

AIRPROX REPORT No 2011139

Date/Time: 13 Oct 2011 1127Z

Position: 5146N 00205W
(7nm N Kemble)

Airspace: Lon FIR (Class: G)

Reporting Ac Reported Ac

Type: BE200 Untraced

Operator: Civ Com NK

Alt/FL: 3500ft NK
QFE 1018mb NK

Weather: VMC CLBC NK

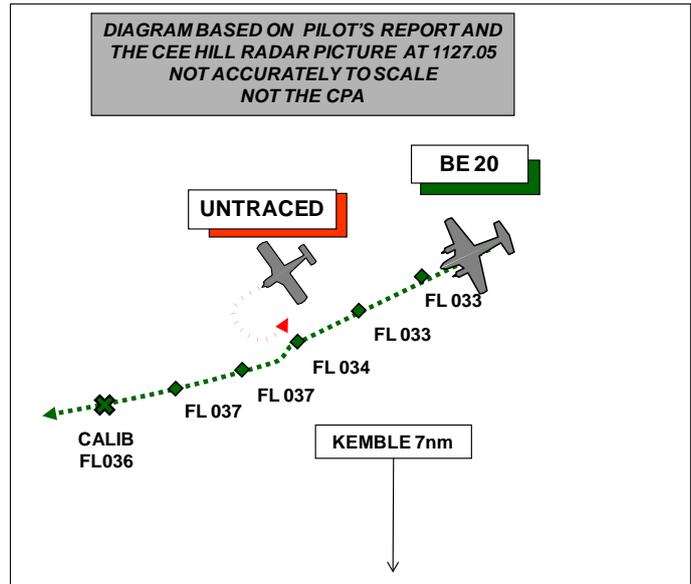
Visibility: NR NK

Reported Separation:

0ft V/100m H NK

Recorded Separation:

NR



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE BE200 PILOT reports flying a blue and white ac with all external lights switched on, on a calibration flight of the Brize Norton PAR (RW 08) under VFR; he was squawking as directed with Modes C and S, was in receipt of a TS from Brize DIR and TCAS 1 was fitted. While long downwind in the radar pattern outbound for a calibration run, heading 270° at 180kt but about to turn base, they were busy looking ahead and below for traffic that had been called by Brize, when the PNF, in the RH seat, became visual with a white, low-wing, single-engine light ac in level flight in their 0230-0300 o'clock and about 300m away. She initiated a climbing LH turn to avoiding the ac and this was continued by the PF and collision was averted. There were no TCAS indications.

He assessed the risk as being high and reported the incident to DIR.

UKAB Note (1): The other ac appeared on the Clee Hill radar as an intermittent primary only contact on a similar track to the BE200 before turning. Despite extensive procedural tracing action the ac could not be identified. The CPA appeared to take place at about 1126:45 as the BE200 was squawking 'ident' (no request was apparent on the RT transcript). At that point the ac commenced a climb levelling 200ft above its cruising alt before descending again and then turning L on to the base leg. Although the radar recording appears to show a slight right hand turn commencing at 1126:53, the left hand turn reported by the pilot probably took place at about 1126:40 and was between radar sweeps; consequently it could not be seen on the recording.

RAF BRIZE NORTON CONTROLLER reports controlling on a busy DIR session with a C130 conducting Tactical Landing Training, a VC10 in the instrument pattern and a BE200 calibrating both the RW08 and RW26 PARs. The BE200 left the CTR to the W of Brize to self position for a 3500ft QFE run. The ac was under a TS, had been flying VFR in the Brize CTR, was warned of the high traffic density to the N of Kemble and he believes that he also warned them of possible late warnings of traffic. When trying to ascertain from the crew whether they required to fly O/H Kemble, as the controller wanted to pass TI to them, he was asked to 'Standby' and then was informed that the BE200 had an Airprox with an unknown ac. The incident occurred ivo 5145.53N 00209.48W on a radial of 330° at 7nm from Kemble. It was called at 1128Z with the BE200 at 3500ft QFE 1018mb against traffic believed to be a PA28 type tracking S at the same alt. He does not recall the BE200 pilot passing their heading, but they had taken action to avoid a collision. He asked Kemble for TI on

any traffic of that type but they were not working any ac in that area. The tapes were impounded should they be required. The aircrew reported that they would submit their report on their return to base.

