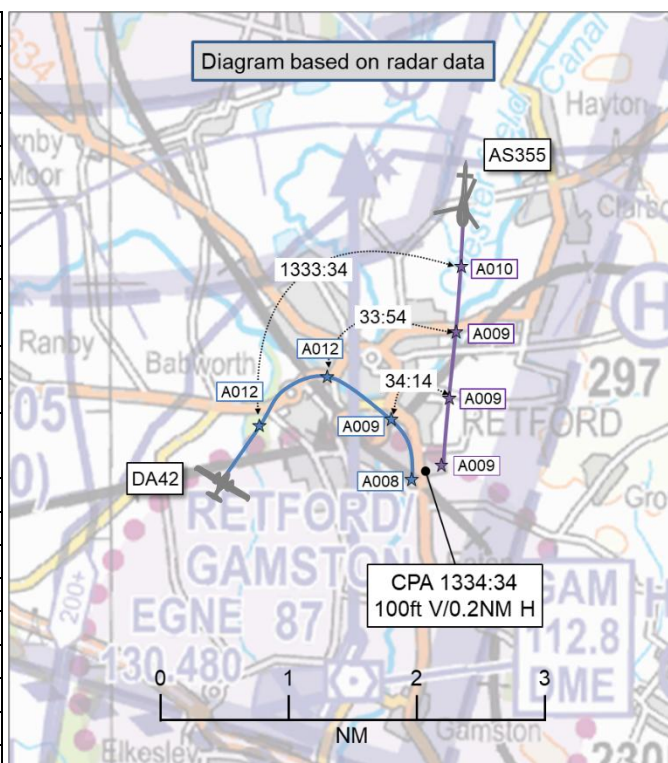


AIRPROX REPORT No 2025063

Date: 29 Apr 2025 Time: 1335Z Position: 5319N 00056W Location: Retford/Gamston ATZ

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	DA42	AS355
Operator	Civ Comm	Civ Comm
Airspace	Gamston ATZ	Gamston ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Gamston Radio	Gamston Radio
Altitude/FL	800ft	900ft
Transponder	A, C, S+	A, C, S
Reported		
Colours	White	Grey
Lighting	Anti-colls, nav, landing and taxi	Anti-colls & nav.
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	600ft	900ft
Altimeter	QNH (1026hPa)	QNH (1026hPa)
Heading	NK	020°
Speed	95kt	90kt
ACAS/TAS	TAS	SkyEcho
Alert	Alert	Information
Separation at CPA		
Reported	0ft V/200m H	0ft V/100m H
Recorded	100ft V/0.2NM H	



THE DA42 PILOT reports that, after task completion to the east of Gamston, they contacted Gamston Radio approximately 6NM to the east of the airfield and requested airfield information (RW20, right-hand circuit, QNH 1026hPa) for join, they then stated that they would join overhead. Upon joining overhead, another aircraft joining from the west also stated they were overhead and visual with [the DA42] and entered the circuit in front of them. Their TAS indicated [the traffic] was at 1500ft, while they were at 2100ft on the QNH.

This aircraft was a C42 microlight doing approximately 60-70kt, significantly slower than them. Due to this they joined the crosswind leg (RW20 right-hand circuit) and extended the downwind leg to ensure adequate separation. They made Gamston Radio aware of their intentions. By the end of the extended downwind leg they were configured appropriately for this point in the circuit (gear down and approach flap selected). At this stage, an aircraft had called ready for departure at Holding Point D, to which Gamston Radio provided Traffic Information on the aircraft in front (turning final) and themselves (turning base), and another aircraft overhead. This provided very good awareness of what and where everyone was in the circuit.

When reaching the end of their base leg (approximately 5sec before initiating a turn onto final), an aural TAS warning was heard and illustrated an aircraft at the same level (600ft AMSL), extremely close to themselves. They had previously checked the final approach track and nothing was seen, and their primary focus was on the aircraft (now on short final) to ensure separation. At this point, a rotary aircraft [pilot] had called final and they were visual with one ahead, no previous radio calls were heard from the rotary aircraft. They and another crew member in the back of the aircraft then became visual with the rotary aircraft, approximately 200m away in their 10 o'clock. Once visual with the rotary aircraft, they performed avoiding action by applying maximum power and initiating a [best angle of] climb. No avoiding action was visually noted from the rotary aircraft. After this, they continued the climb into the

overhead (2100ft QNH) and performed another overhead join. A standard overhead join procedure was followed and they landed safely on RW20. The issue was not raised on the radio as their primary concentration was rejoining the circuit safely, with other aircraft in it.

