AIRPROX REPORT No 2012145

Date/Time: 9 Sep 2012 1427Z (Sunday)

Position: 5213N 00137W (1nm FIN APP RW18 Wellesbourne Mountford - elev 159ft)

Airspace: ATZ (*Class: G*)

	Reporting Ac	*Reporting Ac*	*Reported Ac*
Type:	PA28(A)	RC114	PA28(B)
Operator:	Civ Trg	Civ Pte	Civ Pte
Alt/FL:	500ft↓ QFE (1002mb)	1000ft QFE	1000ft↓ QFE
Weather:	VMC CAVOK	VMC NR	VMC NR
Visibility:	NR	>10km	>10km

Reported Separation:

PA28(A) v PA28(B) 50ft V/<100m H

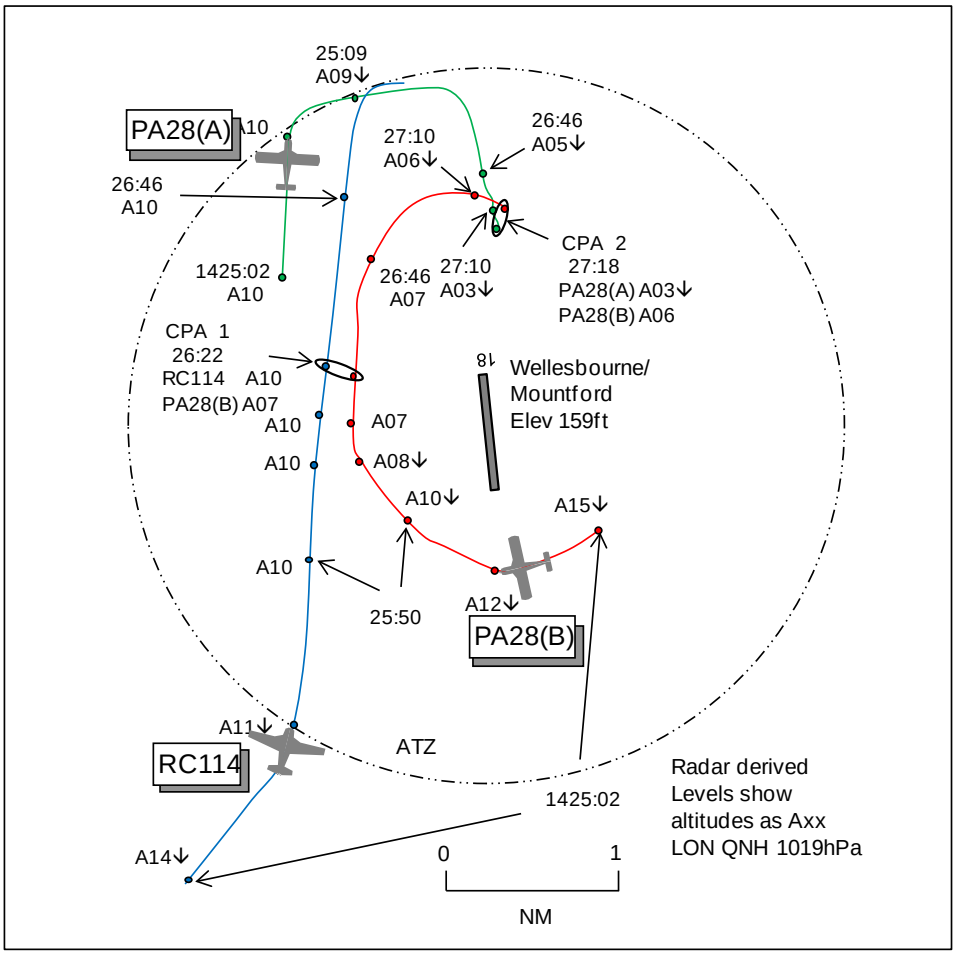
RC114 v PA28(B) Nil V/0·3nm H

PA28(B) v PA28(A) 500ft V

Recorded Separation:

300ft V/0·1nm H

PA28(A) AND RC114 PILOTS AND FISO FILED



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PA28(A) PILOT reports flying dual training sortie from Wellesbourne, VFR and in communication with Wellesbourne Information on 124·025MHz, squawking 7000 with Mode C. The Wx was VMC in CAVOK conditions. Whilst descending on final approach RW18 he saw 2 ac [PA28(B) and RC114] very close together downwind but at that stage there was no risk of collision as far as his ac was concerned. They continued to concentrate on flying the final approach and when descending through 500ft QFE heading 180° at 70kt he suddenly noticed that there was an ac 100m away on a very tight R base heading straight towards his ac. Assessing the situation quickly he realised that the ac was on a direct collision course from the R and above so he called on the radio to ask "ac on base to go-around immediately" whilst he diving his ac away with a L turn. In doing so he lost sight of the ac but was later told by the FISO that it had ended up directly above his ac. He assessed the risk as high.

