## AIRPROX REPORT No 2010100



0ft V/ <0.1nm H

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE PA28 PILOT (A)** reports that she was conducting a CPL Skills test (partial) in the cct in a white ac with orange stripes and was squawking 7000 with Mode C, while in receipt of an Aerodrome Control Service from Wycombe TWR. The cct traffic was light and only a few transmissions were heard on the RT. While at the mid-point downwind for RW06 (LH) heading 240° at 120kt, and discussing what type of approach to do next, her candidate saw another PA28 (with wheel spats) 150m away in their 10 o'clock, crossing their flightpath from left to right, at a similar height. As he exclaimed the ac passed 100m ahead of them heading in a northerly direction.

The examiner asked the controller if he had transit traffic, to which he replied "*No, just a departure to Halton*". Since a test was being conducted she did not report the incident until they were on the ground and assessed the risk of collision as being high.

**THE PA28 PILOT (B)** reports that he was flying a private flight from Wycombe to RAF Halton in a white and red ac squawking 7000. On arrival at Halton he was informed of an Airprox but saw no other ac.

Prior to departure at checkout he enquired about the noise abatement procedure and he had a chart showing the details.

On departure ATC told him to proceed to point Alpha [the N end of the parking apron] and hold, which he did. They then told him to move to the grass taxiway [S and parallel to the asphalt RW] indicated by the white markers but he held his position for a moment as a stationary ac was facing him at point Bravo [on the taxiway at the end of the grass parallel RW] but he was urged to move, which he did and subsequently taxied to the run up position for RW06 and advised that he was ready for departure. ATC then asked him to hold for incoming ac, which he did; after the incoming ac had passed they told him to line up and he was then cleared for take off. While initially heading 020° at 80kt he was aware of an ac ahead in the climb-out, which he subsequently assumed to be the incoming ac doing a touch and go. He is fairly certain that he called, 'C/S taking off', as this is his normal procedure and that he flew the appropriate noise abatement turns which end on a track of

360° then headed north towards Halton. He does not recall hearing any other messages from ATC but before he made the frequency change he thanked Wycombe for their help.

He thought he had maintained a good lookout throughout and could not understand why, having been cleared for take off, there was another ac in the vicinity.

**ATSI** reports that the Airprox occurred at 0948:39 in Class G airspace, 1.7nm NW of Wycombe Air Park and within the ATZ (radius 2nm up to 2000ft aal 520ft).

Wycombe Air Park provide an Aerodrome Control Service (ADC) and RW06, with LH ccts, was the notified RW.

The Wycombe unofficial weather observation was reported as: 230955Z 020/05-10kts 9999 BKN020 Q1021.

ATSI had access to controller and pilot reports, together with radar recordings but, due to an administrative oversight, the original RTF recordings were not available. The controller was therefore questioned some time after the incident in order to clarify events.

The Wycombe Air Park AIP entry for noise abatement, AIP AD2-EGTB-1-5 (**22 Oct 09** i.e. the version valid ay the time of the incident) paragraph 2.21, stated:

'a. Pilots of departing aircraft are required to conform to strict Noise Abatement Procedures. These are available from the Aerodrome Operator.'

When Runway 06 is in use the Sands Noise Abatement Zone, which lies to the northeast, is active. Wycombe Air Park MATS Part 2, Section 1, Chapter 5, Page 1, paragraph 1, together with the Aerodrome pilot briefing diagram and sheet states:

'Runway 06 In Use:

As soon as **safely** possible, before reaching the M40 (e.g., at the windsock), turn left to maintain a track 020° M. Upon reaching 600 feet turn crosswind to track 360° M and maintain to circuit height.

**WARNING:** Close proximity of helicopters during initial climb.

Practice Engine Failures after Take Off are forbidden.

If remaining in the circuit, commence turn downwind to remain inside the Aerodrome Traffic Zone following the published downwind track for 24/06. DO NOT OVERFLY LANE END OR FRIETH whilst on the Downwind leg.

The fixed wing circuit is to be flown at 1000ft QFE.'

The PA28-201 (PA28 (A)) was an exam VFR flight, conducting visual LH ccts on RW06 while PA28-161 (PA28 (B)) was on a VFR flight from Wycombe Air Park to Halton Airfield and was given taxi clearance for departure RW06. When the pilot called ready for departure, PA28 (A) was turning final and had been cleared for a 'touch and go'. The PA28 (B) was given a conditional clearance, "*after the landing Cherokee line-up and wait*". Once the PA28 (A) completed the 'touch and go', the controller gave the PA28 take off clearance with an instruction to follow the noise abatement procedures. The controller expected PA28 (B) to take up a heading 020° until reaching 600ft and then turn onto a heading of 360° to leave the ATZ. PA28 (B) reported changing frequency to Halton Radio shortly after departure. The controller then passed instructions to a helicopter on the apron and did not observe the PA28 (B) as it tracked N.

