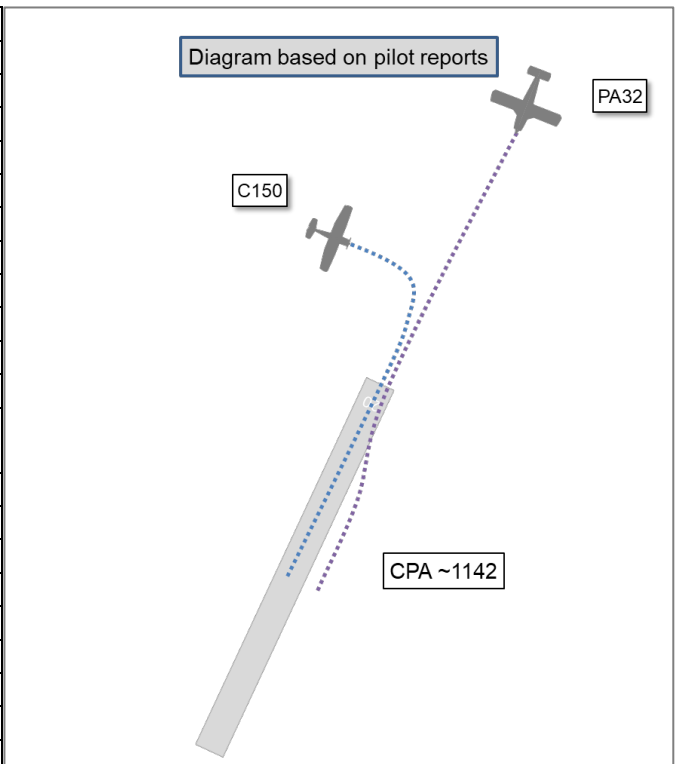


AIRPROX REPORT No 2023252

Date: 17 Nov 2023 Time: ~1142Z Position: 5317N 00057W Location: Retford Gamston Airport

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C150	PA32
Operator	Civ FW	Civ FW
Airspace	Gamston ATZ	Gamston ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Gamston Radio	Gamston Radio
Altitude/FL	NR	NR
Transponder	A, C, S	A, C
Reported		
Colours	White	Blue and white
Lighting	Beacon & strobes	Nose landing light and strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	700ft	900ft
Altimeter	QFE (1016hPa)	QFE (1016hPa)
Heading	205°	200°
Speed	65kt	90kt
ACAS/TAS	Not fitted	SkyEcho
Alert	N/A	None
Separation at CPA		
Reported	30ft V/15m H	Not seen
Recorded	NR	



THE C150 PILOT reports, while getting airborne after a touch-and-go on RW20, at approximately 700ft and 65kt, an aircraft was seen slightly above and to the left, within 15m, headed in the same direction and straight and level. At this point they stopped the climb and maintained straight and level flight. They believed that the aircraft then vacated the circuit.

The pilot assessed the risk of collision as ‘High’.

THE PA32 PILOT reports they were undertaking touch-and-goes. The circuit was busy and there were other aircraft also undertaking touch-and-goes, including a Cessna in front of them. They had each completed a number of touch-and-goes and on a couple of these had extended their downwind leg to give the slower Cessna time to complete turning to final and undertaking their next touch-and-go. This had worked well. On the last touch-and-go the Cessna appeared to be far enough in front that they would not need to extend the downwind leg. When they turned onto the base leg they realised they might not be able to complete a touch-and-go, being closer than they liked, and might have to undertake a go-around. They elected to continue with the approach to final and to decide on final if a go-around was required. When on [the final approach] at about a mile from the threshold they thought it was unlikely that they would be able to complete the touch-and-go and elected to go around. They made a radio call stating that they would undertake a go-around on the deadside. The Cessna [pilot] had been calling “Final 20 touch-and-go” on final but on the last leg just called “Final 20”. They took this to mean that they were landing. In undertaking the go-around, they moved deadside with the runway visible to their right. They watched the Cessna touch down but lost sight of it as they passed overhead. They had retracted the gear and flaps and engaged full power and commenced a climb-out. The next call they heard was the Cessna [pilot] asking what they were doing as they had in fact completed a touch-and-go and come up behind and below them. [The C150 pilot] called an Airprox. They were not expecting this. They elected to turn on to the deadside area of the airfield to ensure they did not conflict with any

traffic turning right-hand downwind. They undertook a crosswind join at circuit altitude following which they completed a normal circuit and full-stop landing. On landing they reported to the Tower to discuss the incident and also with one of the flying instructors. They had flown the Saratoga for about 10 years and this was the first time they had had any incident in the aircraft. They elected to undertake some further flying with an instructor to understand why this incident occurred and prevent this incident from occurring again. They will in future ensure that they fly further into the deadside area to provide a better view of the airfield and improve aircraft separation.

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

THE GAMSTON A/G OPERATOR reports there were around 4 or 5 aircraft in the circuit for RW20. Visibility seemed good. [The C150 pilot] called final for a touch-and-go. They passed the current surface wind. Behind them was [the PA32, the pilot of which] called final shortly afterwards and again they provided the current surface wind. As [the C150] was touching down, [the PA32 pilot] called "going around". [The PA32] then proceeded slightly left of RW20 at low level. As [the C150] was lifting off and ascending for the upwind leg, [the PA32 pilot] flew past [it] to their left at the same altitude with very little horizontal separation. [The PA32 pilot] then ascended and performed a left turn to the deadside before re-joining the circuit a few minutes later.

