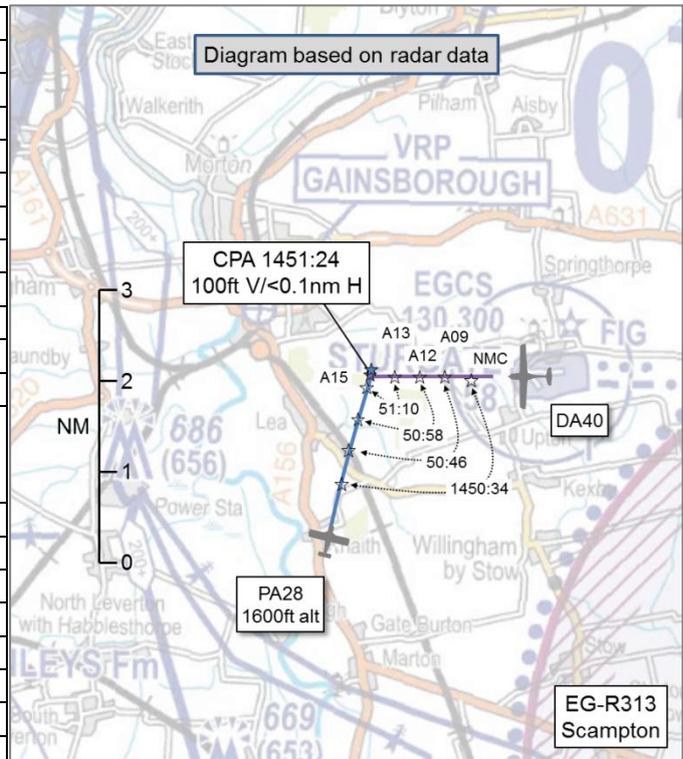


AIRPROX REPORT No 2015125

Date: 23 Jul 2015 Time: 1451Z Position: 5323N 00044W Location: 2nm WSW Sturgate airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|-------------|--|------------------|
| Aircraft | PA28 | DA40 |
| Operator | Civ Pte | Civ Trg |
| Airspace | London FIR | London FIR |
| Class | G | G |
| Rules | VFR | VFR |
| Service | None | None |
| Provider | Sturgate Radio | Sturgate Radio |
| Altitude/FL | 1300ft | 1400ft |
| Transponder | A, C, S | A, C, S |
| Reported | | |
| Colours | White/blue | White/red |
| Lighting | Red tail beacon, white wingtip strobes | Wing tip strobes |
| Conditions | VMC | VMC |
| Visibility | 30km | 8km |
| Altitude/FL | 1500ft | 1800ft |
| Altimeter | QNH (1010hPa) | QNH (NK hPa) |
| Heading | 010° | 265° |
| Speed | 110kt | 90kt |
| ACAS/TAS | Not fitted | Not fitted |
| Separation | | |
| Reported | 150ft V/60m H | 200ft V/NK H |
| Recorded | 100ft V/<0.1nm H | |



THE PA28 PILOT reports that he called Waddington about 10 miles south of Sturgate to advise that he was going to land at Sturgate and wanted to go to their frequency. The squawk was changed to 7000 and he called Sturgate. He received no reply, but because he was a regular visitor, he was fully aware of the normal joining procedures. He made a traffic call advising that he was joining from the south, and that his intentions were to join downwind right for RW27. This involved routing through the centre line for RW27 which he did at 1500ft, 2 miles west of the field. He judged that he was unable to route around to the south of the field due to the Scampton restricted area, which Waddington had advised was hot, and that he could not do an overhead join for the same reason. He heard a call on the Sturgate frequency from a departing aircraft calling 'rolling' and so he and the other two experienced pilots in the aircraft looked out to try and become visual with the departing aircraft. At a point to the south east of Gainsborough the passenger pilot in the right-hand seat shouted urgently 'descend now', which he did immediately and rapidly and in so doing saw an aircraft to the right climbing above his aircraft. He continued the rapid descent to 1000ft, levelled off, and continued the approach to Sturgate as intended without further incident. Subsequent to the incident, and after discussion with the other experienced pilots in the aircraft, the pilot noted that the difficulty in seeing the other aircraft was compounded by its constant bearing prior to CPA and its colour making it difficult to see against the ground area background. It was believed that the other aircraft pilot did not see the PA28 until the last moment, when avoiding action was taken.

