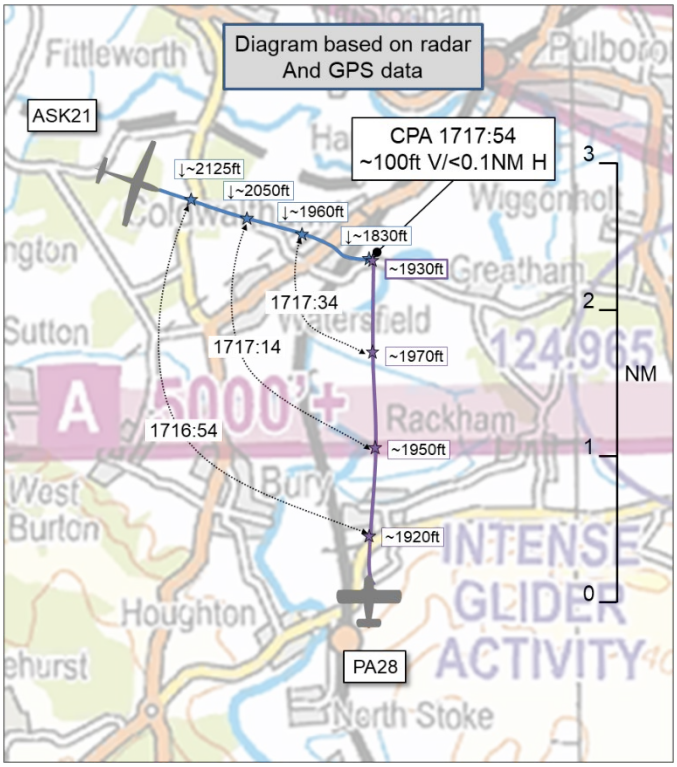
AIRPROX REPORT No 2025174

Date: 08 Aug 2025 Time: 1718Z Position: 5056N 00032W Location: E of Coldwaltham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASK21	PA28
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	Farnborough Rdr.
Altitude	~1830ft	~1930ft
Transponder	Off	A, C
Reported		
Colours	White	Red/white
Lighting	None	Nav and strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1900ft	1900ft
Altimeter	QFE	QNH (1019hPa)
Heading	090°	352°
Speed	60kt	105kt
ACAS/TAS	FLARM	Not fitted
Alert	None	N/A
Separation at CPA		
Reported	100ft V/50m H	Not seen
Recorded	~100ft V/<0.1NM H	



THE ASK21 PILOT reports that they were teaching the P2 a final glide from [waypoint]. P2 was on the controls and they spotted a plane on their right at 90°, level, on a collision course, so they took over and lowered the nose so they passed below. The [aircraft pilot] did not alter course or appear to see them.

The pilot further reported that, after multiple flights in the day, the transponder may have been turned off to conserve battery power and was overlooked before flight. The flight was only a local flight for final glide practise and the pilot did not hold a FRTOL.

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

THE PA28 PILOT reports they were flying on a northerly track from [waypoint] to [waypoint] and receiving a Basic Service from Farnborough Radar [with a squawk] code 0450 allocated. Visual scans did not identify any other traffic and there was no advice of conflicting traffic from Farnborough Radar. However, they made a note in their flight log that their peripheral vision caught sight of what appeared to be a bird descending below their left wing at right angles to their track moving west-to-east out of the sun. The vision was of approximately 1sec duration and nothing was seen to the right-hand side of their aircraft. Their position at the time was approximately 5NM SW of Billingshurst VRP level at 1900ft QNH 1019hPa.

THE FARNBOROUGH RADAR CONTROLLER reports that they were working 2 IFR aircraft inbound and a Traffic Service at the time [of the Airprox]. They did not recall seeing anything concerning around the aircraft in question at the time.

Factual Background

The weather at Shoreham Airport was recorded as follows:

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METAR EGKA 081720Z 22012KT CAVOK 20/15 Q1019
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Analysis and Investigation

NATS Farnborough

Description of the event

The [Farnborough ATC report] stated that the pilot of [the PA28] contacted the Farnborough LARS West frequency at 1706 (all times UTC) and was issued with a Basic Service. A Farnborough squawk of 0450 was issued with the Farnborough QNH provided. Farnborough Radar review displayed [the PA28] tracking north at an altitude of 2000ft. A primary track was displayed on radar tracking east, potentially in confliction with [the PA28]. A 0431 squawk [uninvolved aircraft] was highlighted at the time that was in potential confliction with a 7000 squawk with no Mode-C data displayed, which the LF-LARS controller may have been monitoring, although the controller report or RT could not corroborate this (Figure 1).