THE RC114 PILOT reports inbound from Compton Abbas, VFR and in communication with Wellesbourne Information on 124·025MHz, squawking 7000 with Modes S and C. The visibility was >10km flying 1500ft below cloud in VMC and the ac was coloured blue/white with nav, landing, strobe and anti-collision lights all switched on. Positioning to join downwind at 1000ft QFE and 100kt PA28(B) was first seen on PCAS and immediately visually 1·4nm on a conflicting 90° track off to his R about midpoint downwind to land RW18 RH cct. At 0·4nm PA28(B) turned R to parallel his N'ly downwind track, at cct height but well inside the Wellesbourne cct. A pilot seated in the RH seat observed PA28(B) descending and moving under their starboard wing, PCAS indicated 0·3nm. He took no avoiding action as his ac's speed exceeded that of the PA28. He intended to allow PA28(B) to take the No 2 to land position but when it was abeam the RW18 threshold the ac began a sharp descending RH turn towards the RW and into conflict with another ac, PA28(A), which was on final, before climbing on the deadside. He assessed the risk as high owing to the confusion the Airprox caused and subsequent Airprox between PA28(A) and PA28(B).

THE PA28(B) PILOT reports inbound from Gloucestershire, VFR and in communication with Wellesbourne Information on 124·025MHz squawking with Mode C. On arrival he was instructed to join O/H and descend on the deadside. On tracking crosswind there was an ac [the RC114] in his 11 o'clock on which he was visual. He reported downwind and explained that he was visual with the ac in his 11 o'clock and was instructed to report final. [Diagram provided shows PA28(B) turning inside the RC114 downwind]. Turning onto base leg he realised there was an ac [PA28(A)] on final approach so he initiated a climbing go-around and acknowledged with the FISO that he was going around. He had not heard PA28(A) pilot's calls in the cct to establish the ac's position and only saw it when it was at 500ft on final. He estimated 500ft vertical separation at the CPA.

THE WELLESBOURNE FISO reports PA28(A) was carrying out a training flight conducting ccts on RW18 RH. The RC114 had joined the cct having returned from a cross-country flight and was positioned downwind. PA28(B) flight was inbound from Gloucestershire and had received joining instructions for RW18 RH cct and was told informed there were 2 ac in the cct. PA28(B) flight joined the cct on the deadside and reported downwind. PA28(A) flight turned onto final approach and reported final and was given information to touch and go. Suddenly, as PA28(A) continued its approach, at 1nm PA28(B) made a descending R turn towards final approach conflicting with PA28(A). The instructor in PA28(A) made a radio call stating that an ac was to his R and above him and that it should go-around. The pilot of PA28(B) was advised to take avoiding action and the ac proceeded to go-around onto the deadside of the cct. PA28(A) carried out a touch and go, the RC114 landed and PA28(A) carried out another cct and landed. The RC114 pilot later explained that PA28(B) had also conflicted with his ac causing him to take avoiding action but this was not seen by the FISO as he was focussed on PA28(A) on final approach. Later the PA28(B) pilot was told of the confliction with both the RC114 and PA28(A), the pilot stating he had not seen either ac, he thought. The pilot was reminded of the need to maintain a good lookout and to ensure adequate separation is maintained.

ATSI reports that the Airprox was reported in the Wellesbourne Mountford ATZ, Class G airspace, which comprises a circle radius 2nm centred on RW18/36 from the surface up to 2000ft above aerodrome level (aal). The Airprox was reported by the pilot of PA28(A) and the pilot of a RC114 when another ac, PA28(B) flew into conflict with both other ac.

