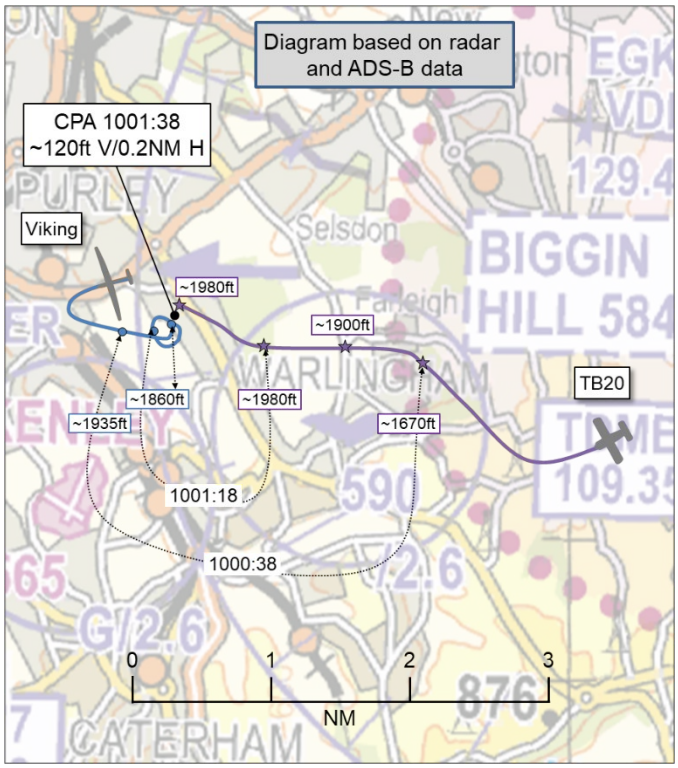
AIRPROX REPORT No 2025127

Date: 29 Jun 2025 Time: 1002Z Position: 5120N 00004W Location: 1.5NM NNW Kenley Airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Viking	TB20
Operator	HQ Air (Trg)	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	AGCS	Basic
Provider	Kenley Radio	Biggin Approach
Altitude	~1860ft	~1980ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White, orange tips	White, blue, red.
Lighting	NR	Bcn, strobes, ldg
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	NR	1900ft
Altimeter	QFE (1005hPa)	QNH
Heading	NR	280°
Speed	NR	115kt
ACAS/TAS	FLARM/SkyEcho[1]	SkyEcho
Alert	None	None
Separation at CPA		
Reported	NR	NK V/1NM H
Recorded	~120ft V/0.2NM H	



THE VIKING PILOT reports that, whilst conducting thermal soaring within the local area upwind of the airfield and conducting their lookout scan, they saw a powered aircraft from their four o'clock position through to their one o'clock position. They continued their thermal turn away from the path of the aircraft. They called up Kenley Radio to report an Airprox because the other aircraft was co-level and passed close enough to startle and cause them concern. There were no indications on [their electronic conspicuity equipment]. It was their opinion that the other aircraft was unsighted of them and did not take an evasive manoeuvre away from them. Having [reviewed an ADS-B data tracking source, it had] shown the other aircraft involved was a TB20. The matter was reported to Biggin Hill Tower.

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

THE TB20 PILOT reports that they took off from [departure aerodrome] at 0958. They then made a standard right turn on a heading of approximately 320°, avoiding the noise sensitive areas to depart [aerodrome] on the typical routeing for westbound traffic to the north of Kenley. They levelled off at around 1900ft, Biggin Hill's METAR had cloud broken at 2000ft. They then gradually turned towards the west to pass to the north of Kenley, keeping a good lookout for gliders and other traffic. They and their passenger both spotted a first glider to the south of Kenley, far from their flightpath. A second glider then appeared, which appeared to be manoeuvring to the north of Kenley and ahead of their aircraft. They made an immediate right turn to remain clear of the glider and pass it on the pilot's side of their aircraft. Once clear of the glider, they gradually turned back towards the west and resumed their flight to [their destination].

