

AIRPROX REPORT No 2014228**Date/Time:** 13 Dec 2014 1401Z (Saturday)**Position:** 5142N 00022W
(3nm NW Elstree)**Airspace:** LON FIR (Class: G)**Aircraft 1** **Aircraft 2****Type:** Vans RV6A PA28**Operator:** Civ Pte Civ Trg**Alt/FL:** 2300ft 2200ft
QNH (1011hPa) NK**Conditions:** VMC VMC**Visibility:** >10km >10km**Reported Separation:**

200ft V/ "close" H 200ft V/0nm H

Recorded Separation:

300ft V/<0.1nm H

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

THE RV6 PILOT reports flying a burgundy-and-cream aircraft with strobes illuminated. The transponder was on with Modes 3A, C and S selected; the aircraft was not fitted with ACAS. He reported that he regularly flew this route and was aware of crossing traffic into and out of Elstree and Denham, and the need to keep a good look-out. He saw the other aircraft late, at the same altitude, on a right-angled course from the north. He immediately started a firm but smooth pull up, then rolled right to keep the other aircraft in sight and present a plan view to be more visible. The other aircraft passed below by about 200ft and slightly behind. Once straight-and-level, his altimeter indicated 2650ft so he descended and called Luton to explain why he had just entered CAS that all was well, and he had now descended.

He assessed the risk of collision as 'High'.

THE PA28 PILOT reports flying a white aircraft with maroon stripes, he did not report which lights were illuminated. The transponder was on with 3A and C selected; the aircraft was not fitted with ACAS. He was on a training sortie with the instructor in the right-hand seat. They were heading south and changing squawk and frequency to Elstree, when the instructor saw something in his peripheral vision. He looked left to see an aircraft approaching from the 9 o'clock position at the same level. The instructor saw the other aircraft climbing, but it was too late to take further action and the other aircraft passed 200ft overhead.

He assessed the risk of collision as 'High'.

THE LUTON APPROACH CONTROLLER reports mentoring a trainee during a busy period of traffic intensity. The PA28 pilot was under a Basic Service and requested a frequency change to Elstree, which was approved by the trainee, who then turned his attention elsewhere. At the same time, the mentor saw an aircraft converging with the PA28 at the same level; this aircraft appeared to turn into controlled airspace, indicating 2600ft. The pilot then called on the Luton frequency to report entering controlled airspace due to needing to take aggressive avoiding action. He then left controlled airspace and, when asked, said that he would file an Airprox report.

Factual Background

The weather at Northolt was recorded as:

METAR EGWU 131350Z 33007KT CAVOK 06/02 Q1012 BLU NOSIG

Analysis and Investigation

CAA ATSI

Training was being provided at the radar position of Luton Approach (LTC GW INT) with trainee and OJTI. Workload was assessed as (busy) medium. At 1350:40 the PA28 had been cleared to enter the Luton Control Zone (CTR) not above 2000ft in order to orbit just to the north of Hemel Hempstead. The PA28 was squawking 4371 and at 1354:00 the PA28 departed the CTR and a Basic Service was agreed. The PA28 advised that he wished to make one further orbit before returning to Elstree and this was approved.

At 1359:27 the PA28 was shown south of the Luton CTR tracking south at an altitude of 1600ft – Figure 1.

