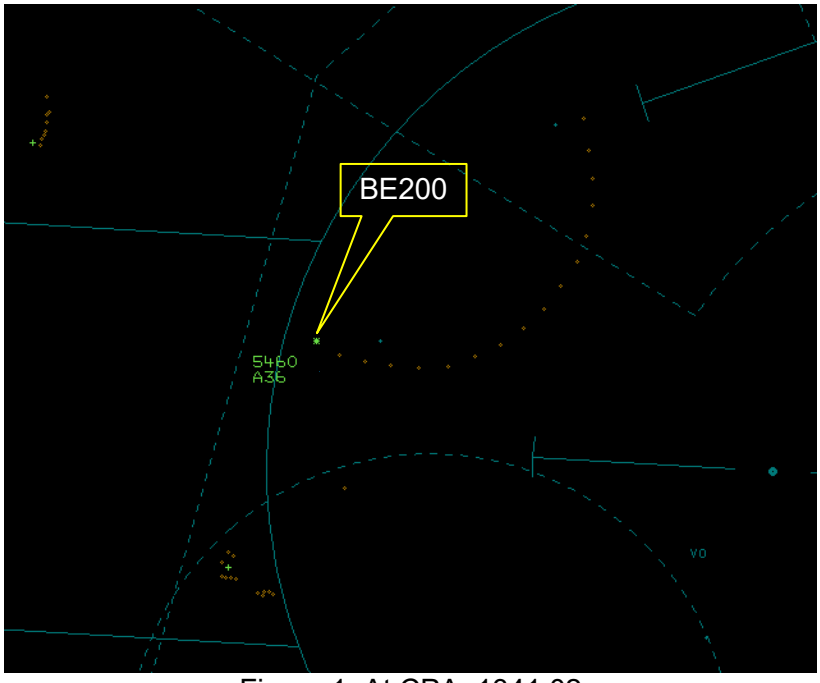


Figure 1: At CPA: 1341:02

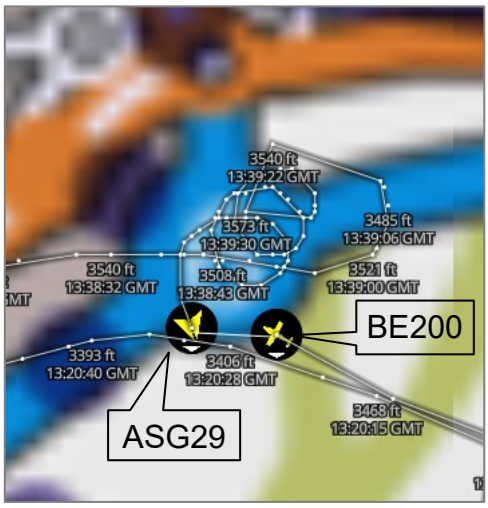


Figure 2: Airspace Analyser Tool - At 1341:00

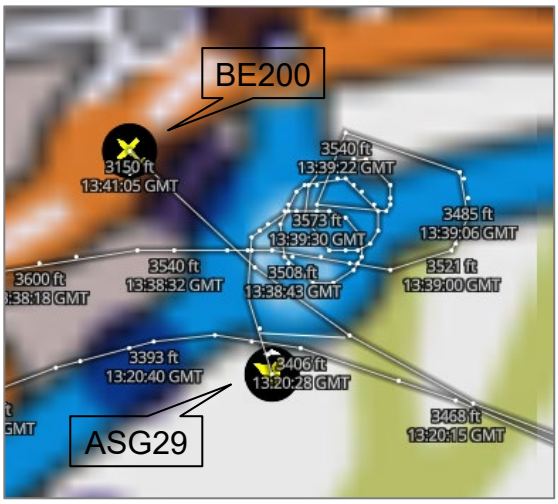


Figure 3: Airspace Analyser Tool - At 1341:05

The ASG29 and BE200 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] If the incident geometry is considered as converging then the BE200 pilot was required to give way to the ASG29.[2]

Comments

BGA

The location of this incident is approximately equidistant from RAF Odiham (4.6NM ESE) and Lasham gliding site (4.3NM SSE). At weekends, bank holidays and some weekday evenings, RAF Odiham is used by Kestrel RAFGSA Gliding Club, which operates a number of club and privately owned gliders. Lasham gliding site is home to one of the largest gliding clubs in the world, operating seven days a week, with more than 220 club and privately-owned gliders based there.

