## AIRPROX REPORT No 2010043

Date/Time: 8 Mar 2010 1152Z

*Position:* 5257N 00230W (5nm

N Tern Hill)

Airspace: Shawbury AIAA (Class: G)

Reporting Ac Reported Ac

*Type*: Squirrel PA38

Operator: HQ Air Trg Civ Trg

<u>Alt/FL</u>: 1900ft ↑ 2200ft

(RPS 1028mb) (RPS 1028mb)

Weather: VMC HAZE VMC NR

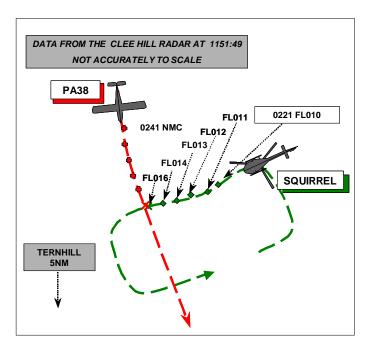
<u>Visibility</u>: 5.0 30

Reported Separation:

150ft V/50ft H 400ft V/ 0 H

Recorded Separation:

NR V/0 H



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE SQUIRREL PILOT reports flying a yellow and black helicopter with nav lights and strobes switched on, on a training flight, squawking a Shawbury conspicuity code with Mode C and operating on a Shawbury monitored quiet frequency and booked into the LFS. Half an hour into a sortie of advanced autorotations, using the canal north of Market Drayton as a line feature entry point for comparison, the ac was being repositioned at 70kt in a left-hand racetrack to re-cross the canal on a notional into-wind heading of 070° for a further autorotation. Climbing through 1900ft with about 30° to go and the ac starting to level off, the NHP student became aware of a light ac in close proximity through the overhead window and warned the HP [instructor] who levelled off. Having levelled off and rolled 'wings level' the HP then also saw the ac, a white coloured, light fixed-wing ac similar to a Grob Tutor, continuing along the right-hand side of the canal towards the S. The fixed wing ac had made no apparent attempt to take evasive action and appeared to be following the line feature of the canal into sun. At the closest point the ac was assessed to have been about 50ft above and five 'spans' clear. The student noted that the white ac had a blue flash down the side, was being flown by a single pilot and carried a registration that they only partly noted.

He assessed the risk as being high.

**THE PA38 PILOT** reports flying a white ac with blue lettering with nav lights and strobes switched on in receipt of a BS from Shawbury LARS squawking as directed with Mode C, he thought, on a training flight. He was heading 151° at 90kt, tracking from Oulton Park to Wolverhampton and just S of Nantwich and level at 2200ft on the RPS when he heard an RT exchange with traffic tracking from his left to right. He then saw a black and yellow Twin Squirrel helicopter 45° left of his nose, about 2km away and lower than himself. As he was positioned to the right of the traffic he maintained speed/direction iaw Rule 17 [RoA]; the traffic passed below him by about 400ft and then passed to the right, appearing to maintain level/direction throughout his observation. At no time did he lose sight of the helicopter or consider the separation to be an issue, assessing the risk to be none.

UKAB Note (1): The recording of the Clee Hill Radar shows both ac. At 1150 the PA38, squawking 0241 (Shawbury) but with no Mode C, is tracking 170° 3nm to the NNW of the Squirrel, squawking 0221 (Shawbury), which is tracking 080° indicating FL000 climbing. At 1150:17 when the PA38 is 2.8nm NW of the Squirrel, the latter commences a tight left turn rolling out on 230° and climbing

through FL007 at 1150:48 with the PA38 in its 0230 at 1.8nm. The Squirrel continues to climb now on 250° and the PA38 tracks 170° until the ac cross at 1151:44 with the Squirrel contact climbing through FL016 coincident with the PA38, which is apparently directly above it. After the ac cross the Squirrel turns hard left onto a NW track still at FL016 passing 0.4nm behind the PA38.

**HQ Air (TRG)** comments that the PA38 pilot had the Squirrel in sight throughout and did not consider the separation to be an issue. However, the relatively late sighting by the Squirrel crew seems to have caused them concern. The PA38 pilot controlled the separation distance throughout this occurrence and with hindsight it may have been prudent for him to have given a wider berth even though he had right of way iaw Rule 17.

## PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar recordings and report from the Squirrel operating authority.

Members agreed that ATC had played no part in this incident and that both ac had been operating legitimately in Class G airspace conducting their respective activities. That being the case, the pilots of both ac had an equal and shared responsibility to see and avoid other ac. The PA38 pilot reported that he saw the Squirrel about 2km away. Members agreed that he had seen the Squirrel involved (there were several Squirrels in the area) since the geometry was consistent, and that seeing the small helicopter climbing up from low level at 2km was reasonable in the circumstances (the Squirrel pilot reported the conditions as being HAZE).

The Board examined the Squirrel crew's participation and discussed the suitability of the area selected for the practice autorotation; bearing in mind that it was in a promulgated AAIA and that DHFS need to conduct a large number of such practices, a majority of Members agreed that there was not a more suitable alternative. That being the case, and that the majority of DHFS Squirrel flying is instructional, lookout, particularly by instructors, is most important. While accepting that the cross-cockpit view form the Squirrel is restricted, particularly when looking above, this is a known factor for which provision should be made, if necessary by manoeuvring one's head, or the ac. It was also pointed out that many civil light ac fly at or about 2000ft, ironically in order to avoid the majority of Military traffic, therefore even more attention should be paid to that height band.

The Board noted that although the PA38 pilot had right of way under the rules of the air, it is always wise to assume that the pilot(s) in the other aircraft have not seen you until their actions prove otherwise. Whenever possible an adjustment of heading to provide lateral as well as vertical separation will reduce the alarm factor of a late sighting and may assist the other pilot's acquisition. Members agreed that, as the Squirrel crew had not seen the PA38 until about the time the ac had crossed, they had not had time to take any avoiding action; however since the PA38 pilot had seen the Squirrel at 2km, monitored it continuously, and considered that it was not a threat and had been in a position to increase the separation if necessary, it followed that there had been no risk of collision.

## PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: Late sighting by the Squirrel crew.

Degree of Risk: C.