## AIRPROX REPORT No 2014080

Date/Time:	9 Jun 2014 1006Z	
<u>Position</u> :	5156N 00117W (6nm N EGTK)	
<u>Airspace</u> :	LON FIR	( <u>Class</u> : G)
<u>Reporter</u> .	Oxford ATC	
	Aircraft 1	<u>Aircraft 2</u>
<u>Type</u> :	PA34	DR10
<u>Operator</u> .	Civ Trg	Civ Pte
<u>Alt/FL</u> :	1800ft	2000ft
Conditions:	VMC	VMC
<u>Visibility</u> :	10K	10k
Reported Separation:		
	0ft V/0.5nm H	0ft V/1nm H
Recorded Separation:		
	100ft V/0.6nm H	



#### CONTROLLER REPORTED

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

**THE OXFORD CONTROLLER** reports being the Radar Controller at Oxford, the weather was fair, and the workload light-to-medium. He was controlling the PA34 in the Oxford radar pattern for an NDB DME approach to RW19 at Oxford and providing it with a Traffic Service. The PA34 was turning onto the base turn at 1800ft when the controller passed Traffic Information on traffic squawking 7000, routing west-to-east with Mode C indicating 1800ft. Its track looked like it would take it across the final approach at 6nm, this information was passed to the PA34 pilot. As the PA34 completed the base turn inbound, the unknown traffic's Mode C was seen to climb to 2000ft, and updated Traffic Information was passed to the PA34. The PA34 pilot reported taking avoiding action by breaking off the approach and the radar "blips" began to merge, with the Mode C of the PA34 indicating 1900ft and that of the unknown traffic at 2000ft. The unknown track then continued north-east, leaving radar cover to the north-east of Cranfield.

**THE PA34 PILOT** reports flying a white and blue aircraft with all lights illuminated and transponder selected with Modes 3A and C. The aircraft was not fitted with TCAS. He was flying in the Oxford radar pattern and receiving a Traffic Service. Oxford ATC gave Traffic Information and he saw the traffic converging on a collision course, so he broke off the instrument approach and took avoiding action, turning to the right to go behind the other traffic.

He assessed the risk of collision as 'Medium'.

**THE DR10 PILOT** reports flying a red and white aircraft with transponder Modes 3A and C selected. The aircraft was fitted with FLARM. He was not in communication with ATC and was transiting to his destination at 2000ft. He saw the other traffic more than a mile away, when it was in a right turn onto a westerly heading, and considered that there was no risk, so continued on course.

He assessed the risk of collision as 'None'.

## **Factual Background**

The weather at Brize Norton was reported as:

METAR EGVN 090850Z 15006KT 9999 FEW030 SCT120 20/14 Q1015 BLU NOSIG

#### Analysis and Investigation

## CAA ATSI

ATSI had access to reports from Oxford ATSU and both pilots, area radar recordings and RTF and transcripts of the Oxford Radar frequency.

At 0941:47 the PA34 contacted Oxford Radar at 5000ft. The PA34 was identified and a Traffic Service agreed. The PA34 entered the hold at the OX, was descended to 3500ft and at 0959:10 was cleared for the NDB/DME approach to RW19 maintaining 3500ft. After the PA34 had reported beacon outbound the descent restriction was removed.

At 1005:24 the Oxford Radar controller passed traffic information to the PA34 on "*traffic southwest two miles eastbound indicating altitude one thousand eight hundred feet looks like it will cross the final approach track at six miles*" (Figure 1).



Figure 1 (blue arrow indicates the final approach track).

At 1006:00 the controller updated the traffic information to the PA34 as "*previously reported traffic right one o'clock one mile crossing right to left indicating two hundred feet above*" (Figure 2). The PA34 replied "*traffic in sight*".



Figure 2.

The two aircraft continued to converge and the PA34 turned to the right (Figures 3, 4 and 5).



Figure 3.

Figure 4.



Figure 5 (CPA).

At 1006:40 the PA34 reported to Oxford Radar that they had just taken avoiding action and requested to reposition. The written report from the pilot of the PA34 stated that the two aircraft were converging on a collision course and that, following the traffic information passed by Oxford, the DR10 was sighted and the PA34 then broke off the instrument approach to take avoiding action and pass behind the DR10.

The written report from the pilot of the DR10 stated that there was no risk of collision and when they saw the PA34 it was in a right turn onto a westerly heading. The written report from the Oxford Radar controller stated that the DR10 was unknown traffic to Oxford, however, its track indicated that it would cross the RW19 final approach track at 6nm. Traffic information was passed to the PA34 and the PA34 broke off the approach.

CAP774, UK Flight Information Services, Chapter 3 Traffic Service, Paragraph 3.5 states that:

'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 Oxford Radar controller passed traffic information on the DR10 to the PA34 as the PA34 turned inbound. The controller updated the information as the two aircraft continued to converge at which point the PA34 reported the DR10 in sight. The pilots of both aircraft were responsible for collision avoidance and the PA34 took avoiding action against the DR10.

## UKAB Secretariat

Both pilots shared an equal responsibility for collision avoidance and for not flying into such proximity as to create a danger of collision<sup>1</sup>. The geometry was a 'converging' situation and so the PA34 pilot was required to give way to the DR10 on his right.<sup>2</sup>

## Summary

An Airprox was reported on 9<sup>th</sup> June 2014 at 1006 between a PA34 and a DR10. The PA34 pilot was under a Traffic Service in the radar circuit at Oxford and received Traffic Information on the DR10. The DR10 was not receiving an ATS. The PA34 pilot saw the DR10 and avoided to the right.

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

Information available included reports from the pilots of both aircraft, 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.

The Board first discussed the actions of the PA34 pilot once he had made the decision to turn inbound. After receiving good Traffic Information from the Oxford controller he had elected to avoid the conflicting aircraft by turning onto a heading of West. The Board thought that there was very little else that he could have done to avoid the incident, and that the Traffic Information from the Oxford controller had allowed him to become visual with the traffic.

Turning to the DR10, the Board noted that the approach "feathers" on charts were there to alert pilots to the fact that traffic may well be making an instrument approach, and as such should act as a reminder to pilots to advise ATC of their positioning. Good airmanship would suggest that a call to Oxford ATC to inform them of his intentions would have been preferable, particularly bearing in mind his altitude. That being said, the Board also accepted that the pilot was perfectly within his rights to route as he did given that the area was within Class G airspace. The Board also noted that he had reported seeing the PA34 as it turned onto West, and surmised that this was probably after CPA, i.e. after the PA34 pilot had taken his avoiding action. The Board concluded that this had probably influenced his assessment of risk of collision given that the PA34 was tracking away at that point.

Looking at the actions of the Oxford controller, the Board agreed that he had given timely and accurate Traffic Information and that his update of the Traffic Information had served to enable the PA34 pilot to become visual with the DR10.

The Board agreed that the cause of the Airprox was a conflict in Class G resolved by the PA34 pilot following Traffic Information by ATC. There then followed a vigorous debate about the risk of the incident, with some members arguing that this was normal operations in Class G but others feeling that a risk category of C was more appropriate. In the end the Chairman put it to the vote and the Board agreed, by a narrow majority, that this was Category E, normal operations.

<sup>&</sup>lt;sup>1</sup> Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

<sup>&</sup>lt;sup>2</sup> ibid., Rule 9 (Converging).

# PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: A conflict in Class G resolved by the PA34 pilot following Traffic Information from ATC.

Degree of Risk: E.

ERC Score<sup>3</sup>: 2.

<sup>&</sup>lt;sup>3</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.