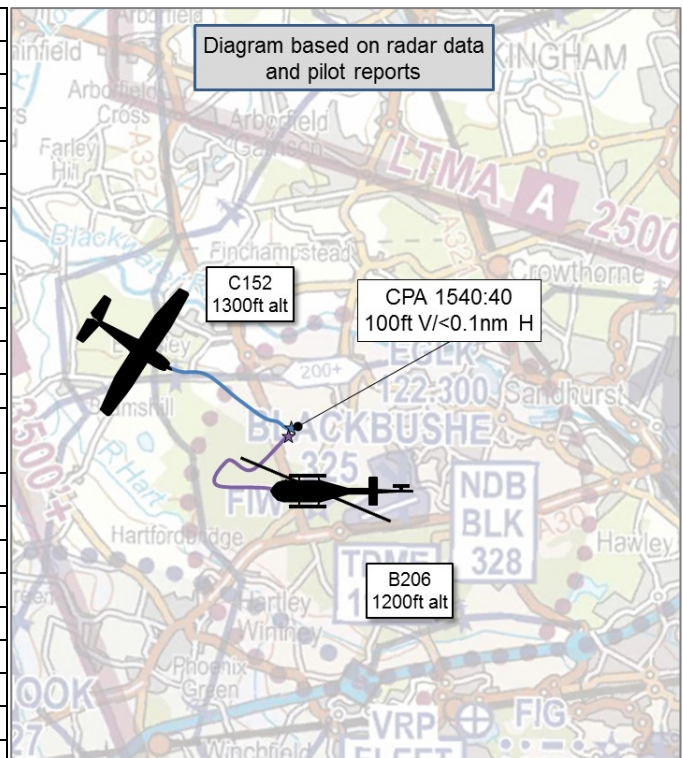


AIRPROX REPORT No 2018253

Date: 08 Sep 2018 Time: 1540Z Position: 5120N 00052W Location: Blackbushe ATZ

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C152	B206
Operator	Civ FW	Civ Helo
Airspace	Blackbushe ATZ	Blackbushe ATZ
Class	G	G
Rules	VFR	VFR
Service	AFIS	AFIS
Provider	Blackbushe	Blackbushe
Altitude/FL	1300ft	1200ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White, Yellow	Black, Green
Lighting	Beacon, Nav, Landing	Nav, Anti-Col
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1100ft	1200ft
Altimeter	QFE	QNH
Heading	135°	050°
Speed	80kt	95kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	Seen after CPA	50ft V/NK H
Recorded	100ft V/<0.1nm H	



THE C152 PILOT reports that he was deadside on recovery to Blackbushe and was explaining a deadside join to his student. He was aware that a B206 was conducting 5min pleasure flights in the northern part of the ATZ but, unfortunately, had an incorrect mental model of the B206's routing; he assumed the B206 was operating at ~500ft. On passing 1100ft in the descent to 800ft, the student exclaimed and pointed to the right. He looked right to see the bottom of the B206 as its pilot banked hard away. Subsequently he spoke with the B206 pilot on the ground who advised him that he had seen the C152 at a late stage and made a hard turn away.

He assessed the risk of collision as 'High'.

THE B206 PILOT reports that he was flying a short pleasure flight and had departed to the north-west as requested by the airfield. On reaching the ATZ boundary he turned around to route towards the deadside where he had been making his approaches to the 'H' from the north-west. As he was about to call deadside, he saw the fixed-wing aircraft approaching him from his left and took avoiding action - rapidly turning to the right and descending. Following the incident, he landed, shut down and went to the tower to let them know what had happened. The FISO stated that the other pilot would most likely wait until he (the B206 pilot) finished his remaining flights to talk to him regarding what happened. After his last flight he received a call from the tower, saying the C152 pilot is waiting to have a chat with him. He met the C152 pilot as he exited the helicopter and he introduced himself. They discussed what had happened and the C152 pilot stated that he was chatting with his student and had not seen the B206 until his student saw the B206 diving away and avoiding the C152. The C152 pilot concluded by informing him that he was going to file an Airprox.

He assessed the risk of collision as 'High'.

Factual Background

The weather at Farnborough was recorded as follows:

METAR EGLF 081520Z 21012KT 9999 FEW034 SCT046 18/11 Q1018

Analysis and Investigation

UKAB Secretariat

The C152 and B206 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. 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 operation².

Summary

An Airprox was reported when a C152 and a B206 flew into proximity in the Blackbushe visual circuit at 1540hrs on Saturday the 8th of September 2018. Both pilots were operating under VFR in VMC and in receipt of an Aerodrome Flight Information Service from Blackbushe.