He assessed the risk of collision as 'High'.

THE DA40 PILOT reports he climbed out of Sturgate on RW27 runway heading, intending to break off climb at about 2000ft, cross the Trent, and head south for Gamston staying out of the Doncaster CTA. Near top of climb, he lowered the nose for another forward vision check, and the other aircraft was seen left, forward and lower on a converging course. His reaction was to climb while the other

aircraft passed under him. He estimated 200ft vertical separation although, in the nose up attitude, it was difficult to estimate separation.

He assessed the risk of collision as 'Medium'.

Factual Background

The weather at Scampton was recorded as follows:

METAR EGXP 231450Z 28010KT CAVOK 18/06 Q1015 BLU

Analysis and Investigation

UKAB Secretariat

The PA28 and DA40 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. The incident geometry was converging and the PA28 pilot was required to give way to the DA40². The entry for Sturgate in a well known Flight Guide does not stipulate a preferred join but states:

'Flights above the aerodrome are limited to 1500 ft aal.

Variable circuits on Rwy 09/27.'

Summary

An Airprox was reported when a PA28 and a DA40 flew into proximity at 1451 on Thursday 23rd July 2015. Both pilots were operating under VFR in VMC, neither in receipt of an Air Traffic Service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

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

The Board first discussed the pilots' actions. The PA28 pilot had made his intentions known on the Sturgate A/G frequency (there was no A/G Service at the time) but it was not clear whether the DA40 pilot had heard or assimilated those transmissions. However, the PA28 pilot did hear the DA40 pilot's call of 'rolling', which prompted the occupants to lookout towards the airfield. The Board noted that it had been the right seat occupant who saw the DA40 at a late stage and had directed the pilot to 'descend now'. Members agreed that the PA28 pilot probably saw the DA40 at about CPA. For his part, the DA40 pilot had departed from Sturgate, heading west in the climb, and had regularly lowered the nose of his aircraft to check for traffic ahead. This resulted in him seeing the PA28, albeit at close range, and re-establish the climb to increase separation. Members commented that both pilots had, by their actions, enabled the detection of the other aircraft, and had then taken appropriate action to ensure that collision was avoided.

However, members also felt that the PA28 pilot's flight might have been conducted differently. The PA28 pilot stated that the proximity of the Scampton restricted area precluded his routeing south or joining overhead Sturgate. The Board disagreed, and felt that whilst a left-hand circuit to RW27 was constrained, it was possible. Similarly, they felt that a right-hand overhead join to RW27 was also entirely feasible, albeit conforming to the airfield 1500ft height limitation would require a modified version of the overhead join. Members recalled circuit joining issues being causal factors in previous Airprox and reiterated that, in their view, an overhead join provided the best opportunity to remain clear of other traffic operating in the vicinity of an airfield whilst establishing the circuit direction and

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c) (2) Converging.

other participants in order to integrate effectively. It was also felt that, in this case, the downwind right-hand join to RW27 was always going to involve crossing the active runway centreline and that this was best done through the crosswind position, where other circuit traffic could better be seen and which afforded a degree of deconfliction from departing traffic, whichever runway was being used. They noted that the PA28 pilot was aware of the DA40 departing, and opined that crossing the extended centreline 2nm out at 1500ft without having it visual increased the risk of conflict, especially since the PA28 pilot was required to give way.

Lastly, members noted that both the PA28 and the DA40 pilots had had the opportunity to increase their situational awareness by restating their respective positions and intentions explicitly if they were uncertain of each other's locations (allowing for the fact that the DA40 pilot may not have heard or assimilated the PA28 pilot's radio call in order to prompt further action in his respect).

Turning to the cause, members agreed that the PA28 pilot was responsible for giving way to the DA40, and that he had flown into conflict with it. Although both pilots took avoiding action to prevent collision, and the pilot reports indicated the PA28 may have been slightly lower than the DA40 anyway, it was felt that in this instance safety margins had been much reduced below the norm.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The PA28 pilot flew into conflict with the DA40.

Degree of Risk: B.