

Consolidated Drone/Balloon/Model/Unknown Object Summary Sheet for UKAB Meeting on 19th January 2022

Total	Risk A	Risk B	Risk C	Risk D	Risk E
6	0	1	5	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
2021232	05 Nov 21 0956	F15 (For Mil)	Balloon	5350N 00052E 30NM ENE Spurn Point FL210	EG D323D (G)	<p>The F15 pilot reports that they saw a large balloon bloom in the HUD at 21,000ft. They aggressively banked to the left to avoid. They then made a call on the radio to avoid [the location of the balloon].</p> <p>Reported Separation: 0ft V/50ft H Reported Risk of Collision: High</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, 6</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

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
2021238	29 Nov 21 1202	Jetstream 41 (CAT)	Drone	5155N 00129W 2NM SW of Enstone FL160	Daventry CTA (A)	<p>The Jetstream 41 pilot reports being in the cruise at FL160, routing towards WAL VOR. They were roughly 20NM west of DTY VOR when suddenly the First Officer (pilot flying) became alarmed at something they had seen. They grabbed the controls ready to take avoiding action but there was no time to react. They stated that a drone just passed underneath the aircraft, no lower than 500ft below. This drone was either hovering or travelling in the opposite direction. The captain (pilot not flying) reported this to London Air Traffic Control and stated what had happened. The drone was a quadcopter type, red on top with a flashing green light.</p> <p>Reported Separation: 100ft V/0m H Reported Risk of Collision: High</p> <p>The NATS Safety Investigation report states that [the Jetstream 41 pilot] reported observing a red drone with lights approximately 500ft below passing nose to tail. [The Jetstream 41] was cruising at FL160 routing direct to WAL, approximately 1.8NM SE of NANUM. No radar contacts were visible.</p>	<p>In the Board's opinion the reported altitude placed doubt on whether or not the Jetstream 41 pilot had seen a drone. However, the description provided was deemed 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
2021240	16 Sep 21 1014	A109 (Civ Comm)	Drone	5136N 00007W 1.5NM N Alexandra Palace, London 1700ft	London FIR (G)	<p>The A109 pilot reports operating VFR at 1700ft when a large drone passed overhead by 200ft in the opposite direction. They descended the aircraft and reported it to Heathrow Specials. On landing they spoke with the Met Police.</p> <p>Reported Separation: 200ft V/0m H</p> <p>The LL SVFR controller reports that the A109 was routing via Alexandra Place to the London Eye, then H4. At approximately 1014, when about 1.5NM north of Alexandra Place mast, southbound at 1700ft, the pilot reported a drone encounter. The pilot reported it was 200-300ft above and was a fairly sizable drone with a red flashing light. The incident occurred in Class G airspace. Nothing was observed on radar.</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, 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

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2021243	5 Dec 21 0726	A319 (CAT)	Drone	5109N 00013W Gatwick 1500ft	Gatwick CTR (D)	<p>The A319 pilot reports on departure, just after thrust reduction, when the Captain and FO noticed a suspected hovering drone which passed below the aircraft by about 100ft. It appeared to be stationary and made of two components. The FO reported they were visual with lights on the suspected drone. After it passed below, the crew informed ATC and they started the mitigation process. The flight continued with no impact on the operation. After discussion, the crew concluded that although only visual with the object for a short period of time, a balloon would have been moving with the airflow, which was at that point a 40kt crosswind, and it was unlikely a balloon would have been released that early in the morning from the fields below. ATC later informed them that no further drone sightings were reported.</p> <p>Reported Separation: 100ft V/0m H Reported Risk of Collision: NK</p>	<p>In the Board's opinion the reported description of the object was 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

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2021247	15 Dec 21 2145	B737 (Civ Comm)	Unk Obj	5149N 00008E 3NM SW Stansted 3500ft	Stansted CTR (D)	<p>The B737 pilot reports passing 3500ft on the UTAVA departure from RW22. The first officer suspected a drone had passed the aircraft at the same level to the right of the aircraft at a distance between 200-300m. The suspected drone was a white lighted object that passed quickly down the right side of the aircraft. ATC were alerted to the suspected sighting and details were passed via the radio.</p> <p>En-route to [destination] company ops were contacted via the radio to organise an engineer to inspect the aircraft in case there was any damage. No abnormal indications were observed after the sighting and no damage was found by the engineer. The captain spoke to Stansted airport police once they arrived in [destination] and incident details were given.</p> <p>Reported Separation: 0ft V / 200m-300m H Reported Risk of Collision: NR</p> <p>The Stansted Radar controller reports that the [B737 pilot] reported a drone on their right-hand side. The drone was described as white, no other details were offered. The [B737 pilot] was departing Stansted on a UTAVA SID passing 3500ft in the proximity of Sawbridgeworth. The police at Stansted airport were informed by GS Airports.</p> <p>The NATS Safety Investigation states that the pilot informed the SS FIN controller at 2141:36, climbing through approximately 3500ft, they observed a drone on the right-hand side of the aircraft, with a lateral miss-distance of approximately 300ft. NODE Radar displayed the aircraft passing altitude 3500ft at 2140:23, 4.7NM south-west of the Stansted centre fix. The controller report stated that this was in the vicinity of Sawbridgeworth. It has been estimated that the UAS was at altitude 3500ft from the pilot report. Safety Investigations reviewed the radar at the time the pilot reported the sighting, however, no radar contacts were visible.</p>	<p>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.</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

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2021249	18 Dec 21 1213	A320 (CAT)	Unk Obj	5139N 00009W ivo Cockfosters 6000ft	London TMA (A)	<p>The A320 pilot reports in straight and level cruise when the crew had a possible drone sighting. The object was heading in the opposite direction (southbound); there was no time to take avoiding action. It passed just above and down the right-hand side. The black object looked like a drone but there was not enough time to assess for certain.</p> <p>Reported Separation: 100ft V/100m H Reported Risk of Collision: Medium</p>	<p>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.</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

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)	