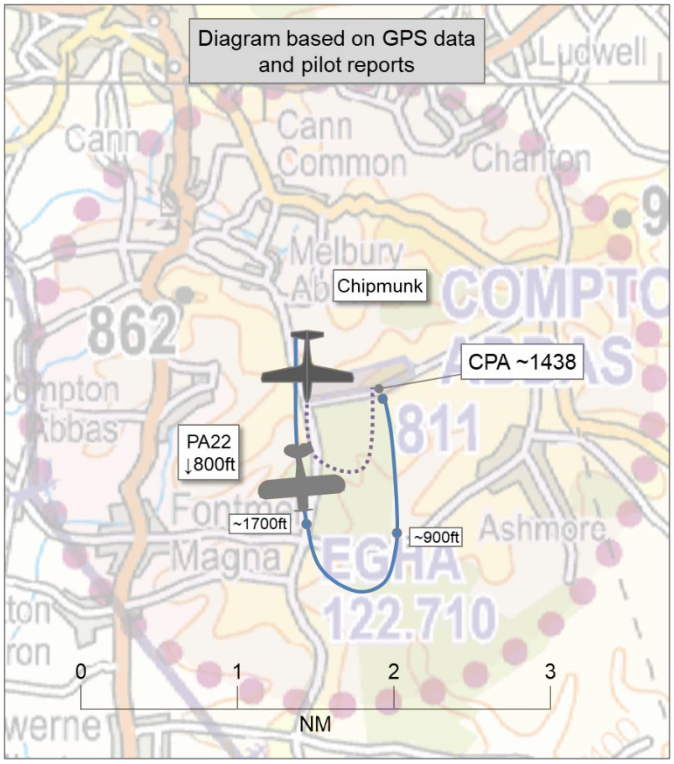
AIRPROX REPORT No 2024072

Date: 20 Apr 2024 Time: ~1438Z Position: 5057N 00208W Location: Compton Abbas

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA22	Chipmunk
Operator	Civ FW	Civ FW
Airspace	Compton Abbas ATZ	Compton Abbas ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Compton Radio	Compton Radio
Altitude/FL	~800ft QFE	NK
Transponder	A, C	A, C, S
Reported		
Colours	White, Blue	Silver
Lighting	Nav, Landing, Taxi	Nav
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1600ft	'Descending to 1000ft'
Altimeter	NK	QFE
Heading	350°	NK
Speed	70kt	90kt
ACAS/TAS	Not fitted	Not fitted
Separation at CPA		
Reported	150ft V/60m H	Not Seen
Recorded	NK	



THE PA22 PILOT reports that they were returning from a local flight, where they had been practising some general handling to the east of the field. RW08 was in use, with a left-hand circuit. They returned to the ATZ from the northeast, so decided to position for an overhead join. A microlight was in the overhead when they called up, and it began descending deadside as the PA22 pilot entered the overhead. At around this point they also heard another pilot transmit that they were also joining overhead from roughly 5NM away, judging that they were still far enough away, they continued. As they crossed the 08 numbers at 2800ft, they had good visibility of the microlight on crosswind beneath them, but were still not visual with the Chipmunk. Once on the deadside, they began descending to circuit height, and asked their passenger to assist in looking for the other traffic. Due to thermal activity, their rate of descent was slower than usual, so they extended to the south to be able to reach circuit height in time with their turn back northwards. They executed their turn at around 1.5NM south of the field, having reached 1800ft. They were still not visual with the Chipmunk, so continued looking out whilst flying northbound, at which point they lost an additional 200ft due to gentle forward pressure on the controls whilst positioning for the lookout. They became concerned that they still couldn't see the traffic, so called up on frequency asking if the other traffic had seen them. The other pilot replied "negative, still looking". Not long after, just as they were about to enter the crosswind leg, they observed the Chipmunk overtaking their aircraft, high, on their left wing, around 200ft above, and a similar horizontal separation of around 200ft. They immediately broke to the right, announced on frequency they were leaving the circuit, and proceeded south. Once clear and they had confirmed there was no other traffic on the deadside, they turned back northbound for a crosswind join. This second attempt was successful, and they landed from the subsequent join on RW08.

