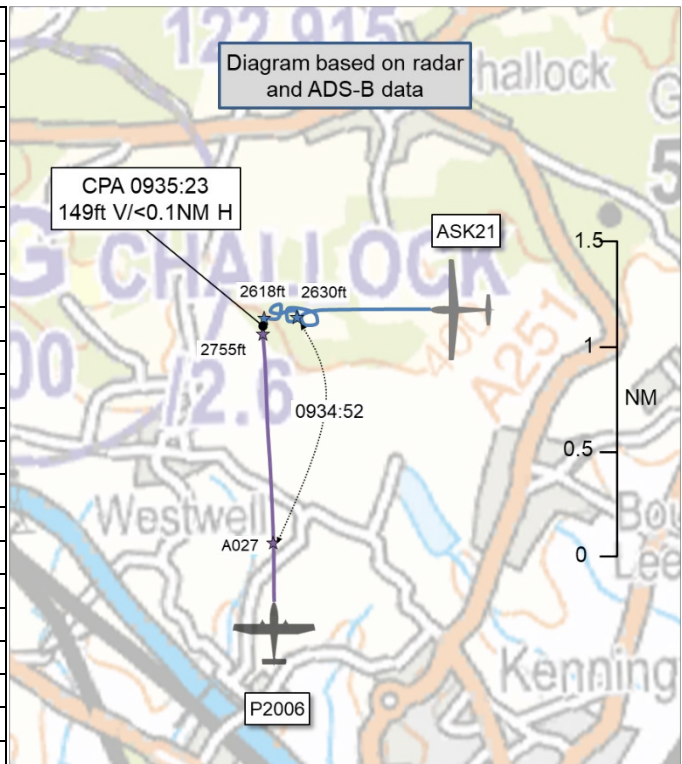


AIRPROX REPORT No 2024153

Date: 04 Jul 2024 Time: 0935Z Position: 5112N 00051E Location: 1.3NM SE of Challock Airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASK21	P2006
Operator	Civ Gld	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	None
Provider	Challock	N/A
Altitude/FL	2618ft	2755ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White	White
Lighting	None	Wingtip, tail strobe
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2000ft	2760ft
Altimeter	QFE	QNH (1010hPa)
Heading	315°	360°
Speed	48kt	123kt
ACAS/TAS	FLARM	PilotAware
Alert	None	None
Separation at CPA		
Reported	50ft V/100m H	NK V/NK H
Recorded	~140ft V/<0.1NM H	



THE ASK21 PILOT reports that this was an instructional flight for a pre-solo student. They had been revising stalling and medium turns. Prior to practising another medium turn to the left, they conducted a thorough lookout. It was during this lookout scan that they [and their student] both spotted the other aircraft in their 10 o'clock at a similar altitude, closing rapidly. They took control and [initiated] avoiding action (left descending turn) to pass behind and below the other aircraft. It was apparent that [the pilot of the other aircraft] had not seen them or a number of other gliders in the vicinity of Challock Airfield. They assess that [the other pilot's] subsequent flight path took them very close to the Challock Airfield overhead.

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

THE P2006 PILOT reports that on this flight they diverted from track to avoid Challock, leaving it to their left for maximum visibility. They observed a tug launch in progress at 9 o'clock low and a glider at 11 o'clock high, neither of concern. They did not see any other gliders and there were no electronic conspicuity (EC) device alerts. Was the EC device working? It is a professional installation with external aerials and picked up a swarm of gliders over Challock on [a return flight] in the afternoon.

Factual Background

The weather at Lydd was recorded as follows:

METAR EGMD 040920Z 28010KT 250V310 9999 FEW041 18/09 Q1010

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the P2006, which was positively identified using Mode S data, had been the only high wing twin engine aircraft passing through the position reported by the ASK21 pilot. There were multiple primary targets seen, and nothing identified as the ASK21. Both aircraft were identified using ADS-B data and it was seen that CPA occurred at 0935:24 as the ASK21 was manoeuvring clockwise through west to northwest and the P2006 travelling approximately north.

