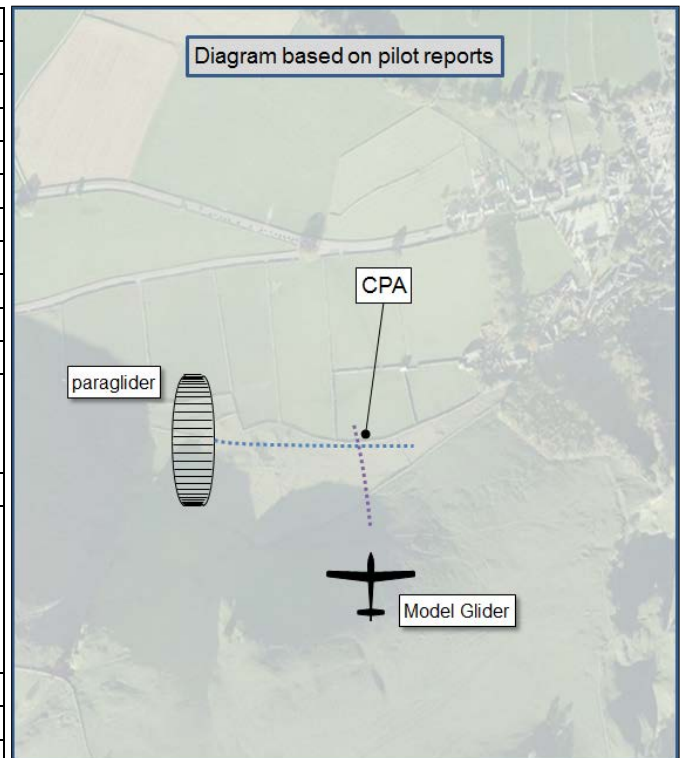


## AIRPROX REPORT No 2016100

Date: 05 May 2016 Time: 1534Z Position: 5320N 00147W Location: Near Castleton

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Paraglider	Model Aircraft <sup>1</sup>
Operator	Civ Pte	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	None
Provider	N/A	N/A
Altitude/FL	NK	NK
Transponder	None	None
<b>Reported</b>		
Colours	Green, Black, White	NK
Lighting	None	
Conditions	VMC	VMC
Visibility	NK	NK
Altitude/FL	1290ft	
Altimeter	QNH	
Heading	090°	
Speed	NK	
ACAS/TAS	Not fitted	Not fitted
Alert	N/A	N/A
<b>Separation</b>		
Reported	0ft V/10m H	NK
Recorded	NK	



**THE PARAGLIDER PILOT** reports that whilst he was ridge soaring at Treak Cliff in Derbyshire, a scale model Remote Controlled (RC) Glider flew from the lee side of the ridge directly across the flight path of his Paraglider with less than 10 metres separation. A number of other Paragliders were also soaring the ridge at the time of the Airprox. The estimated speed of the RC Glider was in excess of 50mph. The construction of the RC Glider appeared to be composite material and, in his opinion, impact with the Paraglider pilot would have resulted in serious injury or fatality. If the RC Glider had collided with the Paraglider lines or canopy then major damage would have occurred. The Paraglider pilot was around 25ft above a rocky hillside at the time of the Airprox. He was climbing his Paraglider from below ridge height and had steadily climbed up to ridge level. He would have been below the line of sight of the lookout for the RC Glider operator until entering the first turn and starting the northerly soaring beat. He was flying relatively slowly, on an into-wind beat, in a straight line, with significant brake applied, following a predictable and standard ridge-soaring flight-path. The appointed lookout for the RC Glider operator was a child of approximately 12 years age. There were no agreements between the Paragliders and RC pilots in place and no warnings. The Paraglider pilot was unaware of the RC Glider's presence until the Airprox occurred. A few seconds later a mid-air collision occurred between the Paraglider and a second RC Glider.

He assessed the risk of collision as 'High'.

