

AIRPROX REPORT No 2012004

Date/Time: 9 Jan 2012 1451Z

Position: 5149N 00118W
(O/H Oxford - elev 270ft)

Airspace: Oxford AIAA (Class: G)

Reporting Ac Reported Ac

Type: PA34 SR22

Operator: Civ Trg Civ Trg

Alt/FL: 5000ft↓ 4000ft
NK QNH (1029hPa)

Weather: IMC CLBL IMC CLBL

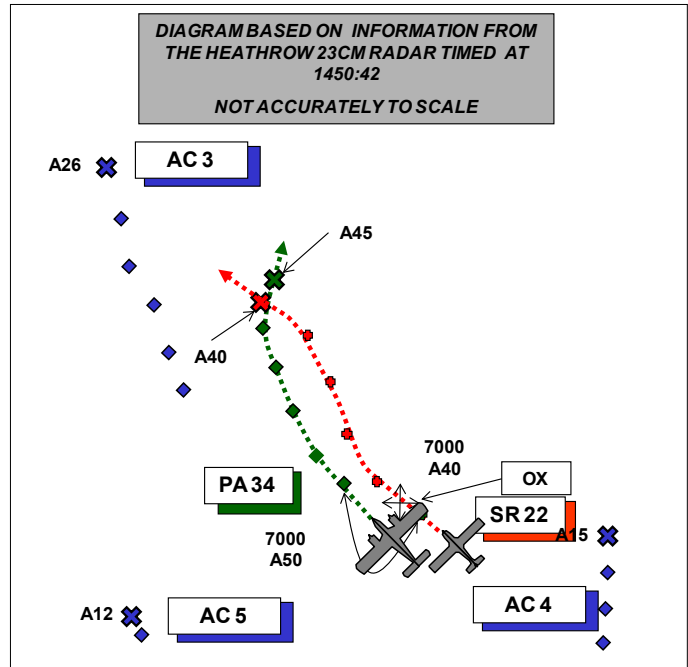
Visibility: NR >10km

Reported Separation:

500ft V/0.5nm H 200ft V/50m H

Recorded Separation:

500ft V/0.2nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PA34 PILOT reports flying an IFR training flight in a blue and white ac with all external lights switched on in receipt of a PS from Oxford while squawking 7000 with Modes C and S but TCAS was not fitted. They were cleared to the 'OX367' [NDB] at FL060. Traffic called on the frequency and requested to route through from Benson direction the overhead at 4000ft. They were given descent to 3500ft which they initiated, heading 339° at 120kts and descending at 1000fpm. During the descent Oxford APP called the transiting ac and told them of their [the PA34's] intentions. The transit ac, a Cirrus type, called visual with them but still flew below them as both ac entered cloud. He stopped the descent until he lost sight of the Cirrus.

He reported the incident on Oxford APP and assessed the risk as being medium.

THE SR22 PILOT reports flying a white ac with all external lights switched on an IFR training flight; at the time they were in receipt of a BS from Oxford and were squawking 7000 with Modes C and S but TCAS was not fitted. They had turned overhead OX onto a heading of 340° at 130kt en-route to Sleaf, climbing from 3500ft to 6000ft, when they were notified of an ac ahead joining the hold at OX and they sighted the ac above them briefly 0.5nm away, as there were gaps in the cloud; it was, travelling in approximately the same direction but in a R turn. As they were unable to judge whether the ac was manoeuvring in, or joining the hold, or whether they were overtaking it or not, they stopped the climb. Very shortly afterwards the ac reappeared still above them and to the right in a right turn. Once they were well clear of it they continued their climb.

He assessed the risk as being Medium.

UKAB Note (1): The recording of the Heathrow 23cm radar shows the incident clearly as depicted above.

ATSI reports that the Airprox occurred at 1450:35, in Class G airspace, 1.5nm NW of Oxford Airport between a PA34 and a Cirrus SR22.

The PA34 was operating an IFR training flight inbound to Oxford Airport from Gloucester Airport and in receipt of a PS from Oxford APP. The SR22 was on training flight operating IFR from Denham to Sleaford and in receipt of a BS, also from Oxford APP.

The Oxford controller was providing an Approach Control Service together with a trainee, without the aid of surveillance equipment. The traffic levels were reported as medium with overall workload as medium-high. The trainee was an experienced controller, new to the unit and undergoing unit training prior to a unit endorsement examination.

ATSI had access to RTF and area radar recordings together with written reports from the Oxford controller and both pilots. The controller's recollection of the precise sequence of events was unclear.

[ATSI Note (1): The controller's initial written report incorrectly included details of the SR22's earlier flight from Sleaford to Denham. The correct flight progress strip (FPS) was not available.]

