

AIRPROX REPORT No 2011041

Date/Time: 13 May 2011 1022Z

Position: 5045N 00316W (5.8nm E of Exeter - elev 102ft)

Airspace: London FIR (Class: G)

Reporter: Exeter ATC

1st Ac

2nd Ac

Type: PA34-200T C172

Operator: Civ Trg Civ Club

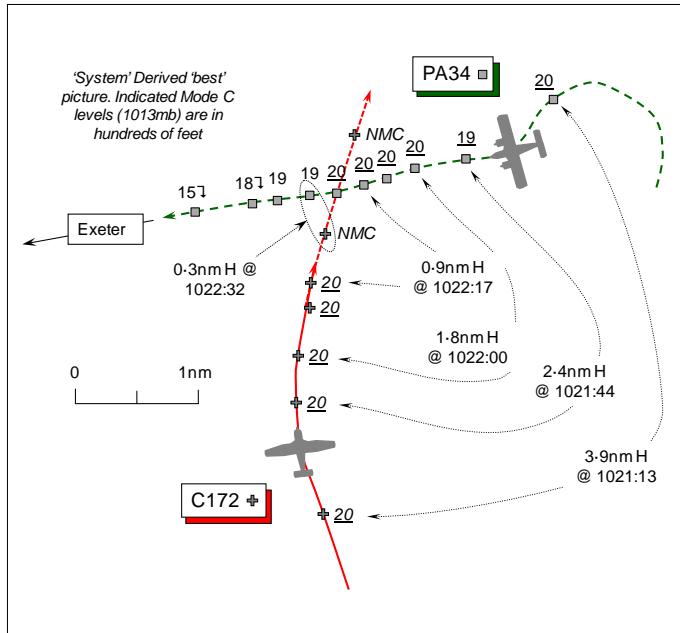
Alt/FL: 2200ft 2300ft
QNH (1021mb) (N/K)

Weather: VMC CLBC VMC

Visibility: 10km >10km

Reported Separation:

100-200ft V/½nm H 100ft V/300-400m H



Recorded Separation:

0.3nm H

CONTROLLER REPORTED

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE EXETER APPROACH RADAR CONTROLLER (RADAR) reports that he liaised with Plymouth MILITARY (MIL) [a LARS ATCRU] regarding the intentions of an A4540 squawk observed 7nm SE of Exeter. [UKAB Note (1): This was reported to be an Apache helicopter at the time, but the reported ac was subsequently positively identified by the RAC as the subject C172.] Plymouth MIL advised that they were no longer providing an ATS; the pilot had been instructed to squawk A7000 and leave the frequency. However, the ac continued to squawk A4540 and tracked northbound towards the final approach to RW26 at the same level as the PA34 which was at 8nm Final on an ILS approach. Two calls were made on 128.975MHz in an attempt to raise the pilot but neither met with a response. The PA34 crew was passed TI twice about the unknown ac and after the second call the pilot reported visual with an aeroplane. The PA34 Examiner subsequently telephoned to advise he believed the reported ac was a C172.

The squawk was lost as it tracked through the RW26 FAT, before a contact appeared squawking A7000 continuing towards Dunkeswell. Further investigation lead to a possibility of the ac being a C172 based at a local aerodrome.

The 1020UTC Exeter METAR: 230°/6kt 190°V280°; >10km Nil Wx; SCT 032, SCT040 QNH1021. Wessex RPS 1015mb; Portland RPS 1017mb.

THE PIPER PA34-200T PILOT, reports he was the PIC conducting an Instrument Rating examination of a candidate, executing an ILS approach to Exeter's RW26 under IFR in VMC, but with IF screens in place. They were in receipt of a TS from Exeter RADAR on 128.975MHz and the assigned squawk was selected with Mode C; neither TCAS nor Mode S are fitted.

