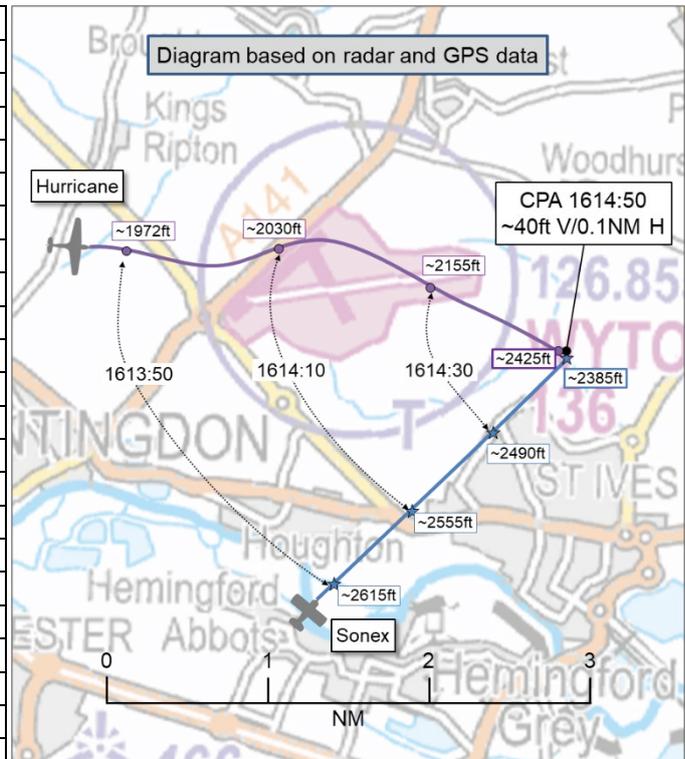


AIRPROX REPORT No 2025199

Date: 05 Sep 2025 Time: 1615Z Position: 5221N 00004E Location: East of Wyton Airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Sonex	Hurricane
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Listening Out ¹
Provider	Chatteris Radio ²	Duxford Info
Altitude	~2385ft	~2425ft
Transponder	A, C, S	None ³
Reported		
Colours	Silver	Green/brown camo
Lighting	Tail, Bcn, Strobes	Nil
Conditions	VMC	VMC
Visibility	5-10km	>10km
Altitude	2500ft	2300ft
Altimeter	QNH (1020hPa)	NK
Heading	045°	120°
Speed	120kt	180mph
ACAS/TAS	SkyEcho	Not fitted
Alert	None	N/A
Separation at CPA		
Reported	5ft V/0m H	Not seen
Recorded	~40ft V/0.1NM H	



THE SONEX PILOT reports that the Hurricane was spotted, very late, by their passenger. They immediately pushed [the aircraft] nose down but the aircraft was very close and would almost certainly have hit them. They knew when and where this happened as their aircraft records data, and they could see ‘-0.7G’ recorded [from when] they pushed the nose down. It was unlikely that in their position, directly in front of and very slightly below, the Hurricane [pilot] would have seen them. They suspected that it has a limited exterior view.

They had ADS-B-Out and their ADS-B traffic display showed nothing. They have since asked a friend to search Flightradar24, for which they had a subscription, to locate the aircraft, but nothing showed up. [They opined that] if the aircraft had a transponder, it obviously was not Mode S, had no electronic conspicuity [equipment] or lighting. [They were concerned as to when] the CAA would make their mind up and mandate an electronic conspicuity protocol.

The pilot assessed the risk of collision as ‘High’.

THE HURRICANE PILOT reports that they were conducting a transit flight from [departure] to [destination] airfield. They were unable to make an approach to [the destination and were delayed for] approximately 15min. They decided to remain clear of the area due to the RA(T) around [their destination] and gliding activity nearby and conducted a circular routing to the north in a familiar area until they could make an approach. Passing east of RAF Wyton on a southeasterly heading, they commenced a climb from approximately 2000ft, planning to climb to 3800ft to give clearance from any

¹ The Hurricane pilot, having requested an earlier arrival, was instructed to hold-off due to an ongoing practice display.

