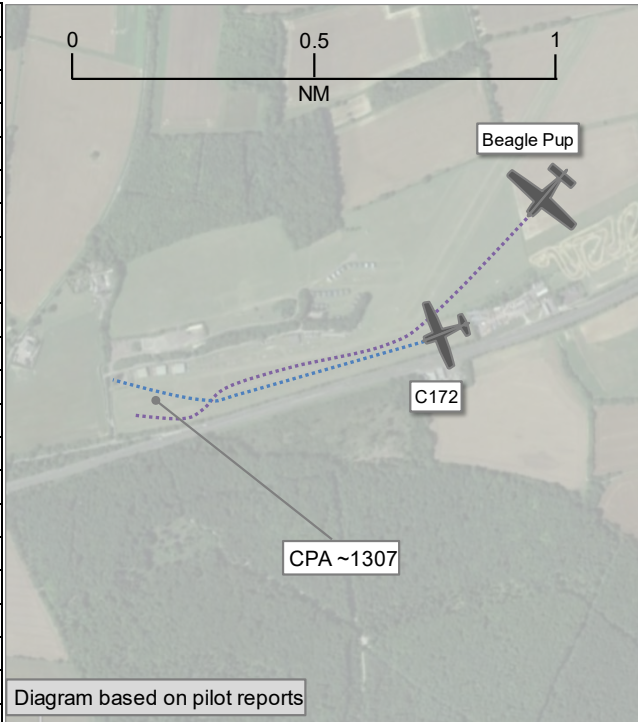


AIRPROX REPORT No 2024189

Date: 27 Jul 2024 Time: ~1307Z Position: 5111N 00114W Location: Popham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|--------------------------|------------------|-----------------|
| Aircraft | C172 | Beagle Pup |
| Operator | Civ FW | Civ FW |
| Airspace | London FIR | London FIR |
| Class | G | G |
| Rules | VFR | VFR |
| Service | AGCS | AGCS |
| Provider | Popham Radio | Popham Radio |
| Altitude/FL | NK | NK |
| Transponder | A, C, S | A, C, S |
| Reported | | |
| Colours | Orange and white | Red and white |
| Lighting | Nil | Strobes, beacon |
| Conditions | VMC | VMC |
| Visibility | >10km | >10km |
| Altitude/FL | ~500ft | 300ft |
| Altimeter | QNH | QFE |
| Heading | 275° | 260° |
| Speed | 80-90kt | 70kt |
| ACAS/TAS | SkyEcho | SkyEcho |
| Alert | None | None |
| Separation at CPA | | |
| Reported | 0ft V/75m H | 0ft V/50m H |
| Recorded | NK | |



THE C172 PILOT reports that, in preparation for departing from RW26, they had carried out power checks facing into wind to the west of RW03. They had then re-positioned the aircraft at the start of the uphill taxiway that leads to RW26 and then turned slightly at this holding point to allow a view down finals along the front of the port wing. They waited for two aircraft to approach and land, listening to R/T for traffic calls. Once the second aircraft had landed, they had heard a call of 'downwind' from another aircraft in the circuit. Having looked into final approach and seeing no traffic, the C172 pilot had then made the R/T call for entering RW26 with intent to proceed to take-off and had then proceeded up the slope and turned immediately into the take-off roll. Having started the take-off roll they had heard a call for 'go around' from what they had presumed was [for] the incoming aircraft that they had heard report downwind. The C172 pilot believed at this point they had been committed to proceed with the take-off, which they had. They proceeded to climb out, turning to 275° as per procedure for that runway. At this point they had been made aware by their passenger (also a private pilot) of the other aircraft off their port wing passing slightly ahead of them. The C172 pilot had then turned slightly more to starboard, keeping the other traffic in sight, until they had been sufficiently clear. The other aircraft had been pulling ahead of them and passed ahead. [The C172 pilot felt that there had been] contributory factors: 1) that this had been their first departure from RW26 and what they should have perhaps done is better positioned the aircraft following power checks to be facing directly up the slope (i.e. eastwards) to get a view onto the base (and possibly downwind) leg as the speed of the other aircraft had been clearly faster than they had anticipated given the downwind call and, 2) that there is a possibility that they had been distracted by the preceding aircraft which had not followed the offset approach procedure and therefore had had to change their approach path fairly briskly to get back into the correct one.

The pilot assessed the risk of collision as 'Low'.