BM SAFETY MANAGEMENT reports that this Airprox occurred between a BE200 operating VFR in VMC in receipt of a TS from Brize Norton Director (DIR) and an untraced light ac. DIR stated that the workload at the time of the incident was high to medium.

At 1124:51 DIR provided TI to the BE200 as, *“traffic west, four miles, two contacts, no height”* which the pilot acknowledged. The radar replay shows one primary-only contact in the position reported by DIR.

At 1125:44 LARS initiated coordination with DIR on traffic unrelated to the incident, with the landline conversation ending at 1126:05. At 1126:15, DIR updated the TI to the BE200 stating, *“previously called traffic twelve o’clock, half mile, similar heading, no height”*. The previously mentioned primary-only contact faded from the radar replay at 1126:13, one mile west of the BE200 in its right one o’clock.

DIR then asked the BE200 whether they intended to route through the Kemble overhead, mentioning that there was “high traffic density to the south”. The BE200 pilot instructed DIR to *“standby”* at 1126:32 and then at 1126:46 transmitted *“Er, standby Calibrator”*. DIR was then involved in liaison with unrelated traffic before the BE200 called them at 1127:16 stating “we’ve actually just had an airprox with a light aircraft that was er approaching from the north”.

Although no conflicting traffic can be seen on the radar replay, at 1126:45 the BE200 can be seen to have climbed 200ft and, at 1126:48 to have climbed a further 200ft. Based upon the BE200 HP’s description of the initial avoiding action taken by the NHP on sighting the unknown ac, this suggests that this was the point when the Airprox occurred.

While it cannot be proved conclusively, based upon the evidence it appears that the ac that was the subject of the TI passed to the BE200 by DIR, was the reported ac. In this instance the ATM related safety barrier operated effectively in that the BE200 was provided timely and accurate TI in accordance with CAP 774. Unfortunately, the lack of an operating transponder on the unknown ac prevented the operation of the additional safety barrier offered by the BE200’s TCAS, leaving ‘see and avoid’ as the remaining safety barrier. Whilst it has not been possible to determine whether the pilot of the unknown ac was able to ‘see and avoid’, the BE200 NHP was able to visually acquire the unknown ac in time to take avoiding action.

This Airprox adds further weight to the argument for a traffic/collision warning system that is interoperable across all types operating within Class G airspace.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the BE200 pilot, transcripts of the relevant RT frequency, radar recordings, reports from the air traffic controller involved and reports from the appropriate ATC authority.

The Board noted that this incident took place in Class G airspace where both pilots had an equal and shared responsibility to see and avoid the other ac. Due to the turn of the untraced ac towards the BE200 and the resultant bank angle, the ac could have been ‘belly up’ to the BE200 and therefore (at least in the latter part of the turn) the pilot would not have been able to see the BE200; the radar recording, however, was inconclusive regarding the untraced ac’s actual track.

The BE200 pilot was given accurate and timely TI by Brize Norton regarding the unknown contact and could have taken a lateral separation based on that information; however, there were several other ac in the area just outside the zone (particularly to the S where they had been warned that

Kemble was busy) that they could have conflicted with had they made a precautionary avoidance turn. The untraced light ac would initially (before its turn) have been tail-on to the BE200 and would have been very hard to see; that being the case in the Board's view, the BE200 crew had most likely seen the ac as early as practicable. The Board therefore concluded that the incident had been a conflict in Class G airspace.

Members observed that although late, the BE200's avoiding action was effective and, combined with the 300m separation extant, had removed any risk of collision. The relative lateness of the BE200's manoeuvre, Members agreed, had resulted in a reduction of normally accepted safety standards.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in Class G airspace.

Degree of Risk: B