

## **AIRPROX REPORT No 2013076**

Date/Time: 10 Jul 2013 0910Z

Position: 51 40N 000 09E  
(1.6nm North of Stapleford)

Airspace: Stapleford ATZ (Class: G)

Reporting Ac      Reported Ac

Type: C152                      PA28R

Operator: Civ Trg              Civ Club

Alt/FL: 1200ft                      1400ft  
            QNH (NR hPa)      QNH (NR hPa)

Weather: NK                      VMC CAVOK

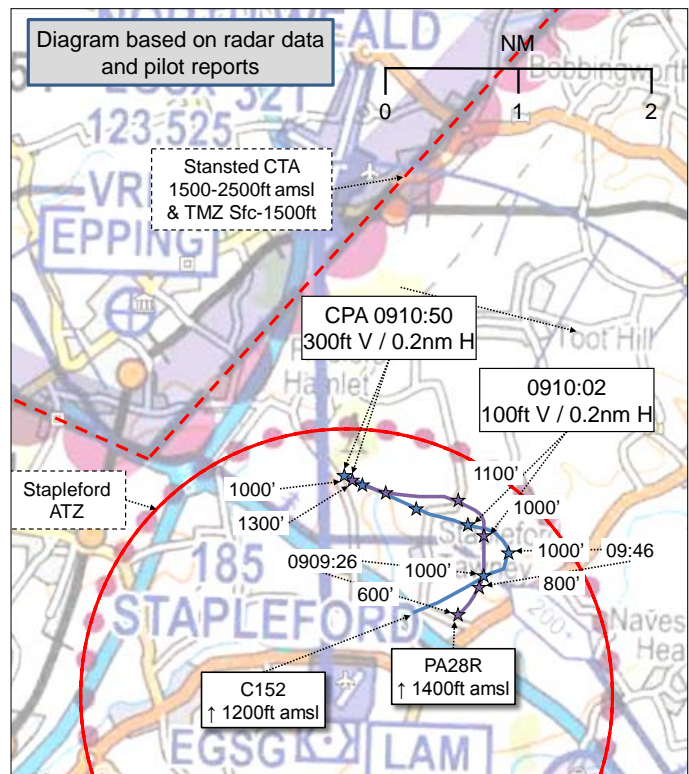
Visibility: >10km                      >10km

Reported Separation:

Few Hundred ft V NR V/NR H

Recorded Separation:

300ft V/0nm H



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

**THE C152 PILOT** reports flying in the left-hand visual circuit to RW04 at Stapleford, with a student, at 90kts. After reaching 1200ft and turning on to the cross-wind leg he noticed another aircraft climbing-out. After manoeuvring his aircraft to check the position of the PA28R, he could see that it was behind him and was getting closer. Concerned that the other pilot may not be aware of his position, or the decreasing separation, the C152 pilot instructed his student to assist with lookout and, when they realised the PA28R was continuing to close on them, he flew an 'evasive manoeuvre,' descending to 900ft whilst making an RT broadcast to see if the PA28R pilot was visual with his Cessna; he did not hear a response. The C152 pilot continued to manoeuvre to keep the PA28R in sight and then saw it fly 'a few hundred feet' above him before hearing its pilot report clear of the circuit and changing frequency.

**THE PA28R PILOT** reports flying a white and blue aircraft, with transponder Modes 3/A and C turned on. He took off from RW04 behind the C152, which he assessed to be in the visual circuit. He was flying to Oaksey Park, requiring a westerly departure, and realised that he would over-take the other aircraft on the cross-wind leg, so both he and his passenger maintained visual contact with the C152 throughout the occurrence. He reports heading around 270°, whilst climbing at 100kt to his cruising altitude of 1400ft, over-taking 'behind' the C152, and did not consider that, at any time, he 'became too close to it'.

