

AIRPROX REPORT No 2014178

Date/Time: 21 Sep 2014 1123Z (Sunday)

Position: 5456N 00510W
(5nm NW of Stranraer)

Airspace: London FIR (Class: G)

Aircraft 1 Aircraft 2

Type: Kitfox C172

Operator: Civ Pte Civ Comm

Alt/FL: 3250ft 3600ft
QNH (1027hPa) QNH (1027hPa)

Conditions: VMC VMC

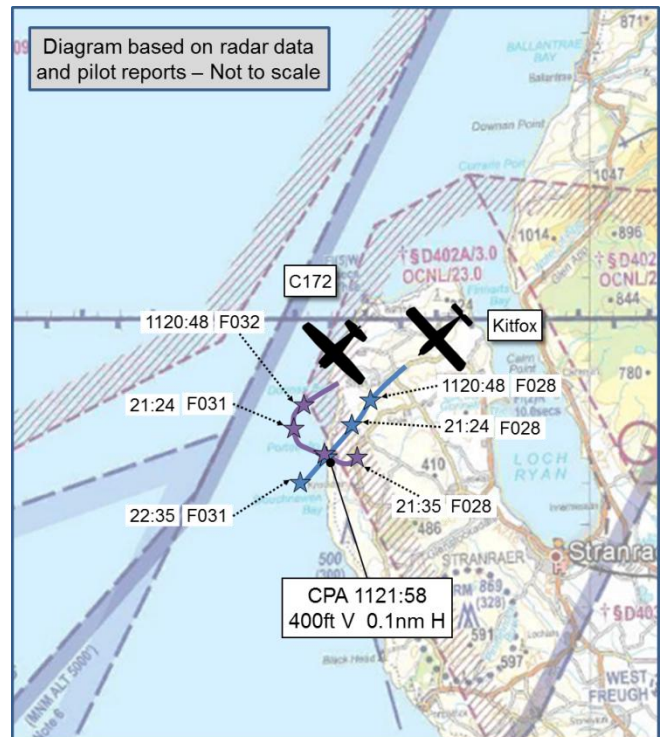
Visibility: 20km >10km

Reported Separation:

100-200ft V/150m H 200ft V/0m H

Recorded Separation:

400ft V/0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE KITFOX PILOT reports flying a red and gold aircraft with wing-tip strobes illuminated and squawking transponder Modes 3/A and C; the aircraft did not have an ACAS¹ installed. He was flying VFR on a heading of 220°, at 90kt and 3250ft (QNH 1027hPa) in 'fine, though slightly hazy' weather with the sun on his left. The pilot was receiving a Basic Service from Scottish Information (he does not recall receiving any Traffic Information) and was in the process of changing to the Belfast City Approach frequency when he saw 'very late' a high-wing single-engine aircraft, possibly a Cessna 172, 200m away in his 1 to 2 o'clock, slightly above and moving from his right to his left; the aircraft appeared to be banking slightly to the right but the Kitfox pilot did not have time to take any action.



Figure 1. Kitfox (Library Picture)

He assessed the risk of collision as 'Medium'.

THE C172 PILOT reports a white aircraft with beacon, strobe and navigation lights illuminated and squawking transponder Modes 3/A and C; no ACAS was installed but he was in contact with Scottish Information and was aware that other GA aircraft were 'in the vicinity'. He was positioning, with another crew member on board, under VFR in VMC, onto a northerly lead-in to a survey track-line to carry out vertical photography, when he saw a red high-wing single-engine aircraft, slightly below, in his 2 o'clock at a range of 1.25-1.5nm, he recalled. He assessed the risk of collision as low, but decided to take avoiding action anyway turning right with a 30° angle of bank and climbing. He kept the other aircraft in sight throughout the manoeuvre and it passed 'safely below' them.

He assessed the risk of collision as 'Low'.

THE SCOTTISH INFORMATION CONTROLLER reports that the C172 pilot was on frequency, carrying out a photographic survey in the Mull of Galloway area, and had been informed of another aircraft which had left the frequency and headed east under VFR. The Kitfox pilot checked-in on the

¹ Airborne Collision Avoidance System

radio and the controller 'passed VFR Traffic Information' to both pilots. As the Kitfox approached the BLACA area, its pilot elected to change to the Belfast City Approach frequency.