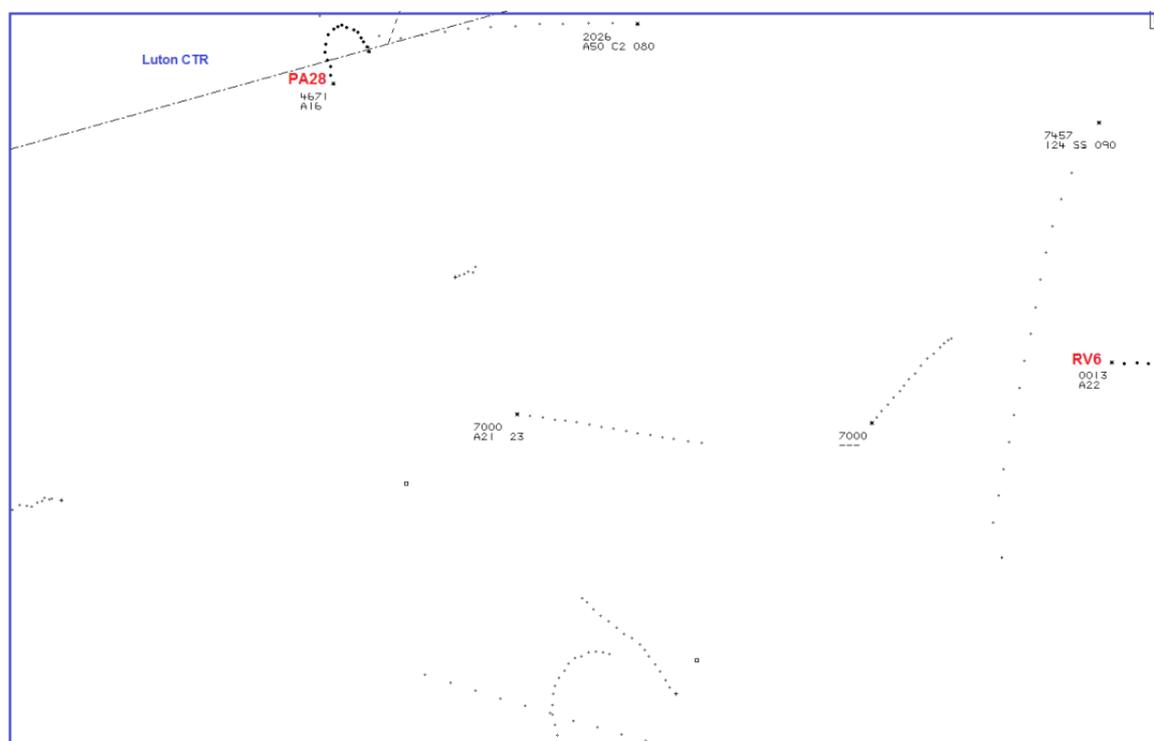


Figure 1 – Swanwick MRT at 1359:27.

At 1401:27 the PA28 and RV6 are shown, 5.3nm northwest and 3.6nm north, of Elstree airfield. Both aircraft were indicating 2300ft and were operating below the Class A controlled airspace of London TMA-1 which has a base of 2500ft. The RV6 was displaying SSR code 0013 used to indicate that the aircraft was monitoring Luton Radar or Essex Radar frequencies. The horizontal distance between the two aircraft was 3.2nm – Figure 2.

