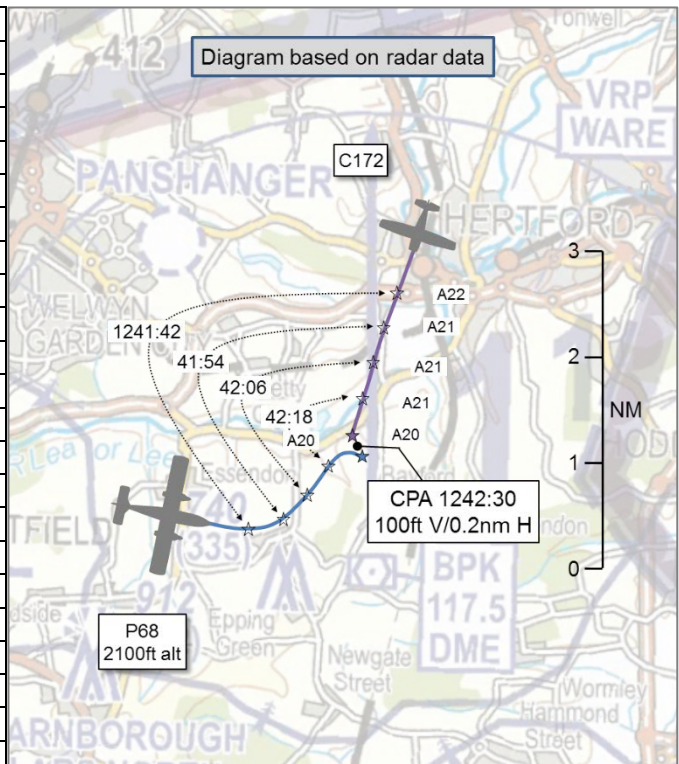


AIRPROX REPORT No 2019152

Date: 21 Jun 2019 Time: 1242Z Position: 5146N 00007W Location: 1NM N BPK

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	P68	C172
Operator	Civ Comm	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	None
Provider	Stansted	N/A
Altitude/FL	2100ft	2000ft
Transponder	A, C, S	A, C
Reported		
Colours	White, blue	White
Lighting	NK	Nav
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2100ft	2200ft
Altimeter	QNH (1020hPa)	NK
Heading	050°	185°
Speed	105kt	114kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	0ft V/<1nm H	100ft V/1nm H
Recorded	100ft V/0.2nm H	



THE P68 PILOT reports being under a fairly high workload, undertaking a survey in and out of Stansted airspace. They had just completed the first line, along the edge of the western side of the Stansted CTR. Despite only receiving a Basic service outside the CTA, Stansted informed him of traffic northwest of them on track to BPK at a similar altitude at about 4 miles. The P68 pilot raised the wing to try and find the traffic. Neither the observer or he could see it so he started a teardrop turn, rolling wings level twice to try and find the traffic. As they intercepted the next line ATC reported the traffic at 1 mile, left of the 12 o'clock. Just as the P68 pilot was about to report not visual, he saw the traffic on a constant relative bearing, left of the 12 o'clock and increasing in size. He reported taking avoiding action which he did by making a steep turn to the right. It seemed to him that it was only as the other traffic moved from their 9 to 8 o'clock position that the other pilot saw them and made a turn in the opposite direction.

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

THE C172 PILOT reports that at the time of the Airprox he was making an entry on his PLOG. When he looked up the P68 was in the 1130 position at the top of his windscreen moving from right to left (west to east) at a range of 1NM. No avoiding action was required because the P68 had passed through the 1130 position and was moving away to the left when first seen. It wasn't near enough to read the registration. Shortly after, he saw the P68 turn onto a southerly heading, paralleling his track for a few seconds, about 2 nm away. The C172 pilot then turned right towards [destination] where he landed. A PPL qualified colleague sitting in the right seat told him that he saw the same situation and that the right wing of the C172 was obscuring the approach of any aircraft from that side at the same level. The C172 pilot commented that this event will have been one of several where all are obliged to stay below 2500ft, near a beacon and leaving the corridor between Stansted and Luton.

The pilot assessed the risk of collision as 'None'.

