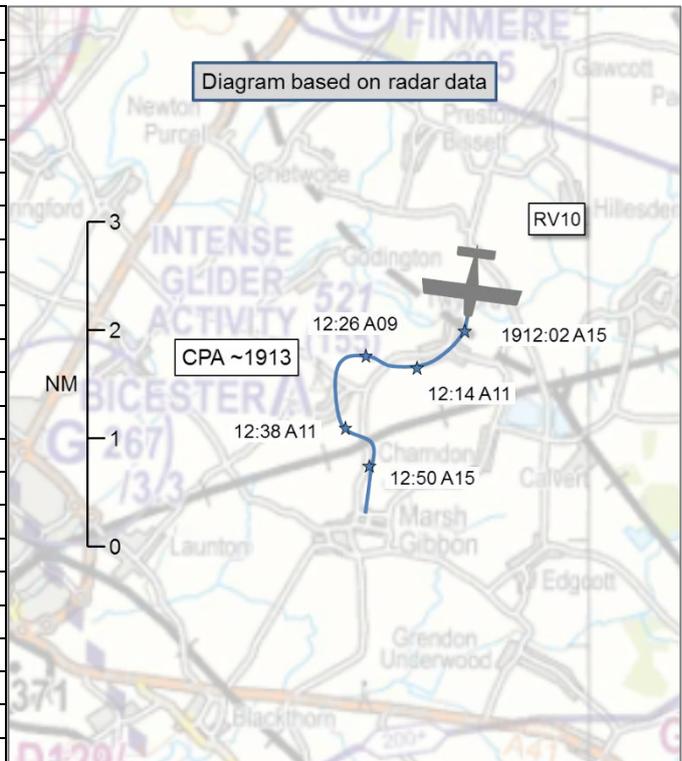


**AIRPROX REPORT No 2020048**

Date: 02 Jun 2020 Time: 1913Z Position: 5156N 00104W Location: 3NM S Finmere

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	RV10	Paramotor
Operator	Civ FW	Civ Hang
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	NK
Service	None	NK
Provider	N/A	NK
Altitude/FL	900ft	NK
Transponder	A, C, S	NK
<b>Reported</b>		Not reported
Colours	White, red	
Lighting	Strobes	
Conditions	VMC	
Visibility	20km	
Altitude/FL	975ft	
Altimeter	QNH (1015hPa)	
Heading	180°	
Speed	150kt	
ACAS/TAS	TAS	
Alert	None	
<b>Separation</b>		
Reported	150ft V/3-400ft H	NK
Recorded	NK	



**THE RV10 PILOT** reports returning to a private strip near Bicester, descending from 2500ft to the circuit height of 1000ft when, approximately 1NM south of Finmere aerodrome, he saw a powered parachute type aircraft about 500m ahead, which was slightly below, tracking in the opposite direction and which passed underneath. He noted that its light coloured canopy blended in against the backdrop of farmland below and was ‘almost invisible’. He also noted that the private strip is close to Bicester gliding centre so a better than usual look-out is always performed because gliders often return on their final glides back to Bicester. The RV10 pilot noted that he had called Oxford but had not received a reply.

The pilot assessed the risk of collision as ‘High’.

**THE PARAMOTOR PILOT:** The BHPA were contacted but the paramotor pilot could not be traced.

**OXFORD ATSU** reports that on review of their RTF recordings, no contact from the subject RV10 callsign was heard.

**Factual Background**

The weather at Brize Norton was recorded as follows:

METAR EGVN 021920Z 04003KT CAVOK 22/05 Q1014 NOSIG RMK BLU BLU=

## Analysis and Investigation

### UKAB Secretariat

The RV10 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 hazard.<sup>1</sup> If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.<sup>2</sup> 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 operation.<sup>3</sup>

## Comments

### BHPA

This was a perfect evening for paramotoring and the majority of paramotorists flying a cross-country would be aviating at about 500ft-1500ft. Without more information, it was not possible to track down the paramotorist and none have come forward stating that they had a close encounter with an RV10. Furthermore, the pilot may not even be a BHPA member. This Airprox emphasises the importance in Class G of a good lookout, which the RV10 pilot was clearly using and should be commended on. Even if the paramotorist had seen the RV10, there would be little he could do considering the widely differing speeds and manoeuvrability of each aircraft. With regards to the colour of the canopy 'blending in against the backdrop of farmland', most paragliding and paramotoring wings are quite vivid in their colour schemes, primarily to enhance visibility. It may be that any slow moving aircraft flying over mixed farmland will always be hard to see from a higher flying aircraft. When an aircraft has the sky as a backdrop (from the viewpoint of an observing aircraft), they are usually easier to see.