The PA28(A) flight was operating VFR, conducting RH ccts to RW18 at Wellesbourne Mountford and was in receipt of a BS from Wellesbourne Information on frequency 124·025MHz.

The RC114 flight was operating VFR on a flight from Compton Abbas to Wellesbourne Mountford and was in receipt of a BS from Wellesbourne Information on frequency 124·025MHz.

The PA28(B) was operating VFR on a flight from Gloucester to Wellesbourne Mountford and was in receipt of a BS from Wellesbourne Information on frequency 124·025MHz.

CAA ATSI had access to area radar recordings and written reports from the pilots of the PA28(A), the RC114 and the PA28(B) together with a written report from the Wellesbourne Mountford FISO.

The Coventry METARs are provided for 1420 and 1450 UTC:

EGBE 091420Z 20012G23KT 160V230 CAVOK 26/12 Q1007= and EGBE 091450Z 20010KT 170V240 CAVOK 25/13 Q1007=

The written report from the Wellesbourne FISO stated that the PA28(A) was conducting RH ccts to RW18. The RC114 was returning from a cross country flight and was positioned downwind while the PA28(B), which was inbound from Gloucester, had received joining instructions for RW18 RH and had been informed that there were 2 in the cct.

The written report from the pilot of the RC114 stated that the PA28(B) was initially sighted on a conflicting 90° track to the R. The PA28(B) turned R to parallel the RC114's N'ly track at cct height but well inside the Wellesbourne circuit. The pilot of the RC114 intended to extend downwind and allow the PA28(B) to take the number 2 position but abeam the 18 numbers the PA28(B) began a sharp descending RH turn towards the RW in conflict with the PA28(A) which was on final.

The written report from the pilot of the PA28(A) stated that while on final approach for RW18 he saw 2 ac very close to each other downwind. The pilot of the PA28(A) continued the approach and then saw the PA28(B) turn onto a very tight R base directly towards the PA28(A). The pilot of the PA28(A) believed that the PA28(B) was on a direct collision course from the R/above and called on the radio for the PA28(B) to go-around immediately.

The written report from the PA28(B) stated that he was instructed to join O/H and descend on the deadside. When the PA28(B) was crosswind there was an ac in the 11 o'clock position from the PA28(B) which the pilot was visual with. When the PA28(B) turned base the pilot realised that there was an ac about 500ft on final approach. The PA28(B) carried out a go-around.

Radar recordings show that at 1422:41 the PA28(A) is airborne in the cct while the PA28(B) is 1·5nm SW of the airfield indicating altitude 2000ft prior to the O/H join. At 1425:02 the PA28(A) is approaching R base, the PA28(B) has descended to 1500ft and is turning crosswind while the RC114 is 3·1nm SW of the airfield at 1400ft.

[UKAB Note (1): At 1425:50 PA28(B) is turning towards the downwind leg, inside the RC114. PA28(B) rolls out onto a parallel the track with that of the RC11, with the CPA (CPA 1) occurring at 1426:22 as the RC114, at altitude 1000ft, passes 0·1nm on the PA28(B)'s LHS, PA28(B) indicating 700ft. Twenty-four seconds later, at 1426:46, PA28(B) commences a R turn onto R base towards the PA28(A) which was on final. By 1427:10 PA28(B) is indicating 600ft and converging with PA28(A), which just R of its 12 o'clock range 0·2nm and 300 ft below. The next sweep at 1427:18 shows PA28(B) passing 0·1nm behind PA28(A) with vertical separation 300ft, CPA 2. PA28(A) continues the approach while PA28(B) breaks onto the deadside and later rejoins the cct.]

CAP410 the Manual of Flight Information Services, part B Aerodrome, Chapter 1, Paragraph 7.4 states:

> 'Landing direction and traffic information on known traffic flying within the ATZ and the immediate surrounding local area is normally passed when the aircraft is still some distance away from the ATZ. This enables the pilot to determine if it is safe to proceed with the flight as planned and to intelligently position the aircraft in relation to other aircraft in the circuit pattern. FISOs are not to instruct pilots to join the circuit at a particular position. Furthermore, FISOs may not allocate a landing order, e.g. 'Report final number 3'. The pilot must be told that there are two aircraft ahead in the circuit and it is up to the pilot to position himself accordingly.'

The Airprox took place in Class G airspace where pilots are ultimately responsible for their own traffic avoidance.

