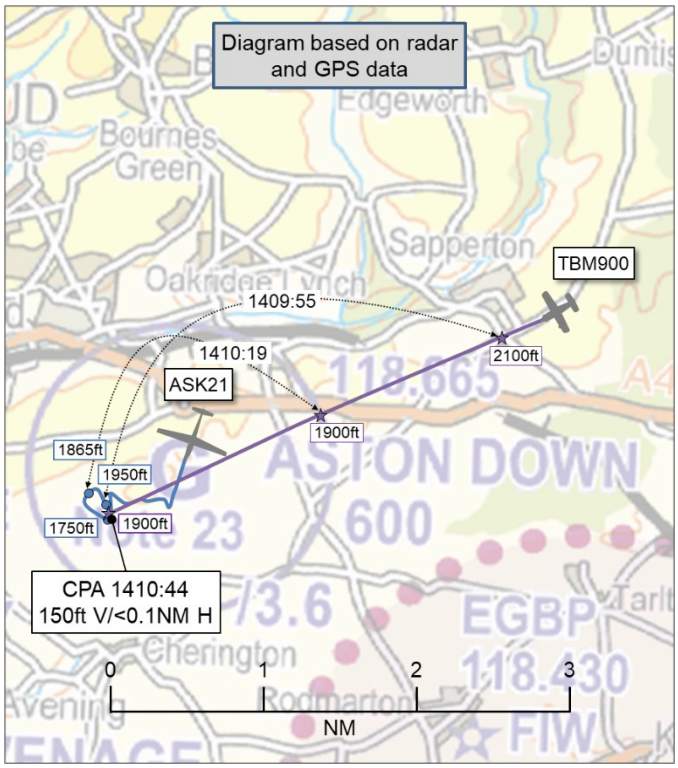
AIRPROX REPORT No 2025247

Date: 10 Dec 2025 Time: 1411Z Position: 5142N 00209W Location: ivo Aston Down gliding site

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASK21	TBM900
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	NK
Provider	Aston Down	NK
Altitude	~1750ft	1900ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White	Not Reported
Lighting	none	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	NK	
Altimeter	QFE	
Heading	230°	
Speed	35kt	
ACAS/TAS	FLARM	
Alert	None	
	Separation at CPA	
Reported	50ft V/15m H	NK
Recorded	~150ft V/<0.1NM H	



THE ASK21 PILOT reports that they were instructing an SPL student in a Schleicher ASK21. They were instructing from the rear seat. This was the third flight of a batch of three with the same student. After a winch launch to 1400ft on the Aston Down QFE, the student commenced manoeuvres to lose height prior to joining a left-hand downwind leg to land on RW20. There was a strong wind gradient with the surface wind gusty, at 15kt south-southwesterly, whereas the wind at circuit height was approximately 35kt south-southwesterly. Because of the turbulent conditions the student was flying the ASK21 at 55kt. This enabled the student to hold the aircraft into wind whilst descending to join the downwind leg. They had been holding into wind on a heading of 230° when the student commenced a turn to the left towards the start of the downwind leg. As the left wing started to drop, they saw an object in their peripheral vision over the left wing. This focussed to a single-engined [aircraft] behind them and level with their tailplane. It was static in their vision and growing rapidly in size. They would estimate the range to be 300m-500m. They shouted *"aircraft"* to the student and took control, rapidly moving the control forward and left to initiate a steep descending left-hand turn. They had turned less than 90° when the powered aircraft passed just above their tailplane. They continued the turn through 360° to see the aircraft disappearing into the distance with no apparent change in track. In all probability, the pilot had not seen the ASK21 at any stage in the incident. It should be noted that the sun was low in the sky and the diffraction caused by this and broken cumulus made visibility to the southwest poor. Nevertheless, they could easily see the powered aircraft as it departed to the southwest. As with all such incidents, subjective time extends but based on the recorded speed of the powered aircraft, they had a closing speed of about 70m/sec. This would be consistent with sighting at 300m-400m and turning less than 90° before it passed their tail. On completing the avoidance turn the altimeter showed 1200ft QFE and they recorded the time as 1410 UTC. Several ground observers also witnessed the incident.

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

THE TBM900 PILOT did not respond to requests to provide a report.

Factual Background

The weather at RAF Fairford was recorded as follows:

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SPECI EGVA 101410Z AUTO 25015KT 9999 BKN025 OVC030 12/08 A2999[1] RMK AO2 CIG 025V030 BKN
V SCT CIG 023 RWY09 SLP160
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Analysis and Investigation

UKAB Secretariat

An analysis of the NATS replay was undertaken and the TBM900 was seen passing Aston Down at the reported time of the Airprox. There was no primary or secondary radar trace on the ASK21.