The RAF Brize Norton and Oxford METARs were:

METAR EGVN 091450Z 26007K T 9999 FE W014 BKN022 11/08 Q1029 WHT TEMPO
SCT012 GRN=
EGTK (Met-observation) 091450Z 25010KT 9999 BKN021 11/08 Q1028 (QFE 1018)

The PA34, approaching from the W, contacted Oxford APP at 1444:38, reporting at FL060; the controller cleared it to the OX (NDB) at FL060 and instructed the pilot to report entering the hold. Information Papa was current with a QNH of 1028. This was correctly acknowledged by the PA34 pilot.

At 1445:43, the SR22 contacted Oxford APP reporting, *"...en-route from Denham to Sleaford routing via your overhead we're at four thousand feet one zero two eight this time just cleared the Benson MATZ at ten miles to run to your overhead request a Basic Service and we're in approval for your overhead (SR22) C/S"*; the controller replied, *"(SR22) C/S Basic Service report overhead"*.

At 1447:02, the PA34 pilot reported entering the hold at FL060. [ATSI Note (2): The controller's flight progress strip showed the PA34 entering the hold at 1450]. The controller replied, *"(PA34) C/S descend to alt three thousand five hundred feet the QNH is one zero two eight report leaving Flight Level six zero,"* which was acknowledged by the PA34 pilot.

At 1449:01, the PA34 pilot reported leaving FL060 and the controller instructed the pilot to report reaching 3500ft.

At 1449:40, the SR22 pilot reported, *"...turning in the overhead northwest bound."* The controller instructed the SR22 pilot, *"...report when you wish to leave the frequency"*.

At 1449:50, the SR22 pilot requested climb to FL060 and the Oxford controller responded, *"(SR22) C/S roger just be advised there is traffic at PA thirty four just left flight level six zero descending to alt three thousand five hundred feet inbound to the Oscar Xray hold"*; the SR22 pilot replied, *"Roger we are visual with that traffic (SR22) C/S we're in his six o'clock low"*. The radar recording shows both aircraft tracking NW, the SR22 overhead Oxford indicating 4000ft, with the PA34 indicating alt 4900ft and in the SR22 aircraft's 12 o'clock at a range of 0.4nm.

At 1450:07 the controller passed TI to the PA34, *"(PA34) C/S just passing through the Oxford overhead is a Cirrus S R twenty two four thousand feet climbing flight level six zero"*, the PA34 pilot acknowledged, *"(PA34) C/S"* and the controller asked, *"(PA34) C/S have you entered the Oscar Xray hold"*, the PA34 pilot replied, *"Standby (PA34) C/S"*.

At 1450:32, radar recording shows the PA34 commencing a right turn indicating alt 4500ft with the SR22 crossing from right to left indicating 4000ft; both aircraft maintain their respective levels and their tracks cross at 1450:35.

At 1450:54, the PA34 pilot transmitted, “(PA34) C/S er AIRPROX time one four five zero”. This was acknowledged by the controller and the pilot added that he would discuss when on the ground. The PA34 subsequently reported on RTF, “...as we were descending in the hold he just flew right underneath us we both disappeared into cloud together....”

The PA34 pilot's report indicated that he was aware of traffic on frequency asking to route via the overhead at 4000ft from the Benson direction and reported sighting the SR22 ac and stopping the descent prior to both ac entering cloud.

The SR22 pilot's report indicated flying IFR and confirmed sighting the PA34 ahead and above. The SR22 pilot stopped the climb.

The controller felt sure that TI had been passed much earlier than was the case. She indicated that the combination of medium/heavy workload together with an increased confidence in the experienced trainee, may have contributed to the passing of late TI and the incorrect time shown on the FPS. She was content that once TI had been passed, the SR22 had sighted the PA34 ahead and above.

The controller had indicated a presumption that the SR22 had been VFR, which was reflected in his report. With hindsight the controller expressed being uncomfortable knowing that the SR22 had been IFR and IMC, when a more appropriate PS would have been available to the pilot.

The controller was asked about the discrepancy regarding the PA34 ac's 'hold entry time' shown on the FPS as '50' when it should have been '47' and the confusion this had caused. She reasoned that this time had not initially been annotated, but later at '50', remembered that the ac had reported taking up the hold. At the same time the pilot was asked to confirm that he had entered the hold. The controller was not sure if this had been a factor in the late passing of TI.

The PA34 ac was IFR and in receipt of a PS from Oxford APP; the controller was therefore required to pass TI to the pilot if a confliction was considered to exist. Due to a combination of increased workload and controller training, such TI was passed later than would have been expected, but nevertheless resulted in both pilot's acquiring a visual sighting and taking appropriate action. Had TI been passed earlier, it was considered likely that this would have aided the PA34 pilot's situational awareness and may have allowed the pilot to take earlier deconfliction action. CAP774, UK Flight Information Services, Chapter 5, Page 2, Paragraph 5, states:

'The controller shall provide TI, if it is considered that a confliction may exist, on ac being provided with a Basic Service and those where TI has been passed by another ATS unit; however, there is no requirement for deconfliction advice to be passed, and the pilot is wholly responsible for collision avoidance. The controller may, subject to workload, also provide TI on other ac participating in the Procedural Service, in order to improve the pilot's situational awareness.'

