

AIRPROX REPORT No 2013051

Date/Time: 16 Jun 2013 1258Z (Sunday)

Position: 5131N 00014E
(1.7nm NE of Damyns Hall A/D
- elevation 56ft)

Airspace: London FIR (Class: G)

Reporting Ac **Reported Ac**

Type: Flight Design EC120B
CTSW (Microlight)

Operator: Civ Trg Civ Pte

Alt/FL: 1000ft 1300ft
QNH (1013hPa) QNH (NR hPa)

Weather: VMC NR VMC NR

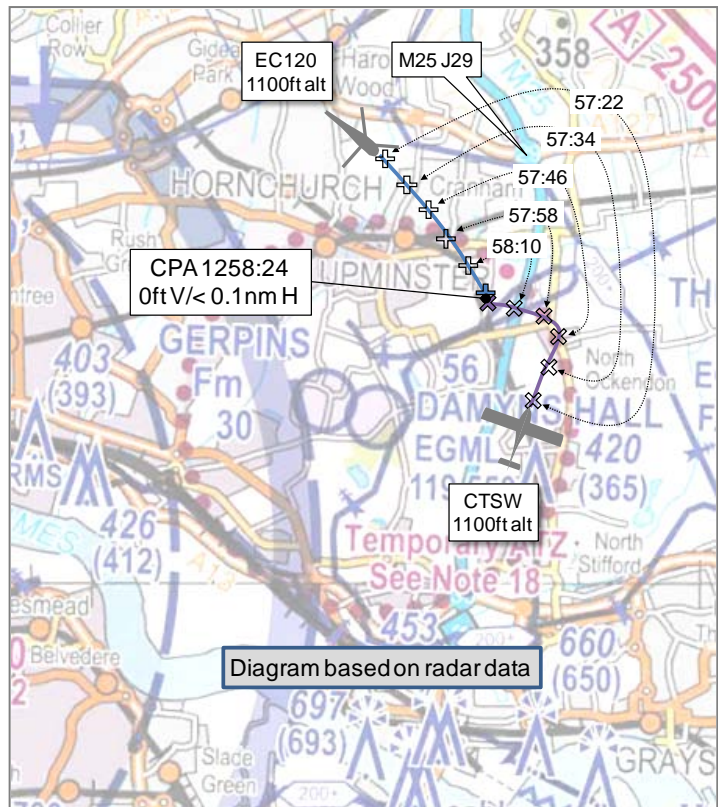
Visibility: 25km 7km

Reported Separation:

0ft V/1km H 400ft V/400ft H

Recorded Separation:

0ft V/0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE CTSW PILOT reports that navigation lights, beacon and landing lights were illuminated. He was carrying out cct training on RW21, left-hand, at Damyns Hall, with a student handling the ac. While on the late downwind leg (he thought) at 1000ft he observed a helicopter in his 2 o'clock, about 1km away, at the same level. As the student turned L onto base leg (heading 300°) at 1000ft he noticed that the helicopter was still in his 2 o'clock, on a collision course, about 300m away. He took control from the student, waggled his wings and turned L onto final approach for RW21. He commented that there was no sign whether or not the helicopter pilot had seen his ac. The helicopter pilot was not on the Damyns Hall A/G frequency.



He assessed the risk of collision as 'High'.

THE EC120B PILOT reports his helicopter was coloured predominantly blue; strobe and navigation lights were illuminated. He was carrying out a flight from a private site to Rochester Airport. He lifted at 12.38, arriving at Rochester at 13.07. The weather on lifting was '9999' visibility. His route was via M1 Junction 10 and 9, to avoid over flying Harpenden, then direct to a point S of LAM (staying clear of Stapleford ATZ), then direct to Rochester (but staying 'clear' of Damyns Hall). He was aware that this area can be particularly busy at weekends with local flights. He was transferred from Luton to Farnborough Radar on leaving the Luton ATZ and stayed with Farnborough until 10nm from Rochester receiving a BS. When he was approaching Stapleford, Farnborough advised him of traffic in the cct and he called Stapleford on box 2 to advise them he would pass to the S and they issued TI. Once clear he went back to Farnborough. The visibility was slightly reduced around this area due to a rain shower, he judged it to be about 7km. At some point between here and Damyns Hall (which

he stayed 'well clear' of despite the lack of ATZ as there are often microlights around this area) he became aware of a small light ac or microlight approaching on a reciprocal track but slightly low and to the R. He moved to the L slightly to pass what, he considered, to be a perfectly 'safe' distance above and to the L behind this ac. He flashed his landing light and the other pilot waggled his wings to indicate he had also seen us.

