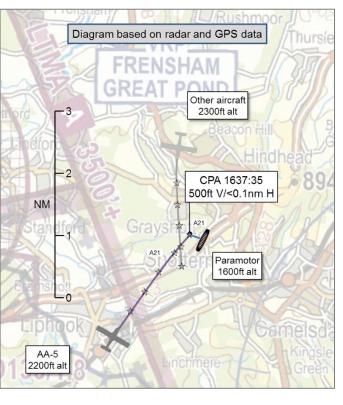
### **AIRPROX REPORT No 2018278**

Date: 07 Oct 2018 Time: 1637Z Position: 5106N 00046W Location: Haslemere

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Paramotor	AA-5
Operator	Civ Hang	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	Farnborough
Altitude/FL	1600ft	2100ft
Transponder	Not fitted	A, C
Reported		
Colours	Purple, white	White, red
Lighting	Not fitted	Strobes, beacon
Conditions	VMC	VMC
Visibility	30km	10km
Altitude/FL	1300ft	2000ft
Altimeter	NK	QNH (NK hPa)
Heading	315°	037°
Speed	15kt	106kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	100ft V/100m H	600ft V/50m H
Recorded	500ft V/<0.1nm H	



THE PARAMOTOR PILOT reports climbing in straight cruise when he noticed an aircraft approaching head-on. The single-engine low-wing aircraft was sufficiently high and to his left that he didn't feel avoiding action was necessary. However, he watched it carefully rather than scanning the sky for other aircraft, which was why he didn't notice the second (Airprox) aircraft until it was very close. He suspected that he only noticed it at all because it flew into his field of view as he was watching the first aircraft pass by on the left. He initially assessed that the Airprox aircraft was heading straight towards him and that he had no more than a second or two to take action. He reduced power and pulled right-tip-steering in an effort to lose height and to present more wing to the other pilot in the hope it would be seen (although he also thought that neither of these actions would have a meaningful effect, given the proximity of the other aircraft). He anticipated being buffeted by the aircraft's wake turbulence but, in the event, this did not happen and the aircraft passed by. The entire incident lasted no more than a few seconds, and for the aircraft to be seen approaching and then to pass by in such a short space of time indicated to him that it was very close. He caught sight of the aircraft again as it continued past on its original heading; at no point did he see a reaction from the aircraft or the pilot.

He assessed the risk of collision as 'High'.

**THE AA-5 PILOT** reports that he only recalled seeing a paramotor once recently and that it may have been on this flight. The paramotor was seen later than usual but he surmised it was due to it being at a lower altitude and therefore not captured in his normal scan. The paramotor was flying on a similar track and he overtook it higher and to their left side.

He assessed the risk of collision as 'Low'.

**THE FARNBOROUGH CONTROLLER** reports that he was working 2 aircraft in the vicinity, both under a Basic Service. They passed each other 200ft apart while he was dealing with another pilot who was requesting a Traffic Service. He did not observe any radar primary returns in the area.

#### **Factual Background**

The weather at Farnborough was recorded as follows:

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METAR EGLF 071650Z VRB03KT CAVOK 11/04 Q1023=
METAR EGLF 071620Z 28004KT 250V320 CAVOK 12/04 Q1023=
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### **Analysis and Investigation**

#### **UKAB Secretariat**

The paramotor and AA-5 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>. If the incident geometry is considered as converging then the AA-5 pilot was required to give way to the paramotor<sup>2</sup>.

### Summary

An Airprox was reported when a paramotor and an AA-5 flew into proximity near Haslemere at 1637hrs on Sunday 7<sup>th</sup> October 2018. Both pilots were operating under VFR in VMC, the paramotor pilot not in receipt of a FIS and the AA-5 pilot in receipt of a Basic Service from Farnborough.

## 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.

Members first discussed the paramotor pilot's perception of the incident. In reviewing the paramotor's altitude from its datalog file and comparing it to the AA-5's radar-displayed altitude it was clear that the 2 aircraft were about 500ft vertically separated. This concurred with the AA-5 pilot's estimate of separation but was much more than that reported by the paramotor pilot. Members wondered whether the paramotor pilot's startlement as the second aircraft entered his field of view had contributed to an underestimate of the vertical separation. This was not to diminish the paramotor pilot's sense of peril, but rather to highlight the powerful nature of human perception, especially when under stress. Given that the paramotor pilot also commented that he had expected to receive a degree of turbulence from the passing AA-5 and had not, the BHPA member commented that although he could not be certain of the conditions at the time, it seemed likely that the AA-5 was indeed higher than the paramotor pilot had perceived. Notwithstanding, he also highlighted the danger of passing close to canopy-suspended aircraft, and opined that this incident reinforced the need for powered-aircraft pilots to consider avoiding such aircraft by as wide a margin as practical, even if they were content with the separation from their perspective.

In the event the aircraft passed with an estimated separation of about 500ft. The Board agreed that this incident had been due to a late sighting by both pilots but, notwithstanding the paramotor pilot's very real sense of danger, that the degree of separation had been such that normal safety standards had pertained. Lastly, the Board commented on the nature of paramotor/paraglider operations and noted that such aircraft were limited in their ability to 'avoid' and therefore the need to 'see' was of even greater importance; pilots should not fixate on one area or aircraft and must maintain a robust and effective lookout, perhaps by regular manoeuvring from side to side, which had the additional benefit of presenting a changing canopy aspect to aid other pilots' visual acquisition.

<sup>&</sup>lt;sup>1</sup> SERA.3205 Proximity.

<sup>&</sup>lt;sup>2</sup> SERA.3210 Right-of-way (c)(2) Converging.

### PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: A late sighting by both pilots.

Degree of Risk: E.

## Safety Barrier Assessment<sup>3</sup>

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

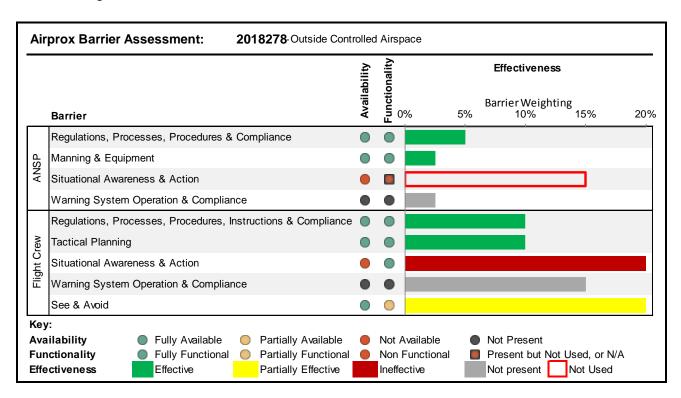
#### ANSP:

**Situational Awareness and Action** were assessed as **not used** because the paramotor pilot was not in communication with an ATSU and the AA-5 pilot was not in receipt of a service that required situational awareness or action from the controller.

# Flight Crew:

**Situational Awareness and Action** were assessed as **ineffective** because neither pilot was aware of the other aircraft until visual sighting.

**See and Avoid** were assessed as **partially effective** because both pilots saw the other aircraft at a late stage.



<sup>&</sup>lt;sup>3</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the <u>UKAB Website</u>.