The controller indicated that when the PA28 (A) reported downwind, the pilot asked whether he was aware of an over flight and described the ac that was in close proximity. The controller recognised that the ac described was probably the outbound PA28 (B) but he was unsure if the PA28 (B) had been given TI on the PA28 (A) in the cct; he believed, however, that it was evident that the cct was active and considered that the instruction to follow the noise abatement procedure would ensure that both ac initially followed the same track with PA28 (B) passing behind PA28 (A) as it turned downwind.

AIP AD2-EGTB-1-5 (22 Oct 09) paragraph 2.22, 3/iii, states:

'Pilots of aircraft flying within the confines of the Wycombe ATZ are responsible for providing their own separation from other aircraft operating within the ATZ.

MATS Pt1, Section 1, Chapter 12, Page 3, paragraph 2, states:

'Aerodrome Control is responsible for issuing information and instructions to aircraft under its control to achieve a safe, orderly and expeditious flow of air traffic and to assist pilots in preventing collisions between:

aircraft flying in, and in the vicinity of, the ATZ.'

The Airprox occurred within the ATZ. It is not clear if the Controller passed TI to the PA28 (B) regarding the PA28 (A) ahead in the cct but he issued instructions to the PA28 (B) to ensure that after departure, the ac followed the noise abatement procedures. The Controller believed that both ac would follow the same noise abatement procedure, with the PA28 (A) turning downwind, while the PA28 (B) departed the ATZ on a northerly track towards Halton, which lies NNE of Wycombe. The PA28 (B) reported changing to Halton Radio but the controller did not see it turning onto a northwesterly track and was therefore not aware of the potential conflict.

Radar recording shows the PA28 (A) follow the noise abatement procedure for a standard circuit with the PA28 (B) turning left at 480ft aal. PA28 (B) can be seen tracking 330° and climbing to circuit height, crossing the midpoint of the downwind leg in close proximity to PA28 (A).

UKAB Note (1): Although there is no transcript, it is understood that, while taxying out (due to his unfamiliarity with Wycombe) the pilot of PA28 (B) had difficulty in assimilating the instructions passed to him by TWR. On further questioning it became apparent that both ac were using RW06 (Asphalt) and that PA28 (B) was instructed to backtrack down RW24 (Grass) to the holding point for RW06 (Asphalt).

UKAB Note (2): The incident shows clearly on the recording of the Heathrow 23cm radar (and others). The geometry is as described in the ATSI report above and as depicted in the diagram.

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

Information available included reports from the pilots of both ac, radar recordings, reports from the air traffic controller involved and reports from the appropriate ATC authorities.

The Board noted that the respective pilots, one a locally based examiner and the other a visitor, had seemingly interpreted the published (mandatory) noise abatement procedures differently; PA28 (A) pilot apparently continuing to the airfield boundary before turning onto 020°, while PA28 (B) turned just after getting airborne and possibly about half way down the RW. [It was not possible from the information available to determine what precise track either ac flew on getting airborne as it was not mentioned in any of the reports and the ac were below the base of recorded radar coverage]. Having been briefed on the procedures in force at the time of the incident, the Board agreed that both interpretations were understandable. There was however, an expectation from both the controller and PA28 (A) crew that the correct procedure [for RW06] was to fly the ground track as depicted in

both the locally produced handout and in Pooley's Flight Guide, which continues straight ahead to the airfield boundary, rather than turning onto 020° 'as soon as safely possible', which in many cases can involve a significantly different ground track.

Although the ADC did not see the incident, and was therefore not able to provide any warning to the respective pilots, without the benefit of a transcript Members could not determine whether or not his actions had been reasonable.

Notwithstanding the factors above, both ac were operating in the area of the visual cct, which is a 'see and avoid' environment. The crew of PA28 (A) were engaged on a high-pressure check flight and, although they saw the opposing ac pass 100m ahead of them, the sighting was too late to take any effective avoiding action. PA28 (B) pilot on the other hand did not see, nor was he aware of (A), at any time. That being the case, the 'built-in' avoidance of about 150m [radar verified] had occurred purely by happenstance.

Members debated whether or not there had been an actual collision risk; considering the crossing geometry, however, they agreed that had there been an actual risk then PA28 (A) would have been in PA28 (B)'s forward field of view for some time, albeit possibly on a constant bearing. Since apparently this was not the case, the Board agreed that, although safety had not been assured, there had been no risk of a collision.

## PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: PA28 (B) turned into conflict with PA28 (A) in the Wycombe ATZ.

Degree of Risk: B.