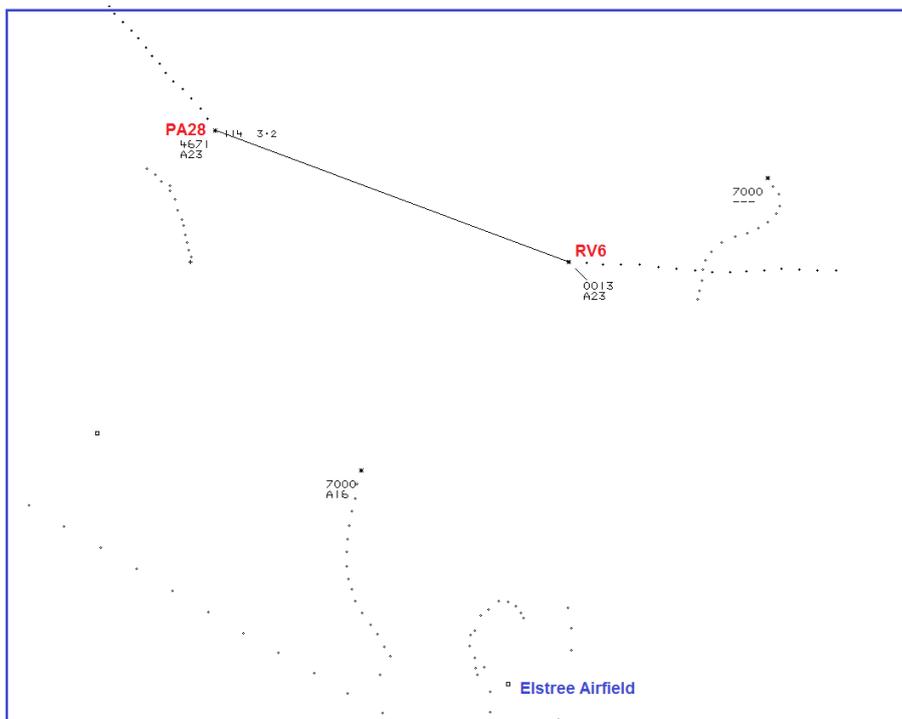


Figure 2 – Swanwick MRT at 1401:27.

The aircraft continued to converge and at 1402:23 the distance between the two aircraft was 0.8nm. Two other aircraft were in the vicinity and the labels were likely overlapping on the Luton controller’s display – Figure 3.

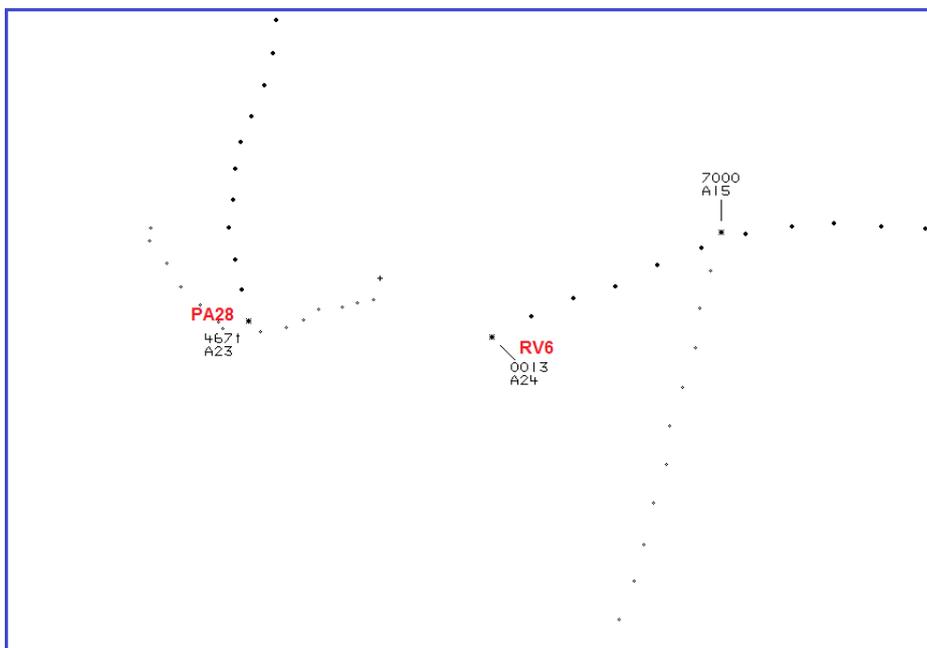


Figure 3 – Swanwick MRT at 1402:23.

At this point the PA28 pilot requested a frequency change to Elstree and the controller replied “(PA28)c/s squawk 7000 service terminates Elstree one two two decimal four [1402:31].” The PA28 pilot responded “(PA28)c/s”. The distance between the two aircraft was 0.4nm – Figure 4.