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

THE CHIPMUNK PILOT reports that they approached Compton Abbas from the north and followed the overhead join procedure of overflying the downwind numbers at 1800ft above the airfield elevation and descending in a 180° turn to the left, on the deadside to 1000ft circuit height. Shortly before overflying

the upwind numbers, they heard Compton A/G ask them whether they had the other aircraft in sight. They responded in the negative, but looking for traffic. There was no other communication about it as far as they were aware. It had been a short (25min) flight with their passenger, who was not an aviator and whom, after about 15min, had expressed slight discomfort and requested to land soon, so they were talking through what they were doing in terms of join procedures, airfield position and orientation, etc.

THE COMPTON AGO reports that Compton operates an AGCS. Due to the positioning of the airfield, the deadside, to the south, is unobservable by operations staff. [Chipmunk C/S] called inbound from the north. [Chipmunk C/S] completed a standard overheard join, before descending deadside. At a concurrent time, [PA22 C/S] was also descending deadside. [PA22 C/S] transmitted to ask if the Chipmunk pilot was visual with the PA22, which [Chipmunk C/S] responded with "negative - looking". [Chipmunk C/S] then reported crosswind. [PA22 C/S] reported that they were leaving the circuit and rejoining from the deadside for separation from [Chipmunk C/S].

Factual Background

The weather at Bournemouth was recorded as follows:

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METAR EGHH 201420Z 02010KT 350V070 9999 FEW048 14/01 Q1029=
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Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken. Neither aircraft could be positively identified, however the PA22 pilot provided GPS data from which an aircraft following the corresponding route could be seen on the radar, see Figure 1. Whilst a microlight could be seen in the overhead (as described by the PA22 pilot) the Chipmunk could not be seen on the radar at all.

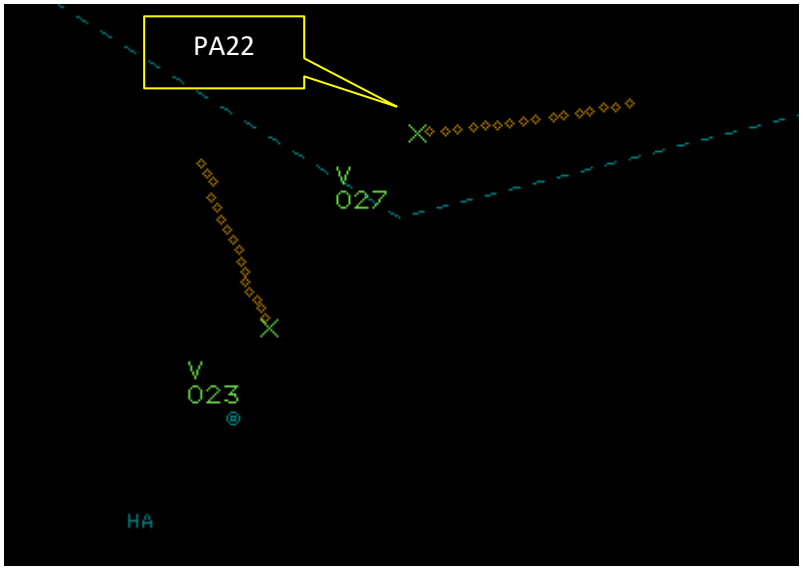

Figure 1 -1434:06

The PA22 faded from radar shortly afterwards, when just north of Compton Abbas, re-appearing to the west of the airfield descending, before fading completely at 1437:18. The Airprox could not be seen on the radar.

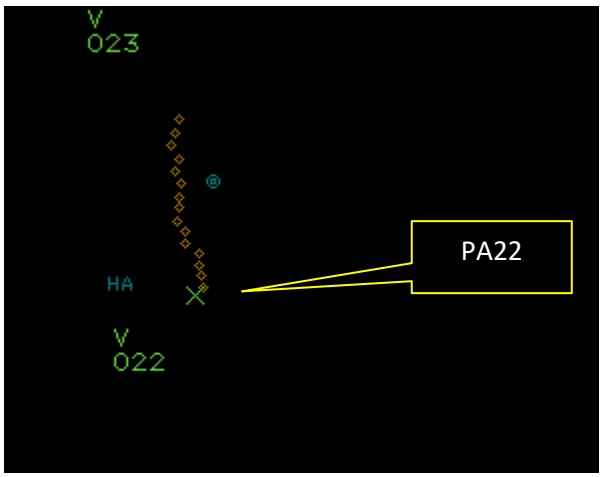

Figure 2 - 1437:00

The PA22 and Chipmunk 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 operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation.[2]

