

AIRPROX REPORT No 2013099

Date/Time: 1 Aug 2013 1211Z

Position: 5130N 00011W
(6nm West London City airport
- elevation 19ft)

Airspace: London City CTR (Class: D)

Reporting Ac Reported Ac

Type: RJ1H R44

Operator: CAT Civ Pte

Alt/FL: 2000ft 1500ft
 QNH (1008hPa) QNH

Weather: VMC CAVOK VMC CLBC

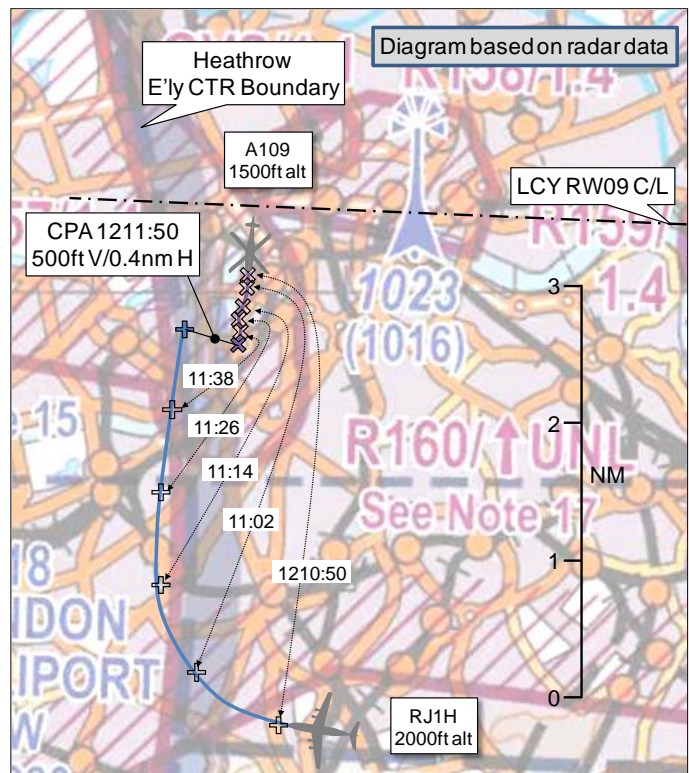
Visibility: >10km >10km

Reported Separation:

500ft V/400-500m H NK

Recorded Separation:

500ft V/0.4nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE RJ1H PILOT reports inbound, IFR, to London City airport (LCY). All lights were illuminated and SSR Modes C and S were selected, squawking 5725. During approach to RW09, on an ILS intercept heading 060° at 2000ft, City Radar informed him about "a couple" of helicopters at about the 1 o'clock position. He had visual contact and received a TCAS TA. A few seconds later a TCAS RA 'monitor VS' was received. Since he had the helicopters clearly identified and he was flying above VS red indication on TCAS, he continued the approach. About ten seconds later 'clear of conflict' was received. He reported having received a TCAS RA to ATC, after the aircraft had landed.

He assessed the risk of collision as 'None'.

THE ROBINSON R44 HELICOPTER PILOT reports operating on a VFR flight under the control of Heathrow radar 125.625MHz. The helicopter, coloured predominately blue, had a strobe and navigation lights illuminated. SSR Mode C was selected. ACAS was not carried. He was conducting an aerial filming task approximately 6nm West of LCY. He was flying in accordance with his ATC clearance under a Radar Control service to operate on Helicopter Route H4, with a limit of no further East than London Bridge and no further West than Vauxhall Bridge. At times, he had clearance to operate off-route in the region of Trafalgar Square. His altitude clearance was not above 1500ft on the London QNH. He complied fully with his given clearance and at no time did he exceed any of the geographical limits. He did not believe he had exceeded any of the vertical limits of his clearance. He was given regular traffic information on other helicopters operating on H4, as well as the inbound aircraft to LCY. Either through his own visual scan or regular traffic information, he remained in visual contact with the arriving aircraft as well as other traffic in his operating area.

He assessed the risk of collision as 'None'.

Factual Background

MATS PART 1¹ states: 'Separation standards are not prescribed for application by ATC between VFR and IFR flights in Class D airspace'.

¹ MATS Part 1, Chapter 5, Paragraph 5.3

MATS Part 1² states the ATC responsibilities for Class D airspace: ‘...Pass traffic information to IFR flights on VFR flights and give traffic avoidance if requested; Pass traffic information to VFR flights on IFR flights and other VFR flights’.

The London City weather was:

EGLC 011150Z 14010KT 100V180 CAVOK 30/18 Q1009=
EGLC 011220Z 15010KT120V210 CAVOK 31/18 Q1008=

Analysis and Investigation

CAA ATSI

An Airprox was reported by a British Aerospace RJ100 (RJ1H) following receipt of a TCAS RA against a Robinson R44 II (R44) in Class D airspace, whilst being vectored for the ILS approach to RW09 at London City. CAA ATSI had access to written reports from both pilots, area radar recordings, RTF recordings of the TC SVFR frequency and recordings and transcripts of the City Radar frequency and the London City Tower frequency. No reports were received from either the TC City Radar or SVFR controllers.

