

## AIRPROX REPORT No 2010103

Date/Time: 24 Jul 2010 1049Z (Saturday)

Position: 5156N 00126W (near Enstone elev 550ft)

Airspace: London FIR (Class: G)

Reporting Ac Reported Ac

Type: PA28 PA28

Operator: Civ Pte NK

Alt/FL: 3000ft (NR) NK

Weather: VMC CAVOK NK

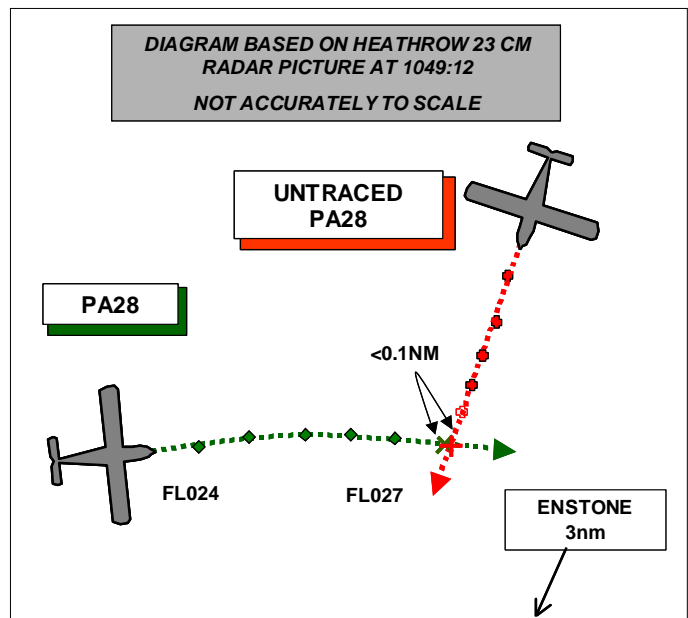
Visibility: >10km NK

Reported Separation:

0ft V/100m H NK

Recorded Separation:

NR V/ 0 H (see UKAB Note (2))



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE PA28 (A) PILOT** reports that he planned to fly private VFR flight, with a student pilot in the RHS, from Kemble to Duxford in a blue and white ac with all lights on, squawking with Mode C. The route was initially via Northleach Roundabout VRP and then direct to Duxford. The route passed close to Little Rissington, Enstone and overhead Upper Heyford in order to keep them clear of the hazards at Croughton and Weston on the Green, then north of Henlow and to overhead Royston where the circuit joining instructions for Duxford were expected. They were in receipt of a TS from Brize Radar and had already sighted a number of contacts called to them. They also had a warning from the controller that there was a risk of late or no warning of traffic due his workload and the traffic density.

When they were in the vicinity of Enstone, heading 085° at 110kt, he conducted a routine lookout scan and then looked in to reconcile their position on the chart. While he was doing this a blue and cream PA28 flew past them, from left to right, immediately in front and apparently in a shallow descent but the incident was over too quickly to note the other ac's registration. He quickly scanned the area to make sure the ac was alone and then reported the occurrence to the Brize LARS controller.

He tried to estimate the distance by recalling his image of the ac in comparison with the size of his own ac while parked at various distances from him and he concluded that it had passed within 100m of them.

He assessed the risk as being high.

UKAB Note (1): Despite extensive procedural tracing action the 2<sup>nd</sup> ac could not be traced.

UKAB Note (2): The recording of the Clee Hill radar shows the incident. As the recording starts at 1045:30 the PA28, squawking 3710 with a Mode C readout of FL024 is tracking 080° towards the incident position. At 1045:41 a primary only contact appears manoeuvring 5nm N of Enstone, but it disappears at 1047:44 in approximately the same position. The primary then reappears at 1048:40 tracking SW towards the incident position. The CPA is at 1049:14 when the PA28 at FL027 and the

primary contact are coincident. The ac cross and the primary contact departs to the SSE while the PA28 continues to the E.

