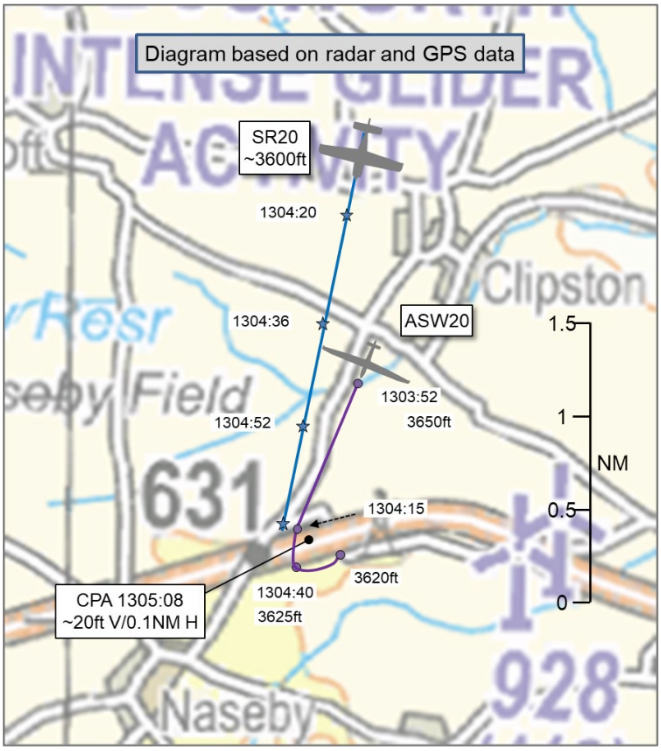
AIRPROX REPORT No 2025109

Date: 14 Jun 2025 Time: 1305Z Position: 5224N 00058W Location: 4NM SE of Husbands Bosworth

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	SR20	ASW20
Operator	Civ FW	Civ Gld
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Listening Out
Provider	East Midlands	Husbands B'worth
Altitude/FL	~3600ft	~3620ft
Transponder	A, C, S	Not fitted
Reported		
Colours	White, blue	White
Lighting	Strobes, nav, ldg	None
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	3500ft	NR
Altimeter	QNH (1012hPa)	QFE
Heading	198°	*'turning'*
Speed	127kt	55kt
ACAS/TAS	TAS	FLARM
Alert	None	None
Separation at CPA		
Reported	0ft V/0.1NM H	500ft V/*'minimal'* H
Recorded	~20ft V/0.1NM H	



THE SR20 PILOT reports that they were on a training sortie routeing […] to […]. Having passed Husbands Bosworth gliding site giving over 2NM clearance, the day had been prime for glider activity and there were other close calls as is the nature of UK airspace with multiple EC protocols and poor LARS provision. The first they had seen of the glider was it pointing at their wing, the pilot's face [had been] visible and it appeared behind the left door pillar ([the SR20 HP] was in the right-hand seat operating as an instructor). They immediately called the traffic to their student and the quickest course of action was to descend, as turning right wouldn't have been quick enough. No avoiding action appears to have been taken by the glider who appeared behind their right-hand side after the event still straight and level after their descent. Unlike almost every other glider seen [that day], the EC system [carried by the SR20] did not detect the glider and its apparent position was blanked by the aircraft structure. The HP had been surprised the glider [pilot] took no action […]. The pilot notes that they are also a glider pilot in addition to their fixed wing flying.

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

THE ASW20 PILOT reports that it was a sunny and thermic day, with strong wind. They took off in their glider from [departure airfield] for a local soaring flight over Northamptonshire, circling in thermals along the way. During the flight, whilst approximately overhead Naseby, which is close to Husbands Bosworth gliding club, they saw a light-aircraft flying from the direction of Market Harborough, appearing to travel roughly south-westerly, slightly below them. The ASW20 pilot had been in a turn, in a weak thermal. They had noted it was a low-wing aircraft with therefore good visibility in front and above. The ASW20 pilot had assumed that the aeroplane pilot had seen them also, particularly as gliders are easier to spot when turning due to the movement and as sunlight catches the wings. They therefore did not perceive it to be an immediate threat. Continuing in the established turn, when they had looked again in the direction of where the aircraft had been, they saw it descend and pass beneath their glider, with good vertical separation. The ASW20 pilot was concerned when they had seen an Airprox report had been

filed, as that suggests the other pilot had not seen them when they assumed they had. Aeroplanes transiting close to an active gliding club on a thermic day should expect to encounter gliders and keep a good lookout (and they say this as someone who flies powered aircraft as well as gliders). As a side note, their glider and the tugs from Husbands Bosworth airfield are fitted with [EC], which is a great aid for awareness of other local traffic, but unfortunately no help for transiting aircraft that don't use [that protocol of EC].

