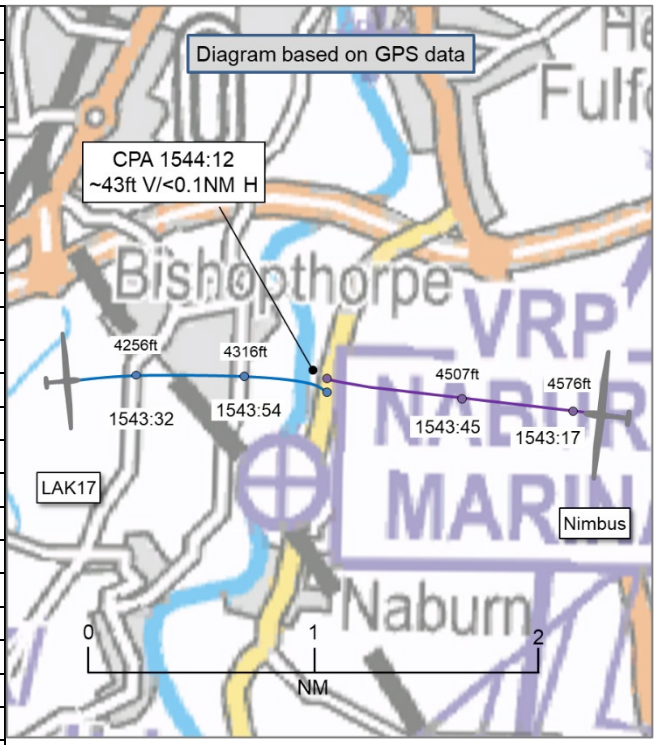
AIRPROX REPORT No 2025169

Date: 02 Aug 2025 Time: 1544Z Position: 5355N 00105W Location: Naburn Marina VRP

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	LAK17	Nimbus
Operator	Civ Gld	Civ Gld
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Listening Out
Provider	Glider Common	Glider Common
Altitude/FL	4329ft	4372ft
Transponder	Not fitted	Not fitted
Reported		
Colours	White	White
Lighting	Strobe	Strobe
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	4160ft	~4000ft
Altimeter	QFE	QFE
Heading	090°	*'West'*
Speed	65kt	~60kt
ACAS/TAS	FLARM	FLARM
Alert	Information	Information
Separation at CPA		
Reported	Nil V/Nil H	20ft V/0ft H
Recorded	~43ft V/<0.1NM H	



THE LAK17 PILOT reports that, whilst flying easterly when south of York at approximately 4000ft, they received an [EC] alert of an aircraft ahead. They identified a glider straight ahead flying directly towards them at high speed (travelling westerly). [Their visual acquisition was] helped by a strobe light at the front of the glider's nose cone. It had been difficult to see due to background haze. The LAK17 pilot took avoiding action by turning to the right. They did not see the other glider taking any avoiding action and believes there would have been a collision if they had not taken avoiding action.

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

THE NIMBUS PILOT reports that they had been P1 in the front and there had been a P2 in the rear cockpit. They were flying approximately due west heading [toward] Rufforth after climbing away from [departure airfield]. At the time of the Airprox, the P1 reported that they had been possibly 500-1000ft clear of cloud, and following a cloud street/energy line. They were not distracted and, in fact, were keeping a good lookout, especially forward in the direction of travel down the cloud street with low workload. Visibility and conditions were good when the [EC] warning had activated. They were scanning for a sighting but could see nothing. The P2 called out that the display indicated [an aircraft] in front and 20ft below. They could still not see the aircraft and decided that, with [their aircraft] having a 26m wingspan, trying to turn would lower a wing possibly dangerously close to whatever may be passing underneath. At one point both pilots suspected a possible false alarm but, right then, the P1 made an ever so slight movement to the right and they caught a glimpse of a glider emerging down to their left and clearly turning away taking avoiding action from them. It appeared clear to the P1 that whilst they may have been travelling head on, the opposing glider had been slightly lower and therefore obscured from view by the cockpit and instrument panel, as it would have been (most likely) below their field of view. The Nimbus pilot assumed that, at that point, the opposing glider had a better view of them as their aircraft would have been slightly higher, therefore not obscured in their field of view, and may have seen their front [EC] flasher, which may have been a key factor in identification of a conflict. If the alarm

had gone off sooner for [the Nimbus], they may have had time to do something different. The P1 noted that they were grateful that the other pilot had seen and avoided them.

