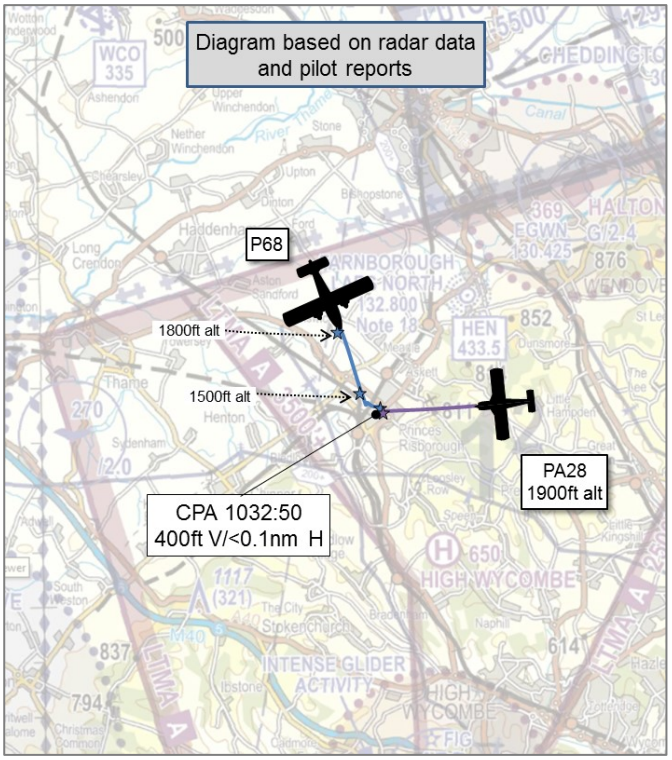
AIRPROX REPORT No 2019248

Date: 26 Aug 2019 Time: 1032Z Position: 5143N 00049W Location: Princes Risborough

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	P68	PA28
Operator	Civ Comm	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic
Provider	Oxford	Farnborough
Altitude/FL	1500ft	1900ft
Transponder	A, C, S	A, C
Reported		
Colours	White, Blue	Grey, White
Lighting	Nav, Strobe, Landing	Nav, Strobe
Conditions	VMC	VMC
Visibility	>10km	10km in Haze
Altitude/FL	1900ft	2000ft
Altimeter	QNH (1018hPa)	QNH (1018hPa)
Heading	165°	325°
Speed	100kt	100kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	<100ft V/10m H	150ft V/200m H
Recorded	400ft V/<0.1nm H	



THE P68 PILOT reports that he was performing a Lidar survey from a position 5nm north of WCO NDB towards the Wycombe ATZ. On his first north-to-south run his observer spotted another aircraft on their left, the observer made the P68 pilot aware of its position due to it being at a constant relative bearing; he immediately made a turn to avoid. Turning behind seemed safest instead of making a right turn onto the same track. Increasing the bank to make sure he would avoid, after turning about 30°, the other aircraft possibly spotted him and initiated a right turn towards him, then appeared to start descending and so the P68 pilot pushed the aircraft into a diving turn. He was only receiving a Basic Service because he could not get a Traffic Service from Farnborough or Brize [UKAB note: Because the P68 pilot said he would be operating in the vicinity of Wycombe Airpark for 3 hrs, Brize instructed the P68 pilot to freecall Farnborough LARS but the Farnborough R/T recording has no record that he did so]. As he initiated the avoiding action, Oxford asked a question about his intentions, he reported he was taking avoiding action, to which the controller replied "that was not the question" and told him to change to Farnborough North. Because he could not report the Airprox to the Oxford controller he reported it when he had returned to Oxford.

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

THE PA28 PILOT reports that he was flying a straight leg from Princes Risborough to Westcott (disused airfield), while in contact with Farnborough Radar. There was no cloud but, probably due to the hazy conditions, he noticed the twin quite late, coming towards him but just below his altitude. The aircraft appeared to have already spotted him as it was already descending further and turning to the right, so he felt he didn't need to make any evasive manoeuvres. However, he thinks he had enough time to make a turn if needed. He doesn't recall any radio warning before, or comments after from Farnborough North. He was a solo student pilot.