After they had shut down the aircraft, they called Gamston 'Tower' to discuss the incident and check what radio calls were made from the rotary aircraft to ensure it was not them who had missed [the R/T calls], to which [the Air/Ground Operator] stated they believe they tried to make an initial call, but they and another aircraft 'stepped on each other' (this is what they remember them saying, but they could not be 100% [certain] that this was factual). They then joined final for RW20 with no further radio calls, with multiple aircraft operating in the circuit. [They opined that] the rotary [pilot] should have had a relatively accurate depiction of the circuit traffic from the position reports given.

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

THE AS355 PILOT reports that they planned a right-base join for RW20 at Gamston but, on establishing comms with Gamston Radio, they were informed of two aircraft joining overhead and one in the local area. At four miles north they could see both aircraft in the circuit pattern and elected to slow down for spacing and join final at 2NM, informing Gamston. At 2NM they called final for RW20 number 2 to the later of the 2 that had joined overhead [they thought]. After circa 10sec they saw the DA42 overtake on their right-hand-side, remain level then called "going around". They presumed [that the DA42 pilot] had not seen nor heard them on the radio and were going around due to aircraft ahead on final.

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

THE GAMSTON AIR/GROUND OPERATOR reports that they were not aware, or noticed, but an Airprox was reported over the phone by [the pilot of the DA42].

[The DA42] was in the circuit. [The AS355] was inbound from the north and joined long final.

The following timeline was derived from an R/T transcript provided by Gamston Airport:

1429:51	Gamston Radio operator	"[AS355 c/s], <i>Gamston Radio, RWY 20, right-hand circuit, QNH1026.</i> "
1430:04	AS355 pilot	" <i>RWY 20 in use, 1026, we will look at joining a long final if the circuit traffic confirms nothing to affect, if not we'll join on base.</i> "
1430:19	C42 pilot	" <i>Descending deadside for 20.</i> "
1430:23	DA42 pilot	"[DA42 c/s], <i>deadside descending, is that a previous traffic calling visual with myself?</i> "
1430:31	Gamston Radio Operator	"[C42 c/s], <i>are you visual with the DA42?</i> "
1430:35	C42 pilot	" <i>Roger, he's gone outside the circuit line.</i> "
1430:40 - 1430:48 the pilot from an unrelated aircraft called ' <i>final</i> ', was acknowledged and passed the surface wind to land.		
1430:59	DA42 pilot	"[DA42 c/s], <i>we are visual with the other traffic, we're going to join crosswind for 20 right-hand.</i> "
1431:52	C42 pilot	"[C42 c/s], <i>turning downwind for 20.</i> "

1431:57 - 1432:17 Another unrelated aircraft joined via the overhead and the pilot's call was acknowledged.

1432:21	DA42 pilot	"[DA42 c/s], <i>downwind, contact 1 ahead, we'll extend downwind.</i> "
1432:25	Gamston Radio operator	"[DA42 c/s], <i>roger.</i> "
1433:16	Student pilot	" <i>Gamston Radio</i> , [student c/s], <i>delta hold, ready for departure.</i> "
1433:25	Gamston Radio operator	"[Student c/s], <i>roger, 1 aircraft turning base, 1 further aircraft behind.</i> "
1433:47	Student pilot	"[Student c/s], <i>roger.</i> "
1433:55	C42 pilot	"[C42 c/s], <i>turning final for 20.</i> "
1433:58	Gamston Radio operator	" <i>C42, surface wind 150, 10 kts.</i> "

1434:03 – 1434:11 The C42 pilot acknowledged the call. This was followed by a call from the pilot of an unrelated aircraft joining overhead who was acknowledged.

1434:14	AS355 pilot	"[AS355 c/s], <i>just turning final, visual 1 ahead and visual with the overhead join.</i> "
1434:23	Gamston Radio operator	"[AS355 c/s], <i>roger.</i> "
1434:32	DA42 pilot	"[DA42 c/s], <i>climbing into the overhead.</i> "
1434:35	Gamston Radio operator	"[DA42 c/s], <i>roger.</i> "

After this, the pilot of the aircraft that was joining overhead called downwind and was advised of one other aircraft downwind, the C42 landed and the AS355 pilot requested taxi to the refuelling area. An unrelated aircraft went around while the DA42 re-established downwind to land.