He assessed the risk of collision as 'None'.

Factual Background

The CTSW was on a VFR training flight conducting ccts on RW21 at Damyns Hall. The pilot was in contact with Hornchurch Radio on 119.550MHz and transponding 7000. There is no ATZ at Damyns Hall Aerodrome¹ and it is depicted on VFR charts in Class G airspace as a minor aerodrome/limited or no facilities, where flying training may be taking place. The RW orientation is not depicted. Frequency 119.550MHz is given on both the 1:250,000 and 1:500,000 VFR charts. The aerodrome is not notified in the UK AIP².

The prevailing weather at London City Airport was:

METAR EGLC 161250Z 22007KT 9999 –RA FEW022 BKN030 15/10 Q1014=

Under a BS the allocation of an SSR code does not constitute the provision of a surveillance service and there is no requirement for a controller to monitor a flight. The avoidance of traffic is solely the pilot's responsibility and pilots should not expect any form of TI.

Rule 9 of the Rules of the Air 2007 states that 'when two aircraft are converging in the air at approximately the same altitude, the aircraft which has the other on its right shall give way'.

Rule 12 of the Rules of the Air 2007 states: '...a flying machine, glider or airship flying in the vicinity of what the commander of the aircraft knows, or ought reasonably to know, to be an aerodrome shall- (a) conform to the pattern of traffic formed by other aircraft intending to land at that aerodrome or keep clear of the airspace in which the pattern is formed'.

Analysis and Investigation

CAA ATSI had access to the written report of both pilots, recorded area surveillance³ and recording of the Farnborough LARS (East) frequency 123.225MHz. The Airprox was not observed by or reported to Farnborough ATC. The EC120B contacted Farnborough LARS (East), from LARS (North), at 1255:40 UTC. Squawk 5021 was assigned, London QNH 1014hPa passed and a BS agreed. EC120B is 4.4nm NNW of Damyns Hall at 1300ft, CTSW is about to turn downwind RW21 at 1000ft (see Figure 1). No further transmissions were made between the EC120B and LARS (East) until 1301:00.

¹ Disestablished 10 January 2013.

² ENR 5.5.

³ Heathrow 10cm, Stansted 10cm and Debden Radars were reviewed and each gave intermittent or partial coverage of the incident, given the radars' location in relation to the incident and level of the aircraft. Therefore, Multi Radar Tracking (MRT) is used in this report.

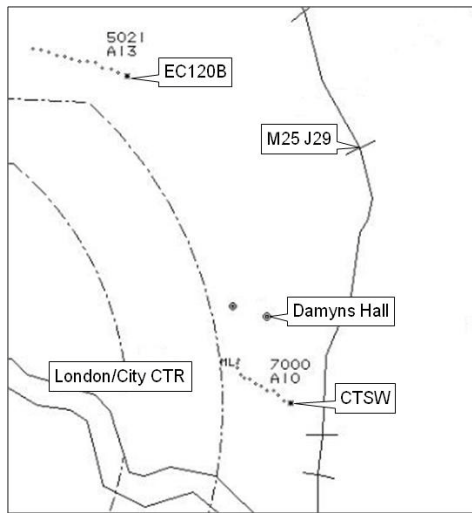


Figure 1: MRT 1255:59.

When the EC120B was 1.9nm NE of Damyns Hall⁴, the CTSW had turned base leg at 1100ft and the EC120B was on a south-easterly track at 1200ft. The aircraft were 0.9nm apart on converging tracks. See Figure 2.

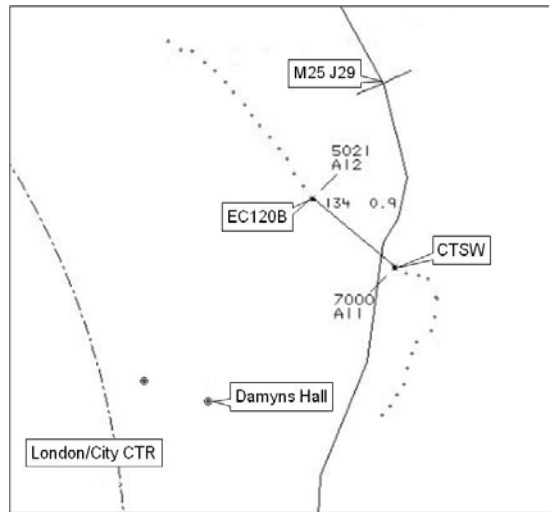


Figure 2: MRT 1258:07

The tracks of the two ac then crossed (1.7nm NE of Damyns Hall) between 1258:22 and 1258:26 as both ac were at 1100ft, 0.1nm apart. See Figures 3 and 4.