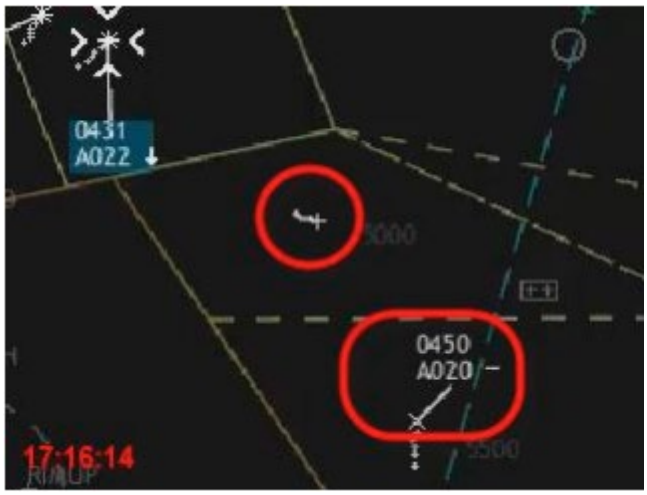

Figure 1 -Farnborough Radar

The subsequent closest point of approach between [the PA28] and the unknown primary contact occurred at 1717:48 and was displayed on NODE Radar as 0.1NM with altitude data unavailable (Figures 2, 3).

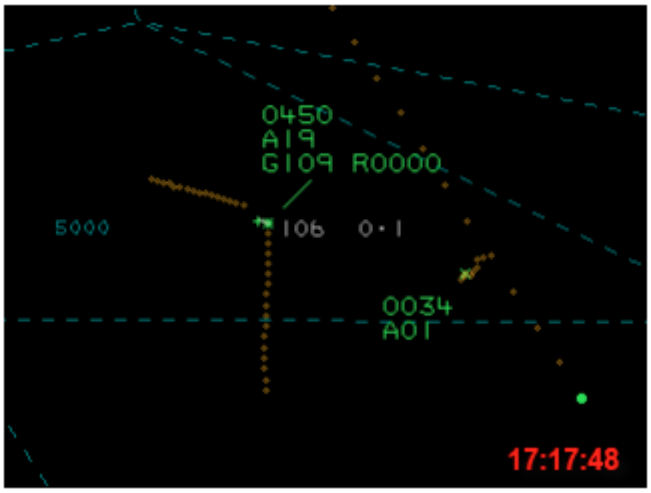

Figure 2 – NODE Radar

Figure 3 – Farnborough Radar

NOTE: Difference in radar times and Mode-C altitude displayed are due to differing radar update rates.

A confliction was not reported on frequency by the pilot of [the PA28].

Investigation

Information available to the investigation included:

- CA4114 from the Farnborough LARS Controller (LF-LARS).
- NATS4118 Initial Watch Management Investigation Report
- UKAB Pilot Airprox report from the pilot of [the ASK21].
- UKAB Pilot Airprox report from the pilot of [the PA28].

Farnborough was operating in a combined configuration of Farnborough LARS West and Approach functions. Review of RT and radar displayed controller workload as medium with aircraft inbound to Farnborough on the Approach frequency. The LF-LARS controller report stated they had no recollection of the event, and review of RT/radar suggested they were not cognisant of the confliction.

The PA28 was [routeing approximately west] receiving a Basic Service from Farnborough LARS West. The ASK21 glider was operating [in the vicinity of Parham gliding site] (Figure 4).

