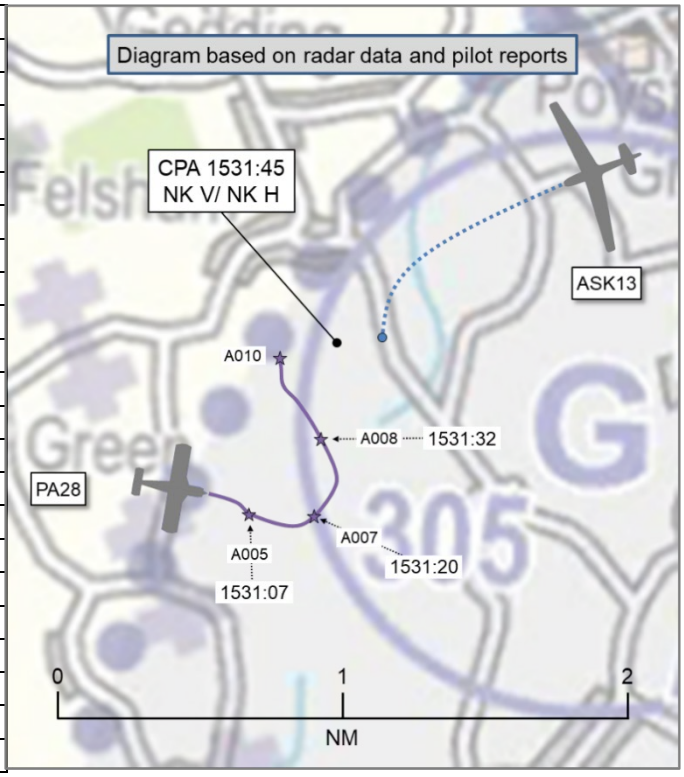
AIRPROX REPORT No 2022192

Date: 29 Aug 2022 Time: ~1532Z Position: 5210N 00051E Location: 1NM W Rattlesden

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASK13	PA28
Operator	Civ Gld	Civ FW
Airspace	Wattisham MATZ	Wattisham MATZ
Class	G	G
Rules	VFR	VFR
Service	None	None
Provider	N/A	N/A
Altitude/FL	NK	1000ft
Transponder	Not fitted	A, C, S
Reported		
Colours	Red, white	Red, white
Lighting	None	Anti-Col
Conditions	VMC	VMC
Visibility	5-10km	>10km
Altitude/FL	550ft	1100ft
Altimeter	QFE (NK hPa)	QNH (1023hPa)
Heading	200°	360°
Speed	55kt	95kt
ACAS/TAS	Not fitted	Not fitted
Separation at CPA		
Reported	0ft V/200m H	300ft V/100m H
Recorded	NK V/NK H	



THE ASK13 PILOT reports that they were conducting a winch-launch trial lesson and, as it was reasonably windy, had planned a high and close-in base-leg and final turn. As they turned left from diagonal-leg to base-leg at around 500ft, they saw a low-wing single on the runway heading [RW06] at about 1 o'clock and at the same height. [The other aircraft] turned left towards them, then obviously had seen them and turned left again. It passed down their starboard side, climbing quite hard. When they had initially seen it, [the ASK13 pilot] turned slightly left to stay between the other aircraft and the runway, planning to keep turning, and would have landed-long or in a field if required. They assessed the risk as medium as there was around 200m of separation. They were not aware of any radio calls to the gliding site. [The ASK13 pilot understands that] the aircraft was seen from the ground and that it was assumed from its position and height to be on, or practising an approach to, RW06 at Rattlesden.

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

THE PA28 PILOT reports that they had intended to do some circuits and then fly further afield. They did a few PFLs, climbing away at 500ft AGL for each. As they turned and headed for home, they decided to do one more [PFL]. They had set best glide [airspeed], picked a field, etc. They then noticed Rattlesden airfield to their right, mentioned [to their passenger] that that they were a bit close to it, and turned left on to a heading of 360°. They were aware that they were also near the edge of the [Wattisham] MATZ and did a full-power climb. At this point, their passenger said "*glider, right, quite close*". They looked but could not see anything conflicting and said "*can you give me a height*?" and their passenger said "*yes, below*". They then saw the glider to their right, 300ft below and a reasonable distance away. They wanted to reassure their passenger so said "*ok, that's too close, but he's not conflicting*". They did not need to take any evasive action, and could see that [the glider] would pass well below them, right-to-left [they recall], and they looked behind to keep sight of it. Shortly after, their passenger said "*he's gone behind us now*" and they carried on climbing, heading north for a few minutes and then went to [destination airfield].

