

Consolidated Drone/Balloon/Model/Unknown Object Summary Sheet for UKAB Meeting on 8th November 2023

Total	Risk A	Risk B	Risk C	Risk D	Risk E
3	1	1	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
2023225	25 Aug 23 1000	A320 (CAT)	Balloon	5110N 00029E 3.5NM NE Billericay FL100	London TMA (A)	<p>The A320 pilot reports approaching WPT WESUL when their FO indicated a white flying-object at their 11 o'clock position, passing-by at a lower altitude. [The pilot] saw it too, shortly afterwards, but as there were only 2-3sec that this white, balloon-like object was in plain sight, they were not sure if it was a drone or a white balloon. No avoidance action was taken as there was no time to react. The FO sent a report to their [company] reporting office.</p> <p>Reported Separation: 600ft V/ 400m H Reported Risk of Collision: Medium</p> <p>The Swanwick controller reports that, whilst operating as NE DEPS (bandboxed), the crew of [the A320] reported that a white object had passed 1000ft beneath them. They advised that they were unsure whether it was a balloon or a drone. [The Swanwick controller] advised the Midlands Group Supervisor of this. There were no [Heathrow] inbounds to warn about it.</p> <p>NATS Safety Investigations report that, analysis of the radar indicated that there were no associated primary or secondary contacts associated with the drone report that were visible on radar at the approximate time of the event.</p>	<p>In the Board's opinion the reported altitude or description of the object were sufficient to indicate that it was probably a balloon.</p> <p>Applicable Contributory Factors: 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
2023228	13 Aug 23 1258	A320 (CAT)	Drone	5136N 00009W Finchley 6100ft	London TMA (A)	<p>The A320 pilot reports that on intermediate approach to Heathrow, not long after leaving the BNN hold and descending through FL65, a large quadcopter style drone was seen to pass directly beneath the aircraft. Separation was estimated to be around 200-300ft.</p> <p>Reported Separation: 250ft V/ 0m H Reported Risk of Collision: Low</p> <p>The NATS Investigation reports that the pilot reported sighting a drone "<i>directly underneath us now by about 200ft</i>". The aircraft was passing 6100ft at the time 12NM northeast of Heathrow. The pilot stated it "<i>looked to be a pretty big one, a metre in width</i>". Analysis of the radar by Safety Investigations indicated that there were no primary or secondary contacts associated with the drone report visible on radar at the approximate time of the event.</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
2023231	12 Sep 23 1155	B787 (CAT)	Drone	5129N 00054W 2NM N WOD NDB FL095	London TMA (A)	<p>The B787 pilot reports in the climb in VMC when they saw a large black drone ahead which passed directly above the aircraft. TCAS did not alert. ATC were informed at the time and the police on landing.</p> <p>Reported Separation: 50ft V/0m H Reported Risk of Collision: Medium</p> <p>The NATS Group Supervisor reports that a controller notified them that a B787 pilot had reported seeing a large black drone at 9500ft at the reporting point WOD. They notified the relevant ATC personnel and then reported the incident to the police.</p> <p>NATS Ltd Investigation The pilot of [B787 C/S] had departed EGLL on a CPT SID and reported to the controller that they had observed a large black drone whilst in the vicinity of WOD. The GS South informed surrounding sectors and Heathrow Tower, subsequently also informing the police.</p> <p>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.</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 providence had played a major part in the incident and/or a definite risk of collision had existed.</p>	A

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)	