

Analysis and Investigation

CAA ATSI

CAA ATSI had access to Farnborough RTF and area radar recordings together with reports from both pilots and the Farnborough controller and unit investigation report. Stapleford operate an A/G radio and do not record RTF.

The Airprox occurred at 1126:11, 0.5nm to the southeast of Stapleford airfield within Class G airspace above the Stapleford Aerodrome Traffic Zone (ATZ). Above Stapleford is the London TMA-1 Class A controlled airspace, which has a base of 2500ft. The DA42 was not in receipt of an Air Traffic Service but was in communication with Stapleford Radio.

The PA28 was squawking 5021. On two occasions the PA28 had operated in the vicinity of Stapleford and had requested a change to the Stapleford A/G frequency in order to obtain information on traffic in the area. On the second occasion, at 1124:37, the PA28 left the Farnborough frequency to advise Stapleford that he intended to overfly Stapleford at 2300ft. The pilot's written report indicated that Stapleford advised that they had no traffic to affect. The PA28 was 2.7nm southeast of Stapleford at 2300ft. The DA42 had just departed from Stapleford and was 0.8nm southwest of Stapleford at 800ft squawking 5420, (UK domestic code); see Figure 1.

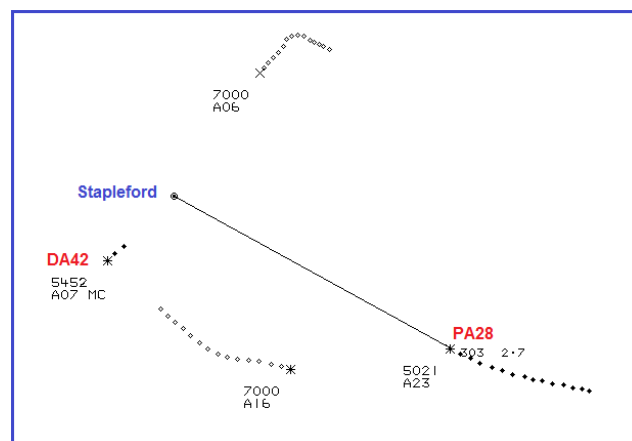


Figure 1

The PA28 pilot elected to change back to the Farnborough (LARS) frequency, reporting back on frequency at 1125:09. At 1125:43 the DA42 had completed a left turn and was passing 2000ft on a north-easterly track. The horizontal distance between the two aircraft was 1.3nm. The two aircraft continued to converge and, at 1126:09, the horizontal distance was 0.2nm with the DA42 indicating 100ft above the PA28; see Figure 2.

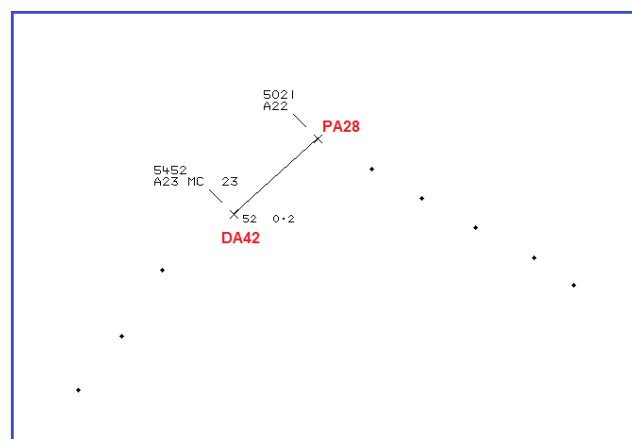


Figure 2

The CPA occurred between radar sweeps at 1126:11 at an estimated distance of 0.1nm horizontally and 100ft vertically. At 1126:13 radar showed the two aircraft had passed, with the DA42 turning right and indicating 100ft above the PA28; see Figure 3.

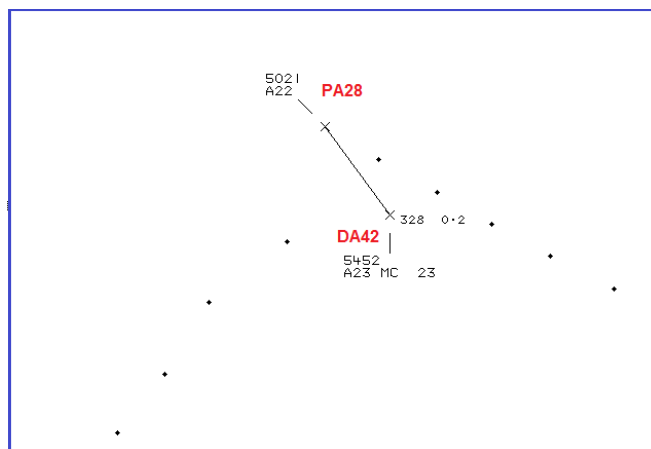


Figure 3

At the time of the Airprox there were four aircraft in the vicinity of Stapleford and Farnborough ATSU reported that the SSR labels were overlapping (garbling) as shown by the unfiltered radar recording in Figure 4.