The pilot assessed the risk of collision as 'None'.

THE DUXFORD AFISO reports that [the PA28 pilot] had carried out a number of circuits at Duxford before leaving for the local area to the east. As far as can be ascertained, [the PA28 pilot] had remained on the Duxford frequency. There was no report of an Airprox involving this aircraft either by RT or by any other means, until an email was received requesting information. Neither of the two duty FISOs had any recollection of any incident involving this aircraft nor had they received any report of such. Rattlesden airfield is a very long way beyond the vicinity of the Duxford ATZ, therefore, no AFIS was being provided and no other service was requested or provided.

Factual Background

The weather at Wattisham was recorded as follows:

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METAR EGUW 291550Z AUTO 06012KT 9999 BKN050/// 19/10 Q1023
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Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the PA28 was identified using Mode S data. The ASK13 was not observed on radar. The diagram was constructed with reference to the radar returns of the PA28 and the location and timing reported by the pilot of the ASK13. The separation of the aircraft at CPA could not be determined.

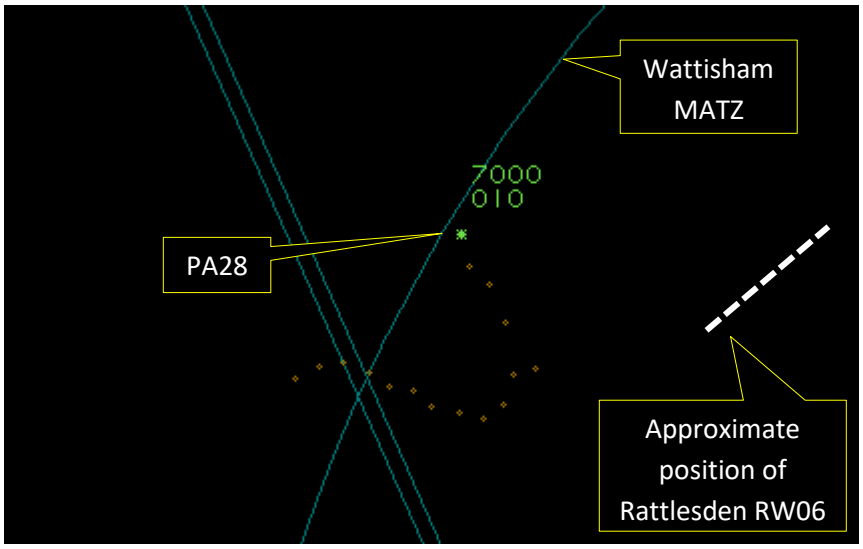


Figure 1 – No other aircraft were observed on radar in the vicinity of the PA28 at the time assessed to have been the CPA.

The PA28 and ASK13 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 head-on or nearly so then both pilots were required to turn to the right.[2] If the incident geometry is considered as converging then the PA28 pilot was required to give way to the ASK13.[3] 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.[4]

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.
[3] (UK) SERA.3210 Right-of-way (c)(2) Converging.
[4] (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Comments

AOPA

It is good to see pilots practising simulated emergencies and briefing passengers to point out other flying machines. An effective HASELL check and a threat-and-error brief prior to commencement could have highlighted their being close to a gliding site and a MATZ, both of which could have been contacted beforehand. GASCo produces a great leaflet on giving gliding sites and parachute drop zones a wide berth.

BGA

In contrast to the square circuit flown in powered aircraft, glider pilots typically fly a circuit with a 'diagonal leg' between the downwind and base legs (see Figure 2).

