AIRPROX REPORT No 2025116

Date: 16 Jun 2025 Time: 1555Z Position: 5411N 00121W Location: Topcliffe

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2					
Aircraft	Kestrel	BE200	Diagram based on radar and GPS data				
Operator	Civ Gld	Civ Comm					1
Airspace	London FIR	London FIR	1 2 2 3	3825ft		1552:10	Kestrel
Class	G	G	- Francisco	1554:10	1553:10	3700ft	3
Rules	IFR	VFR		*	3770ft		
Service	Listening Out	Traffic		7		Vac	1 127
Provider	Sutton Bank	Teesside	CPA 1554:35 ~150ft V/<0.1NM H	1554:29			1
Altitude/FL	~3750ft	3900ft			HE		
Transponder	Not fitted	A, C, S			12		2_
Reported					105		
Colours	White and red	Blue and white		1554:13	11		NM
Lighting	Nil	Strobes				Talto	m
Conditions	IMC	VMC		1		20110	1
Visibility	>10km	>10km		7		- 3	3) NH \ \
Altitude/FL	3000ft AGL	4000ft AMSL		1553:57	77-11		
Altimeter	QFE (991hPa)	QNH (1024hPa)		1	COD		1 7
Heading	~230°	350°			113		
Speed	50kt	200kt	*	1553:41	0.5		0_
ACAS/TAS	FLARM	SkyEcho		3900ft	Win		
Alert	None	None	BE200	- 11	-	-	E 4
	Separation	THEOD.		/		A	
Reported	0ft V/100-200m H	500ft V/100m H					
Recorded	~150ft V/·						

THE KESTREL PILOT reports that they had taken-off from Sutton Bank shortly before midday with a plan to soar locally in the Vale of York and the east Pennine uplands using thermal and wave lift where possible. They had intended to remain clear of controlled airspace and would communicate with Leeming Zone to inform them of their location when required. They would operate a mix of VFR and IFR (possibly sometimes in cloud) and had intended to land early/mid evening or sooner when the available lift was exhausted. The flight had followed this plan until approximately 1500 [when they had] signed off with Leeming, advising that they were returning to Sutton Bank where they had intended to continue some local soaring. The thermal lift was decaying, as might be expected for the time of day, but in the buildup to the Airprox they had circled and had subsequently flown under and along some fractured convective cloud, which concluded a short distance further on from the point of the Airprox. The pilot had intended to fly to that point and then return to Sutton Bank for more local soaring. They were combining their normal lookout scan with reading the best lift path above them from the cloud pattern and adjusting their speed and flap settings to maximise any height gain. Immediately preceding the Airprox, on one lookout scan, they had seen something coming towards them from their left at what appeared to be the same level and closing fast. They quickly ascertained what it appeared to be and assessed it as an immediate collision threat upon which they had simultaneously turned right, raised flaps and dived as they had judged [that to be] the best action. On doing that, and perhaps a split second before they had started their avoidance action, they had seen the other aircraft turn right. On assessing that they had passed, the Kestrel pilot had looked over their right shoulder to see the other aircraft resume its course northbound. After the incident, the Kestrel pilot reports that they had continued in the local area and later further out in the Vale of York as the convection recycled and improved. Later, as the lift ended, they had landed back at Sutton Bank at approximately 1815. [The Kestrel pilot notes that] they declared on the [UKAB reporting] form that they were IMC/IFR because, although in Class G airspace above Topcliffe MATZ, but over 3000ft AMSL they had not been greater than 1000ft vertically separated from the cloud above them. The visibility in all directions was good.

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

THE BE200 PILOT reports that their aircraft had descended to 5000ft south of Upton to avoid controlled airspace. The track from [departure airfield] to Teesside had taken them overhead Topcliffe, which is 8NM SW of the Sutton Bank Glider Site. Their aircraft had been in the process of descending for Teesside and was at 4000ft at the time of the occurrence. The weather was good with excellent visibility, although unstable with light turbulence. Leeds had been providing a Traffic Service up to approximately 10NM south of Topcliffe when they had suggested a free call to Leeming radar. Leeming was closed at that time of day, so Teesside was contacted and a Traffic Service was received. As the aircraft approached the overhead of Topcliffe, [the Handling Pilot] had been the first to see a glider in their 1130, co-altitude, in the opposite direction at a range of approximately 1NM and had taken immediate avoiding action [by] turning right, the glider had (appeared to) initiate a right descending turn. No traffic warning was received from Teesside. There was no NOTAM to show Sutton Bank was active, although this is normal.

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

THE TEESSIDE RADAR CONTROLLER reports that they had been the Radar controller when a BE200 [pilot] free-called requesting a Traffic Service and VFR join at Teesside. The flightplan that the aircraft was booked in had been under a different callsign [...] whereupon the Flight Progress Strip that was in the pending inbound bay was amended to reflect the new callsign. No contacts were observed at the time that the BE200 was identified and the aircraft was then cleared into controlled airspace VFR and landed on RW23. On the day of the incident, no mention was made by the pilot of any incident with a glider. This MOR had been filed following a telephone conversation from the pilot the following day with details of the incident.