Factual Background

The weather at RAF Waddington was recorded as follows:

METAR EGXW 291320Z 14006KT CAVOK 22/08 Q1026 NOSIG RMK BLU BLU

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft were positively identified using Mode S data. The DA42 was seen turning right onto the final approach track for RW20 and the AS355 was seen approaching the same track from a long final position. CPA was assessed to have occurred at 1334:34 with 0.2NM lateral and 100ft vertical separation (Figure 1).

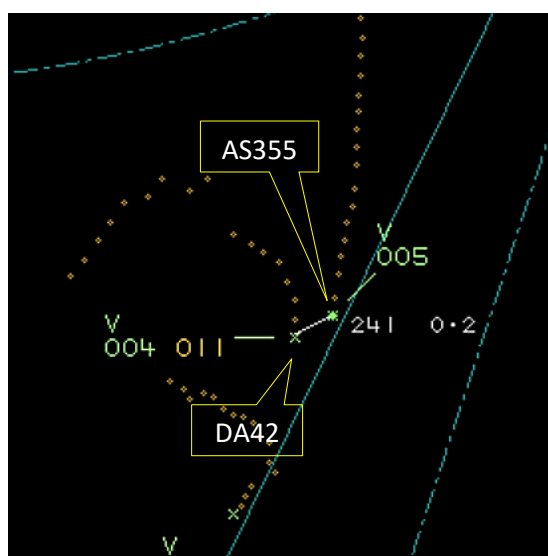


Figure 1 Time 1334:34

The DA42 and AS355 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 DA42 and an AS355 flew into proximity in the Retford/Gamston ATZ at 1335Z on Tuesday 29th April 2025. Both pilots were operating under VFR in VMC 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, a report from the Gamston Air/Ground Operator and a timeline provided by Gamston Airport. 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 looked at the actions of the DA42 pilot and noted that, whilst monitoring the R/T communications, they had missed the AS355 pilot's initial calls with their intentions to potentially join on a long final approach, and members agreed that the DA42 pilot had not monitored the R/T communications sufficiently well enough to have alerted the pilot to the presence of the approaching AS355 (**CF2**). However, the Board was pleased to note that an alert from the TAS equipment fitted in the DA42 (**CF4**) had provided the pilot with situational awareness of the AS355, albeit late, (**CF3**) and that the alert had assisted in identifying the position of the AS355 to the DA42 pilot. While members wondered why the DA42 pilot had not seen the AS355 prior to turning on to final, the Board agreed that the DA42 pilot had become concerned by the proximity of the AS355 (**CF6**), enough for them to have initiated a go-around.

Turning their attention to the actions of the AS355 pilot, the Board noted that the pilot had provided options for their approach. The Board learned from a member experienced in helicopter operations at Gamston Airport that the airport operators generally preferred standard overhead joins as described in their Flying Order Book, however, they also tended to ask helicopter pilots to join on a right or left base, or straight in for noise abatement, therefore, the AS355 pilot had been following a recognised procedure. The Board noted that the pilot had reported visual with the two aircraft joining when they had been at 4NM, referring to a C42 and the following DA42, but when they had called '*just turning*

¹ (UK) SERA.3205 Proximity.

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

final, visual 1 ahead and visual with the overhead join' members surmised that the pilot had thought the landing aircraft had been the second aircraft (the DA42) from the former visual report, mistaking the C42 ahead of them for the DA42. Members agreed, therefore, that the AS355 pilot had had inaccurate situational awareness of the position of the DA42 (**CF3**) and had not monitored the R/T communications adequately enough (**CF2**) to have realised that the DA42 had previously extended its downwind leg and had been on the crosswind sector to join the final approach. Furthermore, the Board noted that the pilot had received information on the DA42 traffic from the electronic conspicuity equipment fitted to the AS355 (**CF4**) but had not seen the DA42 until after it had overtaken them (**CF5**), effectively a non-sighting. Members agreed that the pilot's inaccurate situational awareness and lack of sighting of the DA42 had, most likely, led to the AS355 pilot to have not conformed with the pattern of circuit traffic already formed by the DA42 (**CF1**).

The Board discussed the use of R/T communications at Gamston, noting that it had seemed quite busy at the time of the Airprox. Members understood that Gamston Airport had a mix of private and commercial aviation operating from there and that, at times, it could be very busy. The Board questioned whether, given the level of traffic at the airport, an AGCS was an appropriate level of service for such a busy traffic environment. Nonetheless, members agreed that, in the context of this Airprox, there was nothing that the Gamston AGO could have done to assist matters.