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

Factual Background

The weather at Leeds/Bradford Airport was recorded as follows:

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METAR EGNM 021520Z 24012KT 9999 FEW040 19/09 Q1018=
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Analysis and Investigation

UKAB Secretariat

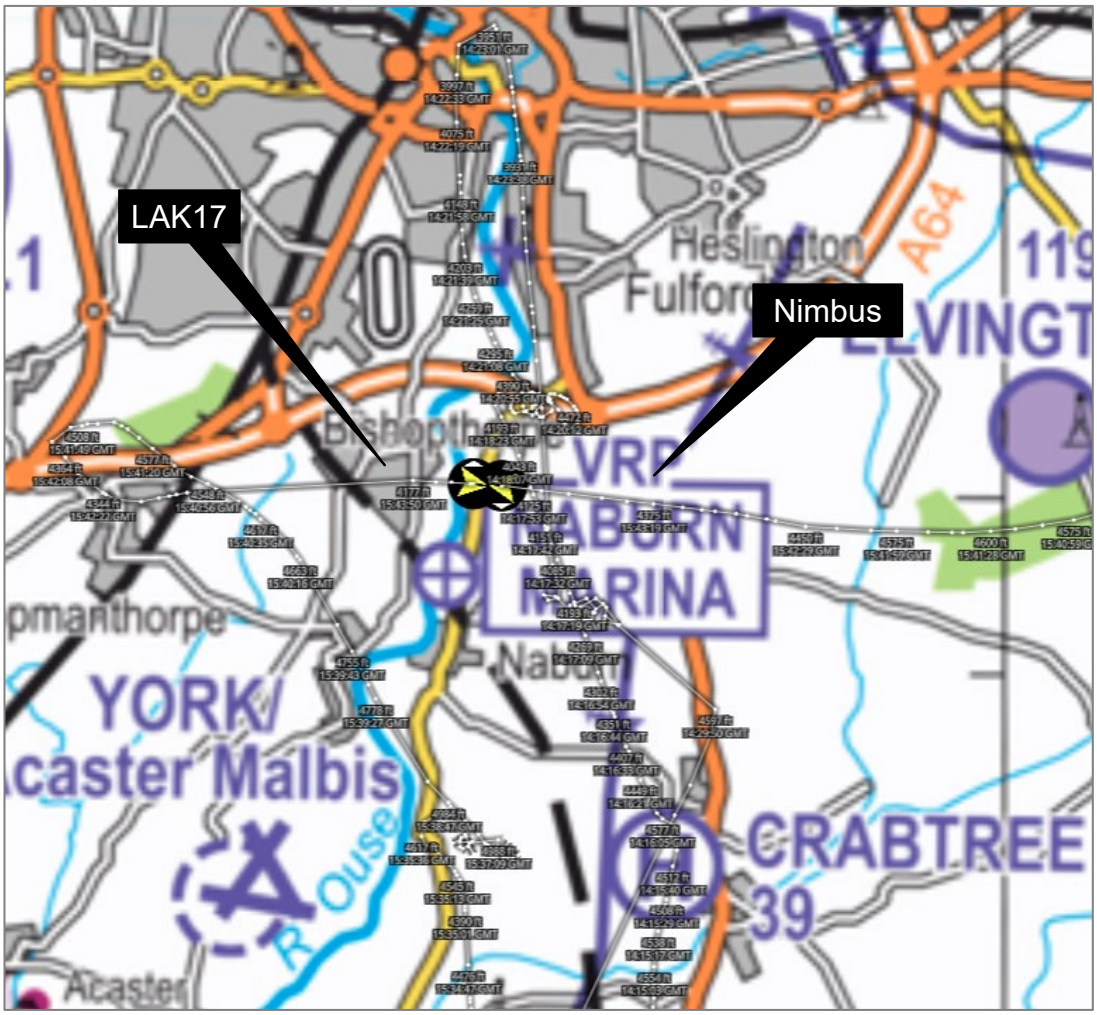


Figure 1: From the Airspace Analyser Tool at CPA minus 2sec.