Summary

An Airprox was reported when a PA22 and a Chipmunk flew into proximity at Compton Abbas at around 1438Z on Saturday 20th April 2024. Both pilots were operating under VFR in VMC, both were in receipt of an AGCS from Compton Abbas.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs, GPS data and a report from the AGO involved. 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 first discussed the actions of the PA22 pilot. They had joined Compton Abbas via the overhead but when they had been unable to lose the height, they had extended to the south of the airfield. Members opined that there were better ways to lose height, and that the reason for joining via the overhead was to visually acquire the circuit traffic whilst above it, but by routing back out of the overhead to descend, the PA22 pilot had denied themselves that opportunity. Furthermore, they had not articulated their intentions to route to the south to other circuit users, who would therefore not have known to look for their aircraft in that location. By leaving the overhead to the south, members thought that the PA22 pilot had not conformed with the pattern of traffic in the circuit (**CF2**). The PA22 pilot had heard the calls made by the Chipmunk pilot, had become concerned that they had not been visual with it (**CF5**) and had called on the RT to ask the other pilot whether they had been visual with the PA22. The Chipmunk pilot had replied in the negative and members thought that at this point the PA22 pilot would have been wise to either have provided a position report, or have asked the Chipmunk pilot for their position (**CF1**). The Board agreed that the PA22 pilot could not have seen the Chipmunk as it had approached from behind (**CF6**, **CF8**) and so it had not been until the Chipmunk had overtaken them that they had seen the other aircraft and turned away (**CF7**).

Turning to the actions of the Chipmunk pilot, the Board noted that the passenger in the aircraft had been feeling unwell and wondered whether this had become a distraction to the pilot. Members noted that the pilot could have called a PAN on the frequency, which would have alerted other circuit users to their predicament and would have given them some priority to land quickly. As it happened, the Chipmunk pilot had not appeared to assimilate that the PA22 had been in the vicinity when the other

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

pilot asked whether they had been visual (**CF4**) and, having said that they were not visual, they had not requested further information as to the whereabouts of the PA22 (**CF3**). Instead, continuing with the join and into confliction with the PA22 (**CF2**). Again, members reiterated that the purpose of the overhead join was to identify the visual circuit traffic before joining the circuit and that if pilots were not visual with all of the traffic, the wise option would have been to remain at height in the overhead until they were visual. In this case, the Chipmunk pilot had not seen the PA22 at all (**CF6**).

Members noted that neither aircraft had been fitted with any form of CWS and wished to highlight to pilots the merits of electronic conspicuity, which on this occasion, given that both aircraft had been transponder-equipped, may have provided some additional information to aid visual acquisition.

When determining the risk of the Airprox, the Board had only the pilots' reports to consider, with no radar or GPS data. However, they thought that the description of the separation by the PA22 pilot described a situation whereby, although safety had been reduced, there had been no risk of collision. They accordingly assigned a Risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2024072			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Tactical Planning and Execution			
1	Human Factors	• Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions
2	Human Factors	• Monitoring of Environment	Events involving flight crew not to appropriately monitoring the environment	Did not avoid/conform with the pattern of traffic already formed
	• Situational Awareness of the Conflicting Aircraft and Action			
3	Human Factors	• Lack of Communication	Events involving flight crew that did not communicate enough - not enough communication	Pilot did not request additional information
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
5	Human Factors	• Unnecessary Action	~~Events involving flight crew performing an action that was not required~~	Pilot was concerned by the proximity of the other aircraft
	• See and Avoid			
6	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
7	Human Factors	• Perception of Visual Information	~~Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement~~	Pilot was concerned by the proximity of the other aircraft
8	Contextual	• Visual Impairment	Events involving impairment due to an inability to see properly	One or both aircraft were obscured from the other

Degree of Risk: C.

Safety Barrier Assessment[3]

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

Ground Elements:

[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 Confliction and Action were assessed as **not used** because the AGO had not been required to sequence the aircraft joining the circuit.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the PA22 pilot did not inform the other circuit users of their intention to extend their join to the south of the airfield and did not update their position once they knew the Chipmunk pilot had not been visual with them. Additionally, neither pilot conformed with, nor avoided, the pattern of traffic in the circuit.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the Chipmunk pilot had not assimilated the position of the PA22 and had not requested any additional information.