Duxford confirmed that no service was provided at that time, and the pilot monitored the frequency while holding.

² Chatteris Radio only operates when parachuting is in progress, therefore, as there had been no parachuting at this time there was no service available to the pilot, who was listening out for Chatteris Traffic.

³ The Hurricane pilot reported that the transponder was selected on Modes A and C, but none were detected.

aircraft operating in [a nearby] ATZ, which they planned to pass adjacent to. Upon passing approximately 2300ft during the climb, they saw a small red aircraft [they thought] that had passed underneath their aircraft right-to-left and was continuing its flight northbound. They were only aware of the aircraft after it had passed underneath in their 8 o'clock position and were unable to take any avoiding action prior. They continued the climb and landed at [their destination] approximately 10min later.

[They mentioned that] upon their return to [their departure point] two days later it was noted by ATC that they had been unable to see the transponder return on their SSR. This was not mentioned on their departure but it was possible that their transponder may have become unserviceable on the subject flight. The pilot noted that the transponder had been selected on with an SSR code selected on their initial departure and a VFR conspicuity code selected thereafter.

THE DUXFORD AFISO reports that they recalled the day being generally busy, although they did not recall much in detail, except that they did recall the Hurricane holding off. As far as they could recall, there was no Airprox report made by either pilot, unless someone else took the call and had not informed them.

Factual Background

The weather at Duxford Airfield was recorded as follows:

METAR EGSC 051620Z 28007KT 9999 FEW048 21/09 Q1020

Analysis and Investigation

Duxford Airfield

The Sonex visited Duxford that morning, landing at 0912 and departed at 1104 with no further comms with Duxford that day.

The Hurricane landed at Duxford at 1627 and was on frequency at the time of the reported Airprox. However, the Airprox was not reported to Duxford at the time. [The Hurricane pilot] had made their initial call to Duxford at approximately 1604, reporting inbound from [the west] with a low readability. A practice display was taking place at the time, so they held off outside of the area until that was complete.

The workload was high with a mixture of based movements and practice displays.

The senior AFISO later confirmed that the [Hurricane pilot] was not under a Basic Service from Duxford [whilst holding off].

The Head of Duxford Airfield concurred with the [investigation] comments and that the correct action was carried out by the AFISO team. As above, the incident occurred outside their jurisdiction and in Class G (uncontrolled) airspace.

Root cause: pilots not achieving visual contact with each other.

CAA ATSI

On review of the Duxford report, it was noted that only the Hurricane [pilot] was on the Duxford frequency, [and the Duxford AFISO] would not have been aware of the presence of the Sonex. ATSI had nothing further to add to the report.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the Sonex was identified using Mode S data, while the Hurricane was seen as a primary track only (Figure 1).

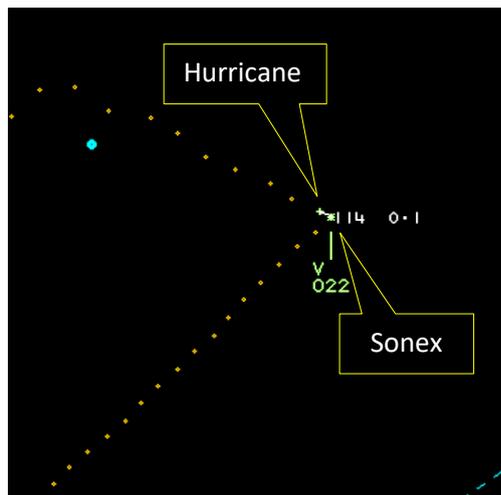


Figure 1- Time 1614:50

Further analysis of third-party aircraft tracking software was undertaken and the Sonex was detected using both MLAT and ADS-B data sources, dependent on the software used. The Hurricane was not visible on either of these sources.

Both pilots supplied their respective aircraft GPS navigation data, which was used in conjunction with the radar data. CPA was seen to have occurred at 1614:50 with 0.1NM lateral and approximately 40ft vertical separation as the Sonex appeared to pass in front of and below the Hurricane.

