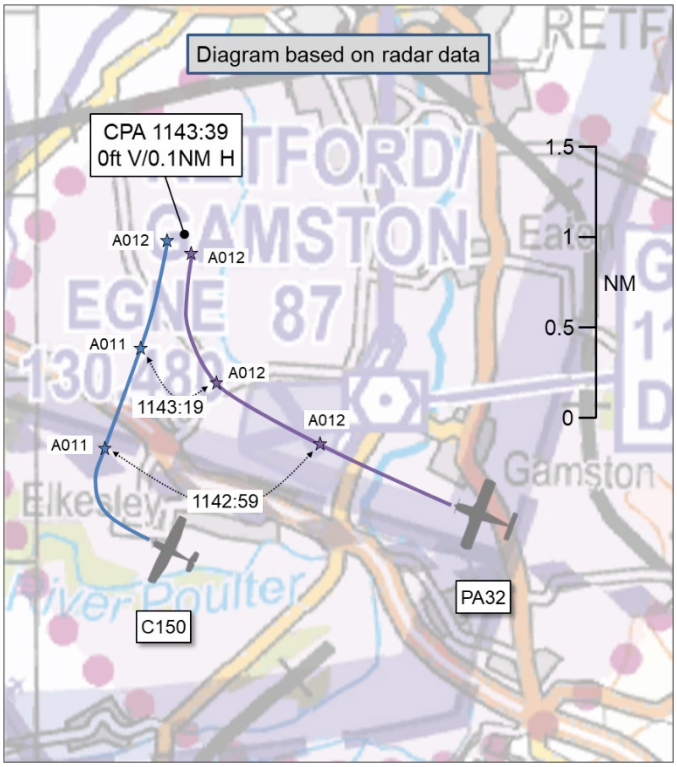
# AIRPROX REPORT No 2025215

Date: 27 Sep 2025 Time: 1144Z Position: 5318N 00059W Location: Retford ATZ

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|---|---|---|
| Aircraft | C150 | PA32 |
| Operator | Civ FW | Civ FW |
| Airspace | Retford ATZ | Retford ATZ |
| Class | G | G |
| Rules | VFR | VFR |
| Service | AGCS | AGCS |
| Provider | Gamston Radio | Gamston Radio |
| Altitude/FL | 1200ft | 1200ft |
| Transponder | A, C, S | A, C, S |
| **Reported** | | |
| Colours | White | Blue, white |
| Lighting | Taxy, strobes, nav, beacon | Beacon, strobes, landing |
| Conditions | VMC | VMC |
| Visibility | >10km | >10km |
| Altitude/FL | 1000ft | 1000ft |
| Altimeter | QFE | QFE |
| Heading | 025° | NK |
| Speed | 90kt | 100kt |
| ACAS/TAS | Not fitted | SkyEcho |
| Alert | N/A | None |
| | **Separation at CPA** | |
| Reported | 0ft V/50m H | "*Not seen*" |
| Recorded | 0ft V/0.1NM H | |




**THE C150 PILOT** reports that they were conducting a training flight with a student on board and remaining in the [RW20RH] circuit when [the PA32] came in from the north [they recall] to join from the overhead. The Airprox occurred when [the pilot of the PA32] turned downwind when they were already established on the downwind leg.

[The pilot of the C150] did not call downwind as they were not yet abeam the threshold. When they passed the A1, [the pilot of the PA32] called crosswind and they became visual with [the PA32] at that point. [They believe that the pilot of the PA32] had not had visual contact with [the C150] at any point.

[The pilot of the C150] continued, and had assumed that [the pilot of the PA32] had been visual with them, but the pilot of the PA32 then turned downwind, [apparently] without knowing that the C150 was already on downwind, and turned right next to them. [The pilot of the C150] saw [the PA32] turning and the instructor took the controls and turned left to avoid [the PA32]. They flew parallel with it while trying to call [the PA32 pilot] over the radio, twice, before climbing to the overhead to avoid a collision. After the two calls were made, the Gamston AGO then called [the PA32 pilot] three times before they replied. The Gamston AGO asked [the pilot of the PA32] if they were visual with the Cessna next to them and [the pilot of the PA32] asked if it was the Cessna on final.

[The pilot of the C150] then joined the circuit again from the deadside. During the Airprox, the student had been flying the aircraft until the instructor took the controls to avoid [the PA32].