The SR22 pilot operating IFR became IMC whilst in receipt of a B.S. It may have been more appropriate for the pilot to have requested a PS, enabling the controller to provide the deconfliction minima between IFR flights in IMC. The controller passed a warning to the SR22 pilot as it passed overhead the airfield and resulted in the pilot acquiring a visual sighting of the PA34. CAP774, UK Flight Information Services, Chapter 2, Page 1, Paragraph 1, 3 and 5, state:

'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.'

'Service is available under IFR or VFR and in any meteorological conditions.'

Pilots should be aware that Basic Service might not be appropriate for flights in IMC when other services are available.

Pilots should not expect any form of TI from a controller/FISO, as there is no such obligation placed on the controller/FISO under a Basic Service outside an Aerodrome Traffic Zone (ATZ), and the pilot remains responsible for collision avoidance at all times. However, on initial contact the controller/FISO may provide TI in general terms to assist with the pilot's situational awareness. This will not normally be updated by the controller/FISO unless the situation has changed markedly, or the pilot requests an update. A controller with access to surveillance-derived information shall avoid the routine provision of TI on specific ac, and a pilot who considers that he requires such a regular flow of specific TI shall request a Traffic Service. However, if a controller/ FISO considers that a definite risk of collision exists, a warning may be issued to the pilot.'

CAP774, UK Flight Information Services, Chapter 1, Page 1, Paragraph 2, states:

'Within Class F and G airspace, regardless of the service being provided, pilots are ultimately responsible for collision avoidance and terrain clearance, and they should consider service provision to be constrained by the unpredictable nature of this environment. The Class F and G airspace environment is typified by the following:

- It is not mandatory for a pilot to be in receipt of an ATS; this generates an unknown traffic environment;
- Controller/FISO workload cannot be predicted;
- Pilots may make sudden manoeuvres, even when in receipt of an ATS'.

The Airprox occurred in the vicinity of the Oxford OX-NDB hold between two ac operating IFR. The PA34 was in receipt of a PS and the SR22 was in receipt of a BS. The controller passed late TI, which nevertheless resulted in the two pilots acquiring a visual sighting of each other, enabling them to take appropriate action to stop their respective descent and climb.

A number of factors were considered to have been contributory factors:

- i. The late passing of TI to the PA34.
- ii. The controller training and increased workload was considered to have been a contributory factor in the late passing of TI and uncertainty about the time the PA34 entered the hold.
- iii. The SR22 was operating IFR/IMC and in receipt of a BS when it may have been more the appropriate for the pilot to have requested a PS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequency, radar recordings, reports from the air traffic controller involved and a report from the appropriate ATC authorities.

The Board noted that this incident took place in Class G airspace where, regardless of whether they are operating under VFR or IFR and whether or not they are in a published instrument procedure, pilots are required to see and avoid other ac. That being the case, Members strongly advised pilots to make use of a radar based ATC service, preferably a DS, if they are flying in IMC. If no radar-based service is used, in IMC pilots are generally unable to fulfil their 'see and avoid' responsibility. Members observed that the PA34 pilot operating under a PS in the Oxford instrument pattern was concerned that the SR22 did not avoid him. While it could be argued that good airmanship would have been for the SR22 to either have (preferably) requested a DS or TS from the local LARS unit, Brize Norton, or if for any reason this was not available, a PS from Oxford thus allowing the respective controllers to provide a degree of co-ordination or separation. The CAA ATC Advisor, however, pointed out the CAP774 provision that:

‘Controllers may, subject to workload, initiate agreements (as defined in Service Principles) with pilots of aircraft under a Basic Service to restrict their flight profile in order to co-ordinate them with aircraft in receipt of a Procedural Service. However, controllers shall limit the occasions on which they make such agreements to those where it is clear that a conflict exists, and only when controller workload permits.’

Although the SR22 pilot reported that he was flying under IFR, Members questioned whether that was actually the case since he was not climbing to a correct quadrantal flight level and did not declare that he was IFR; in any event the Oxford Controller would not have known that he was IFR unless the (SR22) pilot told her, which apparently he did not [not on the transcript] despite having the opportunity to do so; the Controller assumed therefore, that he was VFR and she was not required to deconflict the ac. Had the SR22 been IFR the controller (most likely) would not have agreed a BS and requested the pilot to accept a PS and deconflicted the ac procedurally.

A pilot Member observed that the SR22 was on an instructional flight; in his opinion the sequence showed a poor appreciation of the situation and provided a poor example to the student.

Both pilots however stopped their respective descent/climbs as they entered cloud thus ensuring that there was significant vertical separation between the ac.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in Class G airspace between IFR traffic.

Degree of Risk: C.