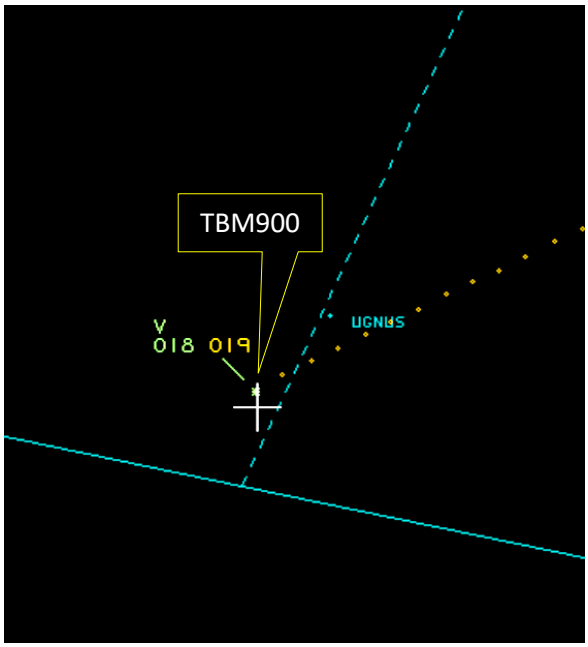


Figure 1 – 1410:51

An analysis of third-party tracking software was undertaken, and the TBM900 was detected using ADS-B data sources, while the ASK21 glider was detected using FLARM data (Figure 2).

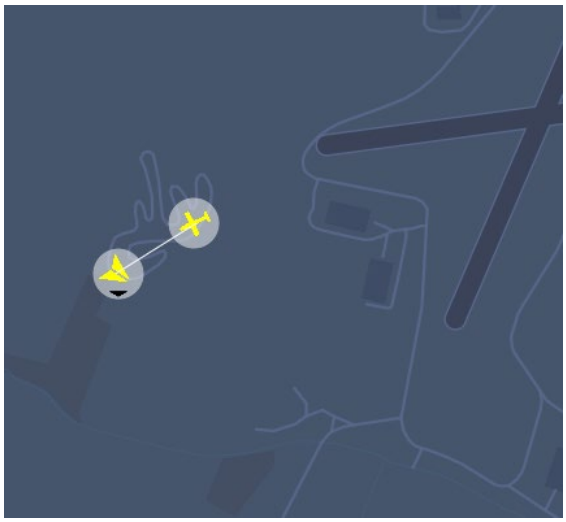


Figure 2 -Time 1410:38

[1] A2999 equates to 1016hPa

The pilot of the ASK21 provided their navigation data file. Using combined radar and GPS data, the CPA was assessed to have occurred at 1410:44 with approximately 150ft vertical and less than 0.1NM lateral separation.

The ASK21 and TBM900 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] An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation.[3]

Comments

AOPA

It is a shame that the pilot of this aircraft did not participate; without their valued input, the safety lessons that could have been learned cannot be explored in an efficient manner.

The CAA provides a VFR navigation Safety Sense leaflet 29[4] which offers good advice about flying close to notified airspace, which in this case has gliders launching to 3600ft AMSL. Other documents include the Skway Code (page 76) and the UK AIP online edition.

BGA

The glider pilot did well to spot the TBM900 with just enough margin to turn and descend out of its path.

UK gliders launch sites are listed in UK AIP ENR 5.5 and typically labelled on CAA VFR charts with a 'G in a circle' symbol (See Airprox depiction above and Figure 3). A greater density of gliders may be expected nearby at any time during daylight hours, and at any altitude up to cloudbase. More active sites are accompanied by an "Intense Gliding Activity" caption.

Figure 3 Depiction of the winch cable and winch launch altitude

Where winch launching is used, the maximum winch launch altitude is listed in the AIP and marked on the chart; this is 3600ft AMSL at Aston Down, as indicated by the black arrow in Figure 3. A glider being winch-launched achieves a climb angle of 45° and an initial climb rate in excess of 4000ft/min

[2] (UK) SERA.3205 Proximity.
[3] (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.
[4] SS29 VFR Moving Map Devices (ref p4 & p9)

within 10sec of starting its ground roll. Under the right conditions, it will then take about 1min to climb to 2500ft AGL; hence the pilot of an aircraft overflying a winch site below its notified maximum winch altitude will have little warning of a launching glider that suddenly appears at or above their level. Overflying a winch site below the notified altitude during daylight hours also risks encountering high tensile strength cable, as seen in Figure 3, connecting a launching glider to the winch on the ground, or the drogue parachute which regulates its descent.

