

AIRPROX REPORT No 2013121

Date/Time: 7 Aug 2013 1646Z

Position: 5131N 00007W
(6nm W London/City Airport
- elevation 19ft)

Airspace: London City CTR (Class: D)

Reporting Ac Reported Ac

Type: RJ1H A109

Operator: CAT Civ Exec

Alt/FL: 2000ft 1500ft
 QNH NK

Weather: VMC CLBC VMC CAVOK

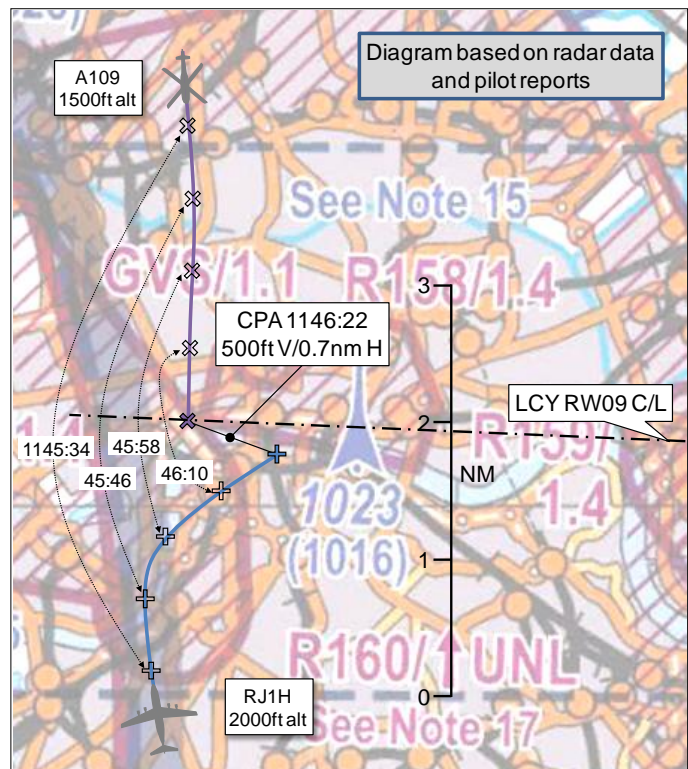
Visibility: >10km >10km

Reported Separation:

 500ft V/0nm H NK

Recorded Separation:

 500ft V/0.7nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE RJ1H PILOT reports inbound to London City airport (LCY) under the control of Thames Radar (combined with City Radar), frequency 128.02MHz. Landing, strobe and navigation lights were illuminated. SSR Modes C and S were selected, squawking 3011. He was on an intercept heading for approach to RW09. After receiving traffic information (TI) from ATC, he received an RA 'monitor vertical speed'. Range of vertical speed 'zero to up 500ft/min'. In VMC, he continued level flight without correction and clear of conflict he continued his normal ILS steep approach into LCY. He did not observe the other aircraft.

He assessed the risk of collision as 'Low'.

THE A109 PILOT reports that the helicopter, coloured predominately white, had the red anti-collision, strobes and navigation lights illuminated. SSR Modes C and S were selected. He was transiting the LCY CTR, VFR, in communication with SVFR/Thames Radar, frequency 125.625MHz. He was unaware of being in close proximity to a Regional Jet and did not remember this particular flight. He commented that he probably crosses the City Zone 4 times a week. However, looking at his flight log from Skydemon software it appears that on this occasion he transited the City Zone not above 1500ft from Alexandra Palace to the London Eye and then south to leave the zone. He commented that it is not unusual to be co-ordinated 500ft below traffic inbound to LCY. Nothing was said on the radio at the time, as far as he could remember.

Factual Background

The London City weather was:

EGLC 071620Z 01008KT 320V060 CAVOK 21/09 Q1014=
EGLC 071650Z 04007KT 330V100 9999 FEW049 21/09 Q1014=

MATS Part 1¹ states the ATC responsibilities for Class D airspace: '....Pass traffic information to IFR flights on VFR flights and give traffic avoidance advice if requested; Pass traffic information to VFR flights on IFR flights and other VFR flights'.