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

[1] The pilot reported that the SkyEcho fitted to the Viking glider was operated as 'ADS-B out' only i.e. the pilot was not exploiting the information received.

THE RAF KENLEY AIR/GROUND OPERATOR reports that they were the Duty Supervisor at the time of this event and were acting as Military Air/Ground Radio Operator (MAGRO) for Kenley Radio. They heard and saw a single-engine piston aircraft to the north of RAF Kenley and noted that it did not look like it was too close or would overfly the airfield. Shortly after, they received a radio call from the Viking aircraft pilot stating that they had experienced an Airprox. They asked whether the aircraft commander was intending on returning to base and they advised that they were content to continue with their sortie but would return within 10min. They had not sighted the proximity between the two aircraft.

Using their smartphone, they obtained a screenshot from FlightRadar24 with the aircraft details. As the unit FSO was available and due to their workload, they asked [the FSO] to contact Biggin Hill and work through the incident report with the aircraft commander on their return.

THE BIGGIN HILL APPROACH CONTROLLER reports that [the pilot of the TB20] was on a Basic Service leaving the ATZ westbound and was asked to report abeam the gliding site at Kenley and informed that they were active, the pilot acknowledged this and subsequently reported abeam Kenley and left the frequency; no other report was made. The ATCO was later made aware that the pilot receiving a service from them had been involved in a reported Airprox with RAF Kenley site.

Factual Background

The weather at Biggin Hill Airport was recorded as follows:

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METAR EGKB 290950Z 24004KT 190V320 9999 SCT020 21/15 Q1027
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Analysis and Investigation

RAF Kenley

[Pilot and controller] narratives were reviewed, with further information obtained from the unit. The SATCO at Biggin Hill was emailed for information and a narrative was obtained from the pilot of [the TB20].

The sequence of events [was as follows]: The Viking [pilot] was thermalling upwind of [Kenley] airfield, and a civilian aircraft [the TB20] was spotted passing from 4 o'clock to 1 o'clock. The Viking [pilot] turned away from the path of the other aircraft.

An Airprox occurred between a Viking and [a TB20]. RAF Kenley sits in Class G airspace so there was nothing to stop [the TB20] routeing through the area and the pilot chose to route north of the airfield to leave a safe distance. The pilot of [the TB20] was aware that Kenley gliding site was active and stated that they and their passenger were both concentrating on lookout during this phase of flight. While it would be considered good 'Air Sense' for the pilot to call via Kenley Radio, there is no requirement for them to do so and there is no ATZ at RAF Kenley.

RAF Northolt has reinvigorated the London Airspace Regional Airspace Users Working Group and 2FTS will continue to be represented at these meetings. This should help raise awareness of operations at RAF Kenley with local airspace users. Ongoing, data gathering that can be used for an airspace change has been requested.

Biggin Hill Airport

An Airprox occurrence was notified by RAF Kenley. Recordings were reviewed of [the TB20] departure, which took place around 1000 (UTC), and noted the following:

The pilot was under a Basic Service from Biggin Approach. The pilot was instructed to report abeam Kenley and informed that the gliding site was active. This instruction was passed before the aircraft left the Biggin Hill ATZ. The pilot initially reported climbing to an altitude of 2200ft; however, later reported levelling off at an altitude of 2000ft, and then reported passing Kenley at an altitude of 1800ft.

The ATM showed a primary radar contact close to [the TB20], approximately 4NM west of Biggin Hill. The PIC of [the TB20] did not report an Airprox on frequency.

The investigation findings and observations [were as follows]: [The TB20 pilot] received sufficient warning of glider activity at Kenley, no Airprox was reported over the RTF to Biggin Hill ATC or via phone, and Class G [airspace] 'See and avoid' [principles apply].

