

## AIRPROX REPORT No 2011165

Date/Time: 30 Nov 2011 1332Z

Position: 5348N 00304W  
(2nm NW Blackpool  
Airport - elev 34ft)

Airspace: Blackpool ATZ    (Class: G)  
Reporting Ac    Reported Ac

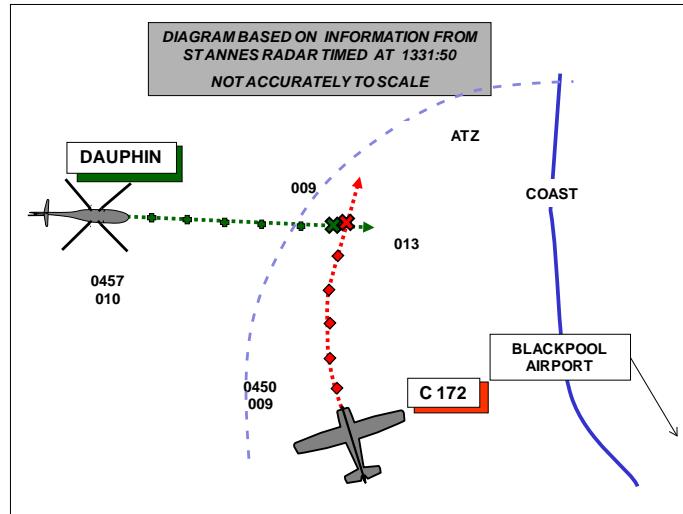
Type: Dauphin 365N3 C172

Operator: Civ Com    Civ Club

Alt/FL: 1000ft    1000ft  
QNH    QFE

Weather: VMC CAVOK NR

Visibility: 35km NR



### Reported Separation:

0ft V/300yd H NR

### Recorded Separation:

400ft V/0.1nm H

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE DAUPHIN 365N3 PILOT** reports flying a commercial VFR flight inbound to Blackpool in receipt of a BS [ACS, See ATSI report] from them, while squawking with Mode C and TCAS was fitted. They were heading 090° at 120kt, were cleared by ATC to join the cct from the W, were informed of a C172 on climb out and that its intention was to turn N towards them. ATC then asked them if they were visual; he replied that they were not and the C172 was instructed to pass behind them. The Cessna replied they had the Dauphin visual and would pass behind it as instructed, he thought [see ATSI report] and would climb to 1000ft. They had a TCAS indication of close proximity, but it was not accurate enough at the very close range to establish the exact position of the contact.

As they continued their lookout, they first saw the C172 about 300yd away in the position indicated on TCAS [UKAB Note (1): His diagrams showed the C172 in his 2 o'clock crossing from R to L at the same height ahead of him]. After taking avoiding action, their ac was landed without further incident. He has no criticism of ATC as all their instructions were concise and apparently also understood by the C172 pilot. They had no reason to believe that there was any risk of collision but reported the incident to ATC on landing.

**THE C172 PILOT** reports that his original Airprox report was mislaid but when contacted he made a further report passing it to the flying club owning the ac who in turn forwarded it to the UKAB, albeit later than desirable.

He departed Blackpool from RW28 and turned N at 800ft climbing at an indicated 1100fpm and 70kt, establishing a heading of 360° at 1000ft.

The Dauphin helicopter was first seen at about his height and descending into Blackpool and he reported visual contact with it to the ADC when it was about 2nm from the coast [offshore] in his 10-11 o'clock position. He then mentally assessed that their tracks would intersect in about 1min without any conflict. He assessed the helicopter was flying at about 120kt which gave him 1min to climb from 800ft to about 2200ft at his indicated performance.

ATC then requested that he position behind the helicopter but this request came much too late for him to comply with.

There was a >40kt Southerly wind at 2000ft and the wind effect on a left turn to crosswind at that stage would have positioned him virtually on a reciprocal heading to the helicopter, would have reduced his climb rate and positioned the helicopter in his blind spot under the nose.

After the ATC request the only safe course of action was to continue with his original plan which proved to be correct and he had the helicopter in view at all times and had adequate vertical separation.

