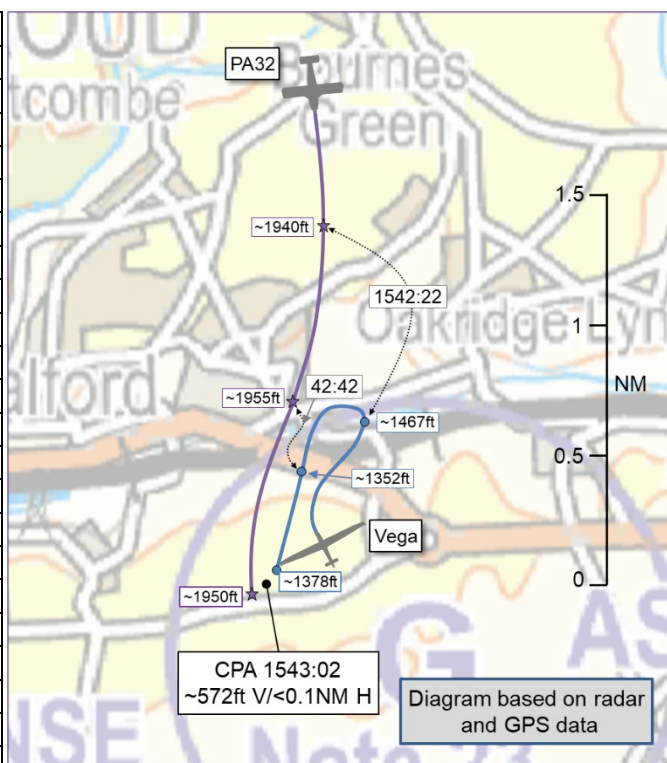


AIRPROX REPORT No 2025087

Date: 16 May 2025 Time: 1543Z Position: 5143N 00209W Location: ivo Aston Down Airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Vega	PA32
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	Gloster Approach
Altitude	~1378ft	~1950ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White	Blue and white
Lighting	None	Ldg, taxi, nav, bcn
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1000ft	2000ft
Altimeter	QFE	NR
Heading	315°	180°
Speed	55kt	130kt
ACAS/TAS	FLARM	FLARM
Alert	None	Unknown
Separation at CPA		
Reported	<1000ft V/NK H	500ft V/3NM H
Recorded	~572ft V/<0.1NM H	



THE VEGA PILOT reports that they winch launched from the southern end of Aston Down's RW02. After launching, they flew locally in the northwest area outside the RW02 left-hand circuit. As they were making a left turn to start their downwind leg at approximately 1000ft-1100ft AGL, they spotted an aircraft heading south (from the north), and above them. They continued their left turn [because they believed that] if they had turned right, they would have increased the risk of collision. They then made a call on Aston Down's frequency to report an Airprox and noted the time. They received no reply. As they were on their downwind leg, [the other aircraft] flew by them on their right-hand side. It was far closer than they would have been comfortable with, and definitely was not above 3000ft AGL (the height at which aircraft should transit around Aston Down). After landing on RW02 west side grass, they checked [two different aircraft tracking software websites], which identified the PA32 aircraft. They also noted the time as 1547, meaning that the Airprox would have happened in the few minutes leading up to that.

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

THE PA32 PILOT reports that they had been alerted by [the Gloster Approach controller] of gliding activity to the south of Gloucester. They reported having seen a glider below and to the left of them and had altered course to the right, west, away from the landing site. They believed they were well clear of the aircraft in sight, and had been looking out for the notified glider activity.

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

THE GLOSTER APPROACH CONTROLLER reports they had been informed of the Airprox by email after the event. They had no recollection of the event.

THE GLOUCESTER ATS MANAGER reports that, after having listened to the R/T, the following had occurred: The PA32 was outbound from Gloucestershire to [destination]. The Approach controller had

warned the crew of possible gliding activity at the gliding sites of Aston Down and Nympsfield (assuming they were active, as they did not normally get any warning of their flying activity). No FIS was agreed between the controller and the PA32 pilot for that flight.