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

THE HUSBANDS BOSWORTH SAFETY OFFICER reports that there had been no interaction with the Husbands Bosworth launch point controller who was on duty at the time so no report is available.

Factual Background

The weather at RAF Wittering was recorded as follows:

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METAR EGXT 141250Z 22019KT CAVOK 24/10 Q1013 RMK BLU=
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Analysis and Investigation

UKAB Secretariat

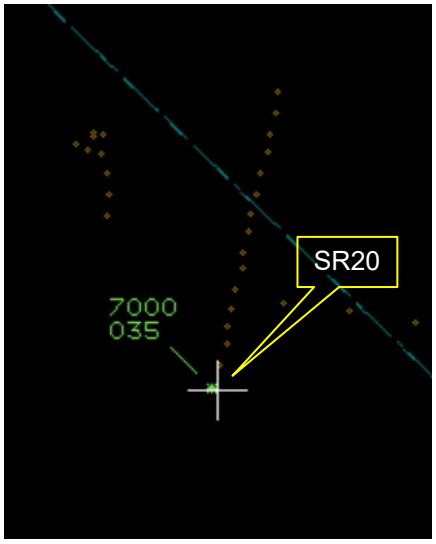

Figure 1: At CPA (1305:08) The ASW20 did not show on radar. White cross shows location of reported CPA.

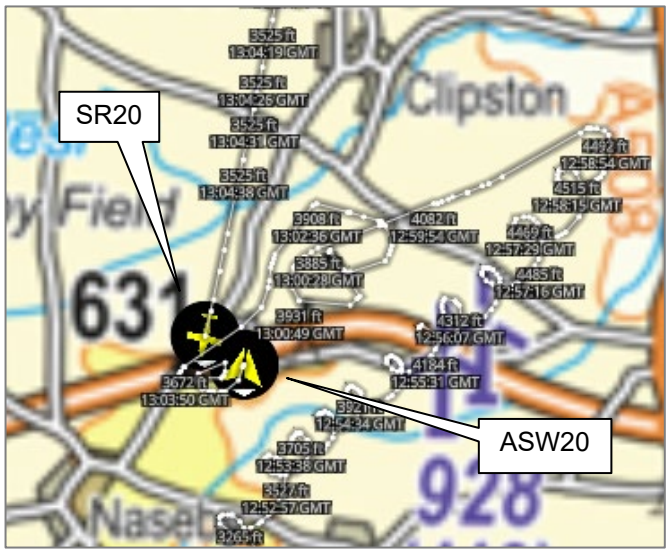

Figure 2: From the Airspace Analyser Tool at CPA minus 3sec (1305:05)