RADAR had advised them of unknown traffic from about 8nm Final on the ILS. At about 6nm Final to RW26, heading 260° at 120kt, level at 2200ft Exeter QNH (1021mb) flying about 200ft below cloud, they obtained visual contact with the other ac about 1nm to the S. It was a high-wing single-engine aeroplane - probably a C172 – approaching from their 10 o'clock, 1nm away at a similar altitude and crossing obliquely astern from their 10 o'clock into their 5 o'clock. The pilot under examination

continued to fly the approach whilst he as PIC monitored the other ac visually as it passed about 100-200ft below his ac and ½nm astern at the closest point. No avoiding action was taken as none was necessary following the visual sighting. He assessed the Risk as 'low' in the prevailing conditions, but highlighted the lack of protection given to published instrument approaches in the 'Open FIR'. His ac is coloured white with black detailing; the HISLs and landing lights were on.

THE REIMS CESSNA-F172M PILOT (C172) reports that at the reported time of the Airprox, he was returning to Dunkeswell from a local VFR solo sightseeing flight with 2 passengers. He had been in receipt of a BS from Plymouth MIL but could not recall the squawk assigned; Mode C was on. Neither TCAS nor Mode S are fitted. The ac is coloured white and blue; the wingtip HISLs were on.

His route had taken him westbound along the coast from Lyme Regis to overhead Sidmouth before turning N for Dunkeswell. About 2-3nm due N of Sidmouth, heading N in a level cruise at 2300ft at 100kt, some 500ft below and 10km clear of cloud, he saw the other ac late about 300-400m away, crossing ahead from R – L. At the closest point the other ac – a cream coloured PA34 – passed about 100ft above his ac 300-400m away with a 'low' Risk. He did not consider that any avoiding action was necessary to maintain flight safety and none was taken.

In retrospect, given their proximity to Exeter Airport, it would have been appropriate to have called Exeter RADAR earlier on 128.975MHz before calling Dunkeswell RADIO to join their cct.

ATSI reports that the Airprox occurred in Class G airspace, 5.8nm to the ENE of Exeter Airport. The PA34 was an IFR training flight, making an ILS approach to Exeter's RW26 in receipt of a TS from Exeter RADAR. The C172 was a VFR flight operating from Dunkeswell A/D, routeing along the coast from Lyme Regis to Sidmouth, before turning N.

At 1017:55, the radar recording shows an unknown contact [the C172] 10nm to the SE of Exeter Airport, squawking A4540 [Plymouth (Mil)], tracking W along the coastline, indicating 2000ft (1013mb) (converts to an altitude of 2216ft Exeter QNH (1021mb) at 1mb/27ft). The PA34, squawking A0422, is 3.5nm NE of Exeter Airport, tracking eastbound and outbound for an ILS approach to RW26.

At 1020:30 the radar recording shows the C172 7.2nm SE of Exeter, turning R onto a northerly track towards the final approach for RW26 and still displaying a Plymouth (Mil) squawk of A4540. RADAR liaised with Plymouth Mil and the controller's report indicated that Plymouth Mil advised that the ac had left their frequency and been told to squawk A7000.

At 1021:14, RADAR passed TI to the PA34 crew about the C172, "...*unknown traffic 10 o'clock range 3 miles intentions unknown appears to be crossing left to right indicating same level at the moment descending.*" The PA34 pilot replied, "*keeping a good lookout [PA34 C/S].*" The radar recording shows the PA34 on an 8nm Final indicating 2000ft (1013mb) [2216ft QNH] and the unknown C172 in the PA34's 10 o'clock at a range of 4nm indicating 2100ft (1013mb) [2316ft QNH]. The PA34 pilot reported localiser established at 6.8 DME.

At 1021:45, RADAR updated the TI, "[PA34C/S] *the unknown traffic [C172] again now in your 11 o'clock range 2 miles appears to be crossing left to right indicating 2 thousand 2 hundred feet same level.*" At 1022:00, RADAR tried unsuccessfully to establish RT contact with the unknown ac; however, at this point the PA34 pilot reported visual with the unknown C172.