Factual Background

The weather at Gloucestershire Airport was recorded as follows:

METAR EGBJ 161550Z 36006KT 330V040 CAVOK 22/04 Q1024

Analysis and Investigation

Gloucestershire Airport

Details of the investigation completed included a discussion with the Approach ATCO who spoke to [the PA32 pilot], collation of Flight Progress Strip and METAR, review of third party recordings, listening to ADI and Approach (APP) R/T recordings.

Gloucestershire ATC was not aware of this Airprox until [after the event] when the MATS received an email from the Airprox Board. The ATCO concerned was advised and an MOR was filed by the Approach ATCO involved.

Both ADI and APP were staffed with ATCOs who were endorsed in both ADI and APP. Gloster Radar (ATM) was unserviceable. The METAR (information 'W') timed at 1520 was:

METAR EGBJ 161520Z 04006G16KT 010V080 CAVOK 22/03 Q1024

The outbound leg for [the PA32] did not appear on the Gloucestershire traffic management spreadsheet. The reason for this was unknown (due to the length of time passed and no-one being able to remember) although an inbound flight for the same aircraft did appear later in the day and earlier that morning.

The dual valid ADI ATCO had just taken over the position when [the PA32 pilot] called for start at 1529 and start-up approval was given.

At time 1531 [the PA32 pilot] reported that they were in receipt of information 'W' and requested taxi. Taxi was given to holding point C1 for RW09 and a squawk of 4531 was issued along with QNH 1024hPa. All were read back correctly.

At time 1536 [the PA32 pilot] reported ready for departure and was told to line up and wait RW09. [The PA32 pilot] was subsequently told "[C/S] right turn out to the south RW09 cleared for take-off wind 020/3". This was read back correctly.

The flight progress strip was annotated appropriately to show all of the above and indicates that [the PA32] was airborne at 1537.

Tower transferred them to Approach at 1536:58.

The following exchange then took place between [the PA32 pilot] and Gloster Approach:

1539:34 – [PA32 C/S]: *"Gloster Approach [C/S] good afternoon."*

1539:40 – APP: *"[PA32 C/S] Gloster Approach good afternoon, there may be gliding activity to the south of the aerodrome. Report passing, uh, report approaching [waypoint]."*

1539:50 – [PA32 C/S]: *"Report approaching [waypoint], copy gliding traffic and currently one thousand seven hundred feet QNH 1024."*

1539:59 - APP: "[C/S] roger."

There were no further exchanges between [the PA32 pilot] and Gloster Approach.

The Approach ATCO could not remember the event but believes that, in similar situations and if two way communication was lost with an aircraft formerly on the approach frequency, third party ADS-B/MLAT software could be used to ascertain if an aircraft had changed transponder code. If an aircraft had changed code then the reasonable assumption is made that the aircraft had "*gone en-route*" i.e. transferred to another service provider or just left the frequency.

It was noted that no type of service was agreed between Gloster Approach and [the PA32 pilot]. Whilst this was the case it must be noted that the only two types of service that Gloster Approach could provide were Basic and Procedural (Alerting Service being part of both) and, as this was a VFR flight, in reality only a Basic Service could have been provided. It was reasonable to assume that a notional Basic Service was being provided. The Gloster Approach ATCO gave appropriate generic Traffic Information regarding the possibility of encountering gliding activity south of the aerodrome (Gloster). This information was acknowledged by [the PA32 pilot].

At no time did the Gloster Approach ATCO have evidence or reason to think that a definite risk of collision existed. [The PA32] and [Vega] pilots were both believed to be operating VFR in VMC in Class G airspace and were solely responsible for avoiding each other.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the PA32 was identified using Mode S data.

Further analysis of other aircraft tracking sources was undertaken and both aircraft could be seen, although the Vega's track was intermittent. The combined tracks from radar, information from ADS-B sources, and files produced by the navigation equipment fitted to each aircraft were used to assess CPA at 1543:02 with approximately 572ft vertical and less than 0.1NM lateral separation.

The PA32 was seen to have manoeuvred right of track at approximately 1542:42 prior to reaching Aston Down and then passed above and ahead of the Vega from right-to-left as the Vega flew downwind to land at Aston Down (Figure 1).

