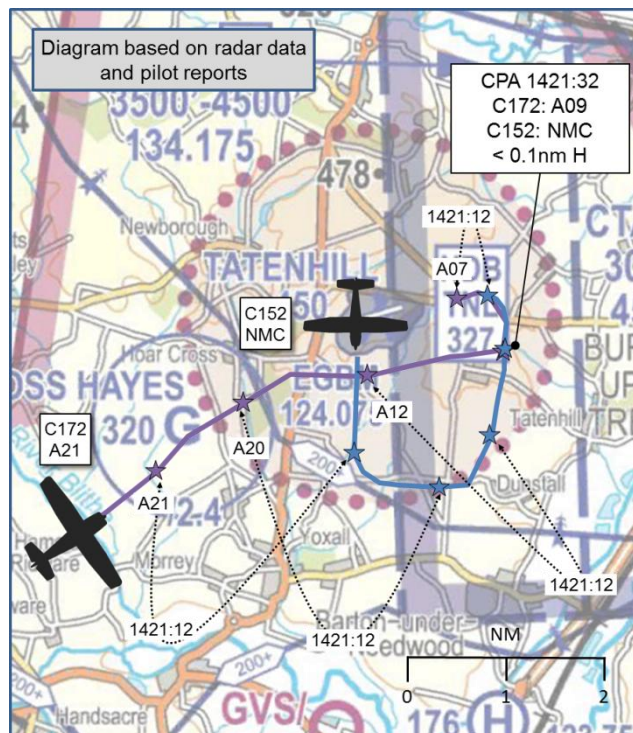


AIRPROX REPORT No 2014114**Date/Time:** 13 Jul 2014 1325Z (Sunday)**Position:** 5248N 00143W
(Tatenhill Visual Circuit)**Airspace:** Tatenhill Visual Circuit (**Class:** G)**Aircraft 1** **Aircraft 2****Type:** C152 C172**Operator:** Civ Pte Civ Trg**Alt/FL:** 600ft 300ft
QFE (992hPa) (NK hPa)**Conditions:** VMC VMC**Visibility:** 10km 20km**Reported Separation:**

100ft V/300ft H NK V/NK H

Recorded Separation:

NK V/<0.1nm H

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

THE C152 PILOT reports flying a white, green and blue aircraft VFR in the visual circuit, in communication with Tatenhill A/G Radio, squawking transponder Modes 3/A and C, he thought. On returning to Tatenhill from a local flight, the C152 pilot heard another aircraft 'report in to the airfield' and then, as he was turning onto base-leg at 1000ft, he heard the other pilot report downwind. At about 600ft on base-leg, the C152 pilot was about to turn onto final approach when he looked right to check for aircraft already on final; when he looked back to the left he saw the C172 about 100ft below him to the left 'cutting inside' his circuit. He recalls that the C172 appears to have gone through the centre-line before turning back onto final just as he was turning his C152 onto final; the C152 pilot elected to go-around.

THE C172 PILOT reports flying under VFR in a white and blue aircraft with strobes and navigation lights illuminated and squawking transponder Modes 3/A, C and S. He called on Tatenhill A/G frequency when he was around 10nm west-southwest of the aerodrome and was informed of gliding in progress to the southwest of the airfield, which he reported visual with. After passing the gliders he positioned for a left-hand downwind join for RW26 and observed an aircraft to the southeast of the airfield at a higher level, but otherwise recalls that the visual circuit appeared clear. He does not recall hearing any RT broadcasts from other aircraft at this time, and he proceeded to base-leg and then final approach, when he was given the surface wind by the A/G operator. As he turned on to final-approach, he heard another pilot report that he was 'going around'; he looked around but could not see any other aircraft so he continued to land. The C172 pilot does not recall hearing any other broadcasts before the 'going around' transmission.

He assessed the risk of collision as 'Low'.

Factual Background

The weather at Tatenhill at 1320 was recorded as:

METAR EGNX 131320Z 28014KT 9999 SCT030 SCT037 20/12 Q1008

Analysis and Investigation

UKAB Secretariat

The A/G frequency at Tatenhill is not recorded and so no confirmation of radio transmissions is available.

According to The Rules of the Air:

Both pilots had equal responsibility to avoid flying in such proximity to other aircraft as to create a danger of collision.¹

and:

On joining the circuit, the C172 pilot was required to conform to the pattern of traffic formed by other aircraft intending to land at Tatenhill or keep clear of the airspace in which the pattern was formed.²

and:

An aircraft shall not overtake or cut in front of another aircraft on its final approach to land.³

The C172 pilot reported that he saw an aircraft to the southeast of the airfield, at a higher level, but otherwise recalls that the visual circuit appeared clear, and he does not recall hearing any broadcasts from the C152 pilot until he heard his 'going around' call. If the C152 (flying wide downwind on the ATZ boundary) was the aircraft that the C172 pilot saw, it is likely that he perceived the circuit to be clear.

Summary

An Airprox occurred in the Tatenhill visual circuit, in Class G airspace, between a C152 and a C172.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both aircraft and radar photographs/video recordings.

The Board surmised that the C172 pilot had either not seen the C152 at all during his base leg and final approach (and that the aircraft that he had seen was indeed a different aircraft not in the ATZ), or that he had not assimilated that the aircraft that he had seen was in the circuit but was flying a very wide circuit pattern. They also noted that the C152 pilot had not seen the C172 until very late indeed. The Board therefore quickly agreed that the cause of this Airprox was a non-sighting by the C172 pilot and, effectively, a non-sighting by the C152 pilot. Members discussed the contributory factors which had led to this occurrence and observed that, although the C152 pilot was established in the circuit first, the fact that he had elected to fly an unusually wide circuit with his downwind leg reaching as far as the ATZ boundary meant that other pilots would not be expecting to look that far away from the airfield and associate his aircraft with being in the circuit. It seemed likely that the C172 pilot had seen the C152 to the southeast but, not having heard any transmissions from it, the C172 pilot had assumed that the circuit was clear; essentially, he had not integrated with the other aircraft already in the visual circuit. Members observed that, although the C152 had embarked on a very wide circuit, there is no standard definition of what constitutes a visual circuit and pilots often adjust their pattern, quite legitimately, for many different reasons.

It was agreed that the C172 pilot would have been better served to have kept an eye on the aircraft he had seen to the southeast rather than assuming it had departed, but this was easy to say in

¹ Rules of the Air 2007, Rule 8, Avoiding Aerial Collisions

² Rules of the Air 2007, Rule 12, Flight in the vicinity of an aerodrome, and Regulatory Article 2307(1) Para 16

³ Rules of the Air 2007, Rule 13, Order of Landing

hindsight. Similarly, again in hindsight, members agreed that the C152 pilot's decision to fly such a wide circuit could have been mitigated by making his intentions clear on the A/G frequency, and he could even have taken the step of talking directly to the C172 pilot to ensure that they both understood each other's intentions given that he had heard the C172 pilot's joining call.

Turning to the risk, the Board noted that the radar recording showed the CPA to be earlier in the base leg than the C152 pilot had reported, and it was therefore very likely that the aircraft had been in close proximity without either pilot being aware of the other aircraft; it was concluded that chance had played a major part in separating the aircraft and so the degree of risk was agreed as Category A.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A non-sighting by the C172 pilot and, effectively, a non-sighting by the C152 pilot, both in the visual circuit.

Contributory Factor(s): 1. The C152 pilot flew an unusually wide visual circuit pattern.
2. The C172 pilot did not integrate effectively with the C152.

Degree of Risk: A.

ERC Score⁴: 100.

⁴ Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.