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

**THE PA32 PILOT** reports that they did a normal overhead join at 2000ft and a descent to the deadside for RW20RH. As they were about to start on the crosswind, they radioed their position and were also listening out for other traffic. They heard on the radio, and saw as they crossed over the RW02

threshold, a C152 on a takeoff run, but that was not the traffic involved in the Airprox. They presume that the other aircraft involved was either on the circuit crosswind leg or turning onto downwind.

They did their usual lookouts before turning right onto their downwind leg. They made a radio call "[PA32 C/S] *downwind to land 20RH*". They did not see any other traffic and they did not hear any pilots calling downwind. They received a radio call from the Air/Ground Operator just before they turned onto base leg asking them if they had seen the Cessna 152 [the C150] to their left-hand side. They said no, they had not seen any other traffic. That was the first time that they were aware of the incident and have no idea how near or far away the aircraft were from each other.

After they landed, they talked to the other pilot. From what they could recollect, [the C150 pilot] told them that they had seen [the PA32] turn onto the downwind leg and had turned left to manoeuvre away. [The pilot of the PA32] asked when they usually made downwind calls in the circuit and, as far as they can recollect, they said 'when adjacent the numbers' which is more or less where the incident took place so, maybe, the other pilot was just about to make their call.

**THE GAMSTON AIR/GROUND OPERATOR** reports that [the pilot of the PA32] called inbound, and airfield information was passed. [The pilot of the PA32] advised that they would join overhead. There were three aircraft in the circuit at the time.

[The pilot of the PA32] completed an overhead join and called crosswind and turning downwind. [The C150] was downwind. [The pilot of the C150] called [the pilot of the PA32] with no response on two occasions, and then called climbing into the overhead to avoid a collision.

[The AGO] attempted contact with [the pilot of the PA32] on three occasions and got a response on the third time. They asked if they were visual with the aircraft to the left and they said they were only visual with the one on final. [The AGO] explained there was an aircraft to their left already established in the circuit.

## Factual Background

The weather at RAF Waddington was recorded as follows:

```
METAR EGXW 271150Z AUTO 18010KT 9999 OVC032/// 14/09 Q1019
```

## Analysis and Investigation

### UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data. The PA32, but not the C150, was observed by reference to ADS-B data sources.

The aircraft were depicted on the radar replay at Flight Levels. A correction was applied to determine their altitudes. The diagram was constructed and the separation determined from the radar data.

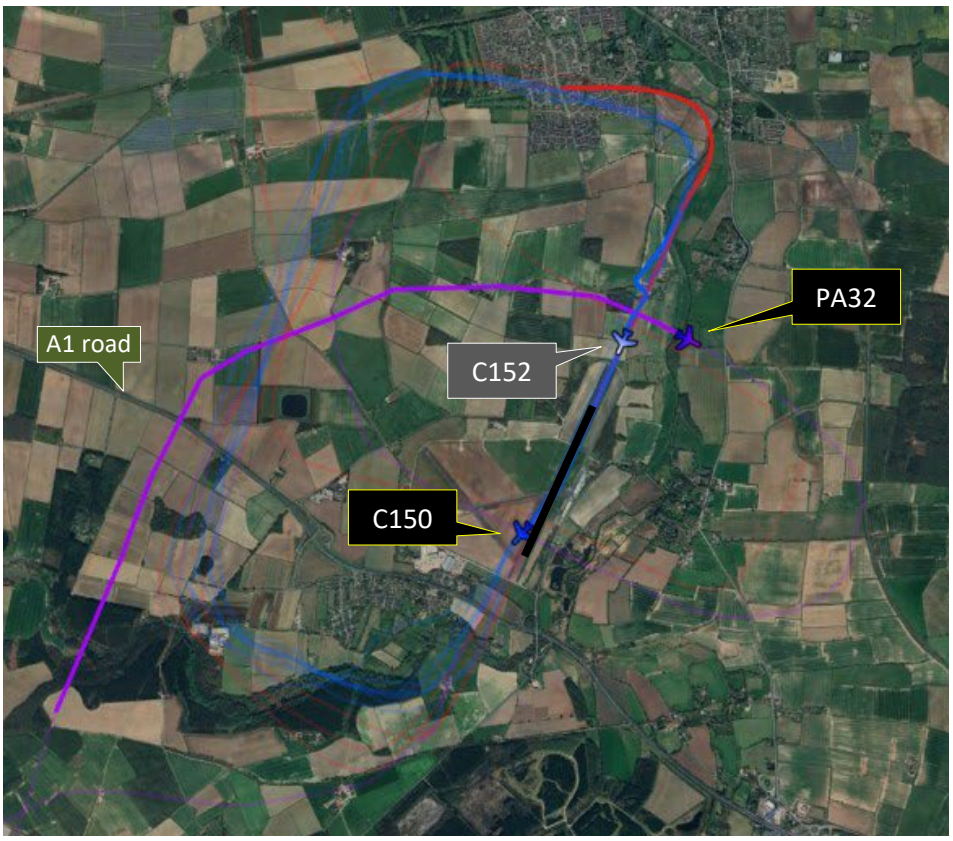



Figure 1 – Aircraft positions at 1141:19 (MLAT and ADS-B data)