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 began by looking at the actions of the C152 pilot. He was joining onto the deadside and concentrating on instructing the student on the correct method for such a join with the expectation that the B206 would be below circuit height. Members wondered how the instructor had come to the conclusion that the B206 would be at ~500ft and whether the AFISO had given information to the C152 pilot on the B206's operating area and height. The C152 pilot said he could not remember being given such information but, equally, there was no evidence that this had not been given and it had just not been assimilated by him. Some members wondered to what extent the B206's operations had been promulgated to the airfield users, and whether this had included information as to its likely operating height. Irrespective, it was clear to the Board that the C152 instructor had equated 'pleasure flight' with operations below circuit height, and this served as a reminder to all of the need to ensure clarity of information rather than assumption; the greater the accuracy and depth of information that pilots receive, the greater their SA. Notwithstanding, it was also clear to the Board that the C152 instructor had been distracted from maintaining a robust lookout during his join by concentrating on instructing the student; the Board agreed that this also highlighted the need to maintain a good lookout when instructing, especially in a busy visual circuit.

For his part, the B206 was operating on the deadside up to circuit height and, although entitled to do so, some members thought that it might have been more appropriate if either Blackbushe had imposed a height restriction below circuit height, or the B206 pilot had himself avoided operating at that height, to ensure the B206 did not conflict with fixed-wing aircraft joining from the northwest. Notwithstanding, the B206 pilot had seen the C152, albeit later than desirable, and had been able to conduct an emergency avoiding manoeuvre to avoid.

The Board then looked at the cause and risk of the Airprox. Some members thought that the C152 pilot had not integrated with the B206 already within the circuit, but others argued that the B206's sight-seeing operation meant that they were not yet forming a pattern for the C152 pilot to integrate with; both pilots were effectively 'joining' deadside, albeit the B206 pilot had remained within the ATZ at all times. Acknowledging that the manoeuvring B206 pilot had probably seen the C152 as early as the

¹ SERA.3205 Proximity.

² SERA.3225 Operation on and in the Vicinity of an Aerodrome.

geometry permitted, the Board agreed that the incident was probably best described as a conflict in the ATZ resolved by the B206 pilot. Turning to the risk, members noted that the B206 pilot had had to carry out avoiding action to increase the separation between himself and the C152, and that the C152 pilot did not see the B206 until after CPA. The Board therefore agreed that safety had been much reduced and accordingly assessed the risk as Category B.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in the Blackbushe ATZ resolved by the B206 pilot.

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:

ANSP:

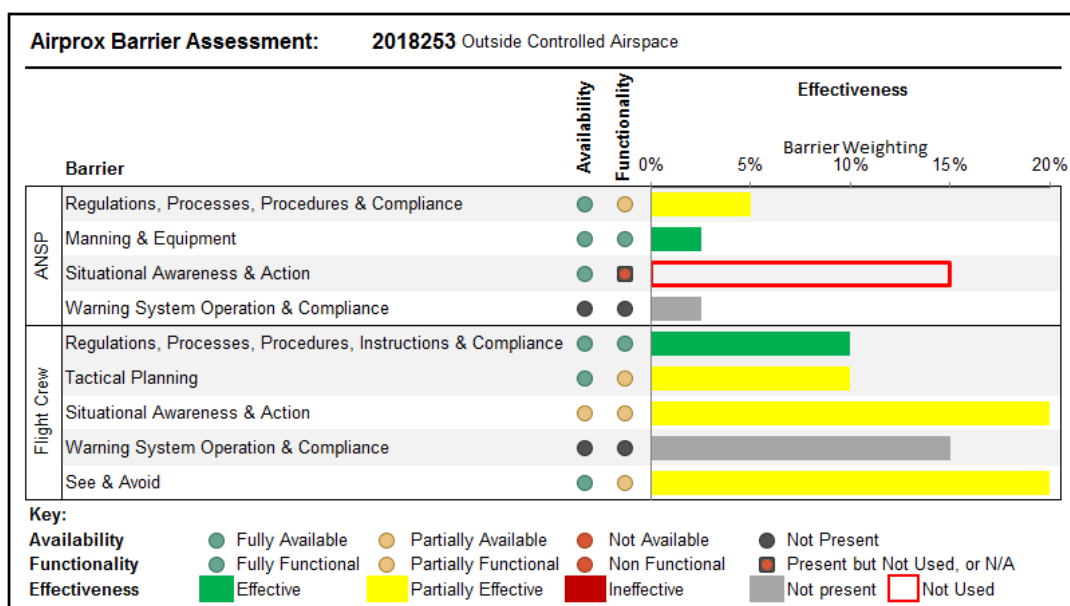
Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because the B206 was not given an operating height restriction to deconflict him from deadside fixed-wing traffic.

Flight Crew:

Tactical Planning was assessed as **partially effective** because the B206 pilot was operating close to the circuit height on the deadside of the aerodrome.

Situational Awareness and Action were assessed as **partially effective** because although the C152 pilot was aware that the B206 was present, he had a flawed mental model of its operating height.

See and Avoid were assessed as **partially effective** because the B206 pilot saw the C152 later than desirable and carried out emergency avoiding action; the C152 pilot did not see the B206 until after CPA.



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