Analysis and Investigation

CAA ATSI

CAA ATSI had access to written reports from both pilots, area radar recordings, RTF recordings and transcripts of the City Radar/Thames Radar frequency and the LTC SVFR frequency. No controller reports were received.

At 1641:40 the A109 pilot was given a clearance to transit controlled airspace southbound not above altitude 1500ft, VFR, via Alexandra Palace and the London Eye. The A109 pilot was instructed to look out for IFR traffic on right-base for RW09 at London City, which would be 500ft above.

By 1644:40 the RJ1H pilot had been instructed to turn onto a heading of 360° and had been passed traffic information (TI) on the A109 as "*approaching from the north a helicopter will transit southbound not above one thousand five hundred feet VFR*" (Figure 1). This was acknowledged by the RJ1H pilot. The A109 pilot was passed updated TI on the RJ1H as being 6nm south and it would be turning right eastbound for the ILS.



Figure 1

At 1645:10 low level Short Term Conflict Alert (STCA) activated and at 1645:33 the A109 pilot reported visual with the RJ1H (Figure 2). The A109 pilot was informed that the RJ1H was just turning eastbound at 2000ft, descending on the ILS, and that "*if you route behind that traffic it'll help*". This was acknowledged by the A109 pilot.

¹ MATS Part 1, Section 1, Chapter 2, Page 2

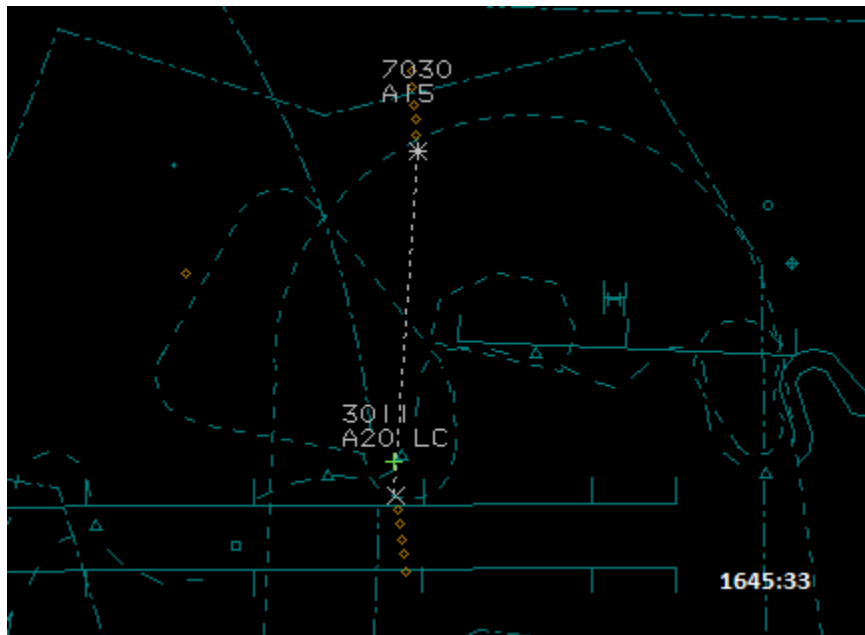


Figure 2

The RJ1H pilot was instructed to turn right heading 060° and cleared for the ILS approach. This was read back by 1645:40 (Figure 3).