CAA ATSI

ATSI has reviewed all the reports and has nothing to add to the Biggin Hill investigation.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the TB20 was positively identified using Mode S data. The Viking glider was seen as a primary-only track. Further analysis of ADS-B data sources was undertaken and both aircraft were identified using ADS-B data (Figure 1).

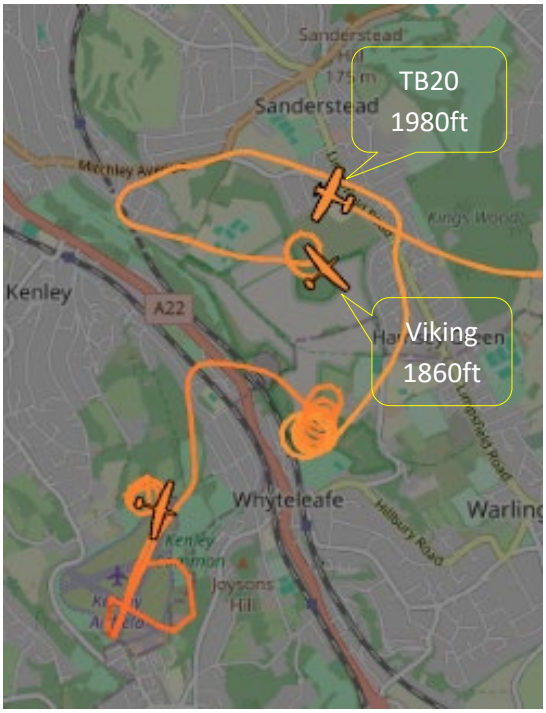

Figure 1 - Time ~1001:30

Shortly before CPA, the Viking was seen to be tracking approximately east prior to circling, and the TB20 tracking approximately west-northwest. CPA was assessed to have occurred at 1001:38 with approximately 120ft vertical and 0.2NM lateral separation.

The Viking and TB20 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.[2] If the incident geometry is considered as converging then the TB20 pilot was required to give way to the Viking glider.[3]

Comments

HQ Air Command

The Airprox occurred in Class G airspace while the Viking [pilot] was conducting thermal soaring approximately 1.3NM to the northeast of RAF Kenley and in receipt of an Air/Ground Communication

[2] (UK) SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.
[3] (UK) SERA.3210 Right-of-way (c)(2) Converging. MAA RA 2307 paragraph 12.

Service from Kenley Radio. The TB20 [pilot] was in receipt of a Basic Service from Biggin Approach and was routeing from Biggin Hill to the west. Having been informed of the gliding activity at RAF Kenley, the TB20 pilot initially planned to route to the north of the airfield. Both aircraft were carrying forms of electronic conspicuity (EC) equipment and, given the configuration of these systems, the TB20 pilot should have received an alert. In this incident neither pilot noted an alert from their EC equipment, which left lookout as the final method of deconfliction. Analysis of the ADS-B data suggests that the TB20 pilot became visual with the Viking at approximately 0.7NM. They took avoiding action, turning right to route further to the north of RAF Kenley with the cloudbase limiting the options for vertical separation. The Viking pilot became visual with the TB20 in their 4 o'clock after the TB20 had taken their avoiding action. At this stage, the Viking pilot maintained their left-hand turn to increase the separation. If the TB20 [pilot] had the facility to call Kenley Radio on a secondary radio this may have helped to coordinate activity and allay the concerns of the Viking pilot.

AOPA

Whilst flying in Class G airspace, a radar-based Air Traffic Service can assist with lookout. In this case, the electronic conspicuity equipment should have alerted the pilots about each other; this did not occur, leaving the final barrier for mid-air collision avoidance being an effective lookout scan.