[UKAB Note: The radar recording shows the C172, in the PA34's 10 o'clock at 1.8nm, both ac indicating 2000ft (1013mb) (2216ft QNH) at about the point the PA34 pilot reported visual contact. The SSR label of the C172 disappears at 1022:17, leaving only intermittent primary radar returns until the pilot selected A7000 after the ac had passed. The CPA occurred at 1022:32, when the C172 is shown passing 0.3nm to port of the PA34 before drawing astern, the PA34 indicating 1900ft (1013mb) – about 2116ft QNH.]

The PA34 was in receipt of a TS from Exeter RADAR. When it became apparent that the unknown traffic, squawking A4540 was likely to come into conflict with the PA34, the Exeter RADAR controller tried to obtain the ac's intentions from Plymouth Mil. RADAR passed TI to the PA34 crew on the unknown traffic. When this TI was updated, the PA34 pilot sighted the C172 and continued to monitor the ac until it had passed.

The Manual of Air Traffic Services (MATS) Part 1, Section 1, Chapter 11, Page 5, paragraph 4.1.1 and 4.5.1, states:

'A Traffic Service is a surveillance based ATS, where in addition to the provisions of a Basic Service, the controller provides specific surveillance derived traffic information to assist the pilot in avoiding other traffic. Controllers may provide headings and/or levels for the purposes of positioning and/or sequencing; however, the controller is not required to achieve deconfliction minima, and the avoidance of other traffic is ultimately the pilot's responsibility.'

The controller shall pass traffic information on relevant traffic, and shall update the traffic information if it continues to constitute a definite hazard, or if requested by the pilot. However, high controller workload and RTF loading may reduce the ability of the controller to pass traffic information, and the timeliness of such information.'

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequency, radar video recordings, a report from the air traffic controller involved and reports from the appropriate ATC authority.

It was evident that RADAR had detected the potential for a conflict with the unknown ac and passed comprehensive TI to the PA34 crew twice. After the controller's second transmission of TI at a range of 2nm, the PA34 PIC reported visual contact with the C172; the radar recording reflects this was when the conflicting ac was 1.8nm away and slightly more distant than the PA34 pilot's estimate of 1nm. The Board noted that the PIC of the PA34 was content to allow the pilot under examination to continue to fly the approach, whilst he monitored the other aeroplane visually and watched as the C172 crossed obliquely astern from their 10 o'clock into their 5 o'clock, at a similar altitude, before the twin was descended on final approach. Whilst in this situation the C172 pilot was required by the 'Rules of the Air' to 'give way' to the PA34 on his right he reports that he had not seen the twin until it was about 300-400m away, crossing ahead from R – L, and somewhat later than the PA34 P-i-C. The Members agreed unanimously that the late sighting by the C172 pilot of the PA34 was the Cause of this Airprox.

Recorded radar data shows that before their tracks crossed both ac were at the same altitude – 2216ft amsl. Although the Board recognised that this Airprox occurred in Class G airspace, where both pilots were operating legitimately in accordance with the ANO, Members considered it unwise that the C172 pilot flew at pattern altitude through a promulgated IFR approach 'feather' that is clearly marked on VFR charts. Plainly the C172 pilot had to cross through the extended centre-line to reach his home base at Dunkeswell at some stage, but pilot Members concurred with his own expressed view that it would have been better airmanship to have done so whilst in communication with Exeter RADAR who could have provided an earlier warning about the PA34 in their ILS pattern.

The radar recording shows the separation at the CPA was 0.3nm and although the C172 pilot saw the PA34 late, it seems he saw the PA34 in time to ensure that he passed clear astern. Neither the PA34 pilot, nor the C172 pilot considered that avoiding action was warranted. Furthermore pilot Members considered the PA34 PIC was always in a position to take control and effect robust avoiding action if need be. Therefore, in these circumstances, the Board concluded that no Risk of a collision had existed.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by the C172 pilot.

Degree of Risk: C.