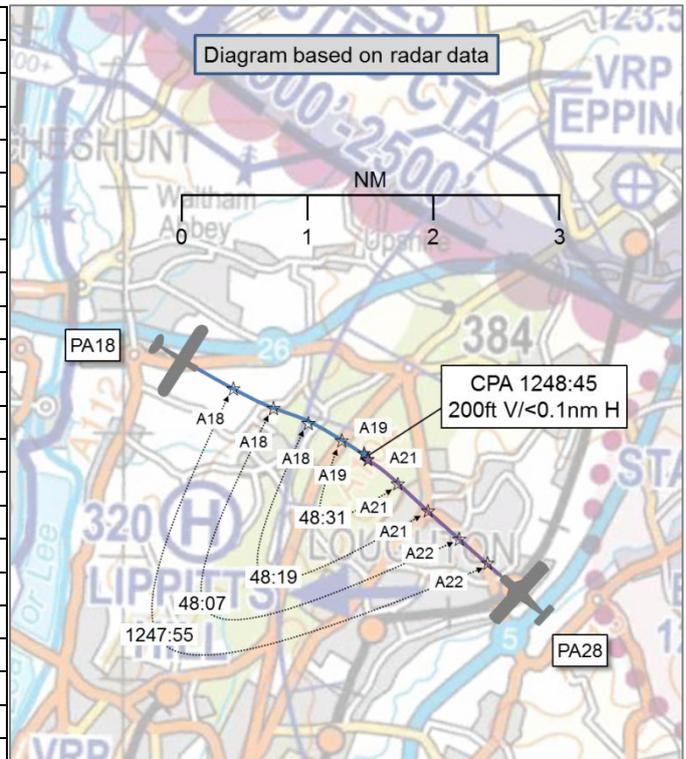


**AIRPROX REPORT No 2015169**

Date: 17 Sep 2015 Time: 1249Z Position: 5140N 00003E Location: 4nm WNW Stapleford

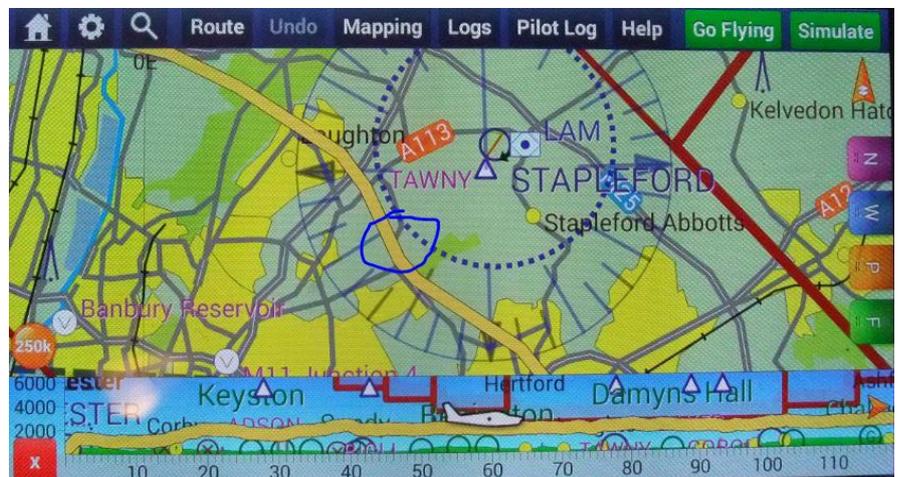
**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

Recorded	Aircraft 1	Aircraft 2									
Aircraft	PA18	PA28									
Operator	Civ Pte	Civ Club									
Airspace	London FIR	London FIR									
Class	G	G									
Rules	VFR	VFR									
Service	Basic	Basic									
Provider	Farnborough N	Farnborough N									
Altitude/FL	1900ft	2100ft									
Transponder	A/C	A/S									
Reported											
Colours	White/blue stripe	Mainly white									
Lighting	NK	Nav, strobes									
Conditions	VMC	VMC									
Visibility	>10km	10km									
Altitude/FL	2000ft	2100ft									
Altimeter	NK	QNH									
Heading	110°	320°									
Speed	80kt	110kt									
ACAS/TAS	Not fitted	Not fitted									
Alert	N/A	N/A </tr <tr> <th colspan="3">Separation</th> </tr> <tr> <td>Reported</td> <td>100ft V/0m H</td> <td>90ft V/10m H</td> </tr> <tr> <td>Recorded</td> <td colspan="2">200ft V/&lt;0.1nm H</td> </tr>	Separation			Reported	100ft V/0m H	90ft V/10m H	Recorded	200ft V/<0.1nm H	
Separation											
Reported	100ft V/0m H	90ft V/10m H									
Recorded	200ft V/<0.1nm H										