THE BEAGLE PUP PILOT reports that their aircraft is based at Popham and had been offline for two months having a fuel tank repair. They had flown for 1hr 10min in the local area north and west of

Popham in the late morning of 27th of July and after lunch elected to fly 2 or 3 circuits for practice and to complete 3 landings. On the second circuit they had been established on finals for RW26 and had made a radio call. They had seen the C172 taxiing to the holding point for RW26 and then proceed past it. The Beagle Pup pilot did not recall having heard a radio call from the pilot, or acknowledgement of one by [the AGO] which [they opine] is unusual at Popham, radio calls are usually acknowledged and an alert would [normally] be given if there is an aircraft on finals. However, the [AGOs] had been very busy with a fly-in that day. RW26 at Popham has a displaced approach path as there is a petrol station on the A303 near the threshold. A dogleg turn is made onto the runway heading just before touchdown. It had occurred to the Beagle Pup pilot that the C172 might line up and hold at the threshold if its pilot had seen their aircraft approaching and made a call 'holding for the landing aircraft'- [the Beagle Pup pilot believed that] it would have been possible for the Beagle Pup pilot to have completed their approach and landing without over-flying the C172. In the event, they had started their take-off roll and the Beagle Pup pilot had decided to initiate a go-around. [They note that] their training had been to make a turn to the right and then climb out on the runway heading to enable the departing traffic to be kept in sight on the left of the aircraft, though they couldn't come far to the right without overflying spectators or the fuel pumps. On climbing out they had been aware that they would infringe the very noise-sensitive area at the western end of RW26 at full power and low level. They had therefore elected to come to the left behind the Cessna. Although the Beagle Pup pilot had felt that they had maintained spatial awareness of the C172's position, with looking out around their aircraft, and for a brief period as they had banked to turn, [the C172] had not been in sight below them. As they had come around to the right behind [the C172] they had regained visual contact. This ultimately put the Beagle Pup in the C172's 9 o'clock at the same level and at that point the C172 pilot had turned to the right and climbed away to the west. The Beagle Pup pilot had then completed a normal right-hand circuit and landing.

The Beagle Pup pilot had reflected on this and the lessons to learn. Given the same circumstances again they opined that they would definitely fly a different go-around. The first thing they would do differently is to initiate the go-around earlier, they [opine that] they should have done this as soon as it had become clear that the C172 had passed the holding point and had been continuing. Secondly, crossing to the dead side would have maintained more separation and not infringed noise abatement considerations. Another 'Popham' factor here is that an aircraft on finals for RW26 cannot make a left turn to the dead side until it has passed the petrol station (overflying is strictly forbidden) and is over the runway. This would possibly have put the C172 out of sight for a time. Nonetheless, to have followed the approach path across to the dead side would have been the best option.

Discussing/practising go-arounds with an instructor is not something that [the Beagle Pup pilot] had given particular thought to before. Clearly one size does not fit all and local factors pertaining to a particular airfield on a particular day make it wise to consider the go-around plan as a part of the preparation for each flight. The biennial revalidation flight is a great opportunity to refresh but theirs had tended to focus on the likes of PFLs, EFATO, stalling, general handling etc. [The Beagle Pup pilot notes that] go-around procedures will be top of the list next time! Finally, the Beagle Pup pilot believed the decision to go-around rather than continue with the approach and landing was correct as, if the C172 pilot had had to abort their take off for some reason, the Beagle Pup pilot would very quickly have been behind the C172 on an obstructed runway.

In view of that evidence, the Beagle Pup pilot notes that they have not submitted any diagrams or other information [...]. As they had been flying a short detail in the circuit only, they had not been using any electronic equipment other than air-ground radio on this trip.

The pilot assessed the risk of collision as 'Low'.

THE POPHAM AIRFIELD MANAGER reports that they have they had interviewed both radio operators on the day and they confirmed that no Airprox had been reported either on the radio or by other means to the airfield. There is no recording equipment at Popham airfield. Looking at the departure records, it appears that the Beagle Pup had departed on RW26 into the right-hand circuit at 1256 for circuit training. The C172 had departed at 1259. This is the only information they hold regarding these two flights.

Factual Background

The weather at Odiham was recorded as follows:

METAR EGVO 271250Z AUTO 31007KT 9999 SCT046/// 21/09 Q1015=

Analysis and Investigation

UKAB Secretariat

The C172 and Beagle Pup pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.¹ An aircraft in flight, or operating on the ground or water, shall give way to aircraft that are landing or in the final stages of an approach to land.²

Summary

An Airprox was reported when a C172 and a Beagle Pup flew into proximity at Popham at approximately 1307Z on Saturday 27th July 2024. Both pilots were operating under VFR in VMC, and both in receipt of an A/G Communication Service from Popham Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots and the Air/Ground Operator. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

The Board firstly considered the actions of the C172 pilot, noting that they had lined-up correctly at the holding point having monitored radio calls and the final approach path of the visual pattern to the extent possible, but members felt that the C172 pilot, having heard a downwind call from the pilot of the aircraft they had presumed to be their closest conflict, could have called for confirmation of their circuit position prior to entering the runway (**CF1**). Having committed to entry and backtrack, members felt that the C172 pilot had been as efficient as possible in initiating their take-off run in order to clear the active runway for other traffic. On hearing a 'go-around' call, which they assumed to have been from the pilot they had earlier heard call 'downwind', the C172 pilot had continued with their take-off roll.

Turning to the actions of the Beagle Pup pilot, members acknowledged that they had made active circuit calls on the Popham Radio frequency and had been conscious of the restrictions around the airfield as they had manoeuvred. Having seen the C172 roll and take-off, members felt that the Beagle Pup pilot had continued their approach to a point that had brought them into conflict with the C172 (**CF6**) rather than initiating a go-around at an earlier stage (**CF2**).