<sup>1</sup> The Model Aircraft involved has the following specifications:

Wingspan: 913mm

Length: 500mm

Weight: 175g (w/o battery)

**THE MODEL AIRCRAFT OPERATOR** reports that he was flying his model glider with his Dad, his brother was spotting. They had taken off with no Paragliders in the air but, during the 20 mins they were airborne, they moved out of the way as some Paragliders passed by. When the numbers increased to 2 or 3 his Dad decided they should land and let the traffic pass. As they prepared to land they became aware of a potential issue when a paraglider passed the slope they were operating from shouting that they were forbidden to fly; as far as they are aware there are no such restrictions. He also says that he and his Dad give Paragliders absolute right of way without exception. He became concerned with the Paraglider pilot shouting at them, and his Dad told him to land straight away. While trying to land the Paraglider came back from the right almost immediately. He says this startled him and he tried to keep out the way whilst watching both his RC Glider and the Paraglider. He aimed for the 'ditching area' and tried to quickly land his RC Glider; as he was trying to land the Paraglider hit his RC Glider.

## Factual Background

The weather at Manchester was recorded as follows:

METAR EGCC 051420Z 19009KT 150V220 CAVOK 19/05 Q1017 NOSIG

## Analysis and Investigation

### UKAB Secretariat

The Air Navigation Order 2009 (as amended), Article 138<sup>2</sup> states:

'A person must not recklessly or negligently cause or permit an aircraft to endanger any person or property.'

Article 166, paragraphs 2, 3 and 4 state:

(2) The person in charge of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can safely be made.

(3) The person in charge of a small unmanned aircraft must maintain direct, unaided visual contact with the aircraft sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions.'

The Paraglider and Model Aircraft 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>3</sup>. They were both operating in Class G airspace, in which they are both entitled to fly.

## Summary

An Airprox was reported when a Paraglider and a Model Aircraft flew into proximity at 1534 on Thursday 5<sup>th</sup> May 2016. Both pilots were operating under VFR in VMC.

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

Information available consisted of reports from the pilots of both aircraft.

The Board first discussed the rules relating to Class G airspace and concluded that both the Paraglider and the Model Aircraft were entitled to operate in the airspace. In doing so, members reiterated the requirement for all airspace users to be courteous and mindful of other airspace users, and abide by the overriding requirement not to permit their aircraft to endanger any person or property.

<sup>2</sup> Article 253 of the ANO details which Articles apply to small unmanned aircraft. Article 255 defines 'small unmanned aircraft'. The ANO is available to view at <http://www.legislation.gov.uk>.

<sup>3</sup> SERA.3205 Proximity.

Given that both aircraft were unpowered and operating in ridge-soaring conditions, who should give way to who was ordinarily dictated by their relative tracks, separation from the ridge, and requirements to maintain energy in available thermal or updraft airflows. The Board noted that model aircraft were exempted from the provisions of the ANO regarding the rules of the air through ANO 2009 Article 253 (ANO 2016 Article 23). That being said, ordinarily, the Paraglider pilot could reasonably expect the model glider operator to give way, given the risk to life to the former. Mindful that there was no recorded information regarding the incident, and that personal perspectives can easily result in contrasting descriptions of the same event, the Board noted that the model glider operator reported that he had only become aware of the Paraglider at a late stage, and was already attempting to land his glider at the Airprox moment because of increasing numbers of Paragliders in the area; he was further taken by surprise when the Paraglider pilot then reversed his track towards his aircraft, which resulted in the collision. For his part, the Paraglider pilot reported that he was initially below the ridgeline and out of sight of the model glider operators until he climbed above. He comments that he was flying slowly, in a straight line and 'following a predictable and standard ridge-soaring flight-path' unaware of the model glider until the Airprox occurred. Although unaware of the specific model glider, it was deduced from the model glider operator's report that the Paraglider pilot was aware that model gliders were being flown in that area given that he had robustly engaged the ground operators from the air just beforehand regarding their permissions. Members wondered whether this verbal engagement had focused the Paraglider on the ground operators at the expense of his own lookout, both at the Airprox moment and the later collision. Furthermore, recognising that micro-climate conditions, aircraft energy, ridge geometry and pilot ability/experience all dictated the Paraglider's performance, members also wondered to what extent the conditions might have allowed the Paraglider pilot to completely avoid the model aircraft area itself given that it appeared that he knew they were operating there. With this in mind, the Board also wondered why the Paraglider pilot had turned back towards the model glider that he had just had an Airprox with, when this was a known threat to him that he subsequently collided with.

