

## AIRPROX REPORT No 2011016

Date/Time: 7 Mar 2011 1415Z

Position: 5219N 00128W (3.5nm  
S Coventry - elev 267ft)

Airspace: LFIR                    (Class: G)  
Reporting Ac                    Reported Ac

Type: DA42                    PA34

Operator: Civ Trg                    Civ Trg

Alt/FL: 1320ft                    NR  
(QNH 1028mb)

Weather: VMC CLOC                    NR

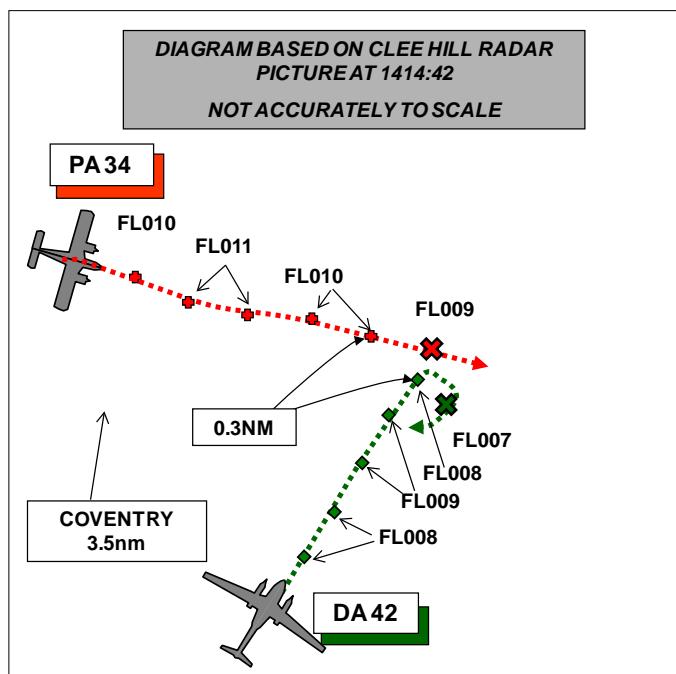
Visibility: >10km                    NR

Reported Separation:

NR                    NR

Recorded Separation:

200ft V/0.3nm H



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE DA42 PILOT** reports conducting a CPL skills test from Coventry and in communication with Coventry APP using an 'Exam' callsign, squawking with Modes S and C. The visibility was good and the ac was coloured white with nav, landing, taxi and strobe lights all switched on. The candidate was the handling pilot and they were joining the cct from the Wellesbourne direction having been given a downwind join for RW23. Other traffic [the subject PA34] on frequency was conducting a standard missed approach and was informed of their position and reported that they had his ac in sight.

About 10 sec later when they were 2.5nm S of the airfield, heading 050° at 130kt and 1320ft QNH, he visually acquired the PA34 1nm away and it initially appeared that it would pass clear of them and slightly above. However, it then started to descend slightly and it appeared to be either on a collision course or about to pass very close. As the candidate [HP] was not taking any avoiding action he took control and executed a steep RH turn and they passed behind the PA34 after a 360° turn. He could not judge how close they passed as their wing and engine completely obscured the PA34. Due to his avoidance, he assessed the risk as low to medium. He noted that on initial sighting of the PA34 he anticipated the commander would comply with Rule 9(3) [the ac which has the other on the right shall give way] which he estimated required a 10° L turn by the PA34 to avoid a conflict.

**THE PA34 PILOT** declined to submit a report.

UKAB Note (1): The circuit direction for RW23 at Coventry is left.

**ATSI** reports that this Airprox occurred at 1414:32, in Class G airspace, 3.6nm to the S of Coventry Airport, just outside the Coventry ATZ which comprises a circle of radius 2.5nm, centred on RW 05/23 and extending to a level of 2000ft aal (Aerodrome elevation 267ft). Coventry is situated below the Birmingham CTA, Class D airspace, base altitude 1500ft.

The PA34 was an IFR training flight inbound to Coventry from Oxford and was in receipt of a TS from Coventry Radar. After the completion of a radar vectored ILS approach to RW23, the PA34 pilot conducted a standard MAP published as:

'Climb to 1500. Straight ahead to 765 or I-CT DME 1 outbound whichever is later, NO DME; straight ahead to 1265, then turn left to track 179° to intercept VOR DTY R304 towards DTY VOR. When within DTY DME 14 (HON DME9 or more) turn left to NDB(L) CT and continue climb to 2000 or as directed.'

The DA42 was returning to Coventry Airport from the SSW after a local VFR (CPL skills test) exam flight in the vicinity of Wellesbourne Mountford, situated 12nm SSW of Coventry.

The Coventry primary radar data source is the local S511, with an SSR feed from NATS, Clee Hill radar. The Radar controller was providing an Approach Radar Control service with a 30nm range displayed on the radar.

CAA ATSI had access to RTF and radar recordings, together with reports from the controller and DA42 pilot; no report was available from the PA34 pilot.