In concluding their discussions, the Board noted that both pilots had missed R/T calls and that the DA42 pilot had had late situational awareness of the AS355 and that the AS355 pilot had had inaccurate situational awareness of the position of the DA42. Members agreed that safety had been degraded but that the EC devices from both aircraft had, most likely, improved the situational awareness of the DA42 pilot at least, and that the DA42 pilot had had an early enough sighting of the AS355 to have initiated timely and effective action to prevent the aircraft from coming into close proximity. As such, the Board assigned a Risk category C to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025063			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Flight Elements			
	• Tactical Planning and Execution			
1	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			
2	Human Factors	• Monitoring of Communications	Events involving flight crew that did not appropriately monitor communications	
3	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			
4	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
	• See and Avoid			
5	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
6	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 Assessment³

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

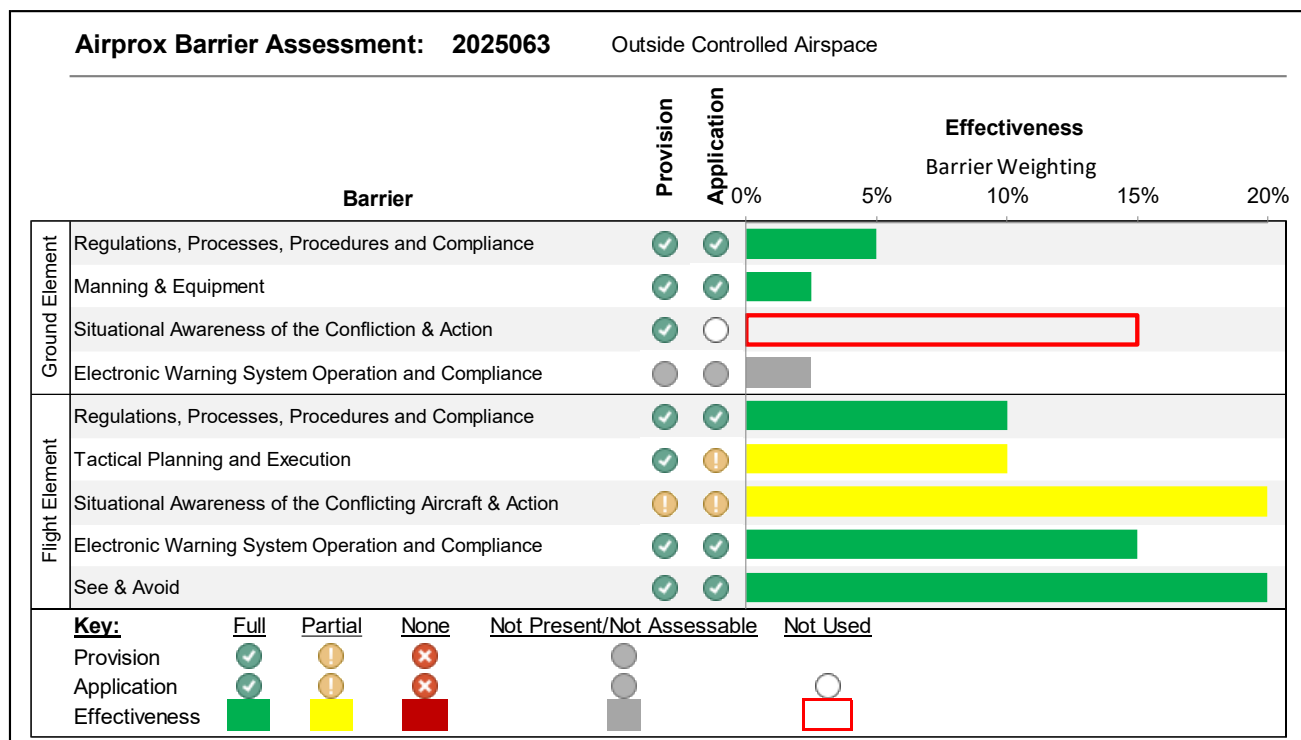
Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because the Gamston Air/Ground operator was not required to sequence the traffic in the circuit.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the AS355 pilot did not conform with the pattern of traffic already formed by the DA42.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the AS355 pilot's situational awareness of the DA42's position within the circuit was inaccurate.



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