The FISO passed information to the PA28(B) that there were 2 other ac in the cct with the expectation that the pilot of the PA28(B) would position himself accordingly.

An Airprox was reported in the Wellesbourne Mountford Aerodrome Traffic Zone, when the PA28(B) flew into conflict with the RC114 and the PA28(A).

[UKAB Note(2): The RoA Rule 12(a) states:

> 'that the commander shall... conform to the pattern of traffic formed by other aircraft intending to land at that aerodrome or keep clear of the airspace in which the pattern is formed…']

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar video recordings, reports from the FISO involved and reports from the appropriate ATC authorities.

Because of the nature of this incident, Members agreed that it should be assessed as 2 independent Airprox with 2 separate causes and risks.

The first incident occurred as both PA28(B) and the RC114 were integrating into the visual cct, after PA28(B) pilot carried out an O/H join and the RC114 pilot joined downwind. The Chairman opened the discussion with the question of "who had established the traffic pattern?" The CAA Flt Ops Advisor opined that Rule 12 was open to interpretation; it was written on the understanding that 1 ac had already formed a traffic pattern whereas in this incident both flights were trying to integrate into the pattern formed by PA28(A). In slightly different circumstances, had the RC114 been already established downwind, PA28(B) pilot would be expected to position from crosswind behind, and to follow, the RC114; if both ac had joined O/H, the traffic order would have been previously sorted. However, pilot Members noted that when the PA28(B) flight was positioning crosswind in the ATZ (although not O/H the upwind numbers of the RW in accordance with the procedure), the RC114 was still outside the ATZ and turning to join on an extended upwind 'downwind leg' position. Owing to the high speed differential, the RC114 very quickly arrived into the downwind leg as PA28(B) was turning downwind. It is possible that the pilot of PA28(B) did not appreciate initially that the RC114 was travelling much faster than his own ac; furthermore, from his position on the crosswind leg he had few options to manoeuvre to give way to the RC114. The Board noted that the RC114 pilot intended to allow PA28(B) to turn on to base and final ahead of him, but Members agreed that it would have been better to have slowed down early for better integration into the cct against other cct traffic As it was PA28(B) pilot saw the RC114 in his 11 o'clock and elected to turn inside of it and descend as it overhauled his ac on his LHS. The RC114 pilot reported seeing PA28(B) converging from the R before it manoeuvred onto a parallel track on his RHS. Members agreed that as neither ac had formed a pattern ahead of the other the cause was a conflict on the downwind leg between PA28(B) and the RC114.

The second incident was more straightforward. After the RC114 had passed on his LHS, PA28(B) pilot turned onto base leg without assimilating the position of PA28(A) on final and this caused the second Airprox. The FISO had told PA28(B) pilot that there were 2 ac in the cct [PA28(A) and RC114] when he joined O/H ahead but one Member wondered whether the RC114's passage had led PA28(B) pilot, unaware that the RC114 pilot intended to extend his downwind leg to let PA28(B) land ahead of him, to execute an early turn towards final in order to stay ahead of the RC114, instead of following it as No3. Whatever the reason, PA28(B) pilot was in error to turn towards final when he did.

In assessing the risk, in the first incident, with the early visual sightings obtained by both pilots and the actions taken by PA28(B) pilot, the Board concluded that any risk of collision had been effectively removed.

During the second encounter, Members commended the actions taken by PA28(A) Instructor when he noticed PA28(B), converging and descending from his R, during his final approach. He had made a broadcast advising PA28(B) to go-around whilst he turned and descended his ac: a good call. However, during this manoeuvre he lost sight of PA28(B) so was unable to keep track of its relative position. PA28(B) pilot saw PA28(A) late and executed a climbing go-around estimating 500ft vertical separation at CPA. Although Members were confident that these actions had removed the actual collision risk, the pilot of PA28(B) had descended towards PA28(A) and the radar recording reveals that PA28(B) crossed just 0·1nm behind and 300ft above PA28(A), which was still descending, with each ac unsighted to both pilots. This was enough to persuade the Board that safety had not been assured during the encounter.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause:
1. A conflict on the downwind leg between PA28(B) and the RC114.
2. The pilot of PA28(B) turned into conflict with PA28(A) on final.

Degree of Risk:
1. C.
2. B.