

AIRPROX REPORT No 2011077

Date/Time: 13 Jul 2011 1446Z

Position: 5013N 00525W (1¼nm
SW of Godrevy Point)

Airspace: London FIR (Class: G)

Reporting Ac **Reported Ac**

Type: EC135 C172

Operator: Civ Comm Civ Trg

Alt/FL: 1200ft 1000-1200ft
RPS (1018mb) (1022mb)

Weather: VMC CLBC VMC NR

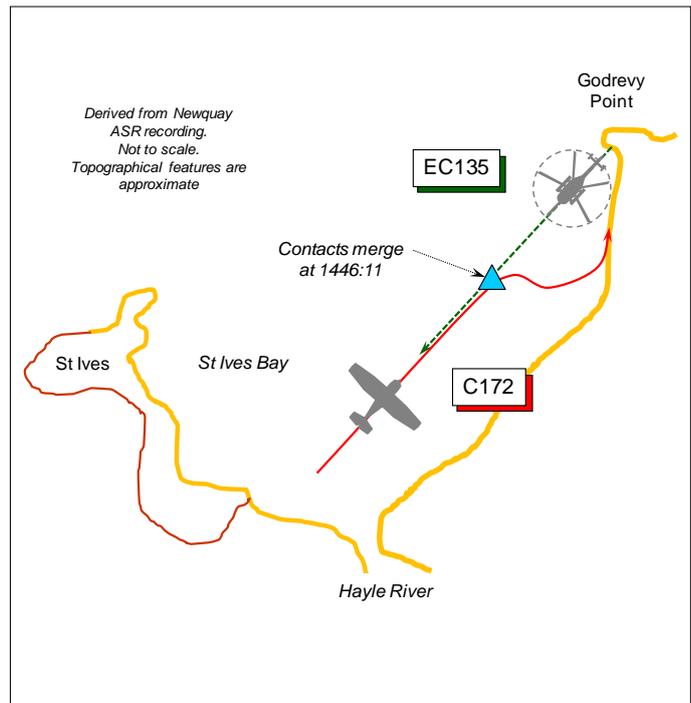
Visibility: 10km >10k

Reported Separation:

Nil V/50m H 0-50ft V

Recorded Separation:

100ft V/contacts merged



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE EUROCOPTER EC135 HELICOPTER PILOT reports that he was in transit to Penzance, VFR and in receipt of a BS from Culdrose APP; a squawk of A0020 was selected with Modes C and S on. The helicopter is coloured yellow and red; the white HISLs and two landing lights were all on.

Flying level at 1200ft SCILLIES RPS (1018mb), about 060° LND VOR 11nm heading 220° at 125kt he encountered a small light ac. Flying into the sun, 200ft below the cloud base in VMC, the white C172 climbed from low level and appeared from out of his 10-11 o'clock blind spot with the sun behind it, which made it impossible for him to see it. The white C172 was seen in his 11 o'clock 100m away flying in a right hand banking turn at the same level before it passed down the port side 50m away with a 'high' Risk of collision. He was unaware that the C172 was in the vicinity until the very last moment when it was too late to take any avoiding action.

He immediately told Culdrose APP that he had just had an Airprox with a light fixed-wing ac flying in the opposite direction; they informed him initially that they had not seen anything on radar but then picked up a 7000 squawk in his 6 o'clock position. The light ac was white in colour and was flying just below the cloud base.

The EC135 pilot also included his two Paramedic's accounts within his report:

EC135 PARAMEDIC (A) was sitting in the LH P2 seat and had turned to speak to his colleague in the back seat; as he turned forwards he saw a white ac banking away at the same level in their 10-11 o'clock position. This aeroplane was extremely close, he estimated about 50-100 meters away – probably at the closer end of that scale – but banked sufficiently to pass down their port side.

EC135 PARAMEDIC (B) was in the rear seat facing aft. His first sight of the C172 was through the port side window, where he saw the complete C172 'filling' the side window of the helicopter. He believes they were about 50 metres apart at this point. He was unaware of his pilot taking any avoiding action.