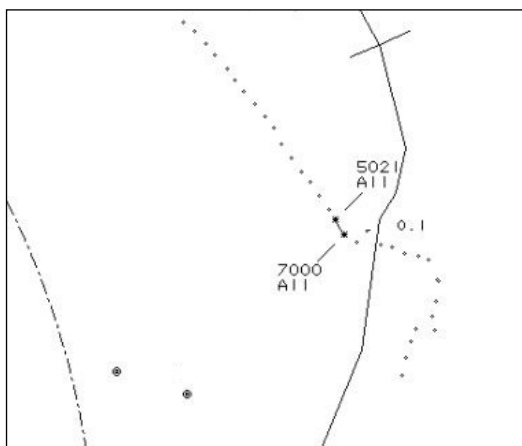


Figure 3: MRT 1258:22

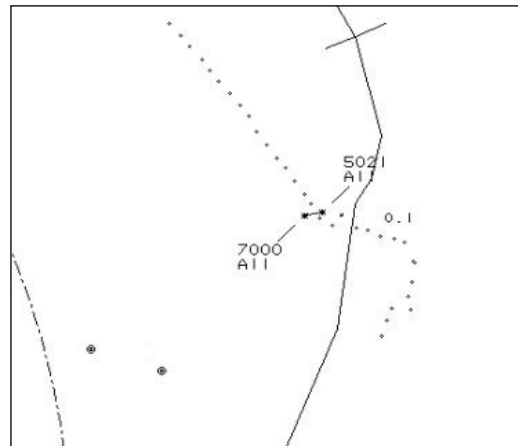


Figure 4: MRT 1258:26

⁴ 513143N 0001444E (WGS84), which is the previously notified aerodrome reference point.

The CTSW positioned to final for RW 21 and the EC120B continued to the SE, requesting transfer to Rochester's frequency at 1301:00.

Summary

The Airprox occurred in Class G uncontrolled airspace, 1.7nm NE of Damyns Hall Aerodrome. The minimum recorded distance between the two ac was 0ft vertical and 0.1nm horizontal. Although the EC120B was in receipt of a BS, in Class G airspace, collision avoidance rests solely with the pilots of both ac. They did obtain visual contact with the other ac and signalled accordingly. However, it would appear that, while the pilot of the EC120B observed the CTSW pilot wagging his wings, the pilot of the latter ac was unaware, at the time, whether or not the helicopter pilot had spotted his ac.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from both pilots, radar video recordings, transcript of the Farnborough LARS (East) frequency and a report from the appropriate ATC authority.

The CAA/DAP Member explained that the Damyns Hall ATZ was disestablished, at the request of the aerodrome operator, in January 2013.

Civil pilot members considered that the circuit carried out at Damyns Hall by the CTSW was wider than would be expected for a microlight aircraft; a GA Member opined that it appeared that the aircraft was carrying out a circuit which was twice the usual distance from an aerodrome. In view of this wide circuit, the civil helicopter member believed that the pilot of the EC120B may not have been aware that the CTSW was actually positioning to land at Damyns Hall and may have thought it was en-route. This was an important aspect because it concerned which pilot had the right of way in accordance with the Rules of the Air Regulations 2007. (See Part A.) The CTSW pilot reported sighting the EC120B in his two o'clock. Consequently, in accordance with Rule 9, having the other aircraft on his right, he should have given way. However, under Rule 12 the EC120B pilot should have remained clear of the airspace in which the pattern of traffic at Damyns Hall is formed. Members were aware that the EC120B pilot knew the position of Damyns Hall, but as the CAA/NATS Aeronautical Charts do not show the layout of the runways at the aerodrome, he would not necessarily have known the circuit directions. The civil helicopter pilot member considered that the EC120B pilot avoided the aerodrome by a reasonable distance. Because the Board members could not resolve the right of way issue, they decided that the cause of the Airprox was a conflict in Class G airspace. As both pilots took appropriate avoiding action it was considered that there was no risk of a collision.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u>	Conflict in Class G airspace resolved by both pilots.
<u>Degree of Risk</u>	C.
<u>ERC Score:</u>	4 ⁵

⁵ 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.