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

THE OXFORD CONTROLLER reports that the P68 pilot reported an Airprox which occurred on his outbound flight. The Airprox was reported on the ground after the flight was completed. The pilot requested a Basic Service, which was agreed. The controller was busy and the Airprox was not reported on the RTF. The pilot stated that he had adjusted course to avoid another aircraft.

THE FARNBOROUGH CONTROLLER reports that she has no recollection of this event due to being notified about it nearly 4 weeks after the occurrence. She had been told that an Airprox was reported in the vicinity of High Wycombe between a P68 and a PA28.

Factual Background

The weather at Benson was recorded as follows:

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METAR EGUB 260950Z AUTO 23003KT 9999 // NCD 24/16 Q1018
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Analysis and Investigation

Oxford Incident Investigation Report

This incident occurred in busy Class G airspace on a good weather day. The controller was busy and did not have spare capacity to monitor aircraft operating on a Basic Service. The controller spoke in a direct and concise manner, which could have been mistaken as terse, but the inflection in his voice was the same with all transmissions.

The Oxford Investigator observed 2 occasions in 5mins where the P68 came close to other aircraft. The P68 pilot had requested, and was operating under, a Basic Service. The controller was working a busy session including transits, vectored approaches, VFR joiners and leavers and aircraft on a Traffic Service. When interviewed, the pilot of the P68 remarked on his lack of collision avoidance equipment. The P68 pilot did not report the Airprox until he had landed.

UKAB Secretariat

The P68 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 hazard[1]. If the incident geometry is considered as converging then the PA28 pilot was required to give way to the P68[2].

Figure 1: 1032:50 CPA

[1] SERA.3205 Proximity.
[2] SERA.3210 Right-of-way (c)(2) Converging.

Summary

An Airprox was reported when a P68 and a PA28 flew into proximity near Princes Risborough at 1032hrs on Monday 26th August 2019. Both pilots were operating under VFR in VMC, the P68 pilot in receipt of a Basic Service from Oxford and the PA28 pilot in receipt of a Basic Service from Farnborough LARS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings and reports 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 began by looking at the actions of the P68 pilot. He had requested a Traffic Service from Brize Norton but, because of the position of his task, they had suggested he request a service from Farnborough, the LARS unit in that area. Notwithstanding, it appeared that the P68 pilot had opted to remain on a Basic Service with Oxford. Members opined that in that area, a known choke point for transiting aircraft, he would have been better served in requesting a Traffic Service with Farnborough; even if they had not been able to provide a Traffic Service he would have received a Basic Service which would have provided both him and others, including the PA28 pilot, a greater level of information regarding traffic in his operating area. As it was, whilst operating under a Basic Service with Oxford he was at the edge of their radar cover which, even if they had been able to monitor his flight **(CF1)**, would have limited any information he received on other aircraft **(CF2)**. The Board noted that the P68 observer saw the PA28 about 0.5nm away and had alerted the pilot who, when he saw the PA28, decided that a turn behind the PA28 was the safest option. The P68 pilot had reported the final separation as less than 100ft and 10m, but the radar recording showed that the vertical separation was closer to 400ft as the aircraft crossed. Although transponder inaccuracy could not be discounted, members suspected that the P68 pilot may have been startled by the encounter and had perhaps misjudged the separation due to the sudden appearance of the PA28 **(CF5)**.

Turning to the actions of the PA28 pilot, members noted that he had seen the P68 late, when it had already turned to avoid him. As a result, he had therefore decided that avoiding action by him was not required **(CF5)**.