A thermalling glider will have a bank angle of 35° or more, typically completing each 360° turn in 20-25 seconds. During this time an aircraft approaching at 200kt would cover 1.1-1.4NM. The pilot of a thermalling glider must look for aircraft approaching from every direction; although continuous turning facilitates 360° lookout, it also leaves the pilot unsighted in any specific direction for about half the time.

From the point of view of the pilot of the approaching BE200, the thermalling glider would have been alternately head-on and tail-on in the course of every 360° turn, at which points it would be very difficult to see at a distance; but it would also have been more-or-less planform twice every turn, when its 18m wingspan and white surface finish would have made it much more apparent.

Summary

An Airprox was reported when an ASG29 and a BE200 flew into proximity at Basingstoke at 1341Z on Saturday 17th May 2025. The ASG29 pilot was operating under VFR in VMC and not in receipt of a Flight Information Service and the BE200 pilot was operating under IFR in VMC in receipt of a Traffic Service from Farnborough Radar.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data, 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.

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3210 Right-of-way (c)(2) Converging.

The Board firstly discussed the actions of the ASG29 pilot, noting that they had been in a thermalling action and, on looking toward Odiham, had visually acquired the BE200 but at a late stage (**CF3**) allowing only time for a brief hard turn before passing the BE200 with an estimated 60m of lateral separation. Members noted that the ASG29 had carried electronic conspicuity (EC) equipment common to most gliders in the UK, but in this case it had been unable to register electronic emissions from the BE200 (**CF2**). The ASG29 pilot had been listening out on the Lasham frequency, and this combination of differing frequencies with the BE200 and incompatible EC equipment had denied the pilot any situational awareness of the proximity of the BE200 (**CF1**). Although members recognised the logic of listening out on the Lasham frequency, they wondered whether an information call to the local service provider might have added a layer of situational awareness for all involved. The Board also recognised airframe limitations in some cases but stated again that, where possible, the carriage and use of a transponder significantly helps develop a known environment for all in the area.

Members moved on to consider the actions of the BE200 pilot, noting that they had been subject to radar vectoring and a subsequent change in service level as they had left controlled airspace. They also noted that the pilot had been passed generic Traffic Information regarding gliding activity in the area, had not carried EC equipment and had therefore gained only generic situational awareness of the presence of the ASG29 amongst other gliders (**CF1**). The Board discussed the BE200 pilot's reported estimate of the minimum separation distance from the ASG29 and that it had been markedly different to that reported by the ASG29 pilot and ultimately to that calculated by comparing radar and GPS data. Members opined that in this case they believed that the BE200 pilot had in all likelihood visually acquired one of the other gliders in the area and felt that the pilot had not sighted the ASG29 in this case (**CF4**).

In reviewing the contribution of the Farnborough Radar controller, members noted that the BE200 had been an IFR arrival under a Radar Control Service and being positioned for a standard visual approach into […] as stipulated in the UKAIP. This procedure has an expectation for the aircraft to vacate controlled airspace in order to facilitate an expected 4NM final to ensure separation against potential VFR traffic within the destination circuit. On leaving controlled airspace, the Farnborough controller had switched the BE200 pilot onto a Traffic Service and had made a number of calls regarding gliding traffic in the vicinity of Odiham. These calls had included reference to pop-up traffic believed to be the ASG29 in response to which the BE200 pilot had called visual. As the ASG29 could not be positively identified, the Farnborough controller had been unable to determine if the BE200 pilot's 'visual' call had related to that aircraft. Board members felt that the Farnborough controller had done all possible to manoeuvre the BE200 away from known glider activity and could have done no more in this case.

The discussion concluded and members considered the risk of collision. Members agreed that the safety of the aircraft had not been assured, that safety margins had been reduced much below the norm and that there had been a risk of collision (**CF5**). The Board assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025086			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Situational Awareness of the Conflicting Aircraft and Action			
1	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
	• Electronic Warning System Operation and Compliance			
2	Technical	• ACAS/TCAS System Failure	An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations	Incompatible CWS equipment
	• See and Avoid			
3	Human Factors	• Identification/ Recognition	Events involving flight crew not fully identifying or recognising the reality of a situation	Late sighting by one or both pilots

4	Human Factors	• Monitoring of Other Aircraft	Events involving flight crew not fully monitoring another aircraft	Non-sighting or effectively a non-sighting by one or both pilots
	• Outcome Events			
5	Contextual	• Near Airborne Collision with Aircraft	An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles	

Degree of Risk: B.