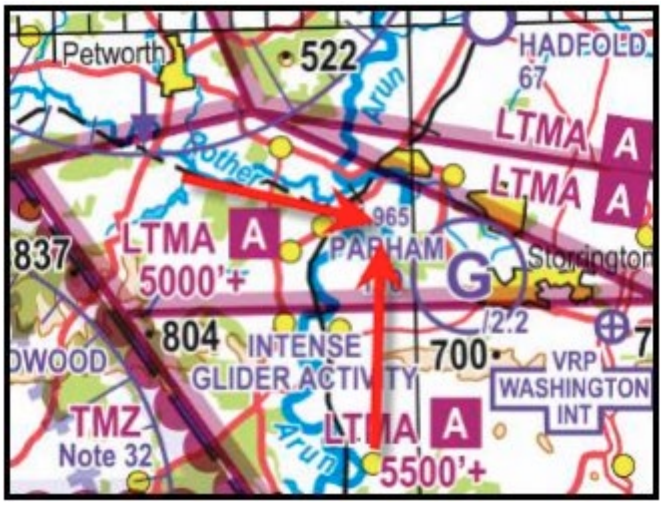

Figure 4

[The PA28 pilot] was receiving a Basic Service, therefore was not required to be monitored by the controller.

CAP774 Chapter 2, 2.1 stipulated:

> 'A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights … The avoidance of other traffic is solely the pilot's responsibility. Basic Service relies on the pilot avoiding other traffic, unaided by controllers/ FISOs. It is essential that a pilot receiving this ATS remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight.'

Review of NODE radar indicated no evidence of [the PA28] enacting any avoidance manoeuvre, whilst the radar trails of [the ASK21] suggested an avoidance manoeuvre may have been taken (Figure 5). This correlated with the pilot's report.

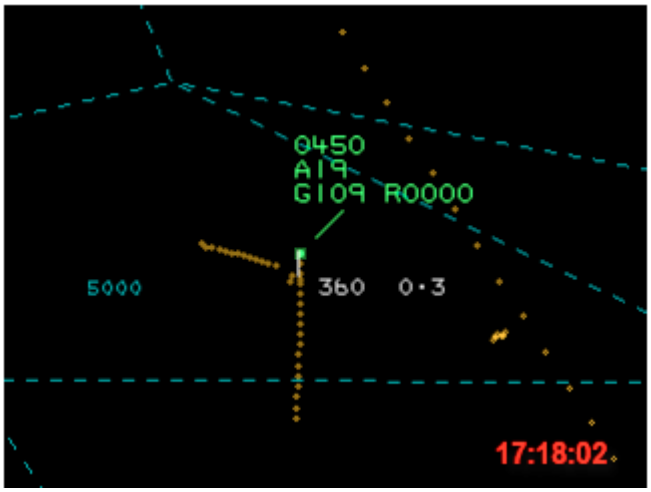

Figure 5

Conclusions

The UK Airprox Board notified NATS Safety Investigations that the pilot of [the ASK21] had submitted an Airprox report regarding a confliction with [the PA28] which was receiving a Basic Service from Farnborough LARS at the time. An Airprox was not reported on the frequency.

There were no Safety Investigation recommendations as a result of this investigation.

CAA ATSI

After a review of the Farnborough Safety Investigation, ATSI commented that there was no mention of whether Traffic Information was passed or not but there is an inference that none was passed as the controller was distracted by another conflict on their screen, *"The LF-LARS controller report stated they had no recollection of the event, and review of RT/radar suggested they were not cognisant of the confliction."* ATSI had nothing further to add to the investigation report.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken; a primary track was detected that matched the GPS navigation file provided by the ASK21 pilot and a northerly track was detected that was coincident with the GPS navigation file provided by the PA28 pilot. The PA28 was seen to be operating on Mode A and C only, using the Farnborough LARS squawk 0450 (Figure 6).

