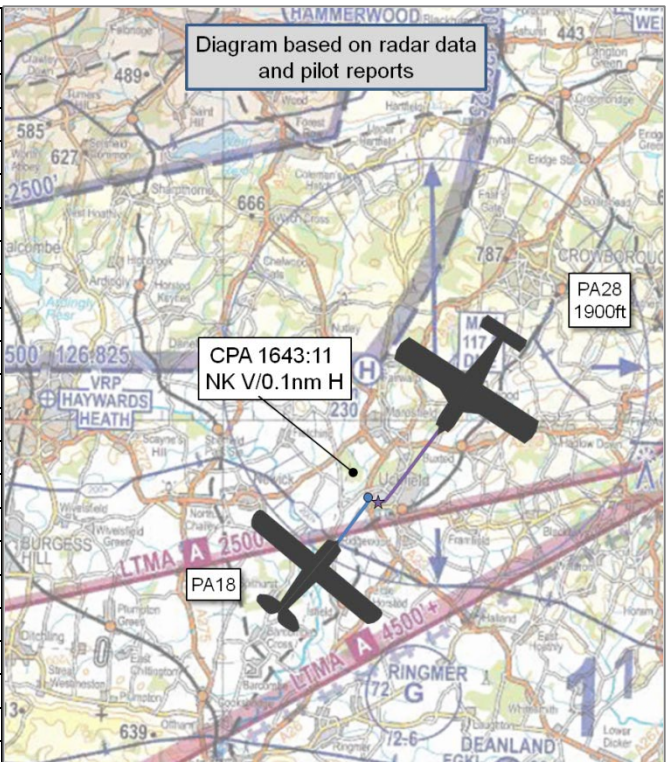


AIRPROX REPORT No 2015167

Date: 27 Sep 2015 Time: 1643Z Position: 5058N 00005W Location: Uckfield, Sussex

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|-------------|---------------|------------------|
| Aircraft | PA18 | PA28 |
| Operator | Civ Pte | Civ Trg |
| Airspace | London FIR | London FIR |
| Class | G | G |
| Rules | VFR | VFR |
| Service | None | Basic |
| Provider | N/A | Farnborough |
| Altitude/FL | NK | 1900ft |
| Transponder | Not fitted. | A,C |
| Reported | | |
| Colours | White, Blue | White, Red, Blue |
| Lighting | Nil | NK |
| Conditions | VMC | VMC |
| Visibility | >10km | 10km |
| Altitude/FL | 1950ft | 2300ft |
| Altimeter | QNH (1033hPa) | QNH |
| Heading | 040° | NK |
| Speed | 78kt | 105kt |
| ACAS/TAS | Not fitted | Not fitted |
| Separation | | |
| Reported | 0ft V/50m H | 100ft V/0.5nm H |
| Recorded | NK V/0.1nm H | |



THE PA18 PILOT reports that during his flight he had tried without success to conduct a Practice Pan with London Centre and had then tried to get a Basic Service from Shoreham; it became obvious from both attempts that he had a radio failure. This was probably due to a flat battery. The aircraft was not fitted with an electrical system and relied on a 12v battery which is normally charged prior to flight; on this occasion, he had flown a couple of days previously and had not recharged it prior to this flight. Whilst south abeam Shoreham, he spoke to Redhill on his mobile phone to advise of the radio problem and request that he be allowed to join non-radio if necessary. This was approved, and a route inbound via Godstone was specified. He was reviewing the route on his chart, preparing for descent to 1500ft, and also attempting to hear the Redhill ATIS; his attention was therefore taken up with these tasks together with planning for a possible non-radio arrival at Redhill. When he looked up, he saw the other aircraft banking left and passing down his right-hand side at the same altitude. It was now not necessary for him to take avoiding action. He noted that, with hindsight, his look-out should have been better, especially at that altitude in the region of the Mayfield VOR, which he described as a 'honeypot location'.

He assessed the risk of collision as 'High'.