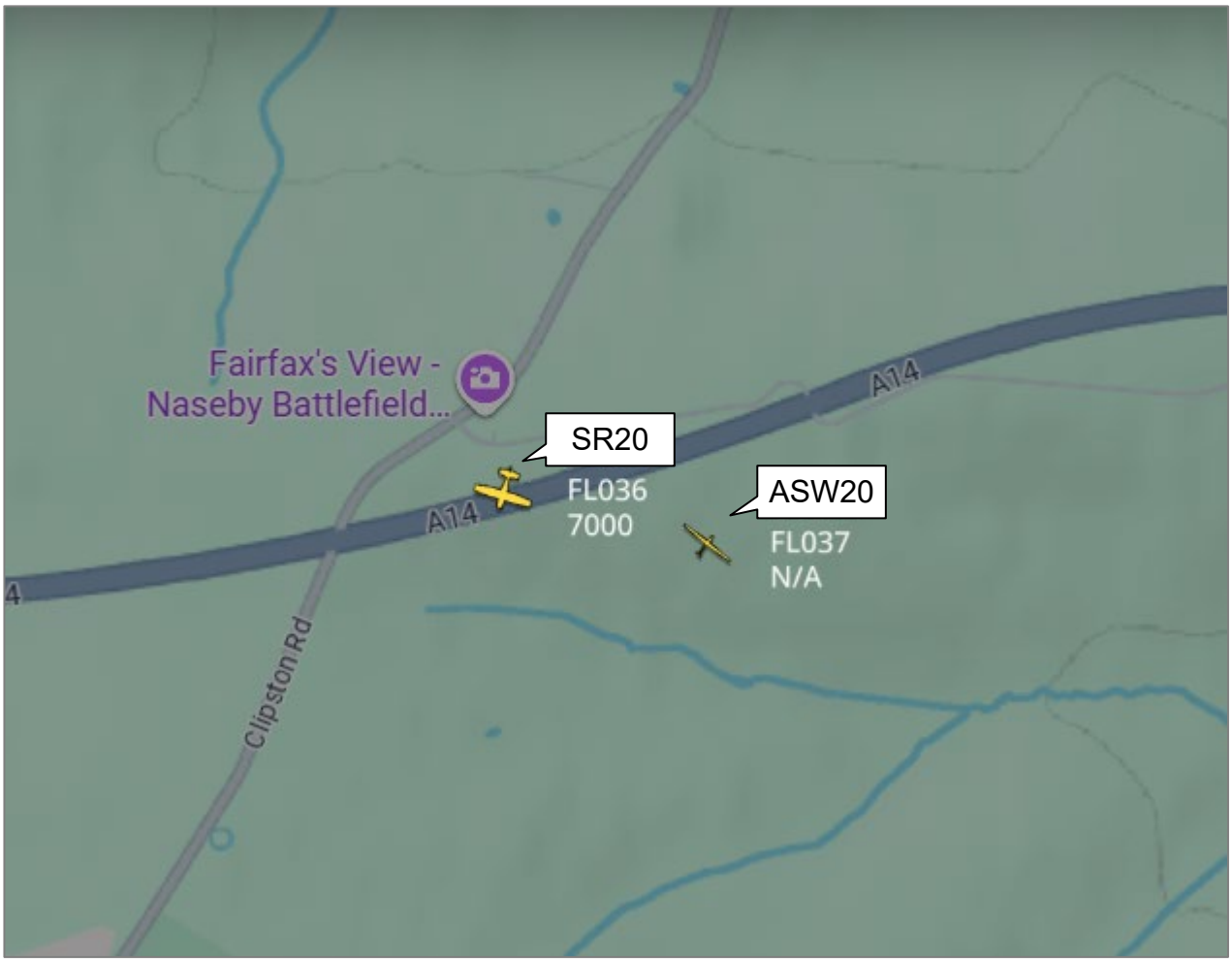

Figure 3: from an open-source aircraft tracking system at 1305:08

The SR20 was tracked and identified using Mode S data. The ASW20 did not appear on radar at or around CPA. Both aircraft could be tracked using a number of open-source tracking tools and, in correlation with the GPS data file provided by the ASW20 pilot, the separation at CPA could be estimated at 0.1NM horizontally and ~20ft vertically. The SR20 could be seen to have initiated descent rapidly from approximately CPA minus 1sec and appeared to 'bottom out' approximately 300ft below the ASW20's altitude.

The SR20 and ASW20 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 SR20 pilot was required to give way to the ASW20.[2]

Comments

AOPA

It is gratifying to see pilots pre-planning their route to avoid known aerial activity sites. It is interesting that the Electronic Conspicuity carried by both aircraft didn't alert. The SR20 pilot was lucky to have seen a glider and have time to take the appropriate action. Had the glider pilot stopped their turn on first sighting, or kept the SR20 in sight, this Airprox might not have been so close.

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

BGA

When operating in airspace where separation ultimately depends on "See and Avoid", pilots should not rely on the assumption that they have been seen by the crews of other aircraft that they have previously sighted.

Almost all gliders in the UK (including this ASW20) are fitted with proprietary EC equipment that warns of impending conflicts with other similarly-equipped aircraft. Although this system has proved effective at mitigating the risk of Airprox with other gliders, basic installations do not detect aircraft equipped only with transponders or ADS-B-out, as in this case. However, recent versions of this EC equipment can optionally add a 1090MHz receiver subsystem, and thereby warn of conflicts with transponder and ADS-B-out-equipped aircraft. Upgrading glider EC hardware to add such a 1090MHz receiver subsystem provides a useful additional safety barrier in airspace with a high density of transponder or ADS-B-out equipped aircraft.

