

Consolidated Drone/Balloon/Model/Unknown Object Summary Sheet for UKAB Meeting on 16th February 2022

Total	Risk A	Risk B	Risk C	Risk D	Risk E
4	0	3	1	0	0

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location ¹ Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Comments/Risk Statement	ICAO Risk
2021250	25 Dec 21 1229	B787 (CAT)	Drone	5145N 00006W Overhead BPK VOR 6000ft	London TMA (A)	<p>The B787 pilot reports that they had taken-off from LHR and the FO was manually flying, maintaining 6000ft before being cleared for further climb. While they were level at 6000ft towards BPK VOR, they saw a flying object approaching them in the opposite direction which they could not identify, but it was fairly big (to be spotted without paying particular attention), had a rectangular shape, was grey in colour with amber lights, and was beneath their aircraft. They assume it was a drone, although it did not look like the typical white drone (it was larger than a domestic drone and had more than 4 rotors). They were cleared high speed but, because the drone was heading towards them, they could not say at what speed it was approaching them nor the altitude it was flying at, but it felt fairly close (maybe 500ft). As soon as they saw it, they told the rest of the crew, while continuing with manual flying and being ready to disconnect the auto throttle in case it was necessary (eg. TCAS, although they would assume without warning because of the lack of transponder of the intruder), but nothing happened and no other crew member could see it.</p> <p>Reported Separation: 500ft V/0m H Reported Risk of Collision: Medium</p>	<p>In the Board's opinion the reported altitude and/or description of the object were sufficient to indicate that it could have been a drone.</p> <p>Applicable Contributory Factors: 1, 2, 3, 4, 5</p> <p>Risk: The Board considered that the pilot's overall account of the incident portrayed a situation where although safety had been reduced, there had been no risk of collision.</p>	C

¹ Latitude and Longitude are usually only estimates that are based on the reported time of occurrence mapped against any available radar data for the aircraft's position at that time. Because such reported times may be inaccurate, the associated latitudes and longitudes should therefore not be relied upon as precise locations of the event.

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location ¹ Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Comments/Risk Statement	ICAO Risk
2021252	17 Nov 21 1530	Paraglider (Civ Hang)	Drone	5115N 00208W IVO Westbury White Horse ~150-200ft agl	London FIR (G)	<p>The Paraglider pilot reports that they were ridge soaring at Westbury White Horse, on an Ozone Mantra M7. There were roughly 10 pilots flying the ridge in very light conditions, the lift band was narrow. Visibility was excellent, cloud was overcast but there was good indirect lighting. They were heading NE to SW across the main bowl of the site, roughly 150-200ft above launch and heard a drone behind them and could hear that it was moving fast and erratically. It passed them on the right hand (upwind) side by 15-20ft and turned around to face them. At this point they could easily distinguish the make and model of the drone, a DJI Mavic Pro, which they could identify as they own one themselves. They believe it then performed an emergency-stop, a feature built into the drone if an object is detected directly in front of it. At this point the drone was roughly 15ft ahead and to their right-hand side. Had they held their heading, they would not have collided with the drone, however, they put on "a fair bit of left brake", toward the ridge, in case the drone did move forward toward them. After it had cleared them to the side, they heard it speed off in the direction of the parking area of the White Horse. They decided to watch the drone (clearly visible due to bright red/green positioning lights) and noted where it landed. They decided to land next to the drone to speak with the operator, but they collected the drone, and departed by the time they had landed nearby.</p> <p>They believe that the operator was aware of the event.</p> <p>Reported Separation: 0ft V/15m H Reported Risk of Collision: Medium</p>	<p>In the Board's opinion the reported altitude and/or description of the object were sufficient to indicate that it could have been a drone.</p> <p>Applicable Contributory Factors: 4, 7</p> <p>Risk: The Board considered that the pilot's overall account of the incident, and the actions taken by the paraglider pilot and drone operator, portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.</p>	B