THE C172 PILOT reports he was operating VFR, in receipt of a BS from Lands End TOWER on 120-250Mhz; a squawk of A7000 was selected with Mode C. Flying at 1000-1200ft (1022mb) some

500ft below and 2nm clear of cloud, the flight was a typical instruction flight following a common route taken for trial lessons along the southern coast from Land's End aerodrome to Penzance, cutting across land to St Ives Bay before following the N Cornish coast to Pendeen before re-joining at Lands End. There was a much higher level of GA traffic in the area than usual due to a microlight and gyrocopter fly-in to the Isles of Scilly; therefore he emphasized to his student the need to maintain a good lookout. His route took him E of St Ives for only a short period, therefore, given the amount of traffic in the local area receiving a BS from Lands End, he elected to remain in radio contact with Lands End TOWER throughout the flight. In the vicinity of St Ives Bay heading 060° at 85kt a small rotary-winged ac that appeared to be a gyrocopter was seen about 1nm ahead on a converging heading in level flight on a course of about 240°. He considered it a collision risk and avoiding action was initiated into a banked turn to the R using 30° AOB onto a heading of about 150°, with a slight climb. The other traffic did not change its course as he turned away. There was no subsequent sighting of the ac. He considered that the other ac was seen and avoiding action taken soon enough to ensure that an Airprox did not occur.

THE CULDROSE APPROACH CONTROLLER (CU APP) reports that the EC135 helicopter pilot called APP on 134.050MHz abeam Godrevy Bay requesting a BS at 1000ft SCILLIES RPS (1018mb) en-route to Penzance. A BS was given with a request to report visual with the HLS and to advise when switching frequency. A few minutes later the EC135 helicopter pilot reported an Airprox with a light civilian ac in the vicinity of Hayle Bay. Nothing was seen on radar; however, upon rotating the EC135's SSR data block, a primary contact was observed in the helicopter's 6 o'clock at a range of ½nm tracking NE, which very shortly afterwards displayed a A7000 squawk climbing slowly through 1000ft unverified Mode C. Observing the ac's course using a combination of the A7000 squawk and the ac's primary radar response, the ac – the C172 - was tracked to Lands End aerodrome. When the C172 was shown joining overhead, he telephoned Lands End aerodrome to inform them of the Airprox. Subsequently, upon talking to the C172 pilot via landline, he confirmed he had been in Hayle Bay but had not seen the EC135 helicopter. The C172 pilot did not contact Culdrose ATC at any point during the flight. His workload was assessed as 'medium-low'.

UKAB Note (1): Manager ATS Newquay International Airport helpfully provided a copy of the Newquay ASR recording covering the period of this Airprox. However, the large displayed range makes it difficult to determine accurately the minimum horizontal separation that pertained. The EC135, identified from its A0020 squawk is shown departing Godrevy Point into St Ives Bay on a steady SW'ly track indicating a level cruise at an altitude of 1300-1400ft Mode C. Meanwhile an ac squawking A7000 is shown tracking NE'ly within St Ives Bay about ½ -1nm offshore broadly in conformity with the route described by the C172 pilot. At 1445:44, the C172 indicates an altitude of 1500ft Mode C, 100ft above the EC135, in the latter's 12 o'clock at a range of 1½nm. The two ac close directly, head-on to one another; at 1446:01 the EC135 indicates 1300ft Mode C with the C172 at 12 o'clock – 0.5nm. Both ac maintain their course as the contacts merge at 1446:11 and pass marginally port-to-port as reported, the C172 indicating 1400ft ALT, some 100ft above the EC135 indicating 1300ft ALT. The C172 appears to turn R toward the shoreline onto a SE'ly heading, in conformity with the reported avoiding action R turn, before regaining the line of the coast 1nm S of Godrevy Point; the EC135 maintains its course and indicated altitude as they draw aft of one another. Subsequently, the EC135 coasts in SE of St Ives and the C172 turns about from Godrevy Point.

ATSI reports that the Airprox occurred within Class G airspace, the EC135 squawking A0020, operating VFR on a flight from Newquay to Penzance heliport. The C172 pilot was operating VFR, squawking A7000, on a local instructional flight from Lands End Airport and in receipt of a BS from TOWER.

The Lands End TOWER RTF recordings did not have a time injection element.

The Culdrose 1450 METAR: 21004KT 9999 –SHRA SCT010 SCT018 BKN030 16/13 Q1021 GRN TEMPO 7000 – SHRA SCT012 BKN020TCU GRN=.

The C172 departed from RW25 at Lands End airport, routing E VFR at 2000ft. A broken transmission, "...to Penzance," was made and the TOWER controller believed the C172 had transferred to Penzance RADIO. This information was passed to two other ac in the area. The C172 pilot's written report indicated that he had remained on the Lands End frequency due to the amount of traffic in the area.