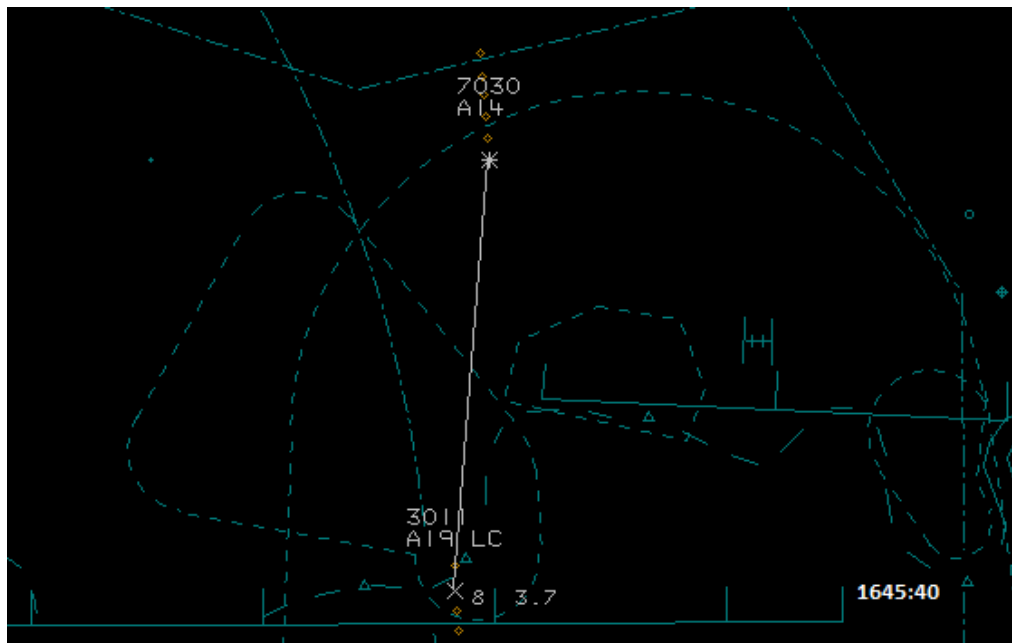


Figure 3

At 1645:57 high level STCA activated.

At 1646:05 the A109 pilot reported being "well behind" the RJ1H (Figure 4).