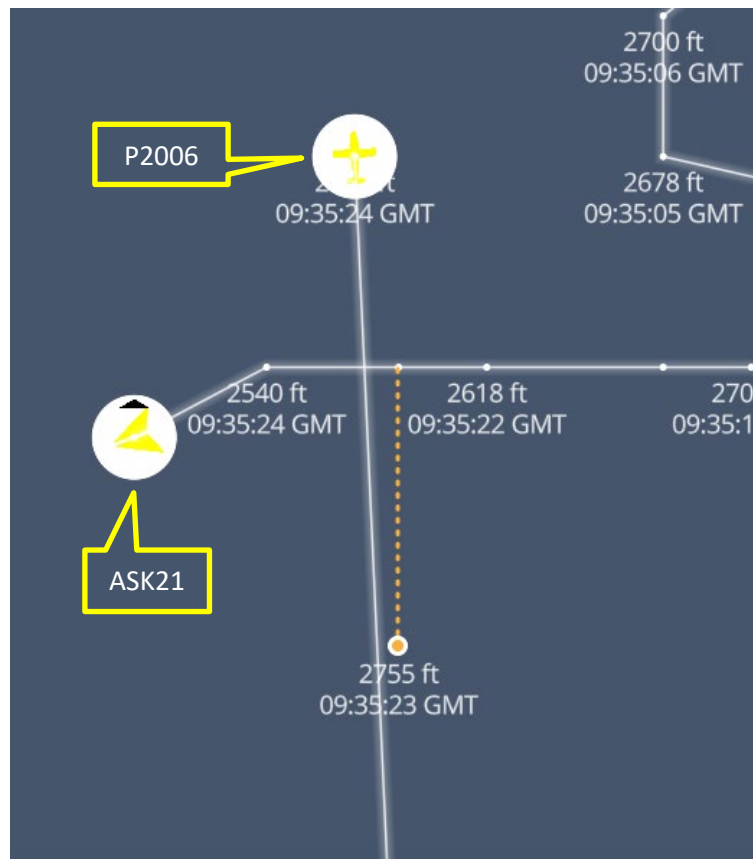


Figure 1- Time 0935:23 separation at CPA 140ft vertically and <0.1NM

The ASK21 and P2006 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 P2006 pilot was required to give way to the ASK21.²

Comments

AOPA

It is heartening to see pilots plan ahead and consider the GASCo Take 2 recommendation³ plus have electronic conspicuity, which on this occasion didn't work. However, both parties had effective lookout and took appropriate and timely action.

BGA

UK glider launch sites are 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 in the chart segment in Part A. A greater density of

¹ (UK) SERA.3205 Proximity.

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

³ GASCo Take 2; <https://www.gasco.org.uk/resources/publications/take-two>

gliders, and aircraft towing gliders, may be expected in nearby Class G airspace at any time during daylight hours, and at any altitude up to cloudbase. When winch-launched, gliders may climb at rates of up to 4000ft/min to the maximum altitude indicated (2600ft AMSL at Challock).

The Challock aerodrome VHF channel (122.915MHz) is listed in ENR 5.5, shown on CAA VFR charts, and is typically monitored by Challock-based gliders flying in this area. If transiting nearby below 3000ft AAL, a brief broadcast call on this channel using "Unattended Aerodrome" phraseology (CAP 413 §4.162 et seq) could help avoid conflicts and increase everyone's situational awareness.

This incident once again highlights the difficulty of seeing a small aircraft approaching head-on at speed, as the P2006 would have appeared to the ASK21 pilot when they were looking out prior to their immediately preceding left-hand turn(s). Where forward-pointing high-intensity landing lights are fitted, many pilots now opt to leave them permanently switched on in daylight, to aid visual conspicuity in this direction (not determined in this case).

Summary

An Airprox was reported when an ASK21 and a P2006 flew into proximity 1.3NM southeast of Challock airfield at 0935Z on Thursday 4th July 2024. Both pilots were operating under VFR in VMC, neither in receipt of a Flight Information Service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings and ADS-B data. 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 discussed the actions of the ASK21 glider pilot, who had been teaching turning manoeuvres to their student and, as such, may have had limited opportunity to have seen the P2006 approaching from the south during those manoeuvres, with both the instructor and student simultaneously making a late sighting of the P2006 (**CF5**). Members noted that the glider's EC device had been configured to detect only similar devices and had not, therefore, been able to detect that of the P2006 (**CF3**). The Board agreed that because the glider pilot had not had any information regarding the P2006 via either an EC device or by radio communication then they had had no situational awareness of its presence (**CF2**).

Moving their attention to the actions of the P2006 pilot, the Board considered why they had not been receiving a FIS having recently ended their radio communication with their previous provider. Members agreed that the P2006 pilot, knowingly passing the glider site, could have informed Challock of their intentions to pass to the east of the site (**CF1**). The Board further considered whether the P2006 pilot had expected their EC device to have been able to detect the EC devices used by the gliders operating in the vicinity of the gliding site, as on this occasion it had not alerted them as anticipated (**CF4**). Members agreed that, although the P2006 pilot had seen a tug launch in progress to their left and another in their 11 o'clock high, the culmination of distraction by those sightings, lack of R/T and EC detection had meant that they had had no situational awareness of the presence of the ASK21 glider (**CF2**), which had been on their right, and that furthermore the pilot had not sighted the ASK21 (**CF6**).

When assessing the risk, members considered the reports from the pilots, the radar replays and ADS-B data available. They noted that the separation between the two aircraft had been reduced and that safety had been degraded, but that the actions of the ASK21 glider pilot in performing an avoidance manoeuvre, in the expectation that the P2006 pilot had not sighted them, had been sufficient to prevent the aircraft from coming into close proximity and that, therefore, any risk of collision had been effectively removed. Accordingly, the Board assigned a Risk Category C to this Airprox.

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

	2024153			
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	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
4	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				
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	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

Degree of Risk: C.

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 P2006 pilot may have been better served by communicating their intentions on the Challock gliding frequency.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither the ASK21 pilot nor the P2006 pilot had had situational awareness of the presence of the other's aircraft.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the EC device in the ASK21 had not been able to detect the P2006, and the EC device in the P2006 had not alerted the pilot as expected.

See and Avoid were assessed as **partially effective** because there had been a late sighting by the ASK21 pilot of the P2006, and a non-sighting of the ASK21 by the P2006 pilot.

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: 2024153		Outside Controlled Airspace						
Barrier	Provision	Application	Effectiveness					
			Barrier Weighting					
			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	⚠	⚠					
Key:								
	<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>			
Provision	✓	⚠	✗	○	○			
Application	✓	⚠	✗	○	○			
Effectiveness								