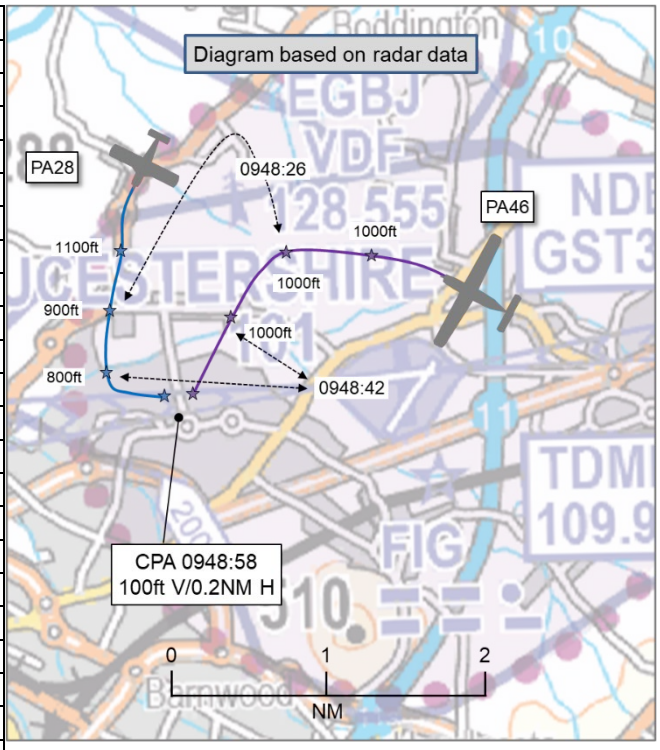
AIRPROX REPORT No 2024230

Date: 31 Aug 2024 Time: 0949Z Position: 5153N 00212W Location: Gloucester Airport

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA28	PA46
Operator	Civ FW	Civ FW
Airspace	Gloucestershire ATZ	Gloucestershire ATZ
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Listening Out
Provider	Gloster Approach	Gloster Tower
Altitude/FL	800ft	700ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Not reported	Blue and white
Lighting		Strobes, beacon
Conditions		VMC
Visibility		>10km
Altitude/FL		1500ft
Altimeter		QNH (1024hPa)
Heading		NK
Speed		120kt
ACAS/TAS		TAS
Alert		None
Separation at CPA		
Reported	NR	500ft V/0.5NM H
Recorded	100ft V/0.2NM H	



THE PA28 PILOT reports that they had been conducting a trial lesson in a PA28. Gloucester Airport was closed (sic) due to ATC restrictions and so had been using indemnity for flights. They had been using RW09LH due to a northeasterly wind of approximately 7-8kt. All calls needed to be made as 'Gloucester Traffic' on the Approach frequency of 128.555MHz. The PA28 pilot had joined overhead descending deadside for a normal circuit with calls on each leg. From the base leg turning final for RW09LH at approximately 700ft height they had seen an aircraft larger than a PA28 in their 11 o'clock position [at a] similar height passing left-to-right in front of them. The PA28 pilot had expected [the other aircraft] to cut in front of them for RW09, although they hadn't heard any radio calls for this aircraft. […]. The PA28 pilot decided to turn left for spacing and could still see the other aircraft and they had been parallel to them [but heading in the] opposite direction. The other aircraft passed them to position for RW04LH, still low and no calls [had been heard]. The PA28 pilot landed on RW09 whilst the other aircraft had been doing a low approach for RW04L. The PA28 pilot stopped before crossing RW04 as they had been unsure what the other traffic was going to do, but then observed them fly a low approach. The PA28 pilot taxied back into [destination] and had then seen the other aircraft on the ground taxiing to [their destination] and they didn't seem to know where they were going. They had then turned around back towards the RW and didn't seem to know it was closed to non-based aircraft.