Factual Background

The Belfast Harbour weather at 1120 was recorded as:

METAR EGAC 211150Z 02004KT 340V050 9999 FEW015 SCT020 16/11 Q1027

Analysis and Investigation

CAA ATSI

The C172 was conducting a Pipeline survey squawking 7401 (SFIS) and was in receipt of a Basic Service from Scottish Information. At 1102:00 the C172 reported overhead Stranraer at 3600ft and indicated an intention to continue with the photo survey for another 15 minutes.

At 1109:15 the Kitfox contacted Scottish Information reporting 3.5nm south of GIVAN at 3300ft. The Kitfox was instructed to squawk 7401 (SFIS) and a Basic Service was agreed. The FISO advised "And (Kitfox) c/s there's a lot of VFR traffic in your area just keep a good lookout" which was acknowledged by the Kitfox pilot. Area radar showed the C172 operating 4nm north of BLACA with the Kitfox 21nm north-northeast of BLACA tracking southwest. No further RTF calls were received from either aircraft until after the Airprox. At 1118:40 area radar showed the C172, 6.9nm north of BLACA in a right hand orbit at FL031 (A3500ft – converts to 3478ft using QNH 1027hPa, with 1hPa equal to 27ft). The Kitfox is shown tracking southwest at FL028 (A3200ft). The horizontal distance between the two aircraft was 1.6nm with the Kitfox indicating 300ft lower than the C172 (Figure 1).

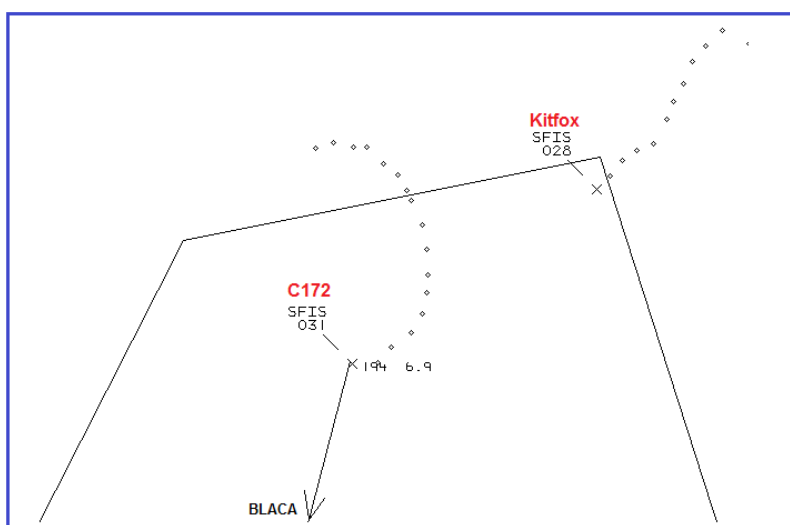


Figure 1

The C172 rolled out onto a west-southwesterly track and at 1120:06 and was diverging from the Kitfox at a range of 1.7nm (Figure 2).