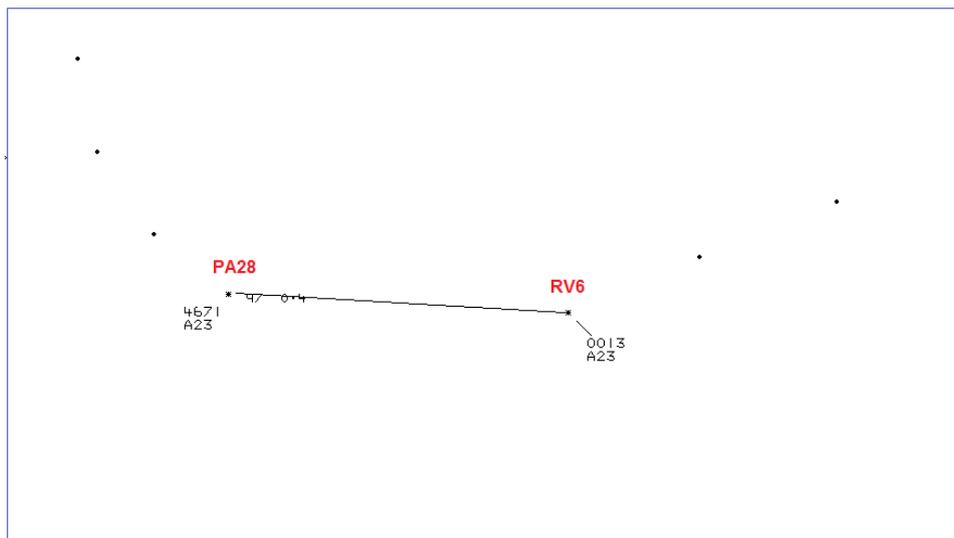


Figure 4 – Swanwick MRT at 1402:31.

At 1402:35 both aircraft were indicating an altitude of 2300ft and the horizontal distance between them was 0.2nm. On the next radar update at 1402:39 (CPA) the RV6 was shown to have climbed to 2600ft (inside CAS) and was passing less than 0.1nm behind the PA28 – Figure 5.

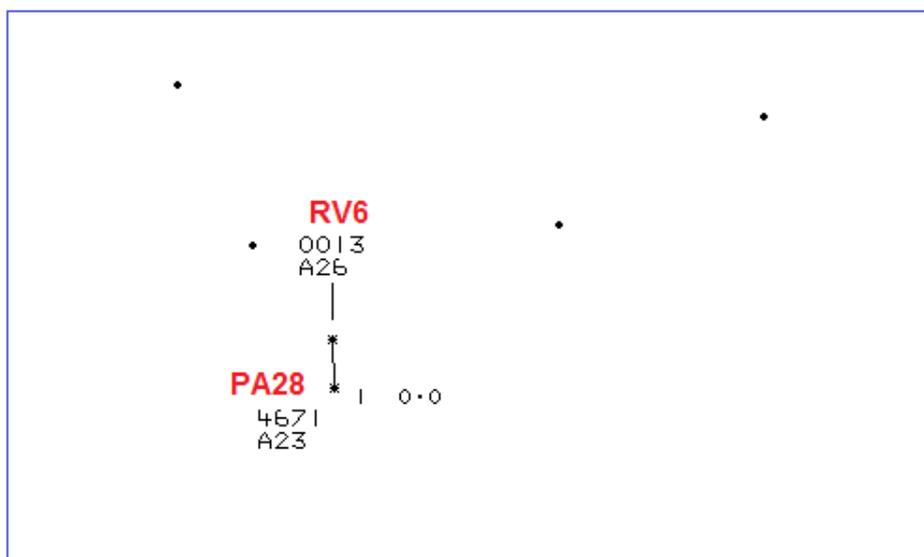


Figure 5 – Swanwick MRT at 1402:39.

At 1402:48 the RV6 pilot contacted Luton Approach and the following RTF exchange occurred:

RV6 *"Luton (RV6)c/s"*

ATC *"(RV6)c/s Luton Radar did you call"*

RV6 *"(RV6) c/s an RV6 from XXXX to XXXX just north of the er Elstree I had to take er immediate avoiding action from another aircraft and er went up to about er twenty six fifty into airspace but I'm back down again now"*

ATC *"(RV6)c/s that's understood it's a Basic Service Luton QNH 1011"*

RV6 *"One zero one one is set (RV6)c/s"*

The two aircraft continued to diverge and at 1403:50 the RV6 pilot was asked if he wished to file an Airprox. The RV6 pilot responded *"I've no idea what it was erm I suppose I ought to yes"*. The controller replied *"(RV6)c/s roger"*.