The AGO perceived the severity of the incident as 'High'.

Factual Background

The weather at Waddington was recorded as follows:

METAR EGXW 171150Z 24006KT 9999 FEW040 09/05 Q1018 NOSIG RMK BLU BLU=

Analysis and Investigation

UKAB Secretariat

The C150 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 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 C150 and a PA32 flew into proximity at Retford Gamston Airport at about 1142Z on Friday 17th November 2023. Both pilots were operating under VFR in VMC, both in receipt of an AGCS from Gamston Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings and a report from the air/ground operator 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.

The Board members first discussed the PA32 pilot's actions and started by commending them for their full and frank report. The PA32 pilot had unfortunately perceived that the C150 pilot had been landing, rather than carrying out a touch-and-go, and so had had incorrect situational awareness (**CF4**). Having called 'final touch-and-go' the Board thought it reasonable to have assumed that the C150 pilot would have done so unless they stated otherwise but, in the event, irrespective of situational awareness, the PA32 pilot had flown a go-around that was lacking in some respects (**CF1**). The PA32 pilot reported

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

they had moved to the deadside, retracted the undercarriage and flap and then commenced a climb (**CF2**), whereas a go-around should commence with application of power along with a shallow climbing turn to the deadside and retraction of services. In addition, the Board felt that the PA32 pilot had not moved far enough to the deadside, perhaps in the belief that the C150 pilot had landed, which, with the PA32 pilot's stated order of events, members felt had contributed to them being at about the same level as the C150 as they had passed on its left side. In sum, the PA32 pilot had not conformed with 'the pattern of traffic', the C150, as they had performed their go-around (**CF3**). The Board further agreed that, without EC or an ADS-B capable transponder in the C150, the EC barrier had been ineffective (**CF5**). The remaining barrier to mid-air collision had been see-and-avoid but the PA32 pilot had not seen the C150 on their go-around and the C150 pilot had seen the PA32 as it had passed on their left side, at about CPA and effectively a non-sighting (**CF6**). Board members discussed the risk, notably the absence of any effective barrier to mid-air collision and the reported separation at CPA. Some members felt that safety had been much reduced whereas others felt that providence had played a major part. The decision went to vote at which the latter view prevailed by casting vote of the Director (**CF7**), Risk A.

Lastly, the Board commended the PA32 pilot on their response to the Airprox and their laudable intention to fly with an instructor to better understand and improve their go-around technique.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2023252			
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	• Action Performed Incorrectly	Events involving flight crew performing the selected action incorrectly	Incorrect or ineffective execution
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	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	• 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				
7	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: A.

Safety Barrier Assessment³

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

Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because an ROCC holder is permitted only to pass information relating to an immediate hazard either from the reports of other pilots or from the aerodrome/platform operator.

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because the PA32 pilot did not 'conform with the pattern of traffic', the C150 ahead.

Tactical Planning and Execution was assessed as **ineffective** because the PA32 pilot executed a go-around but remained in proximity to the runway.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the PA32 pilot had incorrect situational awareness that the C150 pilot was landing.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the C150 transponder did not have ADS-B out and therefore could not alert the PA32 TAS.

See and Avoid were assessed as **ineffective** because the PA32 pilot did not see the C150 and the C150 pilot saw the PA32 'slightly above and to the left', effectively a non-sighting in the high-wing C150.

Airprox Barrier Assessment: 2023252		Outside Controlled Airspace																				
Barrier	Provision	Application	Effectiveness																			
			Barrier Weighting																			
			0%	5%	10%	15%	20%															
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓	[Green bar to 5%]																		
	Manning & Equipment	✓	✓	[Green bar to 2.5%]																		
	Situational Awareness of the Confliction & Action	✓	○	[Red bar to 15%]																		
	Electronic Warning System Operation and Compliance	●	●	[Grey bar to 2.5%]																		
Flight Element	Regulations, Processes, Procedures and Compliance	✓	⚠	[Yellow bar to 10%]																		
	Tactical Planning and Execution	✓	✗	[Red bar to 10%]																		
	Situational Awareness of the Conflicting Aircraft & Action	✗	✓	[Red bar to 20%]																		
	Electronic Warning System Operation and Compliance	✗	✓	[Red bar to 15%]																		
	See & Avoid	✗	✗	[Red bar to 20%]																		
Key: <table style="display: inline-table; vertical-align: middle;"> <tr> <td>Full</td> <td>Partial</td> <td>None</td> <td>Not Present/Not Assessable</td> <td>Not Used</td> </tr> <tr> <td>✓</td> <td>⚠</td> <td>✗</td> <td>●</td> <td>○</td> </tr> <tr> <td>Green</td> <td>Yellow</td> <td>Red</td> <td>Grey</td> <td>White</td> </tr> </table>								Full	Partial	None	Not Present/Not Assessable	Not Used	✓	⚠	✗	●	○	Green	Yellow	Red	Grey	White
Full	Partial	None	Not Present/Not Assessable	Not Used																		
✓	⚠	✗	●	○																		
Green	Yellow	Red	Grey	White																		

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