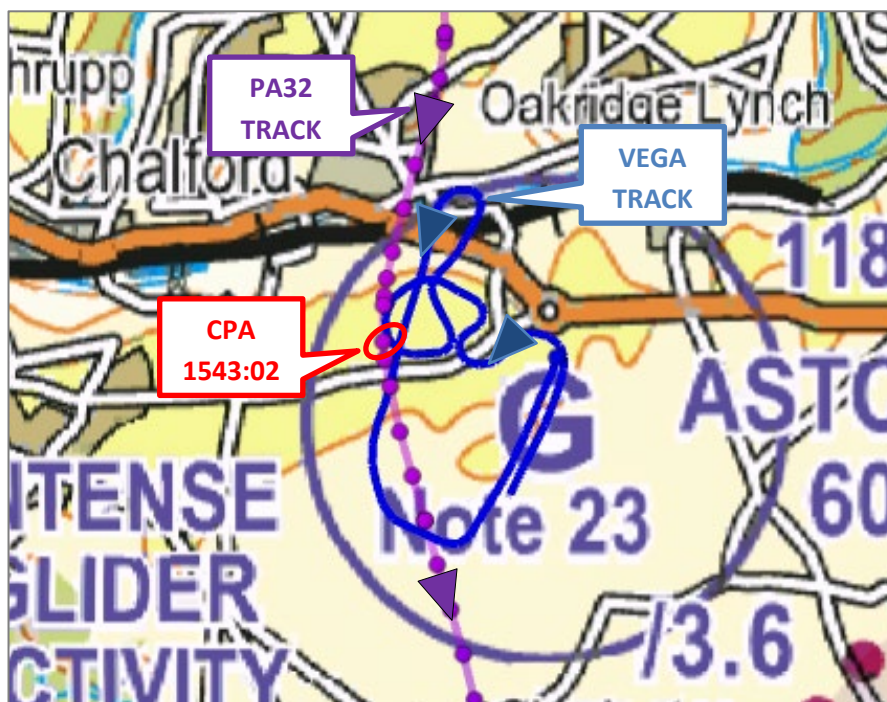


Figure 1 – overlay of PA32 and Vega tracks and CPA.

The Vega and PA32 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 overtaking then the Vega pilot had right of way and the PA32 pilot was required to keep out of the way of the other aircraft by altering course to the right.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

In this case, due to Gloster Approach only being able to offer a Basic Service and having been advised gliding was taking place at Aston Down, it would have increased everyone's situational awareness to call Aston Down on the published frequency.

The blue circle around a gliding site is a tool used to highlight gliding is taking place, flying in the vicinity of these areas can be intense, with launch heights up to 3000ft above ground level (AGL), circuit traffic is mostly at 1000ft AGL. Pilots may wish to avoid flying in these areas as gliders are notoriously difficult to see.

BGA

Aston Down is one of approximately 80 permanent glider launch sites in the United Kingdom listed in UK AIP ENR 5.5 and labelled on the CAA 1:500,000 and 1:250,000 charts with a "G" symbol, as shown on the chart segment in Part A. A greater density of gliders may be expected nearby at any time during daylight hours, and at any altitude up to cloudbase. Where winch launching is used, as here, the maximum winch launch altitude is listed in the AIP and marked on the chart; this is 3600ft AMSL at Aston Down. A glider being winch-launched achieves a climb angle of 45° and an initial climb rate in excess of 4000ft/min within seconds of starting its ground roll. Under the right conditions it will then take about a minute to climb to 2500ft AAL (3100ft AMSL at Aston Down); hence the pilot of an aircraft flying towards a winch site below its notified maximum winch altitude will have little warning of a launching glider that may suddenly appear at or above their level.

As in this case, gliders operating within 10NM of Aston Down below 3000ft AAL (3600ft AMSL) usually monitor the Aston Down VHF channel (notified on CAA charts and in AIP ENR 5.5). If transiting nearby, a brief broadcast call using "Unattended Aerodrome" phraseology (CAP 413 §4.162 et seq) could increase everyone's situational awareness and help avoid conflicts.

Both aircraft were fitted with compatible EC equipment which should have alerted each pilot to the other aircraft's presence. It would be useful to understand why this barrier did not function.

Summary

An Airprox was reported when a Vega and a PA32 flew into proximity in the vicinity of Aston Down airfield at 1543Z on Friday 16th May. The Vega pilot was operating under VFR in VMC on the Aston Down gliding frequency not in receipt of a FIS, and the PA32 pilot was operating under VFR in VMC in receipt of a Basic Service from Gloster Approach.