Summary

An Airprox was reported when an SR20 and an ASW20 flew into proximity 4NM southeast of Husbands Bosworth at 1305Z on Saturday 14th June 2025. The SR20 pilot was operating under VFR in VMC and had been Listening-Out on the East Midlands Radar frequency, and the ASW20 pilot was operating under VFR in VMC and had been Listening-Out on the Husbands Bosworth Traffic frequency.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data and a report from the Husbands Bosworth Safety Officer. 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 discussed the actions of the SR20 pilot, noting that they had planned to avoid a known active glider site and were aware of activity on the day. They had maintained a listening watch with the nearest LARS provider and members acknowledged that the receipt of an active Air Traffic Service in that area is difficult but would always advise seeking one whenever possible to improve the likelihood of situational awareness of proximity traffic and, in this case, members opined that an information call to Husbands Bosworth as they had passed (**CF1**) may hay have alerted others to their passage. The Board noted that the SR20 had been equipped with a TAS unit which had unfortunately been incompatible with the equipment utilised by the ASW20 in this case (**CF4**). Members agreed, therefore, that the combination of incompatible EC and no active ATS had left both pilots with no situational awareness of the presence of the other (**CF3**). The Board further agreed that the SR20 pilot had achieved a late sighting of the glider (**CF5**) which had allowed the SR20 pilot to initiate avoiding action.

Moving to the actions of the ASW20 pilot, members noted that they had been on a local soaring sortie in an area known to them. Like most aircraft of this type, they had carried an EC unit configured primarily for interaction with other aircraft on similar flight profiles. Unfortunately, on this occasion, the EC carried had been unable to detect any electronic emissions from the SR20 (**CF4**). As the ASW20 pilot had maintained a listening watch on the local Husbands Bosworth frequency, and with a lack of EC interoperability, the Board agreed that they had not gained any situational awareness of the presence of the SR20 (**CF3**). Members discussed the ASW20 pilot's actions on having sighted the oncoming SR20. They were cognisant of the ASW20 pilot's belief that the SR20 pilot 'must have seen them' but wished to remind all operators that as See and Avoid is a two-part action and is the final barrier to a mid-air collision, it is critically important that, when gaining visual with a conflicting aircraft, it should be assumed that the other pilot has not seen your aircraft and do all in your ability to ensure safe separation. In this case, the ASW20 pilot could have amended their tactical plan to ensure separation from the SR20 (**CF2**) but unfortunately had found themselves flying into conflict with it (**CF6**).

Concluding their discussion, members turned their attention to the determination of the risk of collision. They noted that neither pilot had gained any situational awareness of the presence of the other but the ASW20 pilot had gained visual contact with the SR20 as they had turned and unfortunately had then

maintained tracking that had brought the 2 aircraft into conflict despite the SR20 pilot's late avoidance manoeuvre. Therefore, members agreed that safety margins had been reduced much below the norm and the Board was in agreement that there had been a risk of collision (**CF7**), assigning a Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025109			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Tactical Planning and Execution			
1	Human Factors	• Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions
2	Human Factors	• Insufficient Decision/Plan	Events involving flight crew not making a sufficiently detailed decision or plan to meet the needs of the situation	Inadequate plan adaption
	• Situational Awareness of the Conflicting Aircraft and Action			
3	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			
4	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			
5	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
6	Contextual	• Loss of Separation	An event involving a loss of separation between aircraft	Pilot flew into conflict
	• Outcome Events			
7	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:

Tactical Planning and Execution was assessed as **partially effective** because the SR20 pilot could have elected to make an information call as they had passed Husbands Bosworth.

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

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

Electronic Warning System Operation and Compliance were assessed as **ineffective** because, although both aircraft had been equipped with conspicuity equipment, neither had been able to detect electronic emissions from the other aircraft.

See and Avoid were assessed as **partially effective** because the SR20 pilot had achieved only a late sighting of the ASW20, and the ASW20 pilot, having achieved early visual contact, had flown into conflict with the SR20.