The METAR was:

EGBE 071350Z 09004KT 050V140 CAVOK 09/M00 Q1029=

At 1218 the DA42 departed VFR from Coventry towards Wellesbourne, in receipt of a BS, in order to complete a CPL skills test. The ac flight progress strip indicated that the ac transferred to Wellesbourne Info at 1220

At 1400:46, the PA34, called Coventry Radar, squawking 4376, in receipt of information 'Uniform' and heading 350°; at the request of the pilot, a TS was agreed, with vectors for the ILS RW23 and QNH 1029. Following an ILS the PA34 pilot requested a standard MAP towards DTY and then a return to Oxford.

The PA34 was given descent to an alt of 2000ft and, at 1406:02, the Coventry Radar controller passed the missed approach instructions, "*(PA34)c/s on the go around it'll be a standard missed approach procedure until one four D M E from Daventry initially not above altitude one thousand five hundred feet*". The PA34 pilot's initial readback needed to be clarified by the controller and a correct readback was obtained. The PA34 was vectored onto the ILS and at 1407:38, the pilot reported localiser established. The PA34 pilot was given further descent on the glide path and asked to report at 4nm DME. At 1409:53, as the PA34 reached 3.9nm from touchdown, the controller instructed the PA34 to continue the approach and, at 1410:22 he passed go around instructions, "*(PA34)c/s cleared for a low approach report going around off runway two three one three zero at three knots*".

At 1410:48, the DA42 established contact with Coventry and requested rejoin, "*(DA42)c/s just ??? from Wellesbourne er to er Coventry for rejoining*"; the radar recording showed the DA42, 10nm SSW of Coventry squawking 7000. Radar responded, "*Roger (DA42)c/s route to the field VFR QNH one zero two nine*"; this was correctly acknowledged and the controller allocated a squawk of 0260 which was correctly acknowledged. At 1411:38, the DA42 transponder code changed to 0260 while the ac was 9nm SSW of the airfield.

Although not considered to be a factor in the Airprox, it is noted that the DA42 pilot did not request, nor did the controller specify, a level of service. On being informed of this the controller was surprised, as he always attempts to specify a level of service. The ac's flight progress strip indicated that a BS was being provided and the controller considered that the outbound agreement 2hr previously might have been a factor.

At 1412:08, the PA34 reported going around.

At 1412:22 Radar passed joining instructions to the DA42, "*(DA42)c/s position downwind lefthand runway two three the Q N H one zero two nine*", this was acknowledged correctly and at 1412:42 Radar passed TI, "*Roger information for you a P A thirty four just going around off Runway two three standard missed approach*"; the DA42 pilot responded, "*Roger looking*".

The controller was asked whether he considered that the VFR pilot would have been familiar with the standard MAP and, although he acknowledged that better information could have been passed, he considered that the exam instructor would have been familiar with the standard missed approach.

At 1412:55, Radar passed TI to the PA34, “*(PA34)c/s traffic er just called me inbound to the field from the southwest it's a D A forty two VFR er level unknown*” and this was acknowledged by the pilot; the radar recording indicated that the DA42 was at FL009 with the PA34 was passing FL008 on the climb out.

At 1413:07, Radar advised the PA34, “*...that contact is believed to be in your left eleven o'clock at a range of three miles*” and this was acknowledged by the pilot. At 1413:12, the radar recording showed the PA34 commencing a left turn off the RW centreline; the distance between the ac was 4.6nm.

At 1413:32, Radar updated the PA34 on the position of the DA42, “*(PA34)c/s that traffic converging from your er righthand side now right one o'clock a mile and a half about to join downwind indicating one thousand three hundred feet unverified*”. The PA34 pilot responded, “Roger we're visual (PA34)c/s”. The radar recording showed the range between the ac was 3.7nm.

At 1413:45, the DA42 was advised, “*(DA42)c/s the PA thirty four just gone around on your lefthand side is visual with you*”. The DA42 pilot replied, “Roger that er (DA42)c/s”. The radar recording showed the distance between the ac was 2.7nm, with the PA34 in a left turn indicating FL011 (converts to altitude 1500ft on QNH 1029, with 1mb equal to 27ft) and the DA42 indicating FL009 (1300ft). The DA42 pilot's report indicated that the PA34 was sighted at about this time, (i.e. 10sec after the PA34 pilot's sighting report); the report gives the first sighting distance as 1nm.

At 1414:03, the DA42 was transferred to the TWR frequency and the radar recording showed the ac converging at a distance of 1.7nm with a vertical separation of 200ft.

The DA42 pilot's report indicated that the pilot initially considered that the PA34 would pass clear, but stated that it started to descend. At 1414:24, Mode C showed the minimum vertical separation between the two ac decrease to 100ft as the PA34 Mode C changed from FL011 to FL010, with the DA42 indicating FL009. The next radar return showed the vertical separation as 200ft.

At 1414:32, the radar recording showed the two ac in close proximity, with the PA34 crossing the DA42 from left to right and 200ft above. At 1414:41 the radar recording shows the DA42, 0.3nm S of the PA34, commencing a right hand orbit, with the respective ac Mode C readouts indicating a vertical distance between the ac of 200ft. The DA42 completed the orbit and then set course at 1415:05 and the first call to the TWR was made at 1415:12.

