## Consolidated Drone/Balloon/Model/Unknown Object Summary Sheet for UKAB Meeting on 11th December 2024

Total	Risk A	Risk B	Risk C	Risk D	Risk E	
3	1	0	2	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
2024266	23 Oct 24 1647	A320 (CAT)	Drone	5131N 00057W 5NM N Reading 5000ft	London TMA (A)	The A320 pilot reports that they were rolling out of a left turn on a base leg for RW09R at Heathrow. Approximately 16NM west of the threshold, 2NM north of the extended centreline and circa 5000ft, two drones were spotted passing down the right side of their aircraft at the same level. One large 'quad' drone, which seemed to have something attached underneath, and another smaller drone in close proximity. They were only visible for less than 2sec before passing behind their aircraft.  Reported Separation: NR Reported Risk of Collision: NR  The Swanwick TC controller reports that [the pilot of the A320], inbound to Heathrow, reported two drones at 5000ft, north of a 16NM final. Heathrow Tower was informed.  NATS Safety Investigations reports that the FIN controller passed details of the sighting onto subsequent pilots and Heathrow Tower was informed. There were no further reports.  Analysis of the radar by Safety Investigations indicated that there were no associated primary or secondary contacts associated with the drone report visible on radar at the approximate time of the event.  UKAB Secretariat notes that a primary-only return was observed for one radar sweep at 1646:59 approximately 16NM west of the runway on the NATS radar replay.	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 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
2024267	31 Oct 24 1811	EMB190 (CAT)	Unk Obj	5134N 00000E 4NM NW of LCY Airport 3000ft	London TMA (A)	The EMB190 pilot reports that on departure from LCY RW27 on the BPK1A departure, level at 3000ft at approximately 1810, the crew observed a suspected drone fly past extremely close to the aircraft. The crew noticed lights on the object as it flew past. Proximity was close enough to make both crew instinctively flinch. Estimated distance only around 10-15ft from the aircraft.  Reported Separation: 10ft V/15m H Reported Risk of Collision: Medium  The Thames Radar Controller reports that on departure from LCY RW27, the EMB190 pilot reported a drone at altitude 3000ft 4NM northwest of London City Airport. Tower [was] advised and [the incident was] reported to the police.  NATS Safety Investigation reports that analysis of the radar by Safety Investigations indicated that there were no associated primary or secondary contacts associated with the drone report, visible on radar at the approximate time of the event.	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, 6  Risk: The Board considered that providence had played a major part in the incident and/or a definite risk of collision had existed.	Α

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
2024271	2 Nov 24 1457	B787 (CAT)	Drone	5128N 00024W IVO Heathrow 1600ft	London CTR (D)	The B787 pilot reports that on a Brookmans Park 6J SID after the initial turn, passing 1600ft, a drone was seen passing to the left of the aircraft. The drone was black in colour with turquoise markings and close enough to identify the four corner props. They did not require to manoeuvre to avoid, however, had they made the initial turn a couple of seconds earlier, then the separation distance would have been significantly reduced.  Reported Separation: NR Reported Risk of Collision: NR  The Heathrow controller reports that the B787 pilot reported a drone after departure RW09R. The aircraft reported a blue/black drone at approximately 1600-1700ft on departure 09R. The pilot reported the drone was approximately 1.5NM east of the 09R departure runway end transiting south/southwest. The controller informed the Tower Supervisor who undertook the necessary coordination and did not clear any further aircraft for takeoff until the Supervisor confirmed it was safe to do so. No drone was observed from the VCR.	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 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								
	• 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	If the reported object was a drone, then the drone operator did not comply with regulations by flying above 400ft and/or in controlled airspace/FRZ without clearance					
	• Tactical Planni	Tactical Planning and Execution							
2	Human Factors	Action Performed Incorrectly	Events involving the drone operator performing the selected action incorrectly	If the reported object was a drone, then 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	If the reported object was a drone, then 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)						