**THE STAPLEFORD AIR/GROUND OPERATOR** was not able to report any details of the incident.

### **Factual Background**

The London City weather 0850 was recorded as:

METAR EGLC 100850Z 02009KT 350V090 9999 FEW042 20/12 Q1026

The Stanstead weather at 0850 was recorded as:

METAR EGSS 100850Z 03010KT 9999 FEW021 19/13 Q1027

## Analysis and Investigation

### UKAB Secretariat

At 0909:26 the C152 can be seen on the Stanstead radar, 1.2nm north-east of Stapleford, tracking north-east, indicating 1000ft amsl as the PA28R appears 0.4nm south-west of it indicating 600ft amsl. Both aircraft track north-east until 0909:47, when first the PA28R and then the C152 turn left; the C152 takes up a north-westerly track, indicating 1000ft amsl, and the PA28R takes a more northerly track, indicating 800ft amsl and turning slightly inside the C152's turn. At 0910:02 the PA28R, heading northwards at 1000ft amsl indicated, passes 0.2nm behind the C152 which is tracking approximately 290°, indicating 1100ft amsl. At 0910:19 the aircraft are 0.3nm apart, both indicating 1100ft amsl. Shortly afterwards, the C152 continues on its track and the PA28R (now indicating 1200ft amsl) continues to turn left onto a more westerly track and again passes 0.2nm behind the C152 (now indicating a descent through 1100ft amsl). The PA28R rolls out 0.2nm behind the C152, on a similar track, indicating a steady climb through 1300ft amsl. At 0910:50 the aircraft returns briefly merge before the C152's return disappears; at this point the PA28R is indicating 1300ft amsl and, before it's return disappears, the C152 indicates 1100ft amsl.

The C152 had right of way because it was being overtaken by the PA28R, which should have overtaken on the right of the C152.<sup>1</sup> Furthermore, the PA28R pilot had the responsibility to 'keep out of the way' of the C152 until the aircraft were clear of each other.<sup>2</sup> Finally, an aircraft which is obliged to give way to another aircraft is required to avoid passing over or under the other aircraft, or crossing ahead of it, unless passing well clear of it.<sup>3</sup>

### Summary

The C152 took off from RW04 at Stapleford and entered the left-hand visual circuit climbing to 1200ft. The PA28R took off from the same runway for a westerly departure, climbing to 1400ft. The crew of the PA28R maintained visual contact with the C152 whilst first passing from left to right, 0.2nm behind it, and then passing around 300ft above the C152. The C152 pilot, concerned by the proximity of the higher performance aircraft, descended to 900ft to avoid the PA28R.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

Board members noted that this Airprox occurred at a busy training airfield and that this, and the presence of the Stanstead CTA and TMZ to the north, could have constrained both pilots' routings. Nonetheless, the Board members were clear that the PA28 pilot had the responsibility to keep well clear of the C152 whilst overtaking it, and should have avoided overtaking above it. Some Board members opined that it was possible that the PA28 pilot had believed that he had overtaken the C152 when their flight-paths had first crossed but, because the PA28 pilot had reported his heading as 270° at CPA, it was more likely that he had maintained visual contact with the C152 throughout and had not actually overtaken until the second crossing. Given that both pilots could see the other's aircraft, and that the C152 pilot had also taken effective and timely avoiding action, the Board agreed that there was not a risk of collision and decided that the Degree of Risk was C. Nevertheless, the Board noted that the PA28 pilot was required, by the Rules of the Air, to keep well clear of the C152 whilst overtaking it. The measured separation was 300ft V and 0.2nm H; the GA pilot members felt that, whilst this could be considered sufficient separation in many other Class G airspace encounters, it

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<sup>1</sup> Rules of the Air 2007, Rule 11, para 1.

<sup>2</sup> Rules of the Air 2007, Rule 11, para 2.

<sup>3</sup> Rules of the Air 2007, Rule 8, para 4.

was too close to be deemed 'keeping well clear' during an overtaking manoeuvre. Consequently, the Board concluded that the cause of the Airprox was that the PA28 pilot flew close enough to cause the C152 pilot concern.

**PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: PA28 pilot flew close enough to cause the C152 pilot concern.

Degree of Risk: C

ERC Score<sup>4</sup>: 2

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<sup>4</sup> 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.