Factual Background

The weather at Leeming was recorded as follows:

METAR EGXE 161520Z 24012KT CAVOK 23/13 Q1024 NOSIG RMK BLU BLU=

Analysis and Investigation

Teesside Unit Investigation

1553 - [BE200 C/S]: Teesside Radar good afternoon [BE200 C/S] information Lima requesting Traffic Service.

RADAR: [BE200 C/S] Teesside Radar squawk 7040 and pass your details.

[BE200 C/S]: Squawking 7040 a Beech 200 currently inbound to yourself currently 4000ft QNH 1025 just overhead Topcliffe 3 POB VFR just a Traffic Service and join for runway 23.

RADAR: [BE200 C/S] roger we had you down as a [...], but you are identified Traffic Service runway 23 in use QNH 1024.

12 second pause (at this point there is a small intermittent contact 1 mile north of the [BE200 C/S], during the pause, [BE200 C/S] merged and passed with this contact, and tracked right slightly.

1555: [BE200 C/S]: QNH 1024 runway 23 [BE200 C/S].

1556 RADAR: [BE200 C/S] cleared to enter controlled airspace VFR.

[BE200 C/S]: Cleared to enter controlled airspace VFR [BE200 C/S].

A contact had been visible on radar prior to [BE200 C/S] calling on frequency. When [BE200 C/S] called up, this contact had been north-northeast by 3NM tracking west. At the point in which [BE200 C/S] was identified, the contact had been intermittent and, by the time the radar controller had finished the transmission advising the aircraft of the service, the aircraft had already merged with the contact. The pilot made no mention of this incident. The only thing to note is that there had been a long pause and a slight deviation to the right where they were maybe taking avoiding action.

Investigator interview with the Teesside Radar controller:

Following discussion with the ATCO in position at the time of the incident, they stated that they did not see the primary-only contact during their initial scan. At the time, other traffic had been on frequency heading towards Newcastle controlled airspace, so the priority had been to transfer that traffic. Then, as there had been confusion over the callsign [BE200 C/S] used, the controller's attention was drawn away from the radar to obtain a new strip. By the time the aircraft was identified, the contact had then been intermittent and was not spotted. Should this contact have been sighted earlier by the controller prior to identification, they would have passed Traffic Information 'believed to have been'.

CAA ATSI

ATSI has reviewed the Teesside investigation and has nothing to add.

UKAB Secretariat

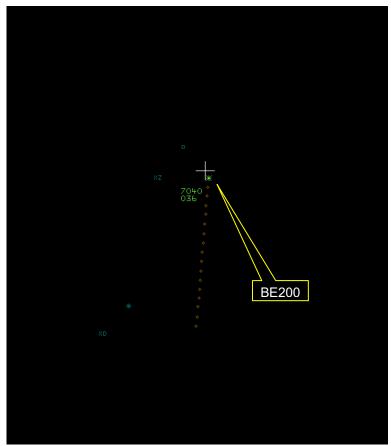


Figure 1: At 1554:35 (CPA). The Kestrel did not show on radar. The BE200 remained at a constant altitude of 3900ft AMSL toward CPA.

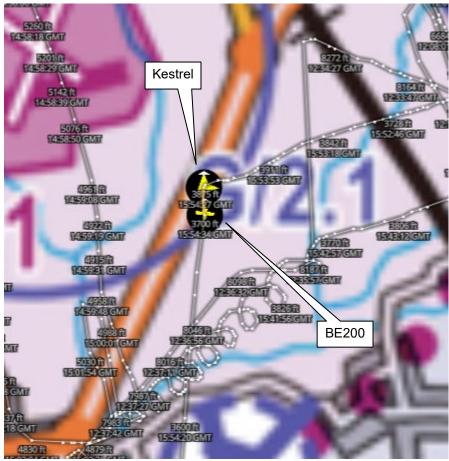


Figure 2: From the Airspace Analyser Tool – BE200 at 1554:34/005°/215kt/+192fpm/3700ft (SPS); Kestrel at 1554:28/226°/32kt/+515fpm/3882ft (SPS)

The BE200 was tracked by radar and identified through Mode S data. The Kestrel did not show on radar. The Kestrel pilot provided a GPS file, with the diagram at page 1 having been created by merging that information with the BE200 radar track.

The Kestrel 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. If the incident geometry is considered as converging then the BE200 pilot was required to give way to the Kestrel. 2

Comments

AOPA

Until the Department for Transport mandates a common form of Electronic Conspicuity, events in Class G airspace will continue to occur. In this case it was only effective lookout that avoided a higher risk event.

BGA

Sutton Bank is one of approximately 80 permanent glider launch sites listed in UK AIP ENR 5.5 and labelled on CAA VFR charts. It operates 364 days per year (weather permitting), recording ~15,000 aircraft movements annually. NOTAMs are not issued for routine operations at permanent gliding sites, and a greater density of gliders may be expected nearby at any time during daylight hours.