The C172 contacted Lands End TOWER and joined on a right base-leg for RW25. After the C172 landed TOWER asked the pilot, "[C172 C/S] *have you been operating Hayle Bay*" and the pilot responded "*Affirm.*" The controller asked, "*er roger did you see the [EC135 C/S]*" The C172 pilot responded, "*Negative [C172 C/S]*".

The C172 departed Lands End airport in receipt of a BS and was believed to have changed to Penzance RADIO. The Lands End TOWER controller was not aware of the Airprox or, of the EC135 helicopter. CAP 774, UK Flight Information Services, Chapter 2, Page 1. Paragraphs 1 & 5, State:

'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 responsibility.'

'Pilots should not expect any form of traffic information from a controller, as there is no such obligation placed on the controller under a Basic Service outside an Aerodrome Traffic Zone (ATZ), and the pilot remains responsible for collision avoidance at all times. However, on initial contact the controller may provide traffic information in general terms to assist with the pilot's situational awareness. This will not normally be updated by the controller unless the situation has changed markedly, or the pilot requests an update. A controller with access to surveillance derived information shall avoid the routine provision of traffic information on specific aircraft, and a pilot who considers that he requires such a regular flow of specific traffic information shall request a Traffic Service. However, if a controller considers that a definite risk of collision exists, a warning may be issued to the pilot.'

The Airprox occurred when the two ac operating VFR in Class G airspace and in receipt of a BS, flew into conflict. Under a BS there is no obligation placed upon the controller to provide traffic information. However, if a controller considers that a definite risk of collision exists, a warning may be issued to the pilot.

HQ NAVY COMMAND is content that had the controller seen the conflicting ac a warning would have been passed to the EC135 pilot. Given the weather conditions on the day and the reported numbers of GA traffic it may have been prudent for the C172 to have contacted Culdrose for a LARS. Whilst this may not have prevented the Airprox from occurring (if he had still requested a BS for instance) both pilots operating on the same frequency may have increased either pilot's SA.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authorities.

These two flights were operating legitimately in Class G airspace and in this situation both pilots were equally responsible under the Rules of the Air for sighting and avoiding other ac. To assist with this aim, the C172 pilot had elected to remain in RT contact with Lands End TOWER whilst following his route around the coast because of the higher than normal level of GA traffic in the area that he perceived would call TOWER. However, helicopter pilot Members familiar with this locale perceived that an ATS from Culdrose might have given him a better understanding of traffic operating in St Ives Bay, which is a popular location for helicopter check test flights from Culdrose. Members suggested

that obtaining a radar service from Culdrose would generally be more beneficial than staying with Lands End TOWER. Nevertheless, whilst operating under a BS with CU APP, as the EC135 pilot was here, Members emphasised that there is no compunction on the controller to identify the flight, track it or provide TI. Plainly, if pilots wish to receive comprehensive TI about other traffic then in the first instance they should request a TS from a radar equipped ATSU and fly at an altitude commensurate with the ATSU being able to see proximate traffic. However, here the CU ASR had not detected the presence of the C172, probably due to the shielding effect of the terrain and the ac's low altitude. Unfortunately, therefore, the CU APP controller was unaware that a definite risk of collision existed and was powerless to intervene even with a basic warning to the EC135 pilot. Moreover, the EC135 pilot's lookout was hampered by the bright sunlight and he states it was impossible to see the C172 because of the sun behind it until the very last moment when it was too late to take any avoiding action. The C172 pilot lookout was not so encumbered by the sun and without any assistance from ATC he had spotted an ac, which he perceived at the time to be a gyrocopter, converging in level flight about 1nm ahead. Small helicopters, at a head-on aspect and with no crossing motion to draw attention to them can be difficult to spot but pilot Members agreed, while he had probably first seen the helicopter at less than 1nm, the C172 pilot saw it in reasonable time to initiate avoiding action into a 30° AOB bank R turn. Therefore, the Board agreed that this Airprox was the result of a conflict in Class G airspace resolved by the C172 pilot. The EC135 pilot reports the C172 passed down the port side 50m away at the same level, the distance also suggested by his paramedic colleagues. The Members concluded unanimously that although the C172 pilot had taken robust avoiding action, at these distances with the EC135 pilot unsuspected beforehand, the safety of the ac involved had indeed been compromised.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in Class G airspace resolved by the C172 pilot.

Degree of Risk: B.