## Summary

An Airprox was reported when an RV10 and a paramotor flew into proximity 1NM south of Finmere aerodrome at about 1913Z on Tuesday 2<sup>nd</sup> June 2020. Both pilots were operating in VMC, the RV10 pilot under VFR, not in receipt of a FIS.

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

Information available consisted of reports from both pilots, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate operating authorities. 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.

Due to the exceptional circumstances presented by the coronavirus pandemic, this incident was assessed as part of a 'virtual' UK Airprox Board meeting where members provided a combination of written contributions and dial-in/VTC comments. Although not all Board members were present for the entirety of the meeting and, as a result, the usual wide-ranging discussions involving all Board members were more limited, sufficient engagement was achieved to enable a formal assessment to be agreed along with the following associated comments.

Members first discussed the RV10 pilot's report and agreed that he must have been startled by the proximity of the paramotor, which he had seen at a late stage (**CF3**). The conditions were ideal for paramotor activity and, being an unregulated activity, it was not possible accurately to predict the location of paramotor activity. This was not to criticise such activity but to draw attention to the fact that a robust lookout is an essential aspect of operations in Class G airspace. The RV10 pilot had no SA on the paramotor and members surmised that the paramotor pilot also most likely had no SA on the RV10 (**CF1**). The paramotor was not electronically significant to the RV10 TAS so no warning was generated

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

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

<sup>3</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

(CF2), indeed the Board were not aware of any electronic conspicuity device for paramotor, paraglider or hang glider activity. The private strip was not marked on any chart available to UKAB so the paramotor pilot could not reasonably have known of its existence and remained clear. In the event, the RV10 pilot saw the paramotor in sufficient time to take avoiding action and that, coupled with the estimated separation at CPA, was sufficient to remove the risk of collision.

### **PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK**

#### Contributory Factors:

	2020048		
CF	Factor	Description	Amplification
	<b>Flight Elements</b>		
	<b>• Situational Awareness of the Conflicting Aircraft and Action</b>		
1	Contextual	• Situational Awareness and Sensory Events	Pilot had no, late or only generic, Situational Awareness
	<b>• Electronic Warning System Operation and Compliance</b>		
2	Technical	• ACAS/TCAS System Failure	Incompatible CWS equipment
	<b>• See and Avoid</b>		
3	Human Factors	• Monitoring of Other Aircraft	Late-sighting by one or both pilots

Degree of Risk: C.

Recommendation: Nil.

#### Safety Barrier Assessment<sup>4</sup>

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 the RV10 pilot was not aware of the proximity of the paramotor until visually sighted and the paramotor pilot was most likely also not aware.

**Electronic Warning System Operation and Compliance** were assessed as **ineffective** because the paramotor was not electronically conspicuous.

**See and Avoid** were assessed as **partially effective** because the RV10 pilot saw the paramotor at a late stage.

<sup>4</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

<b>Airprox Barrier Assessment: 2020048</b>		Outside Controlled Airspace						
<b>Barrier</b>		<b>Provision</b>	<b>Application</b>	<b>Effectiveness</b>				
				<b>Barrier Weighting</b>				
				0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	●	●					
	Manning & Equipment	●	●					
	Situational Awareness of the Confliction & Action	●	●					
	Electronic Warning System Operation and Compliance	●	●					
Flight Element	Regulations, Processes, Procedures and Compliance	●	●					
	Tactical Planning and Execution	●	●					
	Situational Awareness of the Conflicting Aircraft & Action	✗	●					
	Electronic Warning System Operation and Compliance	✗	✗					
	See & Avoid	⚠	⚠					
<b>Key:</b>		<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>		
Provision	●	⚠	✗	●	○			
Application	●	⚠	✗	●	○			
Effectiveness	■	■	■	■	□			