**HQ 1GP BM SM** reports that reports from Brize LARS (RAD), the reporting pilot, a tape transcript and a radar replay were available with which to conduct the analysis; however, there are difficulties with the latter source. Firstly, the replay shows a picture that is heavily processed compared to the one that would have been available to RAD at the time of the occurrence. Consequently, it has not been possible to reconcile some pieces of TI passed by RAD to the PA28, to contacts on the replay. Furthermore, what is believed to be the reported ac appears as an intermittent primary only radar contact and this does not necessarily accord with what RAD may have seen.

In the build-up to the occurrence, RAD had a moderate workload and made a number of transmissions to the PA28 all passing accurate TI. At 1047:48, the TS was reduced due to high traffic density, probably due to a gliding competition around Bicester and other traffic. At the point that the reduction in service was passed, further TI was given relating to two contacts to the N that cannot be seen on the replay and also, *“further traffic left eleven o'clock five miles crossing left right no height information.”* Whilst this contact (AC2) does not appear on the replay at 1047:48, a contact can be seen on the replay in this position up to 1047:43; it is likely that this was the same ac.

A primary contact appears on the replay at 1048:39 NE of the PA28 at a range of approximately 1.6nm and, given the similarity of speeds and tracks; it is likely to be the same contact that had dropped-out at 1047:43. TI was passed at 1047:48 and seems to show AC2 cruising at around 100-120kts.

At 1049:03, the PA28 appears to turn from a track of around 080° to around 100°, onto a conflicting flight path with AC2 and at 1049:24, RAD issued a warning of manoeuvring traffic in the PA28's 12 o'clock at a range of half a mile with no height information. The PA28 pilot's response to the TI was that he was visual with the traffic and that, *“it's a glider.”* Again, this contact does not appear on the radar replay and at that point AC2 is around 0.3nms S of the PA28.

It is impossible to determine whether AC2 dropped out from RAD's Watchman display as it did with the radar replay; consequently, it is impossible to determine whether a sufficient window of opportunity existed for RAD to update the TI on AC2 passed at 1047:48. If the contact was permanently displayed on the Watchman display and given the fact that the controller does not seem to have been actively involved in another task, from the transcript it appears that there was an opportunity, in terms of time, for an update of TI to have been passed from 1048:33, at which point around 2nms lateral separation existed. However, analysis of the occurrence sequence demonstrates that RAD was providing a good level of service before and after the AIRPROX and had limited the service accordingly. Consequently, BM SM concludes that they seem to have been unable to perceive a requirement to update the TI, rather than not providing it outright. This notwithstanding, RAD did pass initial TI on AC2 in a timely manner and had made the PA28 pilot aware of the limitations of his service provision due to high traffic density, with CAP774 clearly stating the pilot's responsibilities for collision avoidance.

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

Information available included reports from the pilots of PA28 (A), transcripts of the relevant RT frequencies, radar recordings and a report from the appropriate ATC authority.

Despite that the primary contact believed to be the untraced PA28 was intermittent and unpredictable, the Board was satisfied that the TI passed by Brize LARS to PA28 (A) was as comprehensive as the circumstances allowed and identified the correct ac rather than the glider mentioned in pilot's response to the call. The recording of the Cleve Hill radar showed several slow moving primary contacts believed to be gliders including one that was in PA28 (A)'s 12 o'clock but at a greater range than the unidentified PA28 that was crossing from L to R just ahead. Although the pilot of PA28 (A) saw the ac later than optimum, the conflicting ac had changed direction about 40sec before the CPA onto a conflicting track that was a line of constant bearing. The pilot had also been distracted by the glider that was also in conflict. Bearing in mind these factors the Board

agreed that the cause had been a late sighting by the pilot of PA28 (A) but they could not determine the part played by the pilot of the untraced PA28. Members accepted PA28 (A) pilot's estimate that there had been no vertical separation and this combined with the radar verified very close horizontal proximity led them to believe that normally accepted safety standards had been eroded.

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

Cause: Effectively a non-sighting by the pilot of PA28 (A); it is not known whether or when the pilot of the untraced PA28 saw PA28 (A).

Degree of Risk: B.