THE PA46 PILOT reports [having been operating to] a slot time at Gloucester of 0948. First visual contact with the other aircraft was 0945 when it had approached from the south to join right-base for RW09. The approximate position of the other aircraft was 1.7NM southwest of Gloucester airfield. The PA46 pilot reports that they had been 1.2NM southwest of Gloucester airfield. From initial contact until landing on RW09 [they recall] [the PA46 pilot reports that] visual contact was maintained with the other aircraft. The PA46 pilot arrived at 0935 and circled to the west of the ATZ at 1600ft until the allotted slot time (0948) then entered the ATZ and descended on the deadside of RW09 [they recall], crossing RW27 threshold and joining left downwind RW09 [they recall] for the final approach, landing at 0956. Gloucester airfield was closed [on the day], and departure/arrival slot times had been provided in advance.

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

THE GLOSTER CONTROLLER reports that this Airprox occurred when no ATC service was being provided and the airport was operating on Indemnity Procedures.

THE GLOSTER SAFETY INVESTIGATION reports that from the 21st July 2024 Gloucestershire Airport identified a number of dates where, due to ATC staffing shortages, no ATC service could be provided, the 31st August being one of those dates.

The airport operates an Indemnity Procedure (AOP04). The additional non-ATC days were managed using this procedure but with the addition of a slot time system to manage the number of aircraft flying. Any aircraft wishing to fly [under that indemnity] must sign the disclaimer form confirming their acceptance of those procedures. The number of aircraft is limited to a slot every 6 minutes but with a requirement to have a slot for both departure and landing. The procedure is limited to based operators only (no visiting aircraft allowed). As part of this procedure, blind calls are made on frequency 128.555MHz (Gloster Approach) so as to enable any aircraft within the local area to be aware of other traffic arriving or departing the airfield. Operators were informed of the requirements by AAN where the requirements of these days were reinforced. Both operators had signed the disclaimer and been in receipt of all information. The PA28 pilot had booked a slot for departure at 0930 and a landing slot at 0942. The PA46 pilot was returning from abroad and had a slot of 0948 allocated to them based on the flight plan times. [R/T recording] tapes for 128.555MHz clarify that the PA28 followed the correct procedure making blind calls including: joining, in the overhead, crosswind, downwind and finals. A tape transmission at 0948:50 from the PA28 pilot says '*Just turning left to avoid traffic*'. At 0949:54 a transmission was made by the PA28 pilot stating '*Traffic on the right side, looks to be landing RW04 – please go around*'. The PA28 pilot then landed and, at 0950:43, made a further transmission '*Aircraft going for RW04 looks to be climbing now. Looks to be a PA28 or slightly larger*'. No transmissions from the PA46 pilot were heard. On the Tower frequency 122.905MHz the PA46 pilot made a call advising that they had been holding to the north awaiting their slot time. At 0948 the PA46 pilot transmitted turning downwind left-hand for RW04. At 0949:10 the PA46 pilot had transmitted '*Left base RW04*' and at 0949:36 transmitted '*Turning finals RW04*'. At 0950:03 they had called '*Going around Traffic approaching RW09*'. During this period no other calls were made or any recognition of the other traffic in the area until the last call. As the airport was closed, it is not possible to confirm the proximity of both aircraft to each other, however, it is concluded that the PA46 pilot had failed to follow the correct procedure by being on the incorrect frequency and by making an approach to RW04 which is also prohibited (RW27/09 only to be used). This [had] potentially led to the reported Airprox.

Factual Background

The weather at Brize Norton was recorded as follows:

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METAR EGVN 310920Z 05011KT CAVOK 16/12 Q1024 NOSIG RMK BLU BLU=
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Analysis and Investigation