The Sonex and Hurricane pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.⁴ If the incident geometry is considered as converging then the Hurricane pilot was required to give way to the Sonex.⁵

Summary

An Airprox was reported when a Sonex and a Hurricane flew into proximity east of Wyton Airfield at 1615Z on Friday 5th September 2025. The Sonex pilot was operating under VFR in VMC 'listening out' on Chatteris Radio frequency, and the Hurricane pilot was operating under VFR in VMC 'listening out' on Duxford Information.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS track data, a report from the AFISO involved and a report from the appropriate operating authority. 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 discussed the actions of the Hurricane pilot and noted that they had been asked to hold-off for approximately 15min prior to being cleared for a landing slot, during which time the pilot had flown to the north to stay clear of the airfield and had remained on frequency without a Flight Information Service (FIS). The Board considered that the 15min hold-off time could have been utilised by requesting a surveillance-based service from Cambridge and members agreed that this may have served the Hurricane pilot in two ways - first, to have provided them with Traffic Information on the Sonex and, secondly, to have informed them of their lack of transponder emissions. The Board further noted that the Hurricane had not had any additional electronic conspicuity (EC) equipment installed, therefore there had been no alerting system available to the pilot via either R/T or EC. Members agreed, therefore, that the Hurricane pilot had had no situational awareness of the presence of the Sonex (**CF1**). The Board also noted that the pilot stated that their first sighting of the Sonex had been when *it 'had passed*

⁴ (UK) SERA.3205 Proximity.

⁵ (UK) SERA.3210 Right-of-way (c)(2) Converging.

underneath their aircraft right-to-left' at or after the point of CPA, and members agreed that this had effectively constituted a non-sighting of the Sonex aircraft by the Hurricane pilot (**CF4**).

The Board then turned their attention to the actions of the Sonex pilot and noted that the pilot had been tuned in to their enroute frequency and listening out for traffic at their destination. Members agreed that this had been appropriate but also wondered if the Sonex pilot had previously been in receipt of a surveillance-based service prior to selecting their destination frequency, as this may have helped with identifying any potential conflict. The Board noted that the Sonex had had an EC device fitted that may have alerted the pilot to the presence of the Hurricane, but there had not been any emissions from the Hurricane's transponder, and members agreed that the EC equipment in the Sonex had been incompatible with that of the Hurricane (**CF2**). The Board also acknowledged the Sonex pilot's concerns regarding their perceived lack of EC equipment in the Hurricane, and members agreed with the principle of the pilot's comments regarding when *'the CAA would make their mind up and mandate an electronic conspicuity protocol.'* Members further agreed that, with no information available to the pilot from a surveillance-based service at the time and no alert from their EC device, the Sonex pilot had had no situational awareness of the presence of the Hurricane (**CF1**). The Board considered that this further contributed to the pilot having not detected the Hurricane until the last moment, and members agreed that this had resulted in a late sighting of the Hurricane by the Sonex pilot (**CF3**).

In finalising their discussion, the Board noted the neither the Sonex pilot nor the Hurricane pilot had had situational awareness of the other's aircraft. Members agreed that, although the Sonex pilot had reacted immediately to the late sighting of the Hurricane, there had been a serious risk of collision and separation had been reduced to a bare minimum (**CF5**). As such, the Board assigned Risk Category A to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025199			
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:

A.

Safety Barrier Assessment⁶

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 the pilot of the Sonex nor the pilot of the Hurricane had any situational awareness of the presence of the other aircraft.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the electronic conspicuity device installed in the Sonex had been unable to detect the Hurricane.

See and Avoid were assessed as **partially effective** because the Sonex pilot had seen the Hurricane late and the Hurricane pilot had not seen the Sonex.

Airprox Barrier Assessment: 2025199		Outside Controlled Airspace		Effectiveness				
Barrier		Provision	Application	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	■	■	■	■	□			

⁶ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).