

AIRPROX REPORT No 2011091

Date/Time: 25 Jul 2011 1957Z

Position: 5138N 00130W (7.5nm SSE
Brize Norton - elev 288ft)

Airspace: Oxford AIAA (Class: G)

Reporting Ac Reported Ac

Type: Pegasus M/Light C130

Operator: Civ Pte HQ Air (Ops)

Alt/FL: 1200ft 1500ft
QNH (1010mb) QNH

Weather: VMC CLOC VMC NR

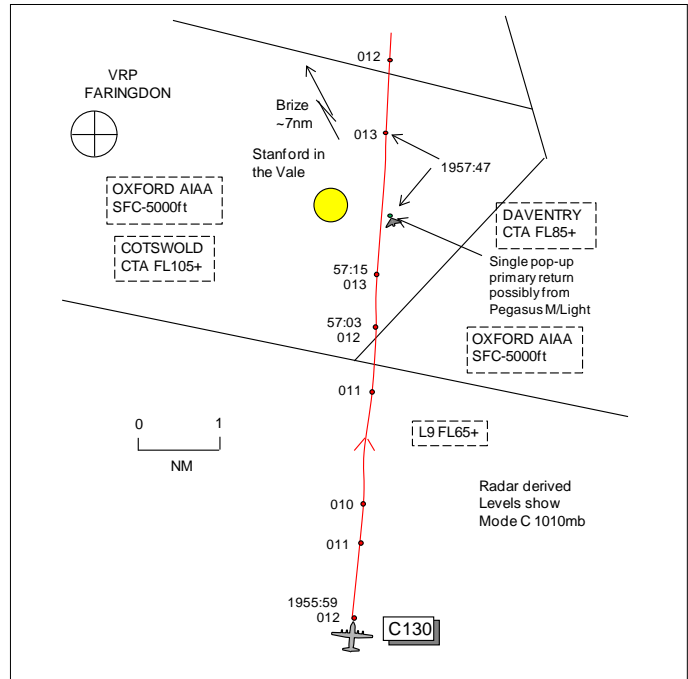
Visibility: 50km NR

Reported Separation:

30ft V Not seen

Recorded Separation:

NR



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PEGASUS M/LIGHT PILOT reports flying a local sortie non-radio from a private site near Swindon, VFR. The visibility was 50km in VMC and the ac was coloured black/green/white and no lighting was fitted. Passing E abeam Stanford in the Vale [7.5nm SSE Brize] heading 340° at 45kt level 1200ft QNH 1010mb he was overtaken from behind and directly above, by 30ft, by a C130. The event happened too quickly to take any avoiding action and he assessed the risk a high.

THE C130 PILOT reports that subsequent to visual recovery to Brize from a low-level training sortie, he was informed that a M/Light pilot had filed an Airprox just to the E of Stanford in the Vale, 3-4nm S of the Brize CTR. No traffic was sighted by the crew at the time. He was not certain if they were receiving a radar service at the time but they thought it reasonable to assume they were in contact with Brize given their proximity to the CTR, speed and N'ly track. He thought he was at 1500ft and 210kt at the position stated.

UKAB Note (1): Sunset was 2008Z.

THE BRIZE RADAR CONTROLLER reports that he did not see any radar returns come close to the C130 and knew nothing of the incident.

Brize METAR shows EGVN 251950Z 34008KT CAVOK 20/03 Q1010=

THE BRIZE SUPERVISOR reports manning the ADC position having been notified of a C130 recovering visually from the S. He monitored the Radar frequency from upstairs and when the C130 was transferred to him it joined the visual cct and landed safely. It was only after the M/Light pilot's telephone call to the oncoming Supervisor, who submitted an ASIMS report, that his shift became aware of the event.

BM SAFETY MANAGEMENT reports that this Airprox occurred between a C130 conducting a visual recovery to Brize Norton in receipt of a BS from BZN APP and a M/Light operating VFR.

The M/Light pilot's report states that the Airprox occurred outside the Brize CTR and that they were not in receipt of an ATS. Moreover, BZN APP states that at the time of the occurrence, although the

PSR was fully serviceable, the surveillance display did not paint any primary-only contacts in the vicinity of the C130; hence they were unable to provide the C130 crew with any TI.

Based upon the limited information available, it is clear that the ATM related safety barriers were unable to function and that the sole remaining barrier was that afforded by “see and avoid.” However, given the limited separation reported by the M/Light pilot, the fact that the C130 crew did not report an Airprox, nor a sighting of the M/Light to ATC and the M/Light pilot’s statement that the incident occurred too quickly for them to take any form of avoiding action, this suggests that “see and avoid” also failed in this instance, leaving only providence.

UKAB Note (2): The radar recording at 1955:59 shows the C130 12nm SSE Brize tracking 005° having just changed from a 7001 squawk to a Brize 3740 code and indicating FL012 (1100ft QNH 1010mb). During the next minute the C130 continues on a steady track with its Mode C showing a descent to FL010 (900ft QNH) before climbing up to FL013 (1200ft QNH) at 1957:15 when the ac is 1nm SE of Stanford in the Vale village. The C130 passes E abeam the village, through the Airprox reported position, maintaining FL013 (1200ft QNH) and as it reaches a position 1nm NE of the village (1957:47), a single pop-up primary return appears, possible the Pegasus M/Light, in the C130’s 6 o’clock range 1nm. The Pegasus pilot reported cruising at 1200ft QNH 1010mb when the CPA occurred.

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.

As this incident occurred in Class G airspace, ‘see and avoid’ pertained. The Pegasus M/Light would have presented a small (tail-on) target aspect to the C130 crew in their 12 o’clock. Also the incident time was almost at sunset, making the sighting of the M/Light more difficult owing to the lack of lighting carried, the ac’s colour scheme and the fading ambient light. Although there was an equal responsibility on both crews to maintain their own separation from other ac, given the geometry of encounter, it would have been difficult for the Pegasus pilot to have seen the approaching C130 in his 6 o’clock. These factors led Members to decide that the cause of the Airprox was a non-sighting by the C130 crew.

Looking at risk, the incident happened too late for the Pegasus pilot to take any action and the C130 crew did not see the M/Light at all. Although the Board accepted that the Pegasus pilot’s estimate of 30ft vertical separation was made in good faith, he did not report encountering any of the considerable wake turbulence that would be expected behind and below a C130 at such close quarters. That said, with the radar recording showing the C130 passing through the area at 1200ft QNH, the same altitude flown by the Pegasus, this had undoubtedly been a very close call. These elements led the Board to conclude that an actual risk of collision existed during this encounter.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A non-sighting by the C130 crew.

Degree of Risk: A.