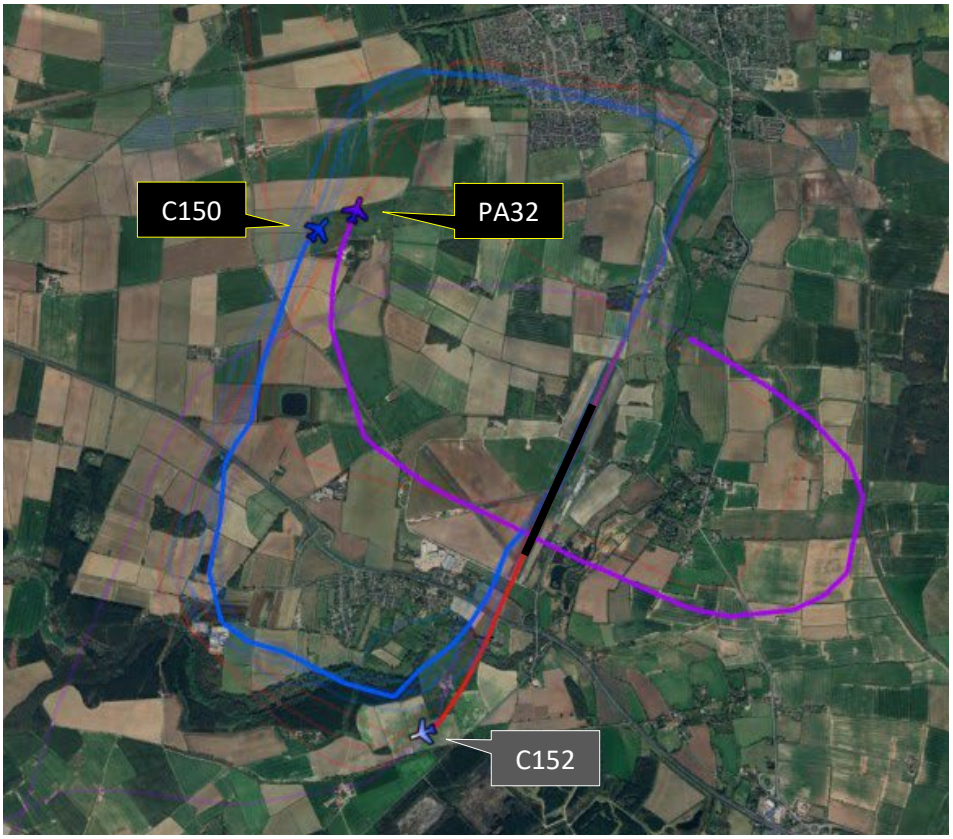



Figure 2 – Aircraft positions at 1143:47, 8sec after CPA (MLAT and ADS-B data)