The CAA publishes advisory materials on Flying over Gliding Sites'.[5]

The electronic conspicuity (EC) equipment fitted to almost all gliders warns of impending conflicts with other similarly equipped aircraft. This system mitigates the risk of Airprox with other gliders, but older and more basic installations do not detect aircraft broadcasting ADS-B signals, as the TBM900 was in this case. However, recent versions of this EC equipment can optionally include a 1090MHz receiver subsystem and thereby warn of conflicts with ADS-B Out equipped aircraft. Updating glider EC hardware to add capability would provide a useful additional safety barrier in airspace with a high density of ADS-B Out equipped aircraft.

Though we are grateful to the CAA for the current publication and promulgation of the materials cited above, we recommend that all possible channels to promote this safety message are used.

Summary

An Airprox was reported when an ASK21 and a TBM900 flew into proximity in the vicinity of Aston Down gliding site at 1411Z on Wednesday 10th December 2025. The ASK21 pilot was operating under VFR in VMC and listening out on the Aston Down gliding frequency. The flight rules under which the TBM900 pilot was operating could not be established.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the ASK21 pilot, radar photographs/video recordings, and GPS track data for the flight of the ASK21. 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 TBM900 pilot and noted that the pilot appeared to have planned a direct track, based on radar and ADS-B tracking data, from their point of departure to their destination without apparent consideration of the airspace and/or potential hazards enroute. Members wondered why this had been the case, noting that they would expect the TBM900 to have had an effective navigation database with airspace and glider site information and, possibly, proximity warnings. The Board further discussed the function of chart decluttering and switching off warnings, as enabled by some EFB's, as being counterproductive to flight safety. Members wondered, firstly, whether the pilot had not seen the glider site due to decluttering of lower airspace for example and, secondly, whether manufacturers may consider disabling any airspace warning function. Regardless, members agreed that there had been sufficient pre-flight planning information available on the CAA charts, with the glider site clearly marked, the winch launch altitude displayed, and the notification of 'intense glider activity' (Figure 3) for the pilot to have better planned their routeing and not to have directly overflown an active winch-launch glider site (**CF4**, **CF2**). The Board then discussed a common misconception by some GA pilots that gliders may not be flying when there is a a low cloudbase or other perceived poor weather conditions, and wished to reiterate to the GA community, in general, to review GASCo's Take Two advice[6] and the CAA Safety Sense leaflet 29[4] on the use of VFR moving maps. Members felt that, if the TBM900 pilot had been unable fly at a suitable height above Aston Down glider site and had needed to maintain VMC, then following the advice of the Take Two guidance would likely have routed the TBM900 suitably clear of the dangers of the winch launch cable and much of the associated glider activity. The Board also noted that a courtesy call on the Aston Down frequency may have alerted local glider traffic to the presence of the TBM900. As it was, members agreed that the TBM pilot had neither

[5] Flying Over Glider Sites

[6] Take Two

communicated their routeing intentions nor avoided the pattern of traffic already formed at Aston Down (**CF1**, **CF3**).

Moving their attention to the actions of the ASK21 pilot, the Board noted that the pilot had been listening out on the Aston Down frequency whilst their student had been manoeuvring to descend and land at the airfield. The Board noted that the pilot had heard no transmissions on that frequency from the TBM900 pilot, nor had they received any warning of proximate traffic from their EC device. Members agreed that, had the ASK21's EC device been able to receive and detect 1090MHz signals, then they may have been able to have detected the ADS-B emissions from the TBM900. However, members agreed that the ASK21's EC equipment had not been compatible with that of the TBM900, being unable to detect it, and that this, combined with a lack of communication from the TBM pilot, had led the ASK21 pilot to have had no situational awareness of the TBM900's presence (**CF5**, **CF6**).The Board noted that, as the student pilot had made a left turn onto downwind, the instructor had seen the TBM900 approaching them from behind. Members agreed that the sighting had been sufficiently late to have warranted the instructor (PIC) to have taken control and dive away from the approaching aircraft (**CF7**).