The Board noted from the model glider operator's report that the Paraglider pilot appeared to think that the model glider operators should not be flying in that location given that he had shouted to them that they were 'forbidden to fly'. Treak Cliff is National Trust land but, despite contacting the National Trust, it could not be ascertained if there were any applicable byelaws regarding permissions for either Paragliders or Model Aircraft. Both the Paraglider pilot and the model glider operator believe they were allowed to operate from the National Trust land, but neither claim could be verified with the National Trust. The National Trust website does provide guidance for why they do not allow the operation of drones on their property, but there is no clear guidance for Model Aircraft operators or Paraglider operators.<sup>4</sup>

Ultimately, members opined that there are many other environments where different types of aircraft operate in harmony with consideration for others and with mutually acceptable agreements in place to ensure a safe operating environment for everyone. In doing so, the Board reiterated the rules relating to pilots sharing an equal responsibility for collision avoidance, not endangering, and not to operate in such proximity to other aircraft as to create a collision hazard.

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<sup>4</sup> Even for drones, although the National Trust may have authority to ban drones being flown 'from' their land, it was unclear to the Board what authority they had to ban drones flying 'over' their land at a reasonable height (whilst being operated from a public road or track for example) any more than a private individual who might wish to 'ban' drones from flying over their own private land. The National Trust drone guidance (available at <https://www.nationaltrust.org.uk/features/visitor-faqs>) is as follows:

*Few non-commercial users have the correct training or permission from the Civil Aviation Authority to operate drones and should a drone cause damage or harm, pilots generally do not have the correct insurances to compensate those affected. Drones should not be flown over people and as much of our land is open access we cannot guarantee an area is ever completely empty. Drones should not be flown near property and the special nature of our properties makes the risk of damage more severe. Some sites may have wildlife or agricultural animals which could be affected by the presence of drones. Many drones have cameras attached and these could infringe data protection laws (filming people without permission) and potentially could contravene National Trust rules on commercial photography and filming. We therefore do not allow drone flying from or over National Trust land except by contractors commissioned by the Trust for a specific purpose, who satisfy stringent CAA criteria, have the correct insurances and are operating under controlled conditions.*

In assessing the cause and risk of this incident, the Chairman acknowledged that although the two events were inextricably linked, their remit was purely to look at the Airprox perspective and not the subsequent collision between the two aircraft (collision investigations were the remit of the AAIB, and they had declined to investigate this event). With this in mind, the Board discussed the cause of the Airprox at great length. Mindful of the rules relating to Class G see-and-avoid airspace and the fact that model aircraft were not covered by the rules of the air, a discussion ensued about whether this incident had resulted from respective late/non-sightings; one aircraft flying into conflict with the other; a simple conflict in Class G where each pilot had seen the other as soon as could reasonably be expected; or one pilot flying close enough to the other aircraft to cause its pilot concern. In the end, without any supplementary information to help them, the Board decided that the incident was best described simply as the Paraglider pilot being concerned by the proximity of the Model Aircraft. Turning to the risk, the Board noted that the evidence from both pilots consisted of significantly differing reports and, without any third-party data to substantiate either version of events, they agreed that there was insufficient evidence to determine the risk; therefore, the risk was classified as Category D.

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

Cause: The Paraglider pilot was concerned by the proximity of the Model Aircraft.

Degree of Risk: D.