THE STANSTED CONTROLLER reports that he was working as Stansted Final Director. [P68 C/S] was a survey flight conducting a survey on the western edge of the Stansted CTR and CTA. At the time they were operating outside CAS under a Basic Service. At 12:42, having completed a northeast to southwest run, [P68 C/S] was in the vicinity of BPK at 2100ft and had reported turning to position onto their next line. At this time the controller observed traffic to the northeast of BPK, squawking 7000, indicating 2000ft, tracking towards BPK. Although only operating under a Basic Service, given the relative positions and levels, it was the controller's opinion that this unknown traffic presented a possible risk of collision to the [P68 C/S], so he passed generic Traffic Information to warn [P68 C/S] about the proximity of the traffic. As [P68 C/S] completed their positioning turn the potential risk remained so he updated the Traffic Information and at that point the pilot of [P68 C/S] reported visual with the other aircraft. No other reference was made to the situation thereafter.

Factual Background

The weather at Stansted was recorded as follows:

METAR EGSS 211250Z AUTO 26007KT 9999 NCD 18/08 Q1020=

Analysis and Investigation

UKAB Secretariat

The P68 and C172 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.

Summary

An Airprox was reported when a P68 and a C172 flew into proximity 1NM north of the BPK VOR at 1242Z on Friday 21st June 2019. Both pilots were operating under VFR in VMC, the P68 pilot in receipt of a Basic Service from Stansted and the C172 pilot not in receipt of a FIS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings and a report from the air traffic controller 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 controller's actions and commended him for providing timely and effective Traffic Information to the P68 pilot, only in receipt of a Basic Service, who used this information to try to visually acquire the C172. Unfortunately, this was not possible until at a closer range than desirable but the P68 pilot was then able to take immediate avoiding action.

Members discussed the pilots' actions and agreed that it would have been more appropriate for the C172 pilot to have sought some form of FIS in that area due to airspace constraints and traffic levels (**CF1**); even a listening service would have afforded the opportunity for Traffic Information to be passed. Consequently, the C172 pilot had only generic SA that other aircraft could be in the area (**CF2**). The incident was then compounded by the unfortunate timing of the C172 pilot making an entry to his PLOG (**CF3**), preventing earlier visual acquisition of the P68. Members agreed that the C172 pilot's description of the incident indicated that he had probably seen the P68 at or about CPA and consequently had a different perception of the severity of the event than the P68 pilot. Finally, some members noted that neither aircraft had been fitted with a means of electronic conspicuity, but they recalled that the P68 operating company was in the process of evaluating a suitable system, as recommended by the Airprox

¹ SERA.3205 Proximity.

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

Board in Airprox 2019028. The Board urged the company to hasten their evaluation process given the potential for survey task focus and associated operating requirements to detract from their crews' abilities to maintain a robust lookout; the provision of onboard warning systems would do much to assist in focusing the attention of crews on any potential threats.

Members discussed the risk and agreed that the incident had stopped short of an actual risk of collision due to the P68 pilot sighting the C172 in time to take avoiding action. Although safety had been degraded, the Board agreed that his timely and effective actions had averted the risk of collision (**CF4**); risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2019152			
CF	Factor	Description	Amplification
	Flight Elements		
	• Tactical Planning and Execution		
1	Human Factors	• Communications by Flight Crew with ANS	Pilot did not communicate with appropriate controlling authority
	• Situational Awareness of the Conflicting Aircraft and Action		
2	Contextual	• Situational Awareness and Sensory Events	Generic, late, no or incorrect Situational Awareness
3	Human Factors	• Distraction - Job Related	Pilot was engaged in other tasks
	• See and Avoid		
4	Contextual	• Near Airborne Collision with Aircraft, Balloon, Dirigible or Other Piloted Air Vehicle	A conflict in the FIR

Degree of Risk: C.

Recommendation: Nil.

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:

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because had the C172 pilot listened out (with a listening squawk) or contacted Stansted or Luton for a FIS, relevant Traffic Information could have been passed.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because although the P68 pilot had been passed Traffic Information on the C172, the C172 pilot was not aware of the proximity of the P68.

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

Airprox Barrier Assessment: 2019152		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 Confliction & 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:		<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present</u>	<u>Not Used</u>		
Provision	✔	⚠	✘	○				
Application	✔	⚠	✘	○				
Effectiveness								