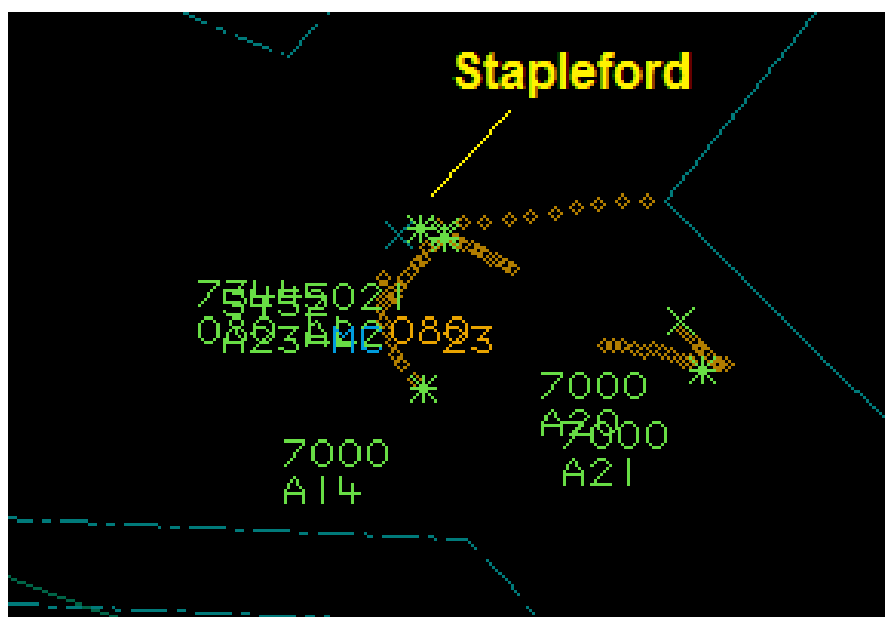


Figure 4 – Swanwick MRT 1126:13

The PA28 pilot's written report indicated that he sighted the DA42 late due to the position of the sun, reporting that the DA42 was slightly below and was taking avoiding action to pass behind. The DA42 pilot indicated that he sighted the PA28 at a (similar) slightly lower level and, after a short delay, considered a right turn was the best option to avoid. The Farnborough ATSU indicated that when the PA28 checked in on frequency after having spoken to Stapleford Radio, the Farnborough controller assumed that Stapleford would have passed any relevant traffic information. The Farnborough controller had then focused his attention on another area of the sector. When the controller returned his attention back to the PA28, he observed that the two aircraft had passed. The Farnborough controller did not detect there was a definite risk of collision hence why no warning was passed. The Stapleford A/G operator, in discussion, indicated that he always advises overflying aircraft to keep a lookout for traffic operating at Stapleford (which are normally below 1800ft) and, if the overflying aircraft are working Farnborough, they can either report passing abeam or return to the Farnborough frequency. The A/G operator could not recall

the exact circumstances of the event but does remember a subsequent telephone call from the PA28 pilot, when it was suggested that the PA28 pilot contact the DA42 pilot.

The DA42 was in communication with Stapleford Radio (an A/G Service) but was not in receipt of an Air Traffic Service. It was not clear if the DA42 pilot was aware of, or had heard the PA28 pilot's transmission to transit via the overhead. The PA28 pilot had contacted Stapleford and, in the absence of any traffic information or request to report overhead, the pilot had elected to return to the Farnborough LARS frequency in receipt of a Basic Service.

UKAB Secretariat

Both pilots shared an equal responsibility for collision avoidance and for not flying into such proximity as to cause a danger of collision¹. If the incident geometry is considered as converging then the DA42 was required to give way to the PA28, which he did.²

Summary

An Airprox was reported when a PA28 and a DA42 flew into proximity at 1126 on Tuesday 30th December. Both pilots were operating under VFR in VMC. The PA28 was receiving a Basic Service from Farnborough LARS, the DA42 was speaking to Stapleford on the A/G frequency.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, radar photographs/video recordings, reports from the air traffic controller involved and a report from the appropriate ATC authority.

The Board agreed that this was a relatively straightforward encounter between two aircraft whose pilots were carrying out normal activity in Class G airspace under the principles of see-and-avoid. The Board commended the PA28 pilot for contacting Stapleford before overflying the ATZ to increase his situational awareness, but commented on the very limited information that an Air Ground Communications Service (AGCS)³ can provide. Notwithstanding, they opined that the A/G Operator could usefully have responded to the PA28 pilot's call with the information that the DA42 had recently departed and was climbing en route to the northeast, although they recognised that the A/G Operator was not required to do so. That the PA28 pilot was told that there was no traffic to affect was unfortunate in that it was highly likely to have caused him to have formed a false mental picture as he approached the airfield. In subsequently discussing the level of service provision at Stapleford, the Board recalled the conversation that had occurred during the assessment of Airprox 2014232 earlier in the meeting. During that discussion, the suitability of having only an A/G Service at Stapleford was queried given the busy nature of the airfield; the Board recalled that a recommendation had been made as a result of the discussion about Airprox 2014232, that Stapleford and the CAA review the suitability of this arrangement. The Board therefore refrained from making a further recommendation in this respect, but hoped that this Airprox would also be considered as part of that review.

The Board noted that Farnborough LARS had assumed that Stapleford would have passed Traffic Information to the PA28, but wondered whether this had been a safe assumption to make, and whether Farnborough LARS knew that Stapleford had only an AGCS. They also noted that the PA28 pilot had asked for only a Basic Service from Farnborough, and opined that a Traffic Service would have been more appropriate since this would have provided a measure of positive flight following and Traffic Information rather than relying on the controller to spot any conflicts when his attention might be focussed elsewhere. Notwithstanding, the Board also acknowledged that Farnborough LARS may not have been able to supply a Traffic Service given the likely intensity of traffic and workload. Nevertheless, based on the premise that 'if you don't ask you don't get'; the Board opined

¹ SERA 3205 Proximity.

² SERA 3210 Converging.

³ CAP 452 Ch 4 refers

that pilots should always request what they needed and wanted rather than second-guess the controller's ability to provide.

Turning to the cause and risk, the Board quickly agreed that the cause had been a late sighting by both pilots, but that the DA42 pilot had taken timely and effective action to avoid a collision. They therefore assessed the risk to be Category C.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by both pilots.

Degree of Risk: C.