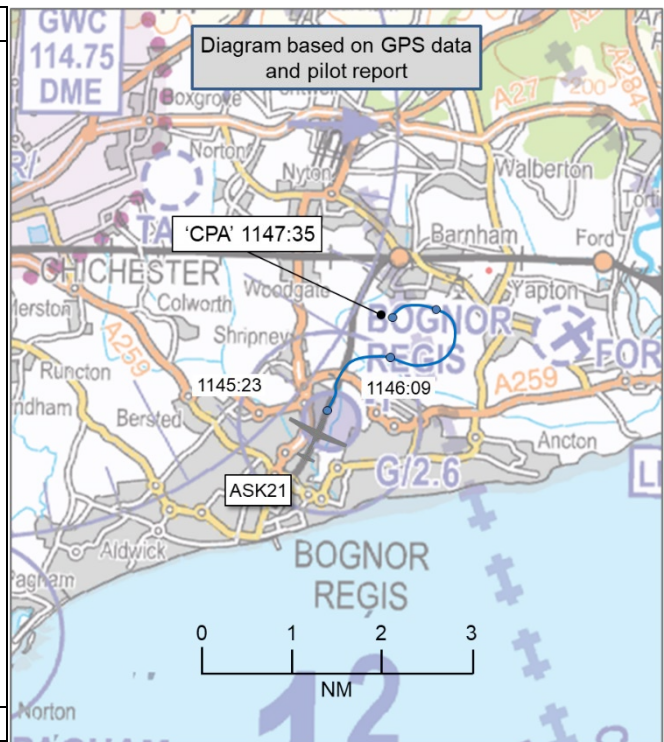


**AIRPROX REPORT No 2023223**

Date: 23 Sep 2023 Time: 1148Z Position: 5049N 00038W Location: IVO Bognor Airfield

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASK 21	Untraced
Operator	Civ FW	
Airspace	London FIR	
Class	G	
Rules	VFR	
Service	Listening Out	
Provider	Bognor	
Altitude/FL	A010	
Transponder	A, C, S	
<b>Reported</b>		
Colours	White, yellow	
Lighting	Landing, strobe	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	1200ft	
Altimeter	QNH	
Heading	190°	
Speed	60kt	
ACAS/TAS	PowerFLARM	
Alert	None	
<b>Separation at CPA</b>		
Reported	30ft V/20ft-70ft H	NK
Recorded	NR	



**THE ASK21 PILOT** reports that they had been on a training flight from Bognor teaching a student to aerotow; the student had been in control at 1200ft. The other aircraft had appeared from behind their left wing and looked like it would pass between them and the Eurofox. The ASK21 pilot had pulled the tow release and violently pushed forward. The left wing of the PA46 [they recall] had passed over the canopy of the tug, the tug pilot just saw a white flash. The ASK21 pilot thought they had collided but, after regaining level flight, had been surprised and relieved to see both aircraft still flying. The 'PA46' did not appear to alter course at all. There had been no indications on the [electronic conspicuity equipment] or TCAS [sic] in either glider or tug. The tug pilot called Goodwood but they had no knowledge. People on the ground could not find the aircraft on FlightRadar24 although the tug and glider were visible. Unfortunately, due to the speed of the other aircraft and the need to take urgent evasive action, the ASK21 pilot had been unable to see the registration. The tow plane gave chase but had been unable to see a registration before it had got too far away. There had also been several witnesses on the ground all of whom thought there was going to be a collision.

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

**THE OTHER AIRCRAFT** could not be traced.

**Factual Background**

The weather at Shoreham was recorded as follows:

METAR EGKA 231120Z 21010KT 9999 FEW031 16/10 Q1017=

## Analysis and Investigation

### UKAB Secretariat

Despite significant effort, no trace of a second aircraft could be found. Radar, ADS-B and electronic conspicuity (EC) equipment replays were examined for a period of 60min either side of the reported time of the event with no other traffic recorded in the area and height bracket described.