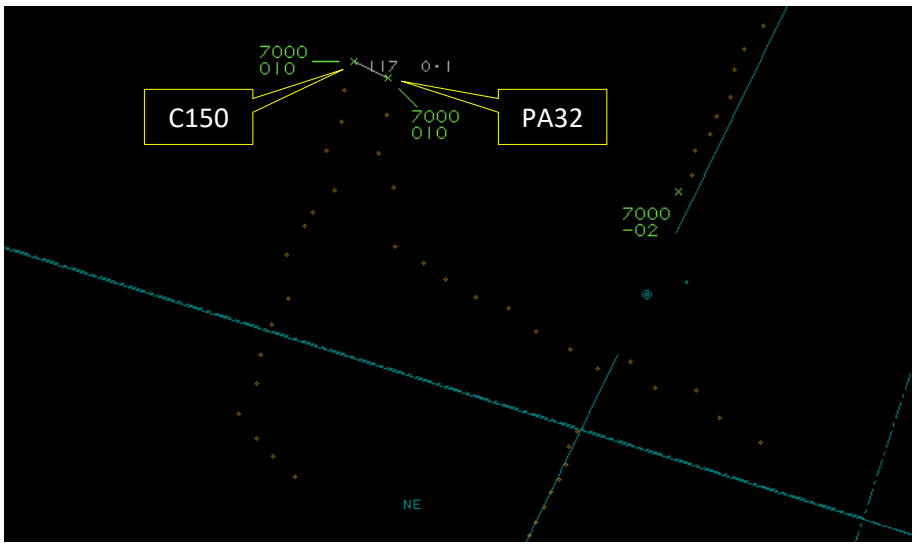



Figure 3 – CPA at 1143:39 (radar data)

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 in the Retford ATZ at 1144Z on Saturday 27th September 2025. Both pilots were operating under VFR in VMC, and 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 Radio 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 first considered the actions of the pilot of the C150. Members noted that they had been conducting a training flight, and had been established in the circuit at Retford aerodrome, when they had heard the pilot of the PA32 call on the radio that they had intended to join. It was noted that they had subsequently visually acquired the PA32 when it had been on the crosswind leg. Members agreed that the C150 pilot had been concerned by its proximity when the PA32 pilot subsequently turned onto the downwind leg (**CF7**). Members wished to strongly encourage the fitment of additional EC devices to aircraft, particularly to those operated by flying schools. It was suggested that, had the C150 been fitted with a compatible EC device, a timely alert to the approaching PA32 may have been provided to assist with their situational awareness. Notwithstanding, it was noted that the C150 pilot had assessed that a potential conflict situation had begun to develop, and members appreciated that they had attempted to call the PA32 pilot to warn them of their presence. No response had been forthcoming, and members commended their decision to take positive avoiding action to leave the circuit and to climb to the overhead.

Turning their attention to the actions of the pilot of the PA32, members noted that they had intended to join the circuit from an overhead join. As such, it was agreed that it had been of paramount importance for them to have been certain of the presence and position of any circuit traffic before they commenced their descent to circuit altitude. It was noted that the PA32 pilot had sighted a C152 that had been on a takeoff run, but had not sighted the C150 that had been climbing away from the runway. Referring to

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

the circuit track flown by the pilot of the PA32 (as shown in Figure 2), some members pointed out that they had 'cut the corner' from the crosswind to downwind legs and that they may have, perhaps, focussed their attention midway along the downwind leg to the detriment of a more thorough visual scan further upwind.

The monitoring of the Gamston frequency by the pilot of the PA32 was considered, and members noted that two calls from the C150 pilot, and two calls from the Gamston AGO had not been heard. Acknowledging that two-way contact had been established between the PA32 pilot and the AGO before they had entered the ATZ, members were in agreement that, subsequently, they had not monitored the frequency appropriately (**CF3**). In consideration of the EC device fitted to the PA32, members agreed that it would not have been expected to have detected the C150 (**CF5**). Members concluded that the pilot of the PA32 had not gleaned situational awareness of the C150 (**CF4**) and that it had not been sighted at any stage during the encounter (**CF6**).

Members were keen to highlight the guidance provided in CAP1535 'The Skyway Code' for the correct execution of an overhead join, and drew particular attention to the caution to 'watch for any traffic already on the downwind leg' that seemed most apt in this encounter.