UKAB Secretariat

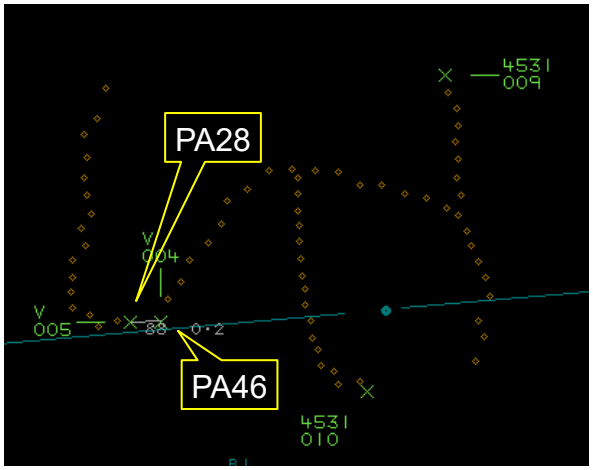


Figure 1: At CPA 0948:58 – 100ft V/0.2NM H

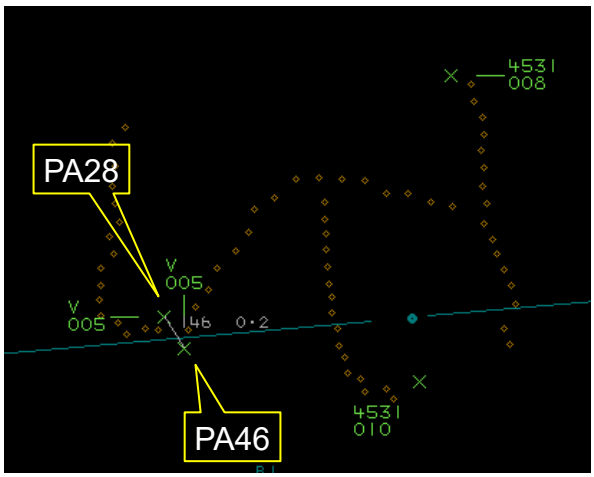


Figure 2: CPA +4sec

Gloucester Airport had been operating under Indemnity Procedures as Air Traffic Services had been unavailable. The PA46 pilot had joined at their allocated slot but had utilised the Tower frequency rather than the Approach frequency, which had led to the 2 involved pilots being unable to receive calls made by the other.

The PA28 and PA46 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] 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.[2]

Summary

An Airprox was reported when a PA28 and a PA46 flew into proximity at Gloucester Airport at 0949Z on Saturday 31st August. Both pilots were operating under VFR in VMC and 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 reports from the air traffic operating authorities involved. 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.

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

The Board firstly discussed the actions of the PA28 pilot. Members recognised the aim of their flight and their adherence to the in-place Indemnity Procedures. Members understood the PA28 pilot's concern due to their uncertainty of the PA46 pilot's intended actions and noted that they had called over R/T an instruction to the PA46 pilot to '…please go around' and wished to restate the need to avoid where possible raising any potential for further confusion for operators. The Board agreed that the PA28 pilot's actions had been managed well in the circumstances and that no more could have been done to avoid the event.

In reviewing the actions of the PA46 pilot, members focussed on the in-place Indemnity Procedures, noting that they had not fully complied with the conditions those procedures carried and that this event had highlighted that paying full attention to pre-flight preparations (**CF4**) is a critical element of all flights, particularly when anticipating unusual circumstances. In this case, the PA46 pilot had not complied with the procedures in place (**CF1**). They had monitored the wrong frequency (**CF2**), but had made the appropriate blind calls. They had made an approach to RW04, whereas the in-place procedures specified either RW09 or RW27 only and had not therefore conformed with the pattern of traffic formed by the PA28 (**CF3**). The Board noted that the PA46 pilot had carried EC equipment which had not offered an alert (**CF6**) and this, together with the pilots operating on different frequencies, had meant a lack of situational awareness for both pilots.

The Board noted the report received from the Gloucester Air Traffic operating authority and acknowledged the limitations for users at the time through a lack of an Air Traffic Service, but felt that the Indemnity Procedures had been adequate. It was unfortunate that, in this case, those procedures had not ensured safety for all operating at that time and acknowledged the ambition to ensure that pilots were fully aware of the conditions to be followed at such times as those procedures were in place. Members noted the 6 minute slot times in force but, as the use of Indemnity Procedures is an unusual practice, they opined that a wider window of perhaps 15 minutes might have helped to generate safer separation.

Concluding their discussion, members agreed that, although both pilots had been visual with each other's aircraft, there had been a degree of uncertainty for the PA28 pilot as to the intended actions of the PA46 pilot and this had led to concern as to its proximity as it had joined the circuit (**CF7**). A lack of common radio frequency monitoring and incompatible EC had meant that neither pilot had had situational awareness of the presence of the other (**CF5**) before they had achieved visual contact and members agreed that safety margins had been degraded and had assigned Risk Category C to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2024230			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Regulations, Processes, Procedures and Compliance			
1	Human Factors	• Use of policy/Procedures	Events involving the use of the relevant policy or procedures by flight crew	Regulations and/or procedures not complied with
	• 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	• 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	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			
7	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: C.