This incident once again highlights the difficulty of seeing an aircraft approaching head-on at high speed with little relative motion, as the BE200 would have appeared to the Kestrel pilot. Where

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(2) Converging.

forward-facing white recognition lights are fitted (on each wingtip), many BE200 operators elect to leave them permanently switched on in daylight, to aid visual conspicuity in this direction.

The carry-on CAP 1391 ADSB-based TAS on board the BE200 can be configured to receive transmissions from the EC equipment carried by almost all gliders (including this Kestrel) and display nearby glider traffic via participating EFB applications. Using this option can provide a useful additional safety barrier in airspace where gliders operate.

The EC equipment fitted to almost all gliders warns of impending conflicts with other similarly-equipped aircraft. This mitigates the risk of Airprox with other gliders, but basic installations do not detect aircraft equipped only with transponders or ADSB-out, as the BE200 was in this case. However, recent versions of this EC equipment can optionally include a 1090MHz receiver and thereby warn of conflicts with transponder and ADSB-out-equipped aircraft. Updating glider EC hardware to include a 1090MHz receiver provides a useful additional safety barrier in airspace with a high density of transponder or ADSB-out equipped aircraft.

Summary

An Airprox was reported when a Kestrel and a BE200 flew into proximity at Topcliffe at 1555Z on Monday 16th June 2025. The Kestrel pilot was operating under IFR in IMC and had been listening out on the Sutton Bank frequency, and the BE200 pilot was operating under VFR in VMC in receipt of a Traffic Service from Teesside.

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.

The Board firstly considered the actions of the Kestrel pilot, noting that they had been operating locally and had earlier in their flight communicated with Leeming to maintain their awareness of other traffic. On moving towards the more eastern side of their flight, they had reverted to Listening Out on the Sutton Bank frequency. Members noted that, as they had continued their search for greater lift, they had seen the BE200 approaching, co-altitude, from their left-hand side at a relatively close distance (**CF7**) and had performed an avoidance manoeuvre. Although the Kestrel pilot had carried an electronic conspicuity (EC) unit common to most gliders in the UK, the Board agreed that it had not been compatible with that utilised by the BE200 (**CF5**). The absence of common RT, combined with a lack of interactive EC equipment, had left the Kestrel pilot with no situational awareness of the proximity of the BE200 (**CF4**). Members praised the Kestrel pilot for their actions on sighting the BE200.

Turning to the BE200, members noted that the pilot had established themselves on a Traffic Service with Teesside as they had tracked northwards but had not at that point received any Traffic Information and, although they had carried an EC device common to many general aviation aircraft which had been adapted to receive signals from that carried by the Kestrel, it had not received any emissions from the Kestrel (**CF6**). The combination of a lack of EC indications or Traffic Information had left the pilot with no situational awareness of the Kestrel's proximity (**CF4**). Members noted that the BE200 pilot reported as having seen the Kestrel as it had approached their 1130 position and, as it had been travelling from the BE200 pilots right-to-left, that visual acquisition had been an effective non-sighting because the glider had already passed through the BE200's 12 o'clock (**CF8**). The Board noted that the BE200 pilot had on sighting the Kestrel, initiated a right turn to increase the separation between the 2 aircraft.

In reviewing the contribution from Teesside, members noted that having made their initial call, the BE200 pilot had been accepted for a Traffic Service. The subsequent investigation stated that although there had been a primary contact in the area as that initial exchange had taken place, the Teesside controller had not seen it (**CF3**) and, equally, had been justifiably distracted by amending the aircraft flight strip to reflect the callsign of the BE200 (**CF2**), leading the Board members to note that the controller had not detected the conflict between the BE200 and the Kestrel (**CF1**).

When determining the risk of the Airprox, the Board accepted that the Kestrel pilot described having seen the BE200 at a late stage and the BE200 pilot as having seen the Kestrel after it had passed through their 12 o'clock, with both initiating avoiding action. Separation at CPA had been reduced to less than 0.1NM and approximately 150ft and the Board felt that safety had been much reduced and that there had been a risk of collision (**CF9**); therefore, the Board assigned a Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025116									
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification						
	Ground Elements									
	• Situational Awareness and Action									
1	Human Factors	Conflict Detection - Not Detected	An event involving Air Navigation Services conflict not being detected.							
2	Human Factors	Task Monitoring	Events involving an individual or a crew/ team not appropriately monitoring their performance of a task	Controller engaged in other tasks						
3	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 Awa	Situational Awareness of the Conflicting Aircraft and Action								
4	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									
5	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						
6	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									
7	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						
8	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									
9	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 Assessment³

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

Ground Elements:

³ 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 Confliction and Action were assessed as **ineffective** because the Teesside controller had had to devote their attention to amending the Flight Progress Strip and did not see the Kestrel on radar (briefly) and therefore did not detect the conflict.

Flight Elements:

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

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the equipment carried by the Kestrel had been unable to receive any electronic emissions from the BE200, and that carried by the BE200 had not registered any electronic emissions from the Kestrel.

See and Avoid were assessed as **partially effective** because the Kestrel pilot had seen the BE200 only in time to enable late avoiding action and the BE200 pilot had seen the Kestrel after it had passed through their 12 o'clock.