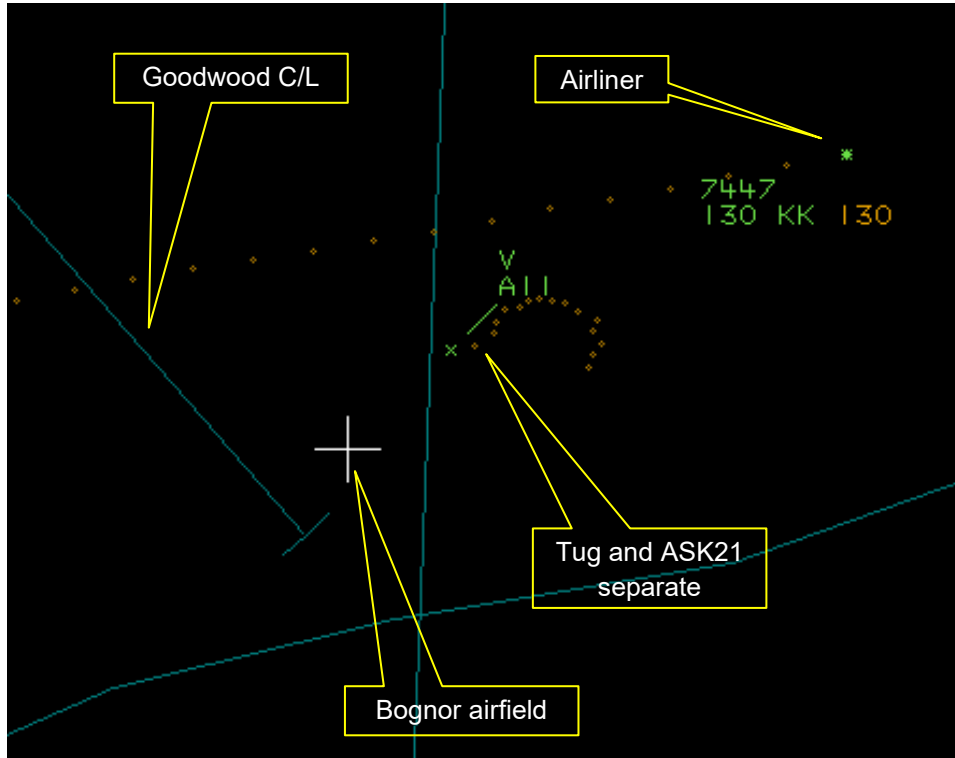


Figure 1: Radar snapshot at 1147:45 (CPA + 10sec) – 1min after the Eurofox (Tug) first appeared on radar. The ASK21 did not appear on radar.

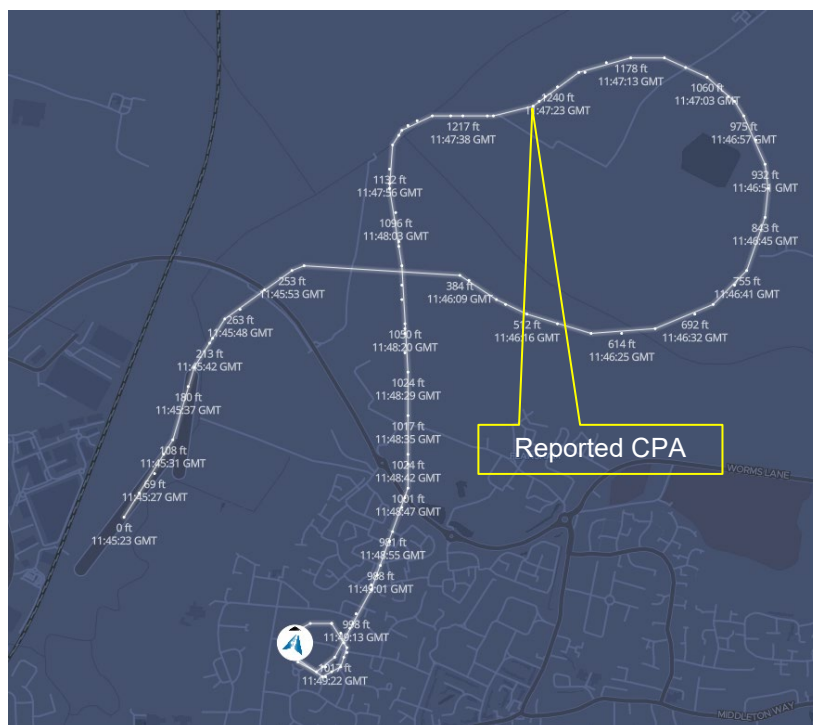


Figure 2: EC equipment track of the ASK21 from launch to CPA +~3 mins

The ASK21 and untraced aircraft pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.<sup>1</sup>