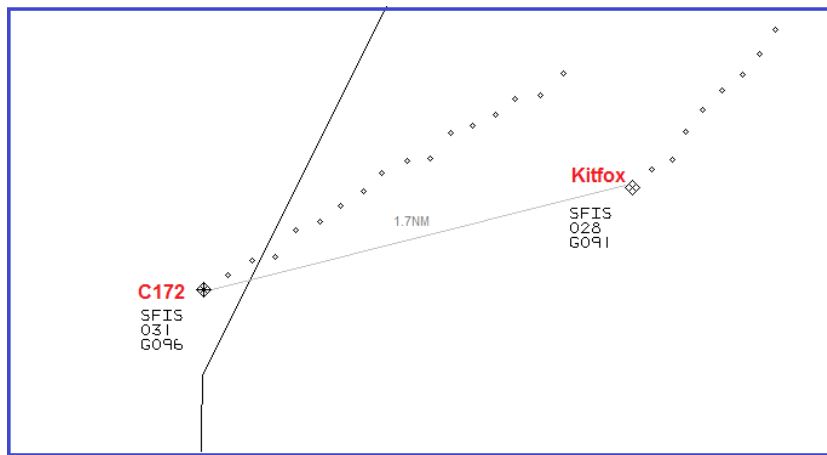


Figure 2

At 1121:05 the C172 commenced a right turn onto a southeasterly track and, at 1121:36, was in the Kitfox's 1 o'clock at a range of 1nm, crossing from right to left and 400ft above (Figure 3).

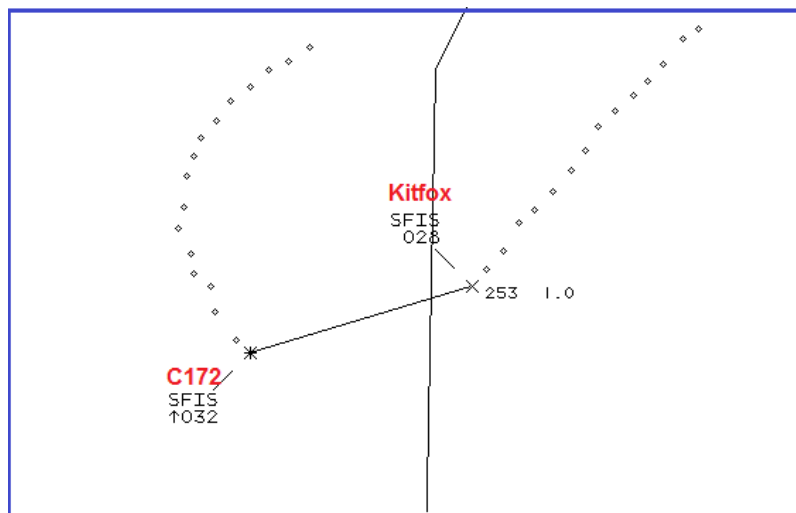


Figure 3

At 1121:56 the horizontal distance between the two aircraft had reduced to 0.1nm with a vertical distance of 400ft. The C172 appeared to have turned left towards the Kitfox, but this may have been due to track jitter from the radar performance at lower levels (Figure 4).

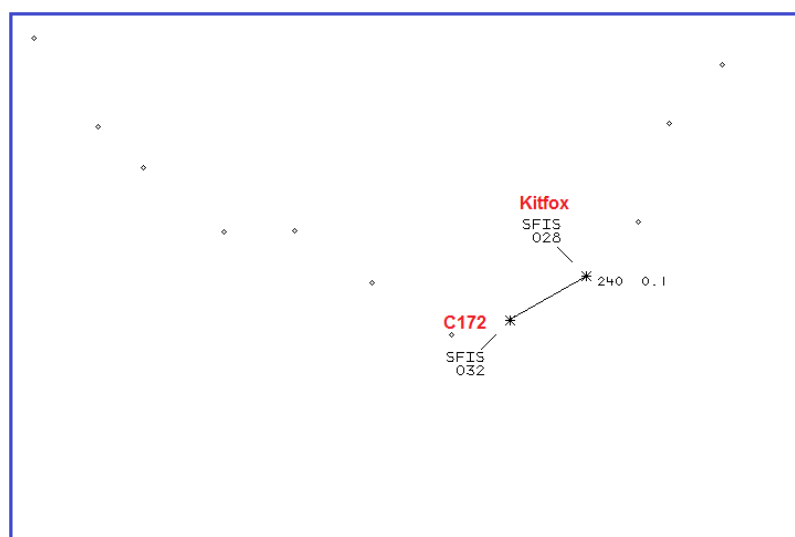


Figure 4

The next sweep of the radar showed the two aircraft passing abeam at a range of 0.1nm and 400ft vertically. The radar appeared to show both aircraft turning to the right but, again, this may have been due to track jitter from the radar performance at lower levels (Figure 5).