Neither aircraft appeared on radar. Both pilots provided a GPS file which allowed construction of the diagram at page 1 and a direct comparison of relative altitudes.

The LAK17 and Nimbus 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 head-on or nearly so then both pilots were required to turn to the right.[2]

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

Comments

BGA

In order to sustain an extended cross-country flight, a glider pilot must locate and use rising air at least every 10-15min. In areas where many gliders operate simultaneously it's therefore likely that two or more will, from time to time, find themselves using the same restricted area of rising air. To mitigate collision risks, almost all operators use the proprietary GPS-based warning units that were indeed fitted to both gliders in this incident. Each unit calculates its own predicted flight path, which it transmits as a brief low power digital signal at one-second intervals on an unlicensed radio frequency (868MHz), while also using signals received from similarly-equipped aircraft to predict possible conflicts. If a unit predicts close proximity to one or more other aircraft, it warns of the one presenting the greatest threat. Although a variety of cockpit displays is available, the behaviour of the one fitted to the LAK17 is shown in figure 2. The displays in both LAK17 and Nimbus cockpits also showed the GPS-derived relative height of the other aircraft, updated at one-second intervals.

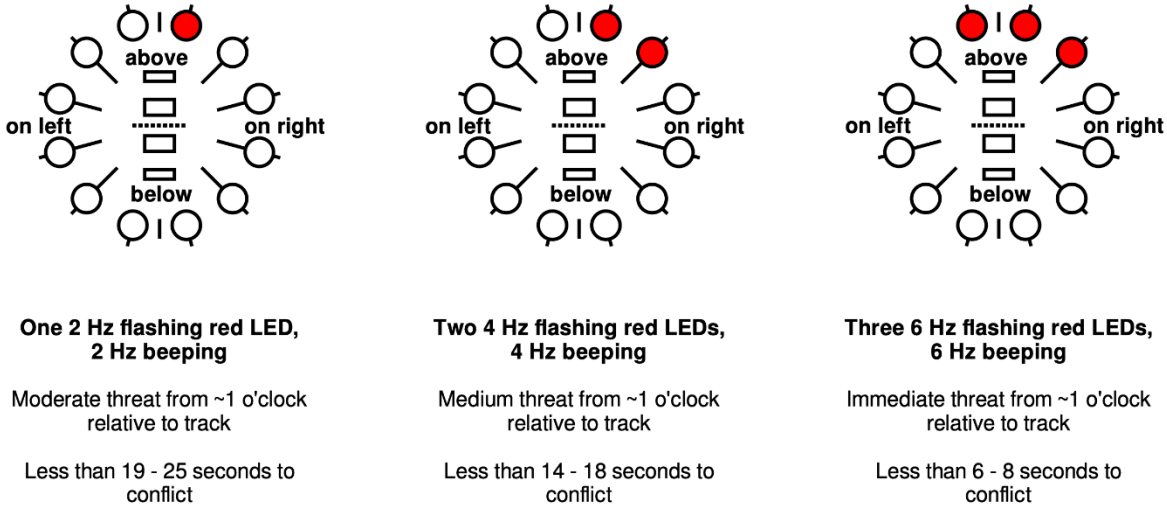


Figure 2: Proximity indicators as used in the LAK17 cockpit.

Both pilots report having received a warning from this system some seconds before sighting the other aircraft. On hearing an audio warning, the LAK17 pilot reports having used their LED display to inform the direction of their lookout. After a couple of seconds, they faintly saw the forward-facing "canopy flasher" (strobe) on the other glider, but initially not the aircraft itself. When the glider became visible a few seconds after that, the LAK17 pilot promptly initiated a right turn to avoid as the audio warning escalated to the highest level (conflict predicted in "less than 6 - 8sec"). This account is consistent with the GNSS flight recorder traces from both gliders, which show the LAK17 turning right at or shortly after 1544:07 (5sec before CPA). With the two aircraft approaching at a relative speed of about 130kt, their horizontal separation at this point would have been about 400m.