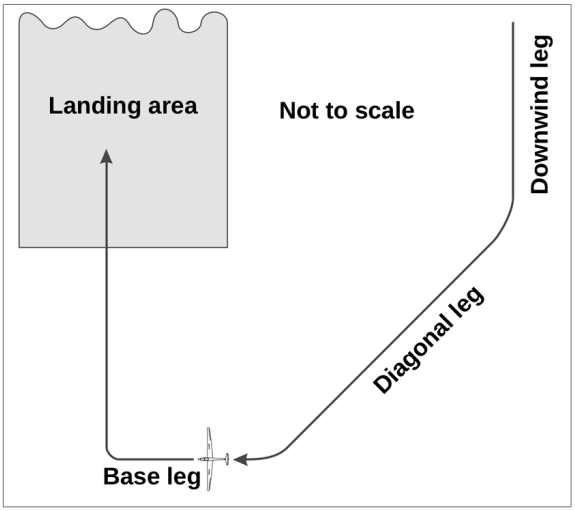


Figure 2 – A typical 'diagonal' leg

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 diagram 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. When winch-launched, gliders may climb at rates of up to 4000ft/min to the maximum altitude indicated (2400ft AMSL at Rattlesden).

With no interoperable Electronic Conspicuity [equipment] between the glider and PA28, and neither aircraft in receipt of an ATS, see-and-avoid was the only operating MAC safety barrier in this incident. The ASK13 pilot is to be commended for maintaining a good lookout, and manoeuvring to remain clear of the PA28.

Summary

An Airprox was reported when an ASK13 and a PA28 flew into proximity 1NM west of Rattlesden at approximately 1532Z on Monday 29th August 2022. Both pilots were operating under VFR in VMC, neither in receipt of an ATS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, a report from the AFISO involved and reports from the appropriate operating authorities. 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 pilot of the ASK13 and a member with particular knowledge of gliding operations explained the concept of the 'diagonal leg' that had been highlighted by the BGA

representative in the comments section. It was noted that the ASK13 had not been equipped with an additional EC device and it was suggested that this might be considered typical given the age and design of the glider. The pilot of the ASK13 had been in radio contact with a ground station through use of a 'common glider field frequency' and members agreed that the pilot would have had no situational awareness of the presence of the PA28 until it had been visually acquired (**CF5**). Members were heartened that an effective lookout had provided the pilot of the ASK13 with plenty of time to assess the unfolding situation and to consider a suitable course of action.

Turning their attention to the actions of the pilot of the PA28, members applauded the practising of emergency drills but wished to emphasise the importance of selecting a safe area beforehand in which to do so. Members were in agreement that the assessment of the suitability of an area should include an awareness of their particular location and an effective lookout for aircraft in the vicinity. It was concluded that neither element had been completed satisfactorily. Members agreed that the pilot of the PA28 had been distracted by the execution of the PFL and had not kept the 'mental-model' of their position sufficiently updated (**CF4**).

It was noted that the pilot of the PA28 had been in receipt of an AFIS whilst flying circuits at Duxford but had left the area and had not terminated the service. Members suggested that it may have been prudent to have terminated the service with Duxford and to have requested an appropriate service for the area in which their flight had taken them (**CF2**). A member with particular knowledge of the Wattisham military unit remarked that this incident had taken place on a Bank Holiday Monday and that the Wattisham unit had not been operational that day. Had the pilot of the PA28 referred to their navigational chart, and noted the frequencies marked thereupon, making a call on the frequency for Rattlesden may have provided the pilot with some situational awareness of the gliding activity in the area. In this case, the pilot of the PA28 had not had any awareness of the ASK13 until it had been sighted by their passenger and, as such, members concluded that that constituted a late sighting (**CF5**, **CF6**). The pilot of the PA28 had inadvertently flown into the Rattlesden gliding area (**CF1**) and members agreed that the pilot had not conformed to the pattern of traffic as established by the ASK13 pilot in the circuit (**CF3**). Nevertheless, having become aware of the presence of the ASK13, members agreed that the pilot of the PA28 had taken appropriate action to leave the area, albeit having caused the ASK13 pilot concern due to their proximity (**CF7**).