**THE PIPER PA18 SUPER CUB PILOT** reports that he was travelling straight and level in good VMC, routing southeast to the southwest of Stapleford ATZ. He suddenly saw a white coloured light fixed-wing aircraft approach and pass immediately below his starboard wing, travelling in the opposite direction. He reported the first sighting as 200m. It was all over too quickly to take any avoiding action. He was looking out, but failed to see the approaching aircraft and still has no idea where it came from. After recovering from the surprise, and when Farnborough N called about something else a few minutes later, he decided to report it as an Airprox. Farnborough transferred him to another frequency to take the details. Some minutes after that, another pilot called and said that he had heard his transmission, and believed that his was the other aircraft. The pilot told the controller

that he would not report a separate Airprox as it seemed to be that he was already reporting it. The other pilot reported that he was flying at 2100ft. The screen shot of the PA18's track from Sky Demon is attached. The Airprox occurred a minute or two after he had altered course slightly to avoid entering Stapleford's ATZ, approximately in the location of the rough hand-drawn circle on the screen shot he thought.



He assessed the risk of collision as 'High'.

**THE PIPER PA28 PILOT** reports that he was travelling in a straight and level flight, approximately overhead Cheshunt, tracking direct to BPK. He was navigating using his map and was looking out of the side window scanning the ground and sky. As he looked forward from this, he immediately noticed an aircraft pass less than 100ft above him. It was travelling in a slight left track of his opposite direction as he noticed the right-hand side of the aircraft and its blue stripe down the side of the fuselage. No avoiding action was taken as it was too late from the time of seeing the aircraft to respond.

He assessed the risk of collision as 'Medium'.

**THE FARNBOROUGH LARS CONTROLLER** reports that whilst on duty as the band-boxed LARS North and East, he was informed by the pilot of the PA18 that he had experienced an Airprox. Having heard his report, the pilot of the PA28 stated that he had recently flown close to another aircraft and that it might have been his aircraft involved in the Airprox. Because the pilot of the PA18 was close to the boundary with LARS East, he instructed him to contact him on the East frequency and he asked for the details on that frequency. He stated that when he was at altitude 2200ft, at approximately 1250 and 3nm southwest of Stapleford, a white aircraft had flown underneath him by approximately 100ft in the opposite direction. Weather conditions were 'good' VFR and he first saw the aircraft 30 seconds before they passed.

## Factual Background

The weather at London City and Stansted was recorded as follows:

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METAR EGLC 171250Z 26012KT 9999 FEW035 17/08 Q1001=
METAR EGSS 171220Z 27009KT 9999 FEW030 15/08 Q1000=
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## Analysis and Investigation

### CAA ATSI

The PA18 pilot was tracking southeast, with the intention of passing to the west of Stapleford ATZ, in receipt of a Basic Service from Farnborough ATC. The PA28 pilot was northwest-bound, also routing to the west of Stapleford ATZ, on a Basic Service from Farnborough ATC.

Neither aircraft had been maintaining a constant track until at 1248:04, the PA18 pilot made a small right turn, and the PA28 pilot, now 3nm to the west of Stapleford, a small left turn, which placed both aircraft head-on and 2.1nm apart (Figure 1). The PA18 was transponding code 5022, and the PA28, 5025.

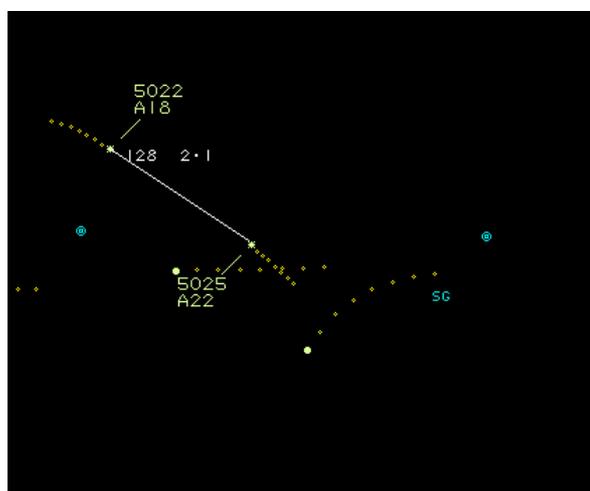


Figure 1 – 1248:04

Figures 2 & 3 show the radar recording before and after the aircraft had passed, 1248:45 and 1248:47 respectively. CPA was assessed as having taken place at 1248:46, with the aircraft being separated by less than 300ft vertically, and 0.1nm horizontally.