The Board then looked at the actions of the controllers. The Board agreed that neither controller was required to monitor the aircraft under a Basic Service **(CF1)**, and both pilots would have been better served by at least requesting a Traffic Service in order to benefit from monitoring by ATC in that area. Some members wondered if the Oxford controller's somewhat terse manner may have influenced the P68 pilot not to report the Airprox on frequency; had he done so, this may have enabled earlier identification of the PA28 which, in turn, might have enabled an earlier report from the Farnborough controller when their recollection of the incident was clearer.

Turning to the risk, the Board agreed that the P68 observer had seen the PA28 as early as could be expected under the prevailing conditions, and was then able to warn the P68 pilot who turned behind in a timely and effective manner as he continued to monitor the PA28's flight. Notwithstanding the P68 pilot's assessment of high risk of collision and perception of a very close encounter, the Board reviewed the radar recording and agreed that it was more likely that the P68 pilot had mis-perceived the proximity of the PA28 and that, in actuality, the P68 pilot's actions had removed the risk of collision. Accordingly, the Board agreed that this incident was probably best described as a conflict in the FIR **(CF3)** which had been resolved by the P68 pilot; risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTOR(S) AND RISK

Contributory Factor(s):

	2019248		
CF	**Factor**	**Description**	**Amplification**
	Ground Elements		
	• Situational Awareness and Action		
1	Contextual	• Situational Awareness and Sensory Events	Not required to monitor the aircraft under the agreed service
	Flight Elements		
	• Tactical Planning and Execution		
2	Human Factors	• Communications by Flight Crew with ANS	Appropriate ATS not requested by pilot
	• Situational Awareness of the Conflicting Aircraft and Action		
3	Contextual	• Situational Awareness and Sensory Events	Generic, late, no or incorrect Situational Awareness
	• See and Avoid		
4	Contextual	• Near Airborne Collision with Aircraft, Balloon, Dirigible or Other Piloted Air Vehicle	A conflict in the FIR
5	Human Factors	• Monitoring of Other Aircraft	Late-sighting by one or both pilots

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:

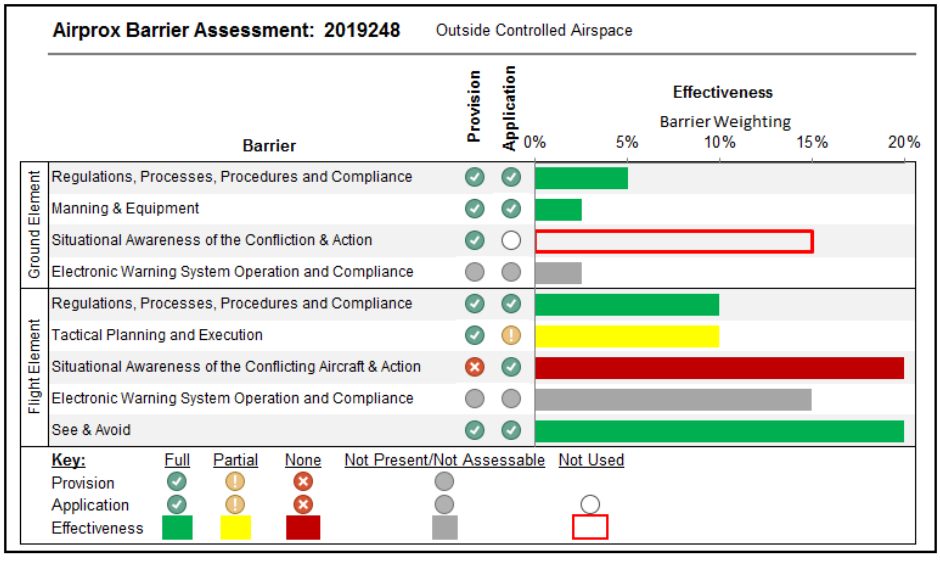
Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because both aircraft were on a Basic Service and the controllers were not required to monitor the aircraft.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because both pilots could have requested a Traffic Service.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had any information on the other aircraft.



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