In summary it was he who had the initial visual contact; as he was on the right he had right of way, so in the event of a conflict the helicopter should have given way to him.

**THE BLACKPOOL ADC** reports that at about 1325, the Dauphin pilot called on frequency and requested joining instructions; he was instructed to join the cct, RH downwind for RW28 and expect to break off to land on taxiway B.

The C172 was cleared to line up on RW28 shortly afterwards and the pilot was passed TI about the Dauphin inbound from the W. The Dauphin pilot was also passed TI about the C172 that was just rolling on RW28 and after airborne it would be turning to the N. Updated TI was then passed to the Dauphin as the ac approached the downwind position as the C172 became airborne. The Dauphin pilot reported that he was not visual with the Cessna, at which point, the C172 pilot reported visual with the Dauphin. The C172 pilot was then instructed to pass behind the Dauphin and to contact Blackpool Radar but the Dauphin pilot reported that the C172 had passed in front of him.

**THE DSATCO AT BLACKPOOL AIRPORT** reports that TI was passed to both pilots. The Cessna pilot was then instructed to pass behind the helicopter but he passed in front of it causing its pilot to take avoiding action.

**ATSI** reports that an Airprox occurred at 1331:51, in the Blackpool ATZ (Class G airspace), which comprises a circle radius 2.5nm centred on RW 10/28, extending from the surface to 2000ft above aerodrome level (34ft).

The Eurocopter AS365N3 helicopter (Dauphin) was operating VFR on a flight from the offshore rigs to Blackpool and was in receipt of an ACS from Blackpool TWR.

The Cessna 172 (C172) was operating on a VFR local flight from Blackpool and was also in receipt of an ACS from Blackpool TWR (on the same frequency).

The Blackpool TWR controller was providing an ACS in Class G airspace. CAP493, the MATS Part 1, Section 2, Chapter 1, Page 1, Paragraph 2.1 states that:

'Aerodrome Control is responsible for issuing information and instructions to ac under its control to achieve a safe, orderly and expeditious flow of air traffic and to assist pilots in preventing collisions between:

- a) ac flying in, and in the vicinity of, the ATZ;
- b) ac taking-off and landing;
- c) ac moving on the apron;
- d) ac and vehicles, obstructions and other ac on the manoeuvring area.'

CAP774, Flight Information Services, Chapter 1, Page 1, Paragraph 2, states that:

'Within Class F and G airspace, regardless of the service being provided, pilots are ultimately responsible for collision avoidance and terrain clearance.'

CAA ATSI had access to recordings of RTF from Blackpool and area radar recordings together with written reports from the pilot of the Dauphin and the Blackpool ADC.

The Blackpool METARs are provided for 1320 and 1350 UTC:

METAR EGNH 301320Z 18016KT 9999 FEW045 11/07 Q1013=  
METAR EGNH 301350Z 19019KT 9999 -SHRA FEW044 11/07 Q1013=

At 1321:00 the C172 contacted Blackpool TWR requesting taxi; the pilot was given taxi instructions to holding point E2 via Bravo, Charlie and Echo.

At 1328:20 the Dauphin pilot contacted Blackpool TWR with 9nm to run to the airfield and was instructed to report with 3nm to run and to position for a downwind right hand join “east about”. Blackpool MATS Part 2, Section 1, Chapter 20, Paragraph 1.3 states that with regard to rigs-contracted helicopter operations:

‘the pilot may request an arrival or departure directly into wind or east about the tower’.

At 1329:00, the C172 was given a squawk and then clearance to line-up. The controller gave TI about the Dauphin joining downwind right hand, which the C172 pilot acknowledged and he was cleared for take-off; the Dauphin pilot was then passed TI on the departing C172.

When the C172 was airborne the ADC asked the Dauphin pilot, “*are you visual with that traffic now*” and updated the position of the C172 but he informed the controller, “*not visual yet*”.