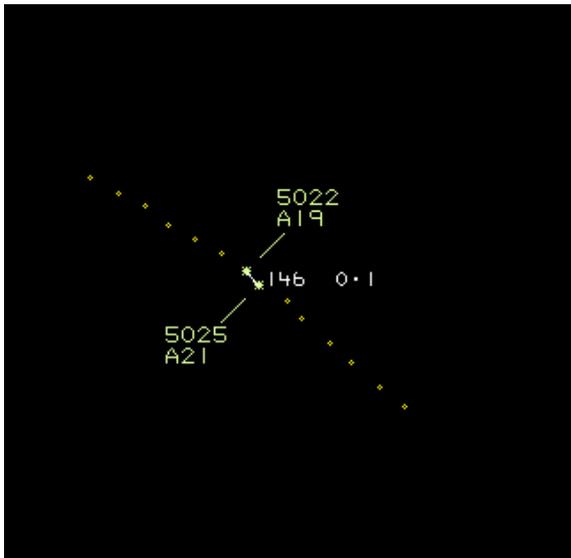


Figure 2 – 1248:45

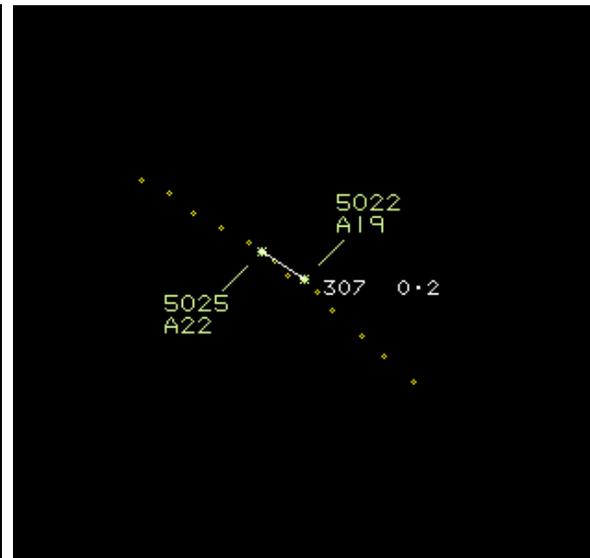


Figure 3 – 1248:47

A Basic Service relies on the pilot avoiding other traffic, unaided by controllers/FISOs. The provider of a Basic Service is not required to monitor the flight (and) pilots should not expect any form of Traffic Information from a controller/FISO. (CAP774, Chapter 2, Para 2.1 & 2.5). Farnborough ATC had combined both North and East Sectors.

### UKAB Secretariat

The PA18 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<sup>1</sup>. Because the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right<sup>2</sup>.

### Summary

An Airprox was reported when a PA18 and a PA28 flew into proximity at 1249 on Thursday 17<sup>th</sup> September 2015. Both pilots were operating under VFR in VMC, in receipt of a Basic Service from Farnborough N. Both pilots reported that they had not observed the other aircraft early enough to take avoiding action. The minimum separation was recorded as 200ft vertical and less than 0.1nm horizontal.

### PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from both pilots, the Farnborough LARS controller, area radar and RTF recordings and reports from the appropriate ATC and operating authorities.

The Board noted that both pilots had been in receipt of a Basic Service from Farnborough and wondered whether they had requested a Traffic Service from the controller. The Board recognised that it is not always possible, due to workload, for a controller to provide a Traffic Service, but the Board opined that it was always worth requesting it; even if the controller had to amend it to a reduced Traffic Service it could be regarded as beneficial. In the circumstances of this incident, ATC members noted that the controller was operating North and East positions bandboxed, and that he may have been unable to provide a Traffic Service; however, they also noted that he may have had

<sup>1</sup> SERA.3205 Proximity.

<sup>2</sup> SERA.3210 Right-of-way (c) (1) Approaching head-on.

an opportunity to use the routing information supplied by the pilots to pass generic Traffic Information.

GA members wondered whether the pilot who had already made his initial call on the frequency might have assimilated the second pilot's initial transmission describing his route when he called Farnborough. Failing this, the Board recognised that without having gained any information about the other traffic from ATC, and not being equipped with any form of ACAS, the only method of traffic avoidance for both pilots was by keeping a good look-out. Members reiterated the importance of appropriately prioritising lookout over in-cockpit and navigation tasks, and also of the need to ensure that canopy obscurations were countered by moving one's head around them to pro-actively search for other aircraft.

Turning to the cause of the Airprox, the Board noted that the PA18 pilot had only seen the PA28 as it passed immediately below his right wing, and that the PA28 pilot had reported that he had only noticed the PA18 as it had passed less than 100ft above him. The Board opined that this had been effective non-sightings by both pilots, and that that was the cause of the Airprox. Turning to the risk, the Board noted that the two aircraft had been very close to each other at the time of the Airprox; radar recordings showed that they were less than 0.1nm apart horizontally and this tied in with the distance reported by the pilots. Both pilots had also reported the vertical separation as about 100ft, although the radar recordings show it as 200ft. Bearing in mind the recognised tolerance of Mode C information of up to 200ft, the Board thought that the vertical separation was more akin to that reported by both pilots. Accordingly, the Board decided that separation had been reduced to the minimum and, because neither pilot had effectively seen the other before CPA, luck had played a major part in the incident. Consequently, the Board decided that the Airprox should be categorised as risk Category A.

### **PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: Effectively a non-sighting by both pilots.

Degree of Risk: A.