Safety Barrier Assessment[3]

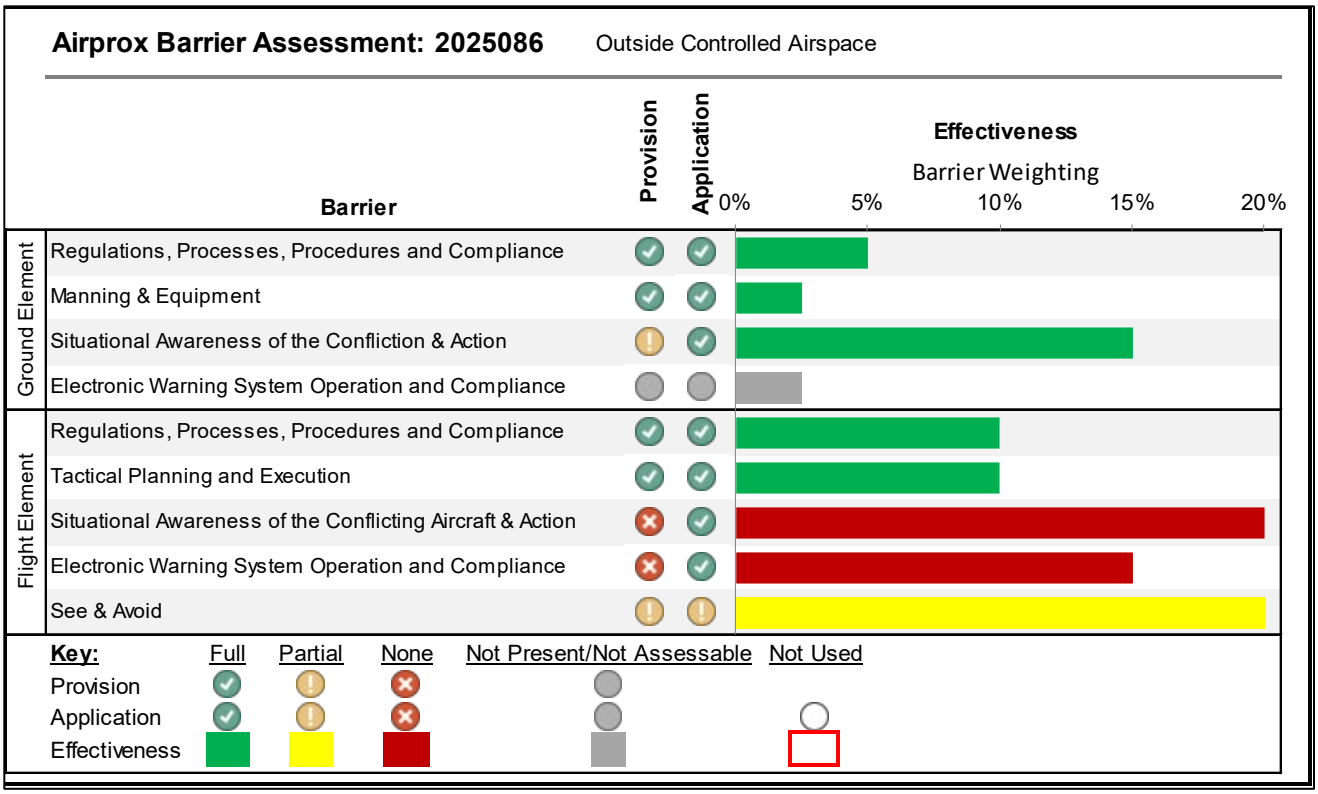
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of the ASG29 had no situational awareness of the presence of the BE200 and the BE200 pilot had only generic situational awareness of the presence of the ASG29.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the equipment carried by the ASG29 had received no electronic emissions from the BE200.

See and Avoid were assessed as **partially effective** because the pilot of the ASG29 had achieved only a late sighting of the BE200 and the pilot of the BE200 pilot had not sighted the ASG29.



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