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location ¹ Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Comments/Risk Statement	ICAO Risk
2021253	28 Dec 21 1341	A320 (CAT)	Drone	5128N 00016W Barnes 2000ft	London CTR (D)	<p>The A320 pilot reports descending on the ILS for RW27L when, at about 6NM on final approach, they saw a small white drone at a similar altitude travelling in the opposite direction which passed down the right-hand side of the aircraft. The FO (PF) estimated within 50m of the aircraft. The crew reported the incident on the radio and were met at the stand by airport police who took a report.</p> <p>The Heathrow ADC reports the A320 pilot reported seeing a drone on the right side of the aircraft at approximately 6NM final, similar altitude, range 100m tracking east. The VCR SUP informed the police and ensured an ATIS message was appended. All subsequent inbounds were warned until relief at 14:00.</p> <p>Reported Separation: 20ft V/<50m H Reported Risk of Collision: Medium</p>	<p>In the Board's opinion the reported altitude and/or description of the object were sufficient to indicate that it could have been a drone.</p> <p>Applicable Contributory Factors: 1, 2, 3, 4, 7</p> <p>Risk: The Board considered that the pilot's overall account of the incident portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.</p>	B

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location ¹ Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Comments/Risk Statement	ICAO Risk
2022006	26 Jan 22 1351	Cabri G2 (Civ FW)	Drone	5243N 00039W 1NM S Cottesmore 2800ft	London FIR (G)	<p>The Cabri G2 pilot reports that the student pilot was flying a track crawl lesson between Belvoir Castle and Exton, with an instructor. They repositioned to overhead the SW end of Cottesmore disused to intercept track 155°. Very shortly after overflying the end of the runway at 2800ft on QNH 1029hPa, they saw an object forward and right of the aircraft, which they initially thought to be a bird. They tracked the object to make sure that it did not move towards the aircraft and it passed about 20-30m away, down the right side of the aircraft. After the object had passed the 2 o'clock position they were able to identify it as a drone/UAV which was of a quadrotor design and metallic blue in colour. They informed the instructor who said they had not seen the object. They decided to carry out a turn to see if they could reidentify the object but were unable to see it. They had just changed to Wittering Zone but had not yet made the initial call. On initial call they informed them of the drone.</p> <p>Reported Separation: 10ft V/20-30m H Reported Risk of Collision: Low</p> <p>The Wittering controller reports that at roughly 1245z, the Cabri G2 pilot called Wittering Zone on VHF to request a Basic Service in the Cottesmore area. The pilot also informed them that they had seen a drone operating at 3000ft, 1NM south of Cottesmore. The pilot described the drone as being a blue-ish colour. No primary contact was seen on radar at the time. The drone was reported and adjacent units made aware.</p>	<p>In the Board's opinion the reported altitude and/or description of the object were sufficient to indicate that it could have been a drone.</p> <p>Applicable Contributory Factors: 1, 2, 4, 7</p> <p>Risk: The Board considered that the pilot's overall account of the incident portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.</p>	B

Relevant Contributory Factor (CF) Table

CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Flight Elements				
• Regulations, Processes, Procedures and Compliance				
1	Human Factors	• Flight Crew ATM Procedure Deviation	An event involving the drone operator deviating from applicable Air Traffic Management procedures	The drone operator did not comply with regulations by flying above 400ft and/or in controlled airspace/FRZ without clearance
• Tactical Planning and Execution				
2	Human Factors	• Action Performed Incorrectly	Events involving the drone operator performing the selected action incorrectly	The drone operator was flying above 400ft without clearance.
3	Human Factors	• Airspace Infringement	An event involving an infringement / unauthorized penetration of a controlled or restricted airspace	The drone pilot was flying in controlled airspace/FRZ without clearance.
• Situational Awareness of the Conflicting Aircraft and Action				
4	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, generic, or late Situational Awareness
• See and Avoid				
5	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft
• Outcome Events				
6	Contextual	• Near Airborne Collision with Other Airborne Object	An event involving a near collision by an aircraft with an unpiloted airborne object (unknown object or balloon)	
7	Contextual	• Near Airborne Collision with RPAS	An event involving a near collision with a remotely piloted air vehicle (drone or model aircraft)	