The controller was asked if he considered giving the PA34 a heading, as a method of traffic management under a TS; he indicated that had the pilot requested a DS, he would have applied a more positive method of control; however, in formulating a plan in CAVOK weather and the (training) PA34's request for missed approach, he was content that he passed appropriate TI and this TI resulted in the PA34 pilot aquiring visual contact with the DA42.

The controller was also asked whether he thought that it might have been appropriate to retain control of the DA42 until after the two ac had passed, he indicated however, that the DA42 was under a BS, appropriate TI had been passed and there was a need to transfer it to TWR for integration into the circuit.

In good weather conditions, the PA34 had requested a missed approach procedure as part of a training exercise; it was in receipt of a TS and the controller passed TI regarding the DA42, which resulted in the PA34 pilot aquiring the DA42 visually.

MATS, Part 1, Section 11, states:

'A Traffic Service is a surveillance based ATS, where in addition to the provisions of a Basic Service, the controller provides specific surveillance derived traffic information to assist the pilot in avoiding other traffic. Controllers may provide headings and/or levels for the purposes of positioning and/or sequencing; however, the controller is not required to achieve deconfliction minima, and the avoidance of other traffic is ultimately the pilot's responsibility.'

The controller shall pass traffic information on relevant traffic, and shall update the traffic information if it continues to constitute a definite hazard, or if requested by the pilot. However, high controller workload and RTF loading may reduce the ability of the controller to pass traffic information, and the timeliness of such information.'

The DA42, in receipt of a BS, was passed TI regarding the PA34 prior to its transfer to the TWR frequency. MATS Part 1, Section 1, Chapter 11, Page 4, Paragraph 3.1.1, states:

'A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot's responsibility.'

and Part 1, Section 3, Chapter 1, Page 5, states:

'8.1 Approach Control shall retain all arriving VFR flights under its jurisdiction until appropriate traffic information on IFR flights and other VFR flights has been issued and co-ordination effected with Aerodrome Control.

8.3 Approach Control must ensure that VFR flights are transferred in sufficient time for Aerodrome Control to pass additional information in respect of local traffic.'

The Coventry Radar controller passed TI to both ac and the PA34 reported seeing the DA42.

The written report from the DA42 pilot, indicated that after seeing the PA34, the pilot initially considered the PA34 would pass clear, but became concerned when the PA34 started to descend slightly. From the radar recording and the PA34 pilot's report, the data available would indicate that the PA34 appeared to descend momentarily, just prior to the Airprox occurrence.

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

Information available included reports from the DA42 pilot, transcripts of the relevant RT frequencies, radar recordings, reports from the air traffic controller involved and reports from the appropriate ATC authorities.

The Board considered the PA34 pilot unprofessional in declining to submit a report, thereby limiting the investigation.

The Board was briefed on the complexities of the airspace and MAP for RW23 at Coventry. Members were also briefed by the CAA Flight Ops Advisor that, although an Examiner is Captain of the ac and ultimately responsible for its safety, he has very little other operating responsibility and it is assumed the candidate is fully responsible for all tasks concerning the operation of the ac.

Although engaged on differing activities, with both pilots in receipt of an ATS while in the vicinity of Coventry, this was essentially an encounter in Class G airspace where the ROA and the 'see and avoid' principle applied. Further, since the PA34 had the DA42 on its right throughout, notwithstanding that it was under IFR and the DA42 was VFR, the former should have given way. Consideration of why the PA34 crew elected to 'stand on' having seen the DA42 was limited to conjecture due to the absence of a report from the pilot. A Member suggested that since the PA34

was an IFR training flight, the HP (student) had probably been flying under an IF hood. The transcript however, confirmed that the crew called visual with the DA42 suggesting that it must have been the instructor/safety pilot who was visual with it and it was his responsibility to initiate visual avoidance, despite that they were flying an IFR MAP. Bearing in mind airspace constraints such avoidance would have had to be lateral and behind the DA42. He went on to say (considering the DA42) it is always a fine line deciding whether or not your ac has been seen when exercising one's right/obligation to 'stand on'; in his view it is better to give way earlier rather than later.

Controller Members agreed that the APR Controller had more than fulfilled his obligations to both ac under an Approach service. In any case, probably as a result of the information he passed, both pilots had called visual with each other's ac. Without any knowledge of the other ac in the cct/pattern Members could not agree whether the DA42 could have been held by APR until after the two ac had crossed, thereby allowing the controller to separate them.

Members observed that this incident could easily have been avoided had the PA34 pilot made a small track alteration soon after he first reported that he was visual with the DA42.

Notwithstanding the factors above, when the DA42 Examiner considered that a collision risk was imminent, he took effective action by orbiting the ac to negate that risk without compromise to the safety of either ac.

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

Cause: The PA34 flew close enough to cause the DA42 crew concern.

Degree of Risk: C.