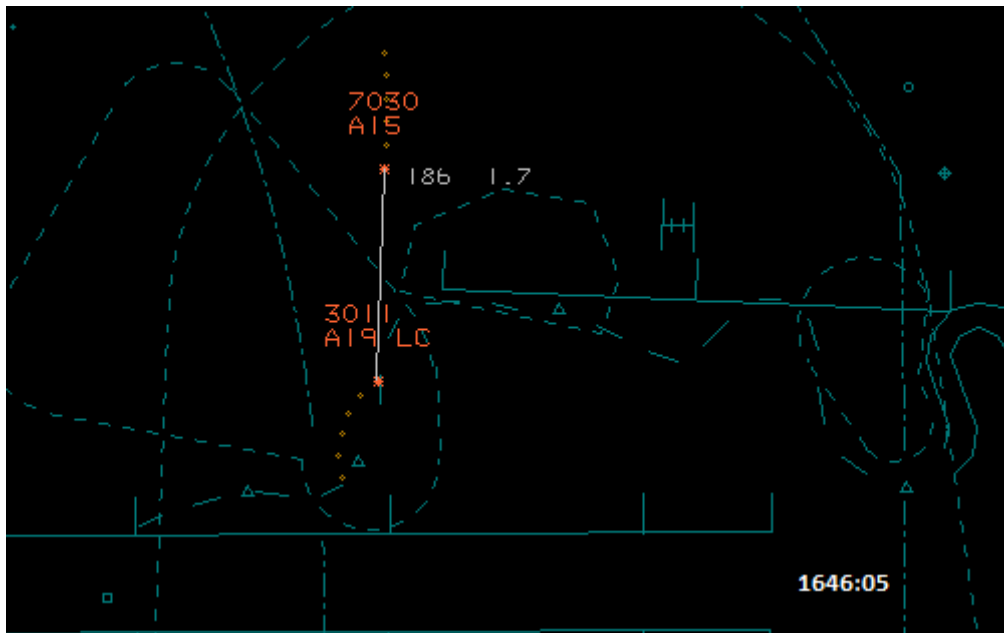


Figure 4

Summary

The Airprox occurred within Class D airspace. The RJ1H was operating on an IFR flight inbound to RW09 at LCY. The A109 was transiting the LCY CTR VFR, from north to south, crossing west of the airport. The controllers complied with their responsibilities for IFR/VFR traffic operating in Class D airspace i.e. TI was passed to the pilots of both aircraft. There is no requirement to provide standard separation between such flights. The RJ1H received a TCAS RA to monitor vertical speed and the A109, obtaining visual contact with the RJ1H, passed behind it.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both aircraft, area radar recordings, transcripts of the relevant RT frequencies and reports from the appropriate ATC and operating authorities.

Before considering the Airprox itself, Board members commented that a number of similar Airprox reports had been filed by pilots of the operator of this RJ1H. All bar one involved aircraft inbound to RW09 at LCY receiving TCAS RAs concerning VFR aircraft 500-600ft below them in, or close to, the LCY CTR. It transpired that the associated airline's company mandatory occurrence reporting form automatically links the reporting of TCAS RAs to the reporting of Airprox.

The Board then considered the specific actions of the pilots on this occasion. Turning first to the RJ1H, the Board noted that this aircraft was inbound, IFR, to LCY and routeing to the ILS RW09 at 2000ft. ATC had informed the pilot about the A109, which had him in sight. The Board noted that the RJ1H pilot did not observe the A109 and that, subsequently, the RJ1H had received a TCAS RA because of its presence despite the fact that both pilots were complying with their respective instructions and operating normally within the airspace. The RJ1H pilot did not alter his flight profile as a result of the TCAS alert, because the associated RA instruction was simply to monitor vertical speed - level flight was within the required parameters. An airline pilot member confirmed that, as in other similar events, this was appropriate action to take in the circumstances.

Turning next to the A109 pilot, the Board noted that he had stated that he regularly transited the LCY CTR and that, although he could not recollect this flight, his log confirmed he was routeing south at 1500ft, in accordance with his ATC clearance, to pass west of LCY. The Board noted that he could not remember being in close proximity to RJ1Hs in general, was visual with the subject RJ1H, and was unconcerned about the incident. The RTF recording confirms that the pilot had been informed

about the RJ1H, and he had reported it in sight. In all respects, the A109 pilot considered this to be a routine flight with no unusual Airprox aspects.

Finally, with respect to ATC, the Board considered that the TC City/Thames Radar and SVFR controllers had both complied with their overall responsibilities and had passed appropriate traffic information to both flights which were conducted under normal procedures and separation standards for the airspace involved. In the event, 500ft vertical and 0.7nm horizontal separation had been achieved even though there was no specific requirement so to do.

The Board members agreed that the Airprox had been reported because of the TCAS RA received by the RJ1H due to the A109's flight vector. They unanimously agreed that this was a TCAS sighting report. In view of recent similar Airprox being assessed as a Category E (normal procedures, safety standards, and parameters pertained) it was decided that this Airprox should also be similarly categorised. However, irrespective of the benign circumstances surrounding this particular event, the Board were concerned that it should not be considered normal procedure for aircraft being vectored within the LCY CTR to receive TCAS RAs lest pilots become inured to what might become normalised routine behaviour rather than reacting fully to TCAS alerts. A number of members also commented that this type of occurrence could easily occur at other airports within Controlled Airspace and should not be considered unique to LCY, especially with the potential increase in Class D airspace that might be introduced at other regional airports in future. Therefore, in conjunction with Airprox 2013095 and 2013099 (also assessed during this Board), they decided to generate an overarching recommendation that the CAA reviews VFR/SVFR traffic procedures within CAS with respect to RA occurrences in TCAS-equipped aircraft.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u>	TCAS sighting report.
<u>Risk:</u>	E
<u>ERC Score:</u> ²	1.
<u>Recommendation:</u>	The CAA reviews VFR/SVFR traffic procedures within CAS with respect to RA occurrences in TCAS equipped aircraft.

² 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.