

AIRPROX REPORT No 2012008

Date/Time: 17 Jan 2012 1027Z

Position: 5155N 00510W (2nm
NW of Brawdy disused
A/D)

Airspace: FIR/UKDLFS LFA7 (Class: G)

Reporting Ac Reported Ac

Type: AS355 MC-130

Operator: Civ Comm HQ USAFE-UK

Alt/FL: 500ft ~600ft agl
RAD ALT NK

Weather: VMC In Drizzle VMC NR

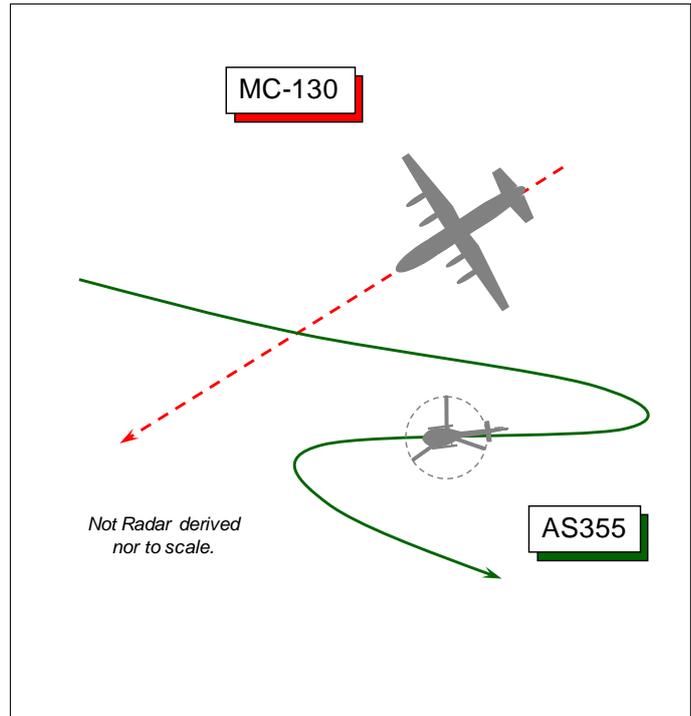
Visibility: 8-10km NR

Reported Separation:

Nil V/400m H 500m H

Recorded Separation:

Not recorded



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE AEROSPATIALE AS355F1 SQUIRREL II HELICOPTER PILOT reports that after departure from Pembrey he was conducting a pipeline inspection task under VFR and was in receipt of a BS from Haverfordwest on 122.200MHz. Whilst approaching a position about 2nm NW of Brawdy disused aerodrome, flying in VMC some 300ft clear below cloud in drizzle, heading 260° at 110kt in a level cruise at 500ft RAD ALT, a C130 was suddenly seen in his 3 o'clock about 400m away overtaking his helicopter to starboard at the same height about 100kt faster. He maintained his track as the C130 flew past with minimum horizontal separation of about 400m. The Risk was assessed as 'medium'.

His helicopter is coloured dark red and the HISLs were on. PCAS is fitted and a squawk of A0036 was selected with Mode C on. Mode S is not fitted.

THE LOCKHEED MC-130 PILOT provided a narrative, reporting that he was operating VFR in VMC conducting tactical low-level training in LFA 7. During the period of the Airprox he was conducting a Self-Contained Approach (SCA) at a 500ft Set Clearance Plane (SCP) to a planned low-approach at Brawdy disused A/D whilst monitoring the Haverfordwest TOWER frequency of 122.200MHz. At 6-mile final, in conjunction with SCA slow-down, he observed helicopter traffic visually and on the ac's ETCAS at a range of 4 miles. The helicopter, subsequently identified visually as an Aerospatiale variant matching the description of the reporting pilot's ac, had initially been observed on a diverging course to the SE. At 4-mile final, he observed the AS355 executing an approximate course reversal, resulting in a near-parallel ground track with a 1mile off-set. Visual avoidance was precluded at that point by solid fog/cloud at 1000ft agl, a lower cloudbase to the N (away from the AS355) and his ac's reduced manoeuvrability in the approach/gear/flap configuration. Electing to continue the SCA, he visually avoided the AS355 by overtaking at an estimated 40-90kt overtake. At 2-mile final, the AS355 was in his MC-130's 8 o'clock position and was observed reversing course again toward the SE. At the closest point the AS355 passed 500m away to port. The remainder of the approach, missed approach, and departure to the N was uneventful and the AS355 was observed on ETCAS throughout the occurrence.