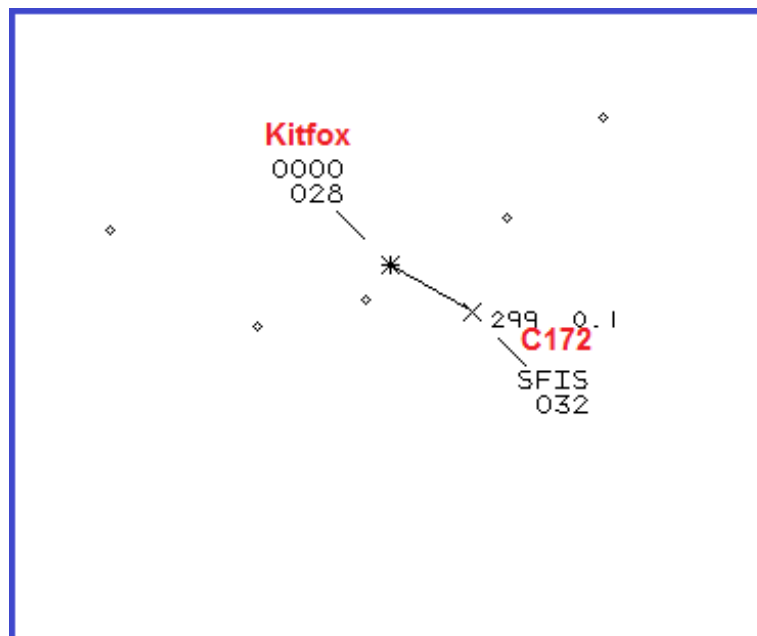


Figure 5

At 1123:00 the Kitfox reported coasting out and requesting a change of frequency to Belfast City which was agreed.

No report was made on the radio about the Airprox, and the FISO has little recollection of the event. The Scottish Information FISO was providing a Basic Service without the aid of surveillance equipment:

‘A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot’s responsibility².

UKAB Secretariat

The aircraft were converging, and the C172 was on the right of the Kitfox, so the Kitfox pilot was required to give way³

Summary

An Airprox was reported in VMC in Class G airspace between a Kitfox flying at 3250ft and a C172 flying at 3600ft. Both aircraft were being flown on QNH 1027hPa, under VFR in contact with Scottish Information, and both pilots had been passed generic Traffic Information. The Kitfox pilot saw the C172 too late to take any action; however the C172 pilot saw the Kitfox and avoided by turning right and climbing.

² CAP774 (Jul 2014) Page 25, Paragraph 2.1

³ Rules of the Air 2007, Rule 9, Converging

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both aircraft, transcripts of the relevant RT frequency, radar photographs/video recordings, reports from the FISO⁴ involved and reports from the appropriate ATC and operating authorities.

The Board noted that both aircraft were in an area and at altitudes such that little in the way of radar based ATS was available. Nonetheless, Scottish Information had correctly passed generic Traffic Information and both pilots were alerted and were looking out for other aircraft. The Board reflected that, according to the Rules of the Air, the Kitfox pilot was required to give way; however, it was clear that he did not see the C172, which turned in to conflict with him, until it was too late to take any action. The Board noted that the geometry of the encounter, and the upward visibility from the Kitfox were likely to have contributed to this late sighting. Turning to the actions of the C172 pilot, the Board thought it likely that he had seen the Kitfox a little later than he recalled because the radar showed that the Kitfox could not have been seen on his right until the aircraft were quite close. Given the C172 pilot's description of the geometry when he saw the Kitfox, the Board consequently agreed that the cause was a late sighting by both pilots. However, the pilots had reported separation of 350ft, and Mode C readouts indicated separation of 400ft; the Board agreed that this was not an unusual level of separation in Class G airspace between aircraft of this performance level. In addition, the C172 pilot had seen the Kitfox in time to ensure that the vertical separation was maintained, and had also turned to keep it in sight. In light of all of this, the Board decided that the Degree of Risk was Category C.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by both pilots.

Degree of Risk: C.

ERC Score⁵: 20.

⁴ Flight Information Services Officer

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.