The Board, in assessing a Risk category for this event, noted that the TBM900 had overflown an active glider site, where winch launching had been in progress. The TBM900 pilot had not notified local traffic of their routeing or position and that this had resulted in a lack of situational awareness of the TBM900's presence and position for the ASK21 pilot. Members concurred that it had been fortuitous that the ASK21 pilot had seen the TBM900 approaching them from behind and manoeuvred accordingly to increase vertical separation and avert a likely collision. The Board agreed that safety had not been assured (**CF8**) and, as such, assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025247			
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	• Aircraft Navigation	An event involving navigation of the aircraft.	Flew through promulgated and active airspace, e.g. Glider Site
3	Human Factors	• Monitoring of Environment	Events involving flight crew not to appropriately monitoring the environment	Did not avoid/conform with the pattern of traffic already formed
4	Human Factors	• Pre-flight briefing and flight preparation	An event involving incorrect, poor or insufficient pre-flight briefing	
	• Situational Awareness of the Conflicting Aircraft and Action			
5	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			
6	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			
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
	• Outcome Events			
8	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[7]

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

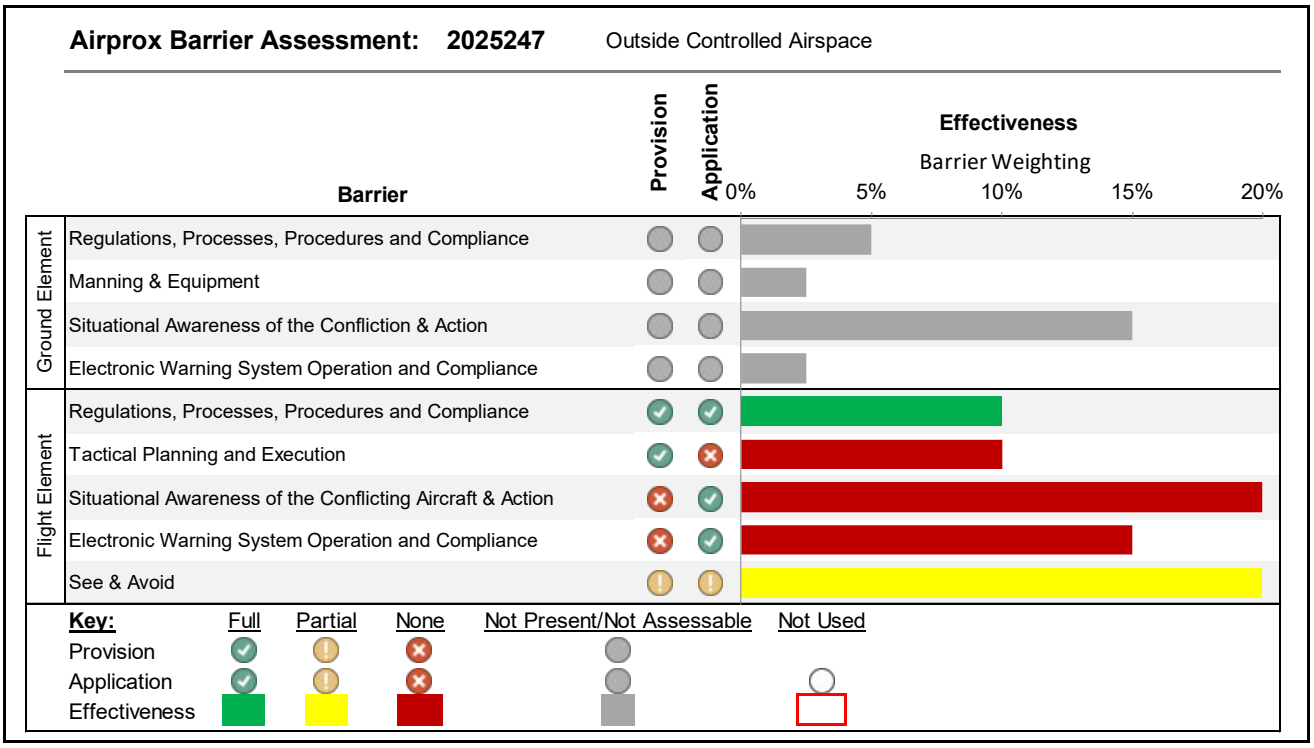
Flight Elements:

Tactical Planning and Execution was assessed as **ineffective** because the TBM900 pilot had planned their route to fly through a published area of glider activity without communicating their intentions to traffic using Aston Down glider site.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the ASK21 pilot had no situational awareness of the presence of the TBM900.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the ASK21's electronic conspicuity device was not able to detect any emissions from the TBM900.

See and Avoid were assessed as **partially effective** because the ASK21 pilot had not seen the TBM900 until a late stage.



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