UKAB Note (1): An A/G Service is provisioned at Haverfordwest - callsign Haverfordwest RADIO – when the A/D is open. The RT is not recorded.

UKAB Note (2): The Airprox occurred outwith recorded radar coverage.

UKAB Note (3): Notification of pipeline helicopter activity within LFA 7S was promulgated within the morning notification message issued by the LFBC under Y series NOTAM – Y0110/12, transmitted at 161617Z JAN.

UKAB Note (4): The disused A/D at Brawdy is now a Barracks operated by the Army, within which is situated a HLS.

USAFE-UK comments that further discussions with the Aircraft Commander(AC) established that he first saw the AS355 crossing his track, which he thought was about 240°, from right to left on a generally south easterly heading and passing clear. The subsequent course reversal by the AS355 indicated that its pilot had not seen the MC-130 prior to rolling out on his stated heading of 260°. However, the point at which the AS355 saw the MC-130 is not clear because its track roughly paralleled that of the MC-130 for some 2nm before turning away to the south east. The MC-130 AC was aware of the relevant PINS NOTAM.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar video recordings and comment from the appropriate operating authority.

The USAFE-UK Advisor explained that the MC-130 crew was aware of the possibility of encountering a pipeline inspection helicopter from the PINS NOTAM. Nevertheless, Members were briefed that such warnings were spread across a very large tract of the UK DLFS that morning and the unspecific nature of the information was of debatable benefit. Nevertheless, the MC-130 carries a large flight deck crew and the Advisor stated that after the pilot acquired it visually and on his sophisticated ETCAS (Enhanced TCAS) display the crew monitored the helicopter closely. It seemed that at one point during their self-contained (internal aids) approach, the MC-130 crew was restricted in their ability to manoeuvre away from the AS355 by the poor weather to the N and might also have lost visual contact on the helicopter, albeit that they maintained VMC throughout. One Member was concerned that the MC-130 pilot seemed to have carried on their approach regardless and if they had to turn away to the N might have flown into cloud. However, the MC-130 crew always retained the ability to climb-out of the LFS if they encountered IMC and the Advisor stressed that the MC-130 crew retained contact on the AS355 throughout the encounter on their ETCAS and were monitoring the position of the helicopter constantly.

Unfortunately, the occurrence was below recorded radar coverage so the geometry could not be clarified, but from the additional information obtained by the USAFE-UK Advisor, the MC-130 pilot recalled that the AS355 had been manoeuvring before he passed abeam the helicopter and its pilot spotted the MC-130 overtaking about 400m to starboard. It was not evident why the AS355's PCAS had not detected the presence of the MC-130 beforehand – unless the MC-130 was not squawking which seemed unlikely; however, the AS355 is shown squawking the appropriate conspicuity squawk with Mode C sometime earlier whereas the MC-130 is not shown at all. Nevertheless, a helicopter pilot Member suggested that the AS355 pilot might have been startled by the sudden appearance of such a large ac unannounced, but he should be reassured that his helicopter had been seen beforehand.

It was stressed to the Board that the diagram was merely a graphic representation from the best recollection of the MC-130 pilot, who believed there was a course reversal by the AS355 prior to it rolling out on 260° and it was after this point that the MC-130 overtook the helicopter 500m away. It was unclear if the AS355 pilot could potentially have seen the MC-130 any earlier before he turned but he would certainly have been unable to do so when the MC-130 was approaching from astern. The perceptions of the minimum separation from both pilots were not widely dissimilar at 400-500m and it was clear that the MC-130 crew had good SA on the AS355 during the occurrence. Taking all

these factors into account the Board concluded that this Airprox had stemmed from a sighting of VFR traffic operating legitimately in Class G airspace. Moreover at these distances, in the Board's view, normal safety standards and parameters had been maintained in the circumstances reported here.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Sighting Report.

Degree of Risk: E.