The RV6 pilot was operating VFR and was not in receipt of an Air Traffic Service. The RV6 pilot's written report indicated that he sighted the PA28 late at the same altitude (2300ft) and climbed to avoid. This resulted in the RV6 entering Class A controlled airspace. The RV6 pilot contacted Luton Approach to explain the unintended infringement of CAS and to advise that he had descended below CAS.

Just prior to the Airprox, the PA28 had been in receipt of a Basic Service from Luton Approach where the avoidance of other traffic is solely the pilot's responsibility and the controller was not required to monitor the flight¹. Given that the provider of a Basic Service is not required to monitor the flight, pilots should not expect any form of Traffic Information from a controller. A pilot who considers that he requires a regular flow of specific Traffic Information shall request a Traffic Service².

The Luton controller's written report indicated that after the PA28 had been transferred to Elstree, the trainee had returned his attention to a problem elsewhere. The controller then noticed an aircraft squawking 0013 which was converging with the PA28 at the same level. The RV6 then contacted Luton to report that he had entered CAS and wished to file an Airprox. The Airprox occurred when the RV6 and PA28 came into proximity whilst operating VFR in Class G uncontrolled airspace where the pilots are ultimately responsible for their own collision avoidance.

UKAB Secretariat

Both pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard³. If the geometry is considered to be converging the RV6 pilot was required to give-way.⁴

Summary

An Airprox was reported on 13th Dec 2014 between a PA28 and an RV6, both aircraft were VMC and VFR. The PA28 was at 2300ft and was not receiving an ATS, the pilot saw the conflicting traffic and took avoiding action. The PA28 pilot had just left the Luton frequency and was at 2200ft, he saw the RV6 too late to take any avoiding action.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of 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 authorities.

The Board first looked at the actions of the RV6 pilot and commended him for both his open and honest reporting and his actions overall. Although not ideal in climbing into controlled airspace, the Board considered that he had taken the most appropriate action available to him to avoid the PA28, which in this case was to climb. Employing the mantra 'aviate', 'navigate', 'communicate', once he had avoided the other aircraft with his climb, he had swiftly called the Luton controller to explain the situation, and this had meant that they could also have reacted in a timely fashion to his presence if it had been necessary. His quick reactions had undoubtedly prevented a much worse situation from developing.

For his part, the Board noted that the PA28 pilot did not see the RV6 until after the other pilot had taken the avoiding action, and so could do little in the circumstances. The Board then discussed the actions of the Luton controller and agreed that it was unfortunate that he had been busy at the time with his attention drawn elsewhere. Had the PA28 pilot previously asked for a Traffic Service, the

¹ CAP774, Chapter 2, Paragraph 2.1

² CAP774, Chapter 2, Paragraph 2.5

³ SERA.3205 Proximity.

⁴ SERA.3210 Right of Way.

Luton controller would have been more focussed on tracking the PA28 and might have been able to call the opposing traffic prior to the change to Elstree's frequency; this would have greatly increased the chances of the PA28 pilot seeing the other aircraft before CPA. That said, the Board acknowledged that, under a Basic Service in what was Class G airspace, the avoidance of other aircraft rests solely with the pilot, and see-and-avoid principles apply.

In determining the cause, the Board quickly agreed that it was a late sighting by the RV6 pilot and effectively a non-sighting by the PA28 pilot. Although avoiding action had been taken by the RV6 pilot, the proximity of the two aircraft was such that the Board assessed this to be Risk Category B, where safety margins had been much reduced below the normal.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by the RV6 pilot and effectively a non-sighting by the PA28 pilot.

Degree of Risk: B.