Consolidated Drone/Balloon/Model/Unknown Object Summary Sheet for UKAB Meeting on 26th April 2023

Total	Risk A	Risk B	Risk C	Risk D	Risk E
3	0	1	2	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
2023029	11 Mar 23 1410	HR200 (Civ FW)	Drone	5207N 00113E 5NM SE Crowfield 3000ft	London FIR (G)	**The HR200 pilot** reports that during a normal flight in very good flying conditions, they and their passenger suddenly spotted an unidentified object that they both believed to be a drone in their 2 o'clock position. It was described as black with green lighting. It passed their port wing at their altitude (3000ft) and at an estimated distance of 100-200m at a speed of approximately 40-50kts. It passed their port wing in just a few seconds and there was no time to take significant avoiding action. They immediately transmitted a radio message to Wattisham Traffic for other listening aircraft in the area. **Reported Separation:** 0ft V / 100-200m H **Reported Risk of Collision:** Medium	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, 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.	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
2023033	12 Mar 23 0713	A320 (CAT)	Unk Obj	5134N 00107E 15NM E Southend FL180	London TMA (A)	**The A320 pilot** reports that on a Standard Arrival into Heathrow, a drone was seen ahead which passed below and under the right side of the aircraft. The drone appeared to be a large circular structure with twin upper and lower circles connected by a vertical rod/connection. **The NATS Ltd Safety Investigation** reports that the [A320 pilot] reported on frequency at 0713:22 and, aware of controller workload, stated they had a report and requested a call back when available. This suggested the drone encounter occurred prior to this time. The pilot subsequently reported "a drone at 18000 feet at about ten miles from TANET … looked like it was reasonable size but hard to gauge exactly." and described it as a "large circular structure with twin upper and lower circles connected by vertical rod/connection." **Reported Separation:** 500-1000ft V/800-1000ft H **Reported Risk of Collision:** NK	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.	C
2023039	3 Apr 23 1710	A350 (CAT)	Drone	5135N 00013W 1.5NM NE Brent Reservoir FL60	London TMA (A)	**The A350 pilot** reports that whilst on departure, on radar heading 335° and at FL60, the aircraft commander saw an object passing below the left-hand side of the aircraft approximately 100ft below. The object appeared to be silver in colour and 'X' shaped. The object was only in view for a few seconds as passed quickly. Due to the short time it was visible, it was difficult to estimate the size of object and distance from aircraft but due to relative speed it is assumed to have been fairly close. **Reported Separation:** 100ft V / NR H **Reported Risk of Collision:** High **The London Radar controller** reported that the A350 pilot reported a drone sighting when they were level at 6000ft. On questioning, they stated that it had passed down their left-hand side approximately 200ft below and was silver in colour. The controller reported it to the Group Supervisor, told the Heathrow Intermediate controller and then vectored subsequent departures around whilst advising them of the sighting.	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, 7 **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.	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)	