AIRPROX REPORT No 2019065

Date: 14 Apr 2019 Time: ~1455Z Position: 5348N 00241W Location: M6, Junction 32

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	ROSSALL VRP -1719
Aircraft	SR20	Paramotor	Diagram based on radar data and pilot report
Operator	Civ FW	Civ Hang	and pilot report
Airspace	London FIR	London FIR	WINDEADMS (430)
Class	G	G	Churchtown 2 873 G 600
Rules	VFR	VFR	Ratten Row Cattern
Service	None	None	ST-MICHAELS Whitechaps 3:66
Altitude/FL	2800ft	NK	CPA ~1455
Transponder	A, C, S	Not fitted	CPA ~ 1435)
Reported			654 A CONGRIDGE CONGRIDA CONGRIDGE CONGRIDA C
Colours	White	Black	INSKIP CONTROL OF THE PROPERTY
Lighting	Strobe, Nav	N/K	Wholes SR20 JUNC JUNC
Conditions	VMC	VMC	2800ft alt
Visibility	10km	N/K	J3 7 Guinsargh
Altitude/FL	2800ft	N/K	R3 12 12 12 12 12 12 12 12 12 12 12 12 12
Altimeter	QNH (1030hPa)	N/K	Paramotor Paramotor
Heading	100°	N/K	406
Speed	140kt	N/K	PRESTON BI
ACAS/TAS	TAS	Not fitted	HOGHTON
Alert	None	N/A	WTN337
Separation			DME Longton BRIDGE JUNC
Reported	250ft V/0nm H	N/K	EGNO M6/M61
Recorded	led NK		MATZ A Grickle

THE SR20 PILOT reports that he had glanced down momentarily to change radio frequency for the next ATS service, when he looked up and outside he saw what he believed to be a paraglider about 300m away at the same level tracking right to left. He immediately dived and turned right to avoid. He commented that normally he would have received a service from Blackpool but unfortunately Blackpool had closed unexpectedly so there was no agency to talk to in that area.

He assessed the risk of collision as 'High'.

THE PARAMOTOR PILOT could not be traced.

The BHPA attempted to trace the Paraglider pilot and believed it could have been a paramotor rather than a paraglider because there were no paraglider events logged in that area for that day. They opined that the ground in that area is fairly low which isn't good for thermal generation. Also, at a time of almost 3pm, there could be some thermal-suppressing sea-air coming inland.

Factual Background

The weather at Blackpool was recorded as follows:

METAR EGNH 141450Z 10017KT CAVOK 08/M02 Q1025

Analysis and Investigation

UKAB Secretariat

The SR20 and Paramotor 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 converging then the SR20 pilot was required to give way to the Paramotor².

The Paramotor did not appear on the radar recording, therefore an accurate separation at CPA could not be verified.

Summary

An Airprox was reported when an SR20 and a Paramotor flew into proximity near Preston at about 1455hrs on Sunday the 14th of April 2019. The SR20 was operating under VFR in VMC and not in receipt of a service. The Paramotor pilot could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the pilot of the SR20 and radar photographs/video recordings. The Paramotor pilot could not be traced.

The Board began by hearing from the BHPA member who said that although the SR20 pilot had reported a paraglider it was very unlikely in that area under the conditions pertaining at the time, and he was more inclined to believe it was a Paramotor. He commented that although the Paramotor pilot would probably not have been able to hear the SR20 approaching due to the noise of his engine and the ear defenders he would likely have been wearing, visibility from a paramotor was quite good, and the pilot might have been able to see the SR20 approaching (CF1). He went on to comment that paramotor manoeuvrability was, however, limited and, as such, it would have been difficult for the paramotor pilot to increase the separation between the aircraft to any significant degree even if he had seen the SR20 in time to carry out any avoiding action manoeuvre. When asked whether the paramotor pilot would have reported an Airprox if he had seen the SR20, the BHPA member commented that paramotor pilots were generally unlicensed and may not have undertaken any formal training. As such, the paramotor pilot may not have been aware of the reporting procedures for Airprox, which may explain why there was no report from the paramotor pilot.

Turning to the actions of the SR20 pilot, the Board acknowledged that it was unfortunate that Blackpool was not providing a service, but that this was not germane to the Airprox due to the very low probability that the paramotor would have been in contact with to Blackpool, who operate non-radar (CF1). Members noted that the SR20 pilot had been trying to establish a service with another agency (CF2) when he looked up and saw the paramotor at the same level. Unfortunate in that the timing of the encounter coincided with his radio operation, the incident was a timely reminder of the need for a robust scan outside before devoting time to in-cockpit tasks. Notwithstanding, the SR20 pilot saw the paramotor, albeit later than desirable, and was able to take emergency avoiding action (CF4). Members also noted that although the SR20 had a TAS, it could not detect the non-transponding paramotor and therefore the SR20 pilot was denied a barrier which could have alerted him to the presence of the paramotor earlier than just visual acquisition (CF 3). In this respect, the Board noted recent CAA initiatives to encourage the introduction of practical electronic conspicuity systems and were heartened to see increasingly affordable and portable systems being developed.

The Board then considered the risk. Although it was not known if the paramotor pilot had seen the SR20, members felt that, regardless, he would probably not have been able to materially increase separation unless he had done so at an early stage. For his part, the SR20 pilot saw the paramotor at about 300m at the same level and had carried out emergency avoiding action to increase the vertical

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¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c)(2) Converging.

separation and turn away. Deducing that the increased separation had been solely down to the SR20 pilot's actions, the Board agreed that safety had been much reduced and that it had only been the SR20 pilot's last-minute action that had averted a likely collision. Therefore, the Board assessed the risk as a Category B.

PART C: ASSESSMENT OF CAUSE AND RISK

В.

Contributory Factors:

	2019065-Barriers					
CF	Factor	Description	Amplification			
	Flight Elements					
	Situational Awareness of the Conflicting Aircraft and Action					
1	Contextual	• Situational Awareness and Sensory Events	Pilot had no, only generic, or late Situational Awareness			
2	Human Factors	Distraction - Job Related	Pilot was distracted by other tasks			
	Electronic Warning System Operation and Compliance					
3	Technical	ACAS/TCAS System Failure	Incompatible CWS equipment			
	• See and Avoid					
4	Human Factors	Monitoring of Other Aircraft	Late-sighting by one or both pilots			

Degree of Risk:

Safety Barrier Assessment³

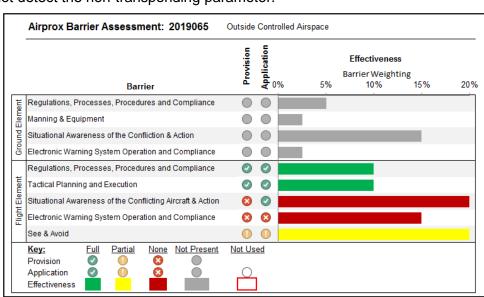
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Elements:

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

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the SA20's TAS could not detect the non-transponding paramotor.

See and Avoid were assessed as partially effective because the SR20 pilot saw the paramotor late, and then had to take emergency avoiding action. It was not known if the paramotor pilot saw the SR20.



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