Summary

An Airprox was reported when a Viking and a TB20 flew into proximity 1.5NM north-northwest of Kenley Airfield at 1002Z on Sunday 29th June 2025. The Viking pilot was operating under VFR in VMC in receipt of an Air/Ground Communications Service from Kenley Radio, and the TB20 pilot was operating under VFR in VMC in receipt of a Basic Service from Biggin Approach.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, ADS-B data, reports from the air/ground operator and 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 Viking glider pilot and noted that the pilot had been operating to the north of Kenley gliding site in receipt of an Air/Ground Communications Service (AGCS) from Kenley Radio. The Board noted that the Viking had been fitted with electronic conspicuity (EC) equipment typically used in a glider, in addition to extra EC equipment which had emitted an 'ADS-B out' signal, but with no facility to alert or inform the pilot of any 'ADS-B in' transmissions. Members agreed that the Viking's EC equipment had, therefore, been unable to provide any indication of detection of the emissions from the same specification of equipment in the TB20 (**CF3**). Members further agreed that, with no information available from the AGO on the TB20 or from the EC equipment carried (through both incompatibility for one equipment and non-exploitation of information from the second equipment), the Viking pilot had had no situational awareness of the presence of the TB20 (**CF2**). The Board also noted that the Viking pilot had seen the TB20 approaching from their 4 o'clock position to their 1 o'clock, and had elected to continue their left-hand thermalling turn to remain clear as the TB20 had passed down their right-hand side. Members agreed that the Viking pilot had been concerned by the proximity of the TB20 (**CF5**).

The Board then considered the actions of the TB20 pilot, noting that they had been following a departure profile and in receipt of a Basic Service from Biggin Approach. The Board noted that the TB20 pilot had received information from the Biggin Hill controller that Kenley gliding site had been active and that both the pilot and their passenger had been actively looking for glider activity. Members agreed that the TB20 pilot had had generic situational awareness of glider activity in the vicinity of Kenley as they had tracked approximately west from Biggin Hill (**CF2**). The Board also agreed that the TB20 pilot had been communicating with the most appropriate service provider at that point of their flight, although some members felt that, had the pilot had a second radio, it may have been helpful to have called Kenley as

they had passed by. The Board noted that the TB20 had been fitted with EC equipment that had been compatible with the extra EC carried in the Viking, but that equipment had not provided either information or an alert to the presence of the glider, and members agreed that the TB20's EC equipment had not alerted as expected (**CF4**).

Turning their attention to the ground elements pertinent this Airprox report, the Board noted that the Kenley AGO would not have been able to inform the Viking pilot about the TB20 as it had been outside the privileges of their licence. The Board agreed, however, that the Biggin Approach controller had had generic situational awareness of gliders operating in the vicinity of Kenley (**CF1**) and had therefore provided generic traffic information of the gliding site activity to the TB20 pilot,.

Concluding their discussions, the Board noted that the TB20 pilot had had generic situational awareness of the presence of gliders in the vicinity of Kenley and had seen the Viking in time to plan to track to the north of it. The Board noted that the Viking pilot had had no situational awareness of the TB20 and members felt that they had likely been startled by the presence of the TB20 approaching on a westerly departure profile from Biggin Hill. Members agreed that, although safety had been degraded, the TB20 pilot had taken timely and effective action to prevent the aircraft from coming into close proximity and, as such, assigned a Risk Category C to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK.

Contributory Factors:

	2025127			
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
	• Electronic Warning System Operation and Compliance			
3	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
4	Human Factors	• Response to Warning System	An event involving the incorrect response of flight crew following the operation of an aircraft warning system	CWS misinterpreted, not optimally actioned or CWS alert expected but none reported
	• See and Avoid			
5	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: C.

Safety Barrier Assessment[4]

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

Flight Elements:

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

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because Viking pilot had no situational awareness of the position of the TB20, and the TB20 pilot had only generic situational awareness of the potential for glider activity in the vicinity of Kenley.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the first of the EC equipment fitted in the Viking could not detect that of the TB20, and detections by its second EC equipment were not being exploited. Additionally, the EC equipment in the TB20 did not alert as expected.