When considering the contributions by the Popham Air/Ground Operator, members recognised the nature of that service, and the report submitted by the airfield manager. They noted that the Airprox had not been reported on R/T at the time and that no recording equipment is utilised at Popham, accepting that there had been no active involvement in the event by the AGO on duty and that the AGO is not required to sequence traffic in the circuit rendering the ground situational awareness barrier to be not used in this case.

Board members expressed disappointment that although both aircraft had carried compatible electronic conspicuity equipment, neither had alerted the pilot to the proximity of the other aircraft (**CF5**). Members also wished to thank both pilots for comprehensive and open reports on this event.

Concluding their discussion, members agreed that both pilots had inaccurate situational awareness of the presence of the other aircraft (**CF3**). The Beagle Pup had been obscured from the view of the C172 (**CF8**) as it had approached from behind and the C172 pilot had not gained sight of the Beagle Pup (**CF7**) until at or beyond CPA. Members felt that neither pilot had assimilated conflict information (**CF4**)

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210(c)(4) Right of Way.

opining that the separation between the C172 and the Beagle Pup had been such that the safety of the aircraft had not been assured and that there had been a risk of collision (CF9). The Board assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

| | 2024189 | | | |
|---|---------------|--|---|--|
| CF | Factor | Description | ECCAIRS Amplification | UKAB Amplification |
| Flight Elements | | | | |
| • Tactical Planning and Execution | | | | |
| 1 | Human Factors | • Action Performed Incorrectly | Events involving flight crew performing the selected action incorrectly | Incorrect or ineffective execution |
| 2 | Human Factors | • Insufficient Decision/Plan | Events involving flight crew not making a sufficiently detailed decision or plan to meet the needs of the situation | Inadequate plan adaption |
| • Situational Awareness of the Conflicting Aircraft and Action | | | | |
| 3 | Contextual | • Situational Awareness and Sensory Events | Events involving a flight crew's awareness and perception of situations | Pilot had no, late, inaccurate or only generic, Situational Awareness |
| 4 | Human Factors | • Understanding/Comprehension | Events involving flight crew that did not understand or comprehend a situation or instruction | Pilot did not assimilate conflict information |
| • Electronic Warning System Operation and Compliance | | | | |
| 5 | Human Factors | • Response to Warning System | An event involving the incorrect response of flight crew following the operation of an aircraft warning system | CWS misinterpreted, not optimally actioned or CWS alert expected but none reported |
| • See and Avoid | | | | |
| 6 | Contextual | • Loss of Separation | An event involving a loss of separation between aircraft | Pilot flew into conflict |
| 7 | Human Factors | • Monitoring of Other Aircraft | Events involving flight crew not fully monitoring another aircraft | Non-sighting or effectively a non-sighting by one or both pilots |
| 8 | Contextual | • Visual Impairment | Events involving impairment due to an inability to see properly | One or both aircraft were obscured from the other |
| • Outcome Events | | | | |
| 9 | Contextual | • Near Airborne Collision with Aircraft | An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles | |

Degree of Risk: B.

Safety Barrier Assessment³

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because the AGO is not required to sequence the aircraft.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the C172 pilot could have confirmed that there had been nothing on finals before leaving the holding point and the Beagle Pup pilot could have initiated their go-around earlier.

³ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because both the C172 and Beagle Pup pilots had inaccurate situational awareness on the position of the other and neither pilot had assimilated the available conflict information.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because although both pilots carried compatible electronic conspicuity equipment, neither had received warnings of the presence of the other aircraft.

See and Avoid were assessed as **partially effective** because the Beagle Pup was obscured from the view of the pilot of the C172 and they had not seen the Beagle Pup until at or around CPA, and the Beagle Pup pilot continued their approach until such time as they came into conflict with the C172.

| Airprox Barrier Assessment: 2024189 | | Outside Controlled Airspace | | | | | | |
|-------------------------------------|--|-----------------------------|-------------|------------------------------------|----------------------------|----------|-----|-----|
| Barrier | | Provision | Application | Effectiveness Barrier Weighting | | | | |
| | | | | 0% | 5% | 10% | 15% | 20% |
| Ground Element | Regulations, Processes, Procedures and Compliance | ✓ | ✓ | | | | | |
| | Manning & Equipment | ✓ | ✓ | | | | | |
| | Situational Awareness of the Conflication & Action | ⚠ | ○ | | | | | |
| | Electronic Warning System Operation and Compliance | ⊘ | ⊘ | | | | | |
| Flight Element | Regulations, Processes, Procedures and Compliance | ✓ | ✓ | | | | | |
| | Tactical Planning and Execution | ✓ | ⚠ | | | | | |
| | Situational Awareness of the Conflicting Aircraft & Action | ⚠ | ⚠ | | | | | |
| | Electronic Warning System Operation and Compliance | ✓ | ✗ | | | | | |
| | See & Avoid | ✓ | ⚠ | | | | | |
| Key: | | Full | Partial | None | Not Present/Not Assessable | Not Used | | |
| Provision | ✓ | ⚠ | ✗ | ⊘ | | | | |
| Application | ✓ | ⚠ | ✗ | ⊘ | ○ | | | |
| Effectiveness | | | | | | | | |