## Comments

### BGA

Maintaining the correct position behind the tow-plane when aerotowing demands a glider pilot's undivided attention; hence when teaching aerotowing both the instructor and student will be looking only at the towplane, and are unlikely to see any conflicting aircraft unless and until it enters that narrow field of view. The tow-pilot, as pilot in command of the aerotow combination, is responsible for lookout and collision avoidance, but (as in many powered aircraft) may have a partially obstructed view to the rear, so that an overtaking aircraft may not be seen until it passes in front.

## Summary

An Airprox was reported when an ASK21 and an untraced aircraft flew into proximity in the vicinity of Bognor airfield at 1148Z on Saturday 23<sup>rd</sup> September 2023. The ASK21 pilot had been operating under VFR in VMC and listening out on Bognor radio. The pilot of the other aircraft could not be traced.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available consisted of reports from the ASK21 pilot, limited radar photographs/video recordings and GPS tracking for the reporting 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 lack of trace for the second aircraft, noting that had it reportedly been a PA46 as described by the ASK21 pilot, they observed that there are a limited number registered in the UK and are generally very well equipped, making the inability to trace such aircraft a significant issue for Airprox investigation.

In considering the report received from the ASK21 pilot, members noted that, until the point of separation between tug and glider, they were deemed to have been a single unit with the tug pilot acting as pilot-in-command and the glider pilot focussed solely on the tug. Members recalled that this scenario highlights the need for other aircraft to be particularly vigilant and remain well clear of active glider sites, utilising conspicuity equipment and radio frequencies where available to maintain situational awareness. In this case, the apparent lack of conspicuity of the second aircraft (**CF2**) and the lack of an active Air Traffic Service for the ASK21 pilot meant that they had not had any situational awareness of the second aircraft (**CF1**).

The Board accepted that the ASK21 pilot had effectively had a non-sighting of the second aircraft (**CF3**) and commended the pilot for their immediate action at the time. Members noted that the initial report had been submitted by the ASK21 pilot and, considering the relationship between tug and glider as described earlier, felt that in such circumstances a report of events from the tug pilot's perspective may have helped in creating a more rounded picture of the Airprox.

When considering the risk, members considered the entirety of the information available to them. They accepted that the second aircraft could not be traced through any of the electronic means available to the Board. In considering the reports from the ASK21 pilot, they noted the precise description and immediate actions the encounter had led to and accepted that the pilot had effectively had a non-sighting of the second aircraft and that providence had played a large part in the event with separation having been reduced to a bare minimum (**CF4**). Accordingly, members assigned a Risk Category A to this Airprox.

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<sup>1</sup> (UK) SERA.3205 Proximity.

**PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK****Contributory Factors:**

	2023223			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
<b>Flight Elements</b>				
<b>• Situational Awareness of the Conflicting Aircraft and Action</b>				
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
<b>• Electronic Warning System Operation and Compliance</b>				
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
<b>• See and Avoid</b>				
3	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
<b>• Outcome Events</b>				
4	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 Assessment<sup>2</sup>**

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 the ASK21 pilot had no situational awareness of the untraced aircraft.

**Electronic Warning System Operation and Compliance** were assessed as **ineffective** because electronic conspicuity equipment carried by the ASK21 had been incompatible with that carried by the untraced aircraft.

**See and Avoid** were assessed as **ineffective** because the ASK21 pilot effectively had a non-sighting of the untraced aircraft.

<sup>2</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

<b>Airprox Barrier Assessment: 2023223</b>		Outside Controlled Airspace							
<b>Barrier</b>		<b>Provision</b>	<b>Application</b>	<b>Effectiveness</b>					
				<b>Barrier Weighting</b>					
				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	✘	✘						
<b>Key:</b>		<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>			
Provision	●	●	✘	●					
Application	●	●	✘	●					
Effectiveness	■	■	■	■					