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(3) Overtaking.

³ (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

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 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 considered the actions of the Vega pilot, and noted that their flight had been of short duration remaining close to the glider site. The Board acknowledged that the pilot had returned to land and had seen the PA32 pass down their right-hand side and above them, away from the glider site. Members agreed that the Vega pilot had, nonetheless, been concerned by the proximity of the PA32 to their own aircraft (**CF5**). The Board noted that the Vega had been fitted with an electronic conspicuity (EC) device common within the glider community, and that this had not provided the pilot with an alert to the presence of the PA32. Members agreed that the EC device had not alerted as expected (**CF3**) and that, without an alert from the EC device or R/T communication from the pilot of the PA32, they had had no situational awareness of the PA32's presence prior to sighting it (**CF2**).

Turning their attention to the actions of the PA32 pilot, the Board noted that the pilot's plan appeared to have taken them towards the overhead of Aston Down. Although this had not been the case with regards to the actual flight path followed by the PA32, members discussed the utility of thorough and accurate flight planning and the avoidance of overflight of winch launch glider sites, especially when planning to fly lower than the notified maximum altitude of the winch launch. The Board discussed that some navigation software may not display glider sites as clearly as others, and that pilots must make themselves aware of such areas rather than relying too heavily on their electronic data. However, in this case the Board noted that the pilot had been aware of glider activity, had seen the glider and manoeuvred away from the glider site, although members agreed that the PA32 had flown close enough to the Vega in the circuit to have caused the Vega pilot some concern (**CF4**). The Board thought that the PA32 pilot could have called Aston Down as they passed to the west and agreed that, in not doing so, the pilot had not effectively communicated their intentions to Aston Down and other aircraft on that frequency (**CF1**). Members further agreed that the pilot had had generic situational awareness of glider activity in the vicinity of the glider site (**CF2**) by virtue of chart information and the R/T reminder from Gloster as they transited southbound, but that this had not been enhanced with an alert from their compatible EC device as would have been expected (**CF3**).

The Board then considered the actions of the Gloster Approach controller and noted that they had provided the PA32 pilot with information about glider activity to the south and had fulfilled the remit of their Basic Service.

Bringing the discussion to a conclusion and in assessing a Risk Category for this event, the Board noted that the Vega pilot had seemed concerned about the PA32's proximity to the glider site rather more than to their own aircraft, with over 500ft vertical separation between them, and that the PA32 pilot had been in sight of and manoeuvred away from the Vega and the glider site. Members agreed that the situation had met the criteria for reporting but that the occurrence had not led to a significant reduction in safety. The Board agreed, therefore, that normal safety standards and parameters had pertained and, as such, assigned a Risk Category E to this event.

CF1 The PA32 pilot had not communicated their intentions to Aston Down.

CF2 The Vega pilot had had no situational awareness of the PA32 and the PA32 pilot had only had generic situational awareness of glider activity in the vicinity of Aston Down gliding site.

CF3 Neither the Vega nor the PA32 electronic conspicuity devices had alerted as expected.

CF4 The PA32 had flown close enough to the glider circuit to cause concern to the Vega pilot.

CF5 The Vega pilot had been concerned by the proximity of the PA32.

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

	2025087			
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
	• Situational Awareness of the Conflicting Aircraft and Action			
2	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			
3	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			
4	Human Factors	• Incorrect Action Selection	Events involving flight crew performing or choosing the wrong course of action	Pilot flew close enough to cause concern
5	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft

Degree of Risk: E.

Safety Barrier Assessment⁴

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 PA32 pilot could have called Aston Down to communicate their intentions as they transited nearby.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because although the PA32 pilot had generic situational awareness of glider activity in the vicinity, the Vega pilot had no situational awareness of the presence of the PA32.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because neither the PA32's nor the Vega's compatible electronic conspicuity equipment alerted as expected.

⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

Airprox Barrier Assessment: 2025087		Outside Controlled Airspace				
Barrier		Provision	Application	Effectiveness		
				0%	5%	Barrier Weighting
						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		■	■	■	■	□