The BGA encourages owners of aircraft operating at its member club sites to equip with the electronic collision-warning system (CWS) fitted to both gliders in this incident. To ensure that their CWS antenna installation is as effective as possible, operators are further advised to routinely check its detection range. Further information availableat this BGA web page:

Lookout - supported by technology - Pilot & Club Info

Summary

An Airprox was reported when a LAK17 and a Nimbus flew into proximity near York at 1544Z on Saturday 2nd August 2025. Both pilots had been operating under VFR in VMC and had been monitoring the Common Glider frequency (130.105MHz).

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots and GPS track data for both aircraft. 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.

Members firstly discussed the actions of the LAK17 pilot, noting that they had been operating under a cloud street in a roughly easterly direction. They had been listening out on the glider common frequency and had been equipped with an electronic conspicuity (EC) device common to many gliders operating in the UK. The Board agreed that their EC device had offered late situational awareness (**CF1**) via an information signal (**CF2**), allowing the pilot to focus their attention and consequently visually acquiring the canopy flasher of the oncoming Nimbus at a relatively late stage (**CF3**) before then taking avoiding action through a turn to the right. The Board noted that both the LAK17 and Nimbus pilots had been monitoring the same common gliding frequency and questioned to what end. As neither pilot reports having had made calls regarding their position, track and altitude, neither had been equipped with a transponder and neither had sought an active air traffic service, it had left both relying on EC equipment and see and avoid as the only barriers available to them. Fortunately, in this case, the late situational awareness afforded to the LAK17 pilot had allowed a degree of separation to be achieved, but members felt that information calls from either pilot may have improved the two pilot's awareness of their impending proximity.

Turning to the actions of the Nimbus pilot, the Board noted that they had been following the same cloud street but in a westerly direction. Members commented that this was not uncommon and the nature of that cloud formation normally leads to a relatively narrow useable track to remain in the rising air, thereby raising the likelihood of two aircraft heading in the opposite directions coming into direct conflict, as in this case. As the Nimbus had been equipped with the same EC equipment as the LAK17, the Board agreed that they too had received a late information signal (**CF1**, **CF2**) and had focussed their lookout in the appropriate direction. Members commented that the canopy flasher fitted to the Nimbus had, in this case, likely obscured the oncoming LAK17 (**CF5**) as it had sat approximately 50ft lower than the Nimbus and the front seat pilot's line of sight would have been through that canopy flasher. The Nimbus pilot reports their concern regarding the initiation of a manoeuvre on receiving the EC alert as they did not know whether the oncoming traffic sat toward the left or right of their nose and were concerned that such a manoeuvre might have accentuated the problem. Members acknowledged this and added that the EC unit used was designed to focus on the most immediate threat and that a 'blind' turn to the left or right might well expose other threats at that time. In this case, the Board agreed that the Nimbus pilot had managed to visually acquire the LAK17 effectively only at CPA (**CF4**).

Concluding their discussion, members noted that both aircraft had been compatibly EC equipped and had received information alerts as to the presence of the other aircraft, leading the pilots to focus their lookout, allowing the LAK17 pilot to visually acquire the Nimbus and take avoiding action which, albeit extremely late, had avoided a more serious outcome. Members agreed that safety had been much reduced and there had been a risk of collision (**CF6**) determining this event to have carried a Risk Category B.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025169			
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	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
	• 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
5	Contextual	• Visual Impairment	Events involving impairment due to an inability to see properly	One or both aircraft were obscured from the other
	• Outcome Events			
6	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]