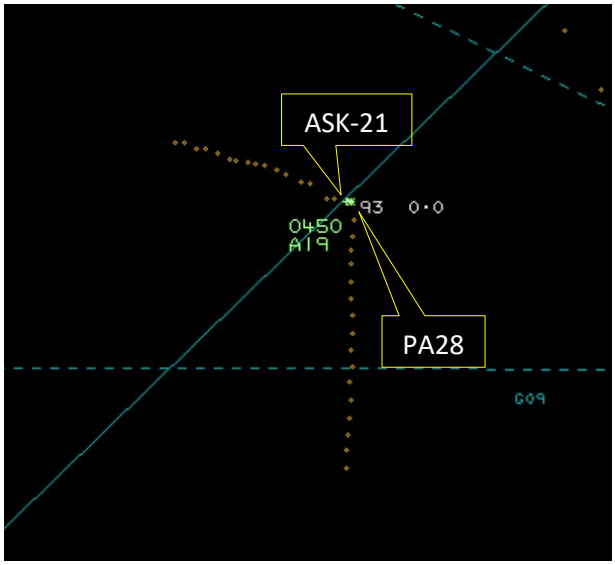

Figure 6 – Time 1717:54

Further analysis of aircraft tracking data was undertaken and neither aircraft was detected using either ADS-B or Mode S data. The ASK21 was detected through data transmitted by its electronic conspicuity device. Analysis of the GPS navigation data was undertaken to compare aircraft elevation and CPA was assessed to have occurred at 1717:54 with less than 0.1NM lateral and approximately 100ft vertical separation.

The ASK21 and PA28 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 PA28 pilot was required to give way to the ASK21 glider.[2]

Comments

AOPA

Whilst flying in class G airspace, there are several barriers to assist in Airprox and mid-air collision avoidance - in this case, until the Department for Transport announces the preferred method of Electronic Conspicuity and it is then fitted to aircraft, this barrier is rendered ineffective - as was a radar service with a transponder, which was turned off in the glider, inhibiting the controller the opportunity to alert the PA28. In this case, luckily, lookout was the final barrier which allowed the ASK21 pilot time to manoeuvre.

BGA

Towards the end of a cross-country glider flight, the pilot plans to climb to an altitude sufficient to fly directly to their destination airfield without further use of rising air and arrive with enough height to land safely. This so-called “final glide” was the phase of flight being taught by the instructor to the Pilot Under Training in the glider in this incident. This ASK21 had been aero-towed to a point about 10NM west-northwest of the destination airfield, released from tow at 1709:18 at just over 3500ft AMSL and immediately begun the practice final glide on a track of about 105°T at an airspeed of 60kt, descending about 200ft for each nautical mile covered over the ground.

Glider pilots almost always navigate this phase of flight using a specialised GNSS “glide computer” (EFB) that continuously indicates their required heading, predicted arrival height and position with respect to airspace and obstacles. However, it is (of course) vital not to become fixated on either this display or the destination airfield, and instructors teaching such exercises emphasise the importance of maintaining an effective lookout scan throughout the final glide.

The ASK21 and PA28 approached each other in wings-level flight at a closing speed of 140-160kt for at least 1min prior to CPA. During this time the PA28 was on a constant bearing of between 1 and 2 o'clock relative to the glider's heading and would have been fractionally below the glider pilot's horizon. The difficulties of sighting an approaching aircraft that appears stationary in a pilot's field of view under these circumstances are well-known.

Summary

An Airprox was reported when an ASK21 and a PA28 flew into proximity east of Coldwaltham at 1718Z on Friday 8th August 2025. The ASK21 pilot was operating under VFR in VMC monitoring their gliding site frequency, and the PA28 pilot was operating under VFR in VMC in receipt of a Basic Service from Farnborough LARS West.

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

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS track data for both aircraft, 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 ASK21 pilot and noted the apparent oversight of the transponder having been left switched off. The Board discussed that this type of glider often did not have a transponder fitted, and that those that do commonly had to conserve battery power, with the battery life typically lasting around 5hrs. Nonetheless, the Board felt that advancements in battery technology were sufficient to have enabled use of the transponder, even after a series of daytime flights, and members agreed that it was a useful training point, as well as a provision of pertinent information on radar, for the transponder to have been switched on (**CF3**). The Board further noted that the ASK21 had been fitted with electronic conspicuity (EC) equipment typically fitted to a glider which had not detected the PA28, and members agreed that the EC device had not been compatible with the emissions from the PA28 (**CF5**). On discussing whether the pilot could have been in receipt of a Flight Information Service (FIS), the Board noted that the pilot did not have a FRTOL and would have been unable to have made use of such a service, and members agreed that as the pilot had been teaching a final glide to base, the best frequency for them to have been using would have been their base frequency in any case. The Board deemed that, as the pilot had not been in receipt of a FIS nor had they received any EC information or alert, they had had no situational awareness of the presence of the PA28 (**CF4**). The Board speculated whether the pilot's attention would have likely been drawn to a track line on the glider's flight computer used specifically for the final glide, and if this had potentially contributed to a last-minute sighting of the PA28. Irrespective, members agreed that the ASK21 pilot had had a late sighting of the PA28 (**CF6**).