When determining the risk, the Board concluded that safety had been degraded but members were satisfied that there had been no risk of collision. As such, the Board assigned a Risk Category C to this Airprox.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2022192			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Tactical Planning and Execution			
1	Human Factors	• Aircraft Navigation	An event involving navigation of the aircraft.	Flew through promulgated and active airspace, e.g. Glider Site
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	• Monitoring of Environment	Events involving flight crew not to appropriately monitoring the environment	Did not avoid/conform with the pattern of traffic already formed
	• Situational Awareness of the Conflicting Aircraft and Action			
4	Human Factors	• Interpretation of Automation or Flight Deck Information	Interpretation of Automation or Flight Deck Information by the flight crew.	Pilot engaged in other tasks
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

	• 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	• Perception of Visual Information		Pilot was concerned by the proximity of the other aircraft

Degree of Risk: C

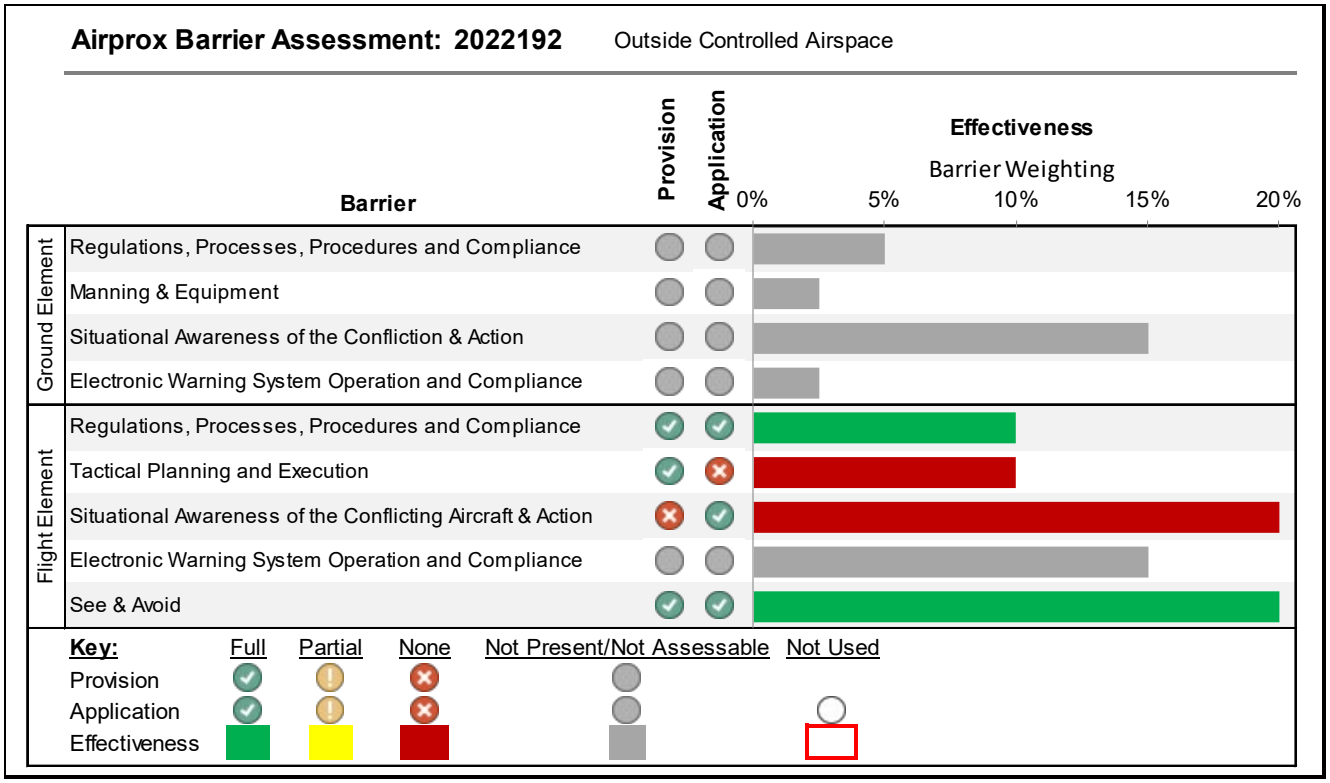
Safety Barrier Assessment[5]

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

Flight Elements:

Tactical Planning and Execution was assessed as **ineffective** because the pilot of the PA28 had flown close enough to an active glider site to have affected the established pattern of traffic in the circuit, and without having communicated their intentions.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of the PA28 had had no Situational Awareness of the ASK13 until having acquired it visually.



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