## Consolidated Drone/Balloon/Model/Unknown Object Summary Sheet for UKAB Meeting on 15<sup>th</sup> May 2024

Total	Risk A	Risk B	Risk C	Risk D	Risk E
6	1	0	5	0	0

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location <sup>1</sup> Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Comments/Risk Statement	ICAO Risk
2024046	4 Apr 24 1830	Chinook (JAC)	Drone	5129N 00005E Plumstead 1300ft	London CTR (D)	The Chinook pilot reports that while transiting through the London Heli-lanes in the vicinity of Greenwich at approximately 1300ft AGL, a drone was spotted passing down the right side of the aircraft, approximately 300m away and at the same height. It appeared to be a rotary type and stationary. Details of location were noted and passed to Heathrow Radar at the time of the incident. <b>Reported Separation:</b> Oft V/300m H <b>Reported Risk of Collision:</b> High <b>The Thames controller</b> reports the Chinook pilot reported an Airprox with a drone some 400m off their left-hand side at a similar altitude. The controller informed the Group Supervisor and LCY TWR and also the oncoming controller to pass the information on to IFR arrivals into LCY.	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. <b>Applicable Contributory Factors:</b> 1, 2, 3, 4, 5 <b>Risk:</b> 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.	С

<sup>&</sup>lt;sup>1</sup> 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 <sup>1</sup> Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Comments/Risk Statement	ICAO Risk
2024050	8 Apr 24 1511	B737 (CAT)	Unk Obj	5212N 00021W 1.5NM SE BEVLU FL117	London TMA (A)	<ul> <li>The B737 pilot reports that on passing approximately FL110 the right-hand seat pilot (FO) spotted a drone passing under the wing. Large in size, dark, but reflective.</li> <li>Reported Separation: 40ft V/40ft H Reported Risk of Collision: High</li> <li>The TC Midlands controller reports that the B737 pilot submitted an Airprox report in response to the sighting of a drone whilst approximately 1.5NM south-southwest of reporting point BEVLU. It has been estimated that the UAS was at 11000ft. Safety Investigations reviewed the radar at the time the pilot reported the sighting, however, no radar contacts associated with the drone were visible.</li> <li>An NATS Investigation reports that the pilot of the B737 reported that either a drone or balloon passed "very close" down the side of the aircraft. The controller alerted the Group Supervisor who attempted to contact the local Police; there were no other relevant aircraft or radar contacts in the vicinity.</li> </ul>	such that they were unable to determine the nature of the unknown object. Applicable Contributory Factors: 4, 6 Risk: The Board considered that the pilot's overall account of the incident portrayed a situation where providence had played a major part in the incident and/or a definite risk of collision had existed.	A

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location <sup>1</sup> Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Comments/Risk Statement	ICAO Risk
2024053	16 Apr 24 1832	B737 (CAT)	Unk Obj	5348N 00126W 8NM W Sherburn-In- Elmet FL033	London FIR (G)	The B737 pilot reports that a non-standard approach was flown via the LBA overhead, before turning onto a heading of 100° due to a couple of large CB cells preventing a standard route. A right-hand pattern was flown which took the aircraft temporarily outside controlled airspace, which is where the drone was spotted. Leeds Radar cleared them for the ILS approach RW32 and it was during the initial turn onto the intercept heading that the drone was sighted. The drone passed down the right-hand-side of the aircraft roughly 100ft below on a south-to-north trajectory. It was metallic in colour and travelling at low speed. As PM, they reported the sighting immediately to both the Captain and ATC. No evasive action was required and the remainder of the approach was flown without incident. <b>Reported Separation:</b> 100ft V/2-300m H <b>Reported Risk of Collision:</b> Low <b>The Leeds Bradford Controller</b> reports that the pilot had requested a right-hand pattern for the ILS to RW32 due to weather avoidance. The aircraft was approximately 0.5NM outside controlled airspace [and the pilot reported that the approximate altitude of the drone was 3200ft, that it was moving in a northerly direction and was silver in colour. The pilot reported that the drone passed approximately 100ft below the aircraft.	In the Board's opinion the reported altitude and/or description of the object were such that they were unable to determine the nature of the unknown object. Applicable Contributory Factors: 4, 5 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.	С
2024056	20 Apr 23 1230	TB20 (Civ FW)	Drone	5143N 00038W IVO Chesham 2200ft	London FIR (G)	<ul> <li>The TB20 pilot reports that the main purpose of this report was to bring to the authorities' attention that a drone was flying above 2200ft in the area of HEN and BNN. They first saw the drone in their 11 o'clock, 50ft above them and around 100m away. They took avoiding action by turning right.</li> <li>Reported Separation: 50ft V/ 50m H Reported Risk of Collision: High</li> <li>The Farnborough controller reports that they had no recollection of the incident, which was not reported on the radio at the time.</li> </ul>	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. <b>Applicable Contributory Factors:</b> 1, 2, 4, 5 <b>Risk:</b> 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.	С

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2024063	12 Apr 24 1301	A350 (CAT)	Drone	5127N 00038W ivo Windsor 4000ft	London TMA (A)	<ul> <li>The A350 pilot reports that, on passing 4000ft, the PF saw a sun-flash of a moving item which attracted their attention ahead of the aircraft. The item was approximately 0.5NM ahead of the aircraft and at a similar level. The PF identified the item to PNF as a red coloured drone as it remained static. They flew over it by about 500-700ft. The drone was a quadcopter-type and about 1ft square. It would have been entirely unsighted had it not been manoeuvring and caught the sun.</li> <li>Reported Separation: 500ft V/NR H Reported Risk of Collision:</li> <li>The SW Deps controller reports that, at 1301, [the pilot of the A350] reported a sighting of a drone approximately 1ft square and red in colour. This occurred at altitude 4000ft and approximately 5NM east of WOD/5NM west of Heathrow. Heathrow Tower were informed immediately to pass on the information for subsequent departures.</li> </ul>	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. <b>Applicable Contributory Factors:</b> 1, 2, 3, 4, 5 <b>Risk:</b> 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.	С
2024066	26 Apr 24 0909	A320 (CAT)	Drone	5528N 00231W Twiss Green 9000ft	Manchester TMA (A)	<ul> <li>The A320 pilot reports departing from Manchester on a SID when a black quadcopter drone with a flashing red light on top was seen passing in the opposite direction just below the nose of the aircraft. It was difficult to judge the exact separation but was enough not to require avoiding action. ATC informed and ASR filed.</li> <li>Reported Separation: 100-300ft V/NK H Reported Risk of Collision: Medium</li> <li>The Prestwick controller reports the A320 pilot reported seeing a drone around 100ft below them. The drone was reported to be black, with flashing lights and two propellers. The Scottish North Group Supervisor informed Manchester ATC who in turn informed the police and subsequent departures. The flight continued without incident and there were no further drone reports.</li> </ul>	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. Applicable Contributory Factors: 1, 2, 3, 4, 5 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.	С

## Relevant Contributory Factor (CF) Table

CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification							
	Flight Elements	Flight Elements									
	• Regulations, Pr	Regulations, Processes, Procedures and Compliance									
1	Human Factors	<ul> <li>Flight Crew ATM Procedure Deviation</li> </ul>	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 Planni	ng 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 I • Percention 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	<ul> <li>Near Airborne Collision with Other Airborne Object</li> </ul>	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)								