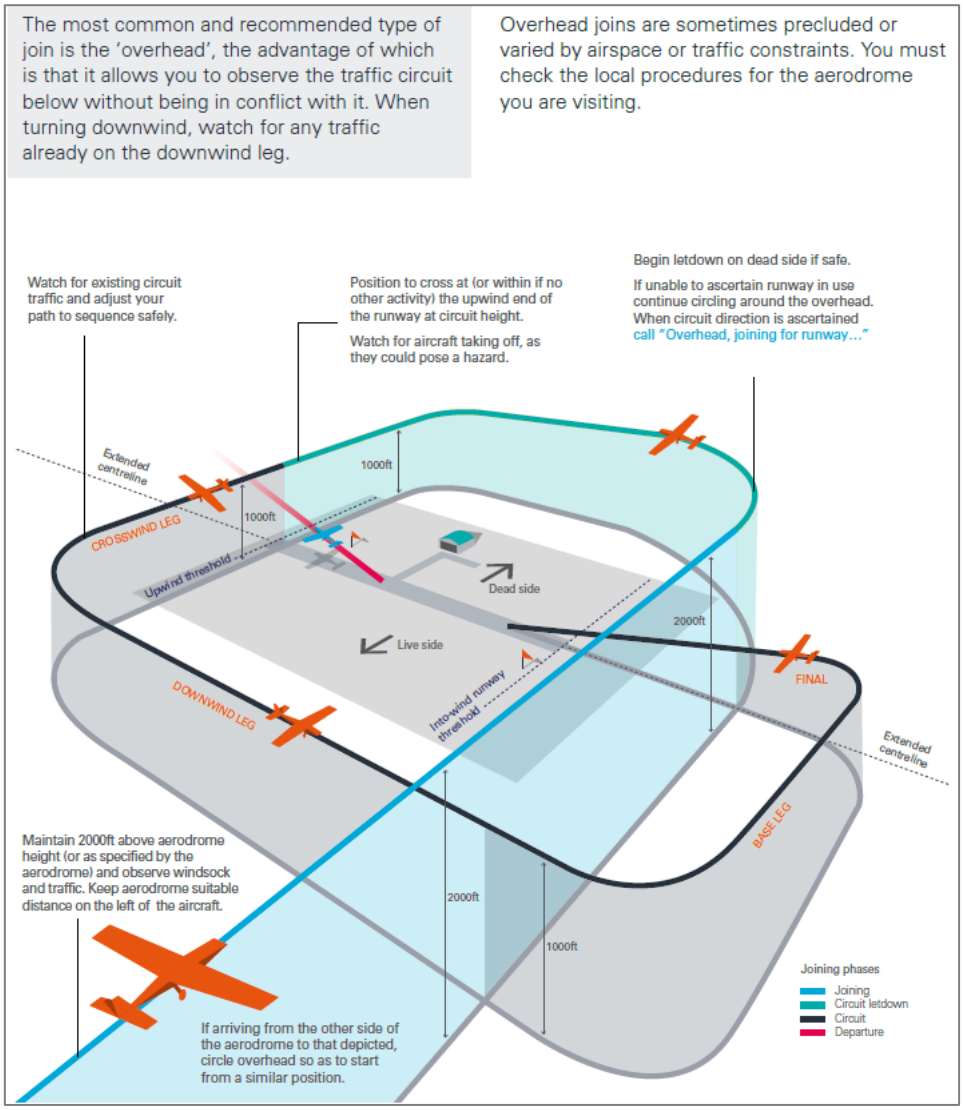



Figure 4 – Guidance provided in CAP1535 (p104) regarding a typical overhead join.

Members next considered the actions of the Gamston AGO, and members agreed that they had not been permitted to have sequenced the traffic in the circuit. Members commended their efforts to have contacted the PA32 pilot to request if they had had visual contact with the C150. It was suggested that there had been little else that the AGO could have done to have assisted matters.

Concluding their discussion, members summarised their thoughts. It was agreed that the pilot of the PA32 had not executed their join to the circuit correctly (**CF1**) and had not conformed with (or avoided) the existing pattern of traffic (**CF2**). However, it was also agreed that the pilot of the C150 had sighted the PA32 in time to have carefully considered the situation and had taken effective avoiding action which had resolved the encounter. Members were in agreement that safety standards had been degraded, however, were satisfied that there had not been a risk of collision. The Board assigned Risk Category C to this event.

## PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

| | 2025215 | | | |
|---|---|---|---|---|
| CF | **Factor** | **Description** | **ECCAIRS Amplification** | **UKAB Amplification** |
| | **Flight Elements** | | | |
| | **• Tactical Planning and Execution** | | | |
| 1 | Human Factors | • Action Performed Incorrectly | Events involving flight crew performing the selected action incorrectly | Incorrect or ineffective execution |
| 2 | 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** | | | |
| 3 | Human Factors | • Monitoring of Communications | Events involving flight crew that did not appropriately monitor communications | |
| 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 |
| 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:

**Ground Elements:**

**Situational Awareness of the Confliction and Action** were assessed as **not used** because the Gamston AGO had not been permitted to have sequenced the traffic in the circuit.

**Flight Elements:**

**Tactical Planning and Execution** was assessed as **partially effective** because the pilot of the PA32 had not conformed with, nor avoided, the pattern of traffic in the circuit.

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

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the pilot of the PA32 had not monitored the Gamston Radio frequency appropriately and had not had situational awareness of the presence of the C150.

**Electronic Warning System Operation and Compliance** were assessed as **ineffective** because the EC device fitted to the PA32 would not have been expected to have detected the presence of the C150.