At 1331:20 the C172 pilot reported visual with the Dauphin and climbing to 1000ft. The ADC instructed him to pass behind the helicopter and to contact Blackpool Radar; the pilot readback the frequency change but did not readback or acknowledge the instruction to pass behind the helicopter. (The instruction “*pass behind*” does not specifically require a compulsory readback as dictated in CAP493, Appendix E, Page 11, Paragraph 5.3.1).

Radar recordings show the C172 in a right turn at 1331:32, heading towards the Dauphin. The Dauphin pilot’s report states that he heard the instruction from ATC and expected the C172 to pass behind him. Radar recordings at 1331:51 show the C172 crossing right to left in front of the Dauphin at a distance of 0.1nm; the Dauphin pilot saw the C172 late and descended to avoid it and at 1331:40 the pilot informed the ADC that the C172 had climbed in front of them.

Both ac were operating VFR in Class G airspace under an ACS. The ADC gave TI to both pilots and the C172 reported having the Dauphin in sight. When the controller issued the C172 pilot an instruction to pass behind the Dauphin, the instruction was not readback or acknowledged by the pilot; it is not clear whether or not the C172 pilot understood the instruction to pass behind the Dauphin. The instruction to route behind the Dauphin was given in the same transmission as a frequency change and it is possible that the ADC took the readback of the frequency as an acknowledgement of the instruction to pass behind.

As both ac were operating VFR in Class G airspace, and the C172 had reported visual with the Dauphin, there was therefore a reasonable expectation by the ADC that the C172 pilot would discharge his responsibility for collision avoidance appropriately whether or not any instruction was issued.

As there is no written report available from the pilot of the C172 it is unclear why the pilot flew in front of the Dauphin.

UKAB Note (2): The recording of the St Annes Radar shows the incident. The Dauphin approaches the CPA from the W, squawking 0457 with Mode C indicating FL010. After getting airborne the C172 is first seen at FL005 commencing a right turn and squawking 0450. The C172 rolls out on N at

1331:37 continuing its climb and the Dauphin continues tracking E at FL010. The C172 crosses 0.1nm in front of the Dauphin and 400ft above it at 1331:50 just inside the ATZ, as shown in the diagram above.

## **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 recordings, reports from the air traffic controller involved and reports from the appropriate ATC authorities.

Members noted that the C172 pilot informed ATC that he was making a right turn out after the Dauphin was on frequency; shortly afterwards ATC reiterated that it was departing to the North and later passed a further report of its position. This gave the Dauphin crew three opportunities to assimilate that there might be a conflict.

Members observed that it is the duty of ATC to provide information to traffic in the vicinity of the ATZ to allow pilots to prevent collisions. Both ac were operating VFR and the C172 being on the Dauphin's right should have had right of way under the RoA. While not strictly required to do so, the controller instructed the C172 pilot to route behind the Dauphin and Members agreed that, in the circumstances, this was a reasonable instruction. Bearing in mind the C172 pilot's report however, Members agreed that the call came too late for the pilot to enact it safely. One Military Member disagreed with this view stating that there was sufficient time available and even a small turn to the left would have broken the immediate collision risk and allowed the helicopter to pass ahead. Another Member also pointed out that as the C172 pilot opted not to accept the controller's instruction to go behind the Helicopter for safety reasons, then, notwithstanding that 'pass behind' is not a mandatory readback item, good airmanship would have been to tell ATC that he was not accepting the instructions and why; this would have had the additional benefit that the Dauphin pilot would have had more accurate information as to the C172 pilot's intentions.

The C172 pilot had the Helicopter in sight until it disappeared well below and behind him and was relatively unconcerned by the incident. Despite accurate TI and slightly less accurate TCAS indications, the Dauphin pilot did not see the C172 until it was an estimated 300yd away in his 2 o'clock. Although the Dauphin pilot thought the C172 was at the same alt, the radar showed it to be above him and climbing, giving a separation of 400ft when their flightpaths crossed. Although in the event the ac were well separated, the Dauphin crew was startled and concerned to see the C172 passing ahead of them when they expected it to pass behind. Members agreed that the cause of this concern had been the late sighting of the C172 rather than its proximity.

## **PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: A late sighting by the Dauphin pilot.

Degree of Risk: C.