Safety Barrier Assessment[3]

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

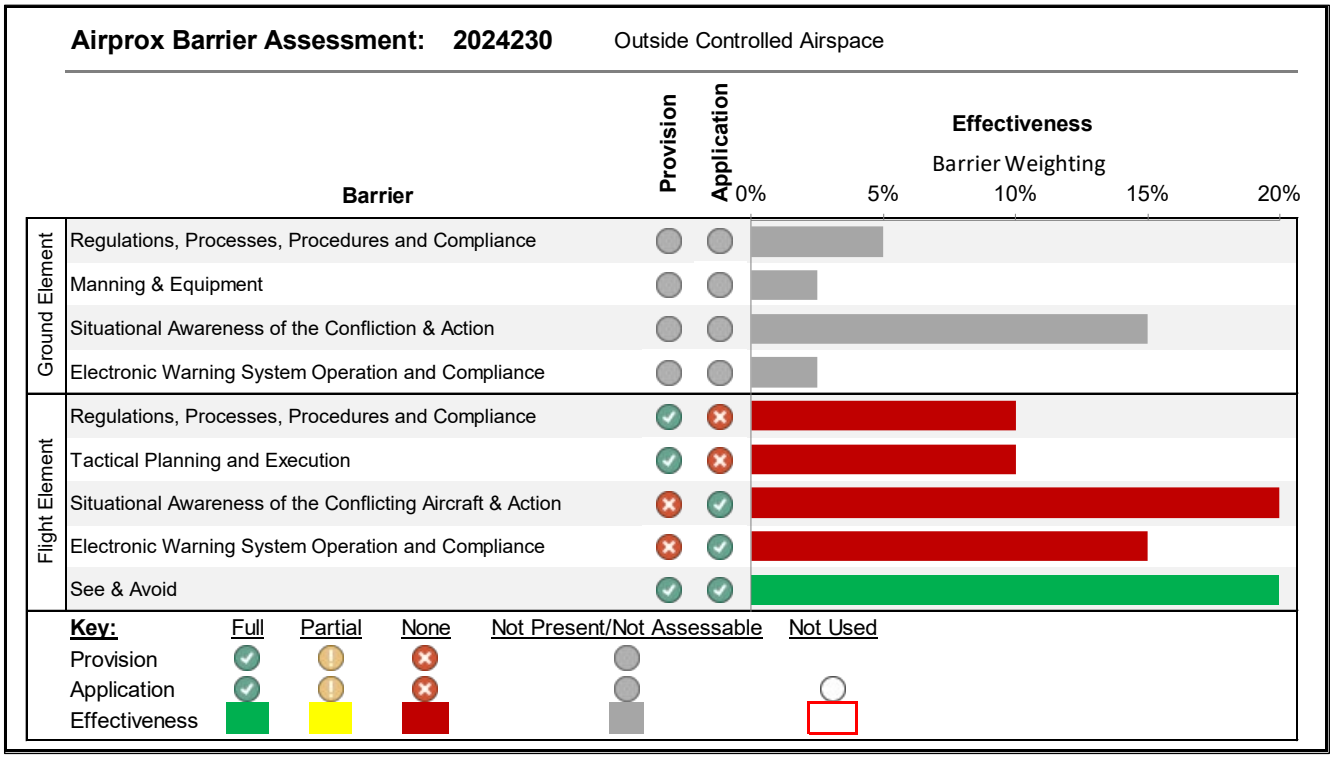
Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because the PA46 pilot had not complied with the correct procedures when the Airport had been operating under Indemnity Procedures.

Tactical Planning and Execution was assessed as **ineffective** because the PA46 pilot had made blind circuit calls on the wrong frequency and did not conform with the pattern of traffic as formed by the PA28 pilot.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had any situational awareness of the presence of the other aircraft.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the TAS carried by the PA46 did not receive any electronic emissions from the PA28.



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