The RJ1H was operating IFR inbound to London City, squawking 5725, and was in receipt of a Radar Control Service from City Radar on frequency 128.025MHz.

The R44 was operating VFR, squawking 7032, and was in receipt of a Radar Control Service from TC SVFR on frequency 125.625MHz.

At 1210:45, having instructed the RJ1H to turn right heading 015°, the City Radar controller passed traffic information to the RJ1H about helicopters operating under 6nm final with the highest one [the R44] at 1500ft, visual with the RJ1H (Figure 1). The RJ1H pilot replied he was looking.

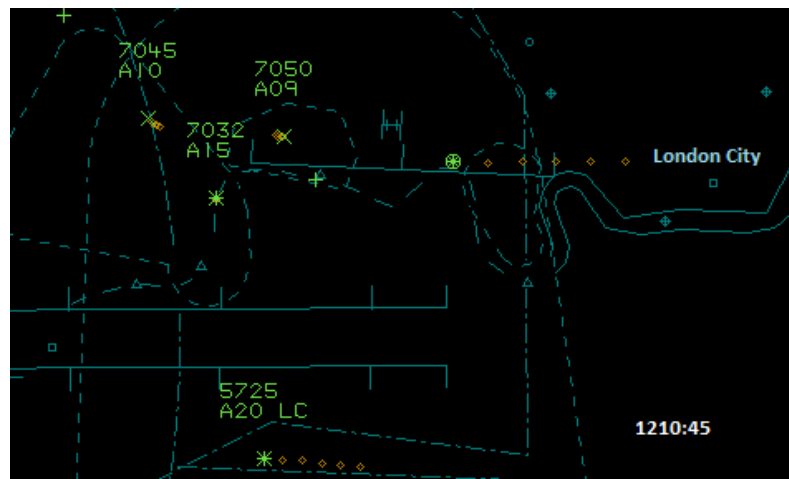


Figure 1

Meanwhile, at 1210:56, the TC SVFR controller passed traffic information on the RJ1H to the R44 pilot, who replied that he was visual with the RJ1H.

At 1211:20 the City Radar controller updated the traffic information to the RJ1H, stating that the first helicopter was in its half past twelve at one and a half miles at 1500ft and would pass down the RJ1H's right hand side (Figure 2). The RJ1H pilot reported that he had the helicopter in sight and was subsequently vectored for the ILS to land at LCY.

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

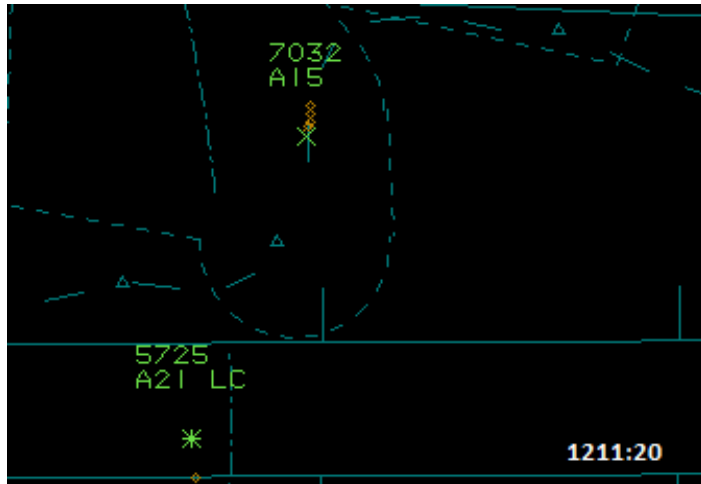


Figure 2

At 1216:00, after landing at LCY, the RJ1H pilot informed the LCY Tower controller that they had received a TCAS RA because of the helicopters, and they were required to report it in accordance with company policy.

Summary

The Airprox occurred within Class D airspace of the London City CTR. The RJ1H was operating IFR and the R44 VFR. Both the City and SVFR radar controllers complied with ATC responsibilities for flights within Class D airspace; appropriate traffic information was issued to both flights. Both pilots obtained visual contact with the other aircraft. The closest point of approach was 0.4nm as the aircraft passed each other, vertically separated by 500ft. The RJ1H received a TCAS RA but neither pilot considered there was any risk of collision.

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 actions of the pilots on this occasion. The R44 had been carrying out a filming task, VFR, under the control of TC SVFR. At the time of the Airprox it was complying with ATC instructions and was heading south, within the LCY CTR, to pass 6nm west of the airport at 1500ft. The Board noted that the R44 pilot had been informed about the RJ1H heading north at 2000ft, and reported visual contact. For his part, the RJ1H, inbound IFR to LCY, was routing northbound on a reciprocal track to the R44 at 2000ft. ATC informed the RJ1H pilot about the R44, which had him in sight, and the RJ1H pilot visually observed the R44 before subsequently receiving a TCAS RA because of its presence. The Board noted that 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.

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 0.4nm 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 R44'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 2013121 (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>Degree of Risk:</u>	E
<u>ERC Score:</u> ³	1.
<u>Recommendation:</u>	The CAA reviews VFR/SVFR traffic procedures within CAS with respect to RA occurrences in TCAS equipped aircraft.

³ 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.