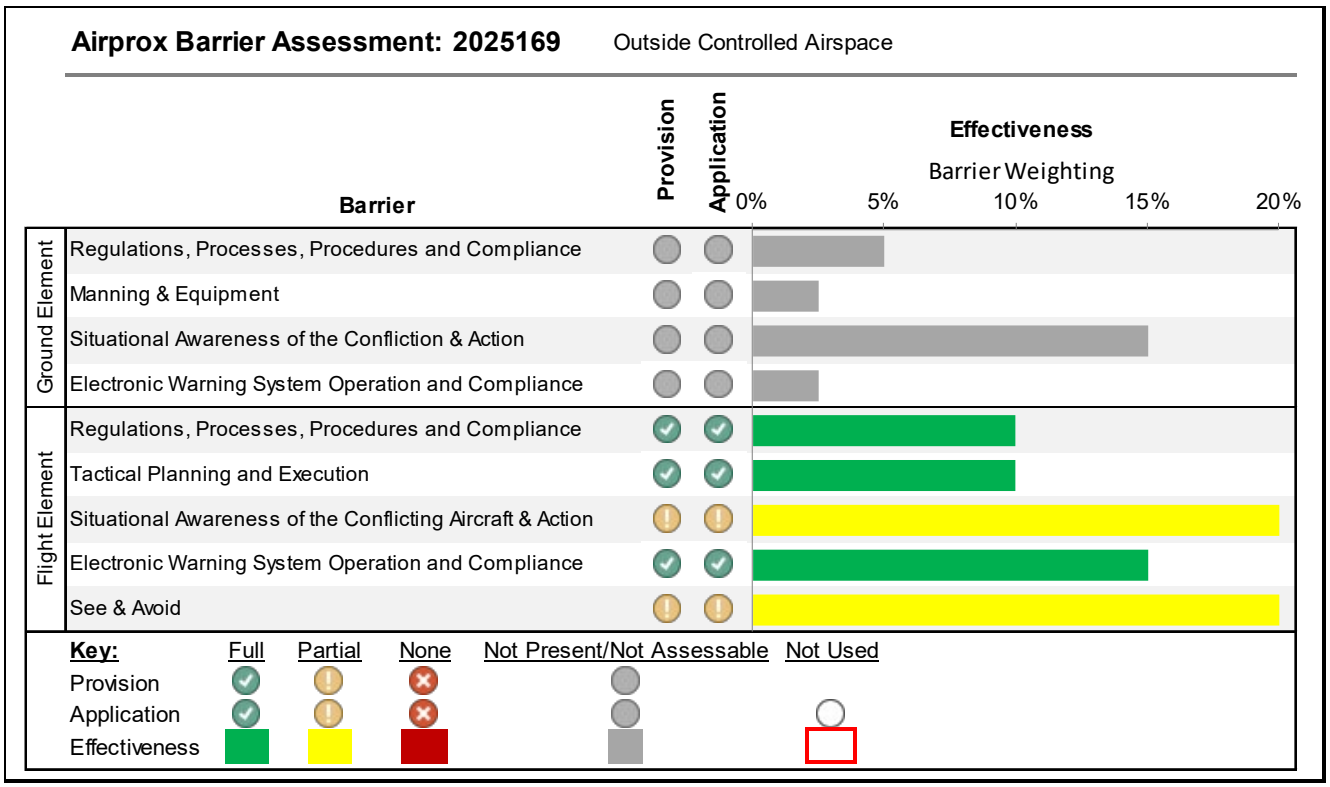
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because both pilots achieved only late situational awareness of the proximity of the other aircraft.

See and Avoid were assessed as **partially effective** because the LAK17 pilot achieved only a late sighting of the Nimbus and, as the LAK17 had been obscured from the view of the Nimbus pilot, they had then achieved sight of the LAK17 only at CPA.

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


Airprox Barrier Assessment: 2025169
Outside Controlled Airspace
Barrier
Provision
Application
Effectiveness
Barrier Weighting
0%
5%
10%
15%
20%
Ground Element
Regulations, Processes, Procedures and Compliance
Manning & Equipment
Situational Awareness of the Confliction & Action
Electronic Warning System Operation and Compliance
Flight Element
Regulations, Processes, Procedures and Compliance
Tactical Planning and Execution
Situational Awareness of the Conflicting Aircraft & Action
Electronic Warning System Operation and Compliance
See & Avoid
Key:
Full
Partial
None
Not Present/Not Assessable
Not Used
Provision
Application
Effectiveness