The Board then considered the actions of the PA28 pilot and noted that the pilot had been in receipt of a Basic Service from Farnborough Radar. The Board discussed the differences between a Traffic and Basic Service and noted that pilots should not expect to get Traffic Information when in receipt of a Basic Service. As it was, no information had been provided to the PA28 pilot on a potential conflict with an unknown primary track (the ASK21), and members agreed that the PA28 pilot could have requested a Traffic Service (**CF2**) which may have led to the Farnborough controller passing Traffic Information on the primary contact. The Board then discussed anecdotal evidence that there is a reluctance from some pilots to request a Traffic Service due to having been refused the service in the past. The Board encourages pilots to seek the level of ATS that best suits their needs and, should a pilot be refused a service when requested, then they can report it using form FCS1522.[3] The Board further noted that the PA28 had had no EC equipment fitted and members agreed that the PA28 pilot had been in a similar position to that of the ASK21 pilot, with no alerts from either a FIS or EC, and subsequently no situational awareness of the presence of the ASK21 (**CF4**). During the Board's discussions regarding the level of FIS to request, members also expressed giving consideration to contacting the local gliding site close to the PA28's track for the benefit of any glider pilots operating in the local area, when capacity for the pilot to do so existed. The Board identified that the PA28 pilot had seen something pass their left-hand side but had been uncertain as to what, and members agreed that the pilot had likely glimpsed the ASK21, which effectively constituted a non-sighting (**CF7**).

Turning their attention to the actions of the Farnborough controller, the Board noted that a primary track which had been converging with the track of the PA28 had been detectable on the controller's radar screen. ATC members discussed whether they would have expected the controller to have made a call on a primary track, and they agreed that, given that the controller did not appear to have had a high workload at the time, the controller might have had an opportunity to have passed Traffic Information on a potential conflict to the PA28 pilot. The Board noted, however, that the Farnborough controller had not been required to monitor the PA28 under the terms of a Basic Service (**CF1**). Nonetheless, the

[3] FCS 1522 - UK Airspace Access or Refusal of ATS Report

Board emphasised that the controller retains a clear 'duty of care', even when providing a Basic Service.[4]

In drawing their discussion to a conclusion and assigning a Risk category, the Board noted that neither the ASK21 pilot nor the PA28 pilot had been aware of the presence of the other aircraft, that the PA28 pilot had, effectively, not seen the ASK21 and that the ASK21 pilot had only seen the PA28 at the last minute. The Board felt that safety had been much reduced and members agreed that the ASK21 pilot's timely emergency manoeuvre successfully prevented a potential collision with the PA28 (**CF8**). The Board assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025174			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Ground Elements			
	• Situational Awareness and Action			
1	Contextual	• ANS Flight Information Provision	Provision of ANS flight information	The ATCO/FISO was not required to monitor the flight under a Basic Service
	Flight Elements			
	• Tactical Planning and Execution			
2	Human Factors	• Communications by Flight Crew with ANS	An event related to the communications between the flight crew and the air navigation service.	Pilot did not request appropriate ATS service or communicate with appropriate provider
3	Human Factors	• Transponder Selection and Usage	An event involving the selection and usage of transponders	
	• Situational Awareness of the Conflicting Aircraft and Action			
4	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			
5	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			
6	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
7	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			
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[5]

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

Ground Elements:

[4] UK Flight Information Services: Fourth Edition Duty of Care: Para 1.3 (p23).
[5] The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.

Situational Awareness of the Confliction and Action were assessed as **not used** because the Farnborough controller was not required to monitor the PA28 under the terms of a Basic Service.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the PA28 pilot could have requested a Traffic Service and the ASK21's transponder was switched off.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither the ASK21 pilot nor the PA28 pilot had situational awareness of the presence of the other aircraft.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the electronic conspicuity equipment fitted in the ASK21 was unable to detect the PA28.

See and Avoid were assessed as **partially effective** because the ASK21 pilot had seen the PA28 late, and the PA28 pilot had not sighted the ASK21 until at or around CPA.