THE PA28 PILOT reports that he was instructing a low-hours PPL student in an early navigational exercise, routing clockwise around the Gatwick CTA at 2300ft. They had just turned onto a westerly heading and were now tracking into a lowering sun, thus reducing forward visibility; however, although it was hazy, other aircraft were not difficult to see. The student observed the other aircraft before the instructor did because it was hidden from his view behind a windscreen strut; it was right and slightly above, tracking in the opposite direction. The instructor took control of the aircraft, carried out a steep avoiding-action turn to the left and also elected to descend. Whilst Rules of the Air would normally require a turn to the right for opposite direction conflicting traffic, the instructor noted the other aircraft was slightly right and so decided a left turn would be safer. As he turned he kept the other aircraft in sight and saw no evidence of it taking any avoiding action. The two aircraft passed

each other less than half a mile apart, but he considered there was no risk of collision. However, he noted that, as an Air Traffic Controller he is very aware of other aircraft transmissions and was not aware of the other aircraft on the same frequency. He was not given any Traffic Information from Farnborough, but on a Basic Service would not have expected to receive any.

He assessed the risk of collision as 'None'.

Factual Background

The weather at Gatwick was recorded as follows:

METAR EGKK 271620Z 06012KT CAVOK 16/09 Q1034=

Analysis and Investigation

UKAB Secretariat

The PA18 and PA28 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right², notwithstanding the PA28 pilot deemed circumstances dictate that a left turn was a better option.

Summary

An Airprox was reported when a PA18 and a PA28 flew into proximity at 1643 on Sunday 27th September 2015. Both pilots were operating under VFR in VMC, the PA28 pilot was in receipt of a Basic Service from Farnborough and the PA18 pilot was not receipt of an ATS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft and radar photographs/video recordings.

The Board noted that, by his own admission, the PA18 pilot's attention was in-cockpit, that his workload was high, and that the radio failure that he was experiencing was highly distracting. Whilst it was admirable that he was using all resources available to him to ensure that Redhill were aware of his impending radio failure join, on the theme of task prioritisation, they reiterated that the old adage, Aviate, Navigate, Communicate remained highly relevant, with 'lookout' being an essential element of the 'Aviate' function. Whilst recognising that this was easy to say from the vantage point of the UKAB meeting, nevertheless, maintaining a safe flightpath during periods of high workload such as emergencies is something that requires conscious effort in order to avoid becoming overtaken by in-cockpit tasks and other associated post-emergency concerns.

Turning to the PA28 pilots, they had turned onto a westerly heading and then soon after had spotted the PA18. Acknowledging that this was an early navigational instruction sortie where the focus would indeed be on accurately achieving the desired track and turn point, some GA members wondered whether navigation had become a distraction to the detriment of look-out. One of the key navigational lessons was to clear the area that one is going to turn into as one approaches the turn point, this incident illustrated why – the actions taken after turning can also detract from lookout as one stabilises on track and assesses drift, fuel remaining etc. The instructor reported that he was aware that he wouldn't receive any Traffic Information from Farnborough because he was on a Basic Service; correct in his statement, Board members reiterated the value of a Traffic Service in busy locations. Although anecdotal evidence suggested that Farnborough ATC was often too busy to

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c) (1) Approaching head-on.

provide a Traffic Service, the Board felt that this should not preclude pilots asking for it in the first instance.

Finally, as in some previous Airprox, the Board warned against pilots flying directly overhead VORs (or other prominent navigation features). Whilst the temptation is to turn directly overhead for ease of navigation, there is every possibility that, as in this case, others will also be using the VOR or feature as a turning point; by routing one or two miles away, the risks of aircraft converging at a common chokepoint are much reduced.

The Airprox took place in Class G airspace where look-out is the main mitigation against mid-air collision. Neither aircraft had a TAS, although in this incident it was unlikely to have helped because the PA18 was not fitted with a transponder (and had a flat battery anyway). The Board opined that, in their opinion, both pilots had probably become pre-occupied with other tasks to the detriment of look-out; they agreed that the cause of the Airprox was effectively a non-sighting by the PA18 pilot (because he only saw the other aircraft after CPA), and a late sighting by the PA28 pilot. Turning to the risk, the Board noted the discrepancy in the two pilots' assessment of the risk of collision but, because the radar recording indicated a horizontal separation of only 0.1nm head-on, and using the PA28 pilot's estimate that the two aircraft were only 100ft apart, they agreed that this was risk Category A; chance had played a major part in events and safety had been reduced to a minimum.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Effectively a non-sighting by the PA18 pilot and a late sighting by the PA28 pilot.

Degree of Risk: A.