

Consolidated Drone/Balloon/Model/Unknown Object Summary Sheet for UKAB Meeting on 15th March 2023

Total	Risk A	Risk B	Risk C	Risk D	Risk E
7	1	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
2023014	18 Jan 23 1455	A320 (CAT)	Drone	5129N 00014W Barnes 2400ft	London CTR (D)	<p>The A320 pilot reports that during final approach for RW27R they had a UAV sighting [whilst] at 2400ft on the right side of the aircraft at approximately 1800-2200ft. It was reported to Heathrow Tower. Police officers visited the aircraft after occurrence.</p> <p>Reported Separation: 300ft V/NR H Reported Risk of Collision: Low</p> <p>The Heathrow Tower controller reports that the [A320 pilot] reported seeing a drone on final for RW27R. They stated that they were at 7.3 DME, the drone was heading 330° from their location, a few hundred feet below, so they estimate it was at 2000ft.</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, 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
2023015	6 Feb 23 1420	R44 (Civ Helo)	Drone	5208N 00132W 4.5NM SE Wellesbourne Mountford 2800ft	London FIR (G)	<p>The R44 pilot reports that they had been carrying out autorotations when a drone was spotted at the same level as them. It was large, looked like a black figure of eight with red lining on one half and blue on the other. When it was first spotted they thought it was a large balloon. No avoiding action was required. They carried on with another autorotation and when climbing away, they saw it again. The altitude they were climbing through was 2800ft on the QNH. Again, no avoiding action was required. A radio call was made to Wellesbourne Information to report the sighting and raise awareness for other aircraft. They changed location for the rest of the flight.</p> <p>Reported Separation: 0ft V/ <0.1NM H Reported Risk of Collision: Medium</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

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.

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2023018	7 Feb 23 1641	AS355 (Civ Helo)	Drone	5134N 00015W Brent Reservoir 1200ft	London CTR (D)	<p>The AS355 pilot reports transiting to Battersea Heliport when they came into close contact with what they believed to be a drone. It was a multi-rotor type, grey/black in colour. It passed below and to the right. They informed RAF Northolt ATC on the radio and, on landing at Battersea, via telephone.</p> <p>Reported Separation: NK Reported Risk of Collision: NK</p> <p>The Northolt Radar controller reports that on initial contact, [AS355 C/S] was instructed to enter the London CTR and transit via Brent to Battersea as there was no other aircraft to affect the transit at the time. Over Brent Reservoir the pilot called to report they had seen a drone in the area. The controller noted the LAT/LONG, asked another military controller to inform TC GS Air that a drone had been reported and to notify SVFR/Thames Radar of the position to inform any other pilots in the area. They believe they also requested Police 251, who was in the Thames Valley area, to have a look in the area to see if the Drone was still there. TC GS Air reported the incident to the Police. They asked the pilot for details of the drone, including size, colour, etc, but they were vague in response. There was no other contact on Radar in that position. No Airprox was called on frequency.</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, 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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2023019	17 Feb 23 1720	DHC-8 (CAT)	Drone	5136N 00023E Little Burstead, Essex 5400ft	London TMA (A)	<p>The DHC-8 pilot reports that 2NM prior to SODVU, they had a near miss with a drone. The altitude of the aircraft was 5400ft and the separation from the drone was estimated to be 100ft. The incident was reported to ATC</p> <p>Reported Separation: 100ftV / 100ft H Reported Risk of Collision: Medium</p> <p>A NATS Investigation reports that the pilot of [DHC-8 C/S] reported that they had sighted a drone, about 100ft above them as they were at 5400ft, 2NM before their current position. They were 2.6NM east of SOQQA (4.4NM west of SODVU) at the time of the reported sighting. The Thames controller acknowledged the report and advised the pilot that they would file a report on the incident. 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 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
2023020	17 Feb 23 1400	Prefect (HQ Air Trg)	Drone	5306N 00037W 6NM NW Cranwell 6500ft	London FIR (G)	<p>The Prefect pilot reports that they had cleared cloud approximately 6NM NW of Cranwell, through a cloud break at 6500ft. Upon sighting a drone within 30m, the QFI took immediate control in order to remain clear. The sighting was reported to Waddington Zone who informed them that they had nothing on radar. The sortie was continued. The drone was described as being black and white and having 3 or 4 straight edges, similar to a quadcopter.</p> <p>Reported Separation: 0ft V/ 30m Reported Risk of Collision: Low</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, 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

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2023022	23 Feb 23 1532	Prefect (HQ Air Trg)	Drone	5310N 00048W 10NM W Waddington 3400ft	London FIR (G)	<p>The Prefect pilot reports that they were heading north up the Trent valley, when the trainee handling pilot witnessed a stationary, 4 propeller drone (white with black stripes approximately 50cm across) abeam to their right at approximately 500ft below the aircraft. The trainee took no avoiding action, but the aircraft passed to the left of the drone and the pilot kept it in sight whilst the attention of the left-hand seat pilot (QFI) was looking for other traffic. The aircraft was under a Traffic Service from Waddington Radar and they had made the pilot aware of two other aircraft operating in vicinity. During the distractions associated with the radio transmissions and identifying this traffic, the drone sighting/Airprox was not passed effectively to the QFI nor onto ATC at the time.</p> <p>The QFI reported that they had been unaware of the drone sighting at the time of occurrence, due to a busy radio passing other Traffic Information, which both crew were looking to identify, and they missed the trainee's "drone" comment. They only became aware of the incident during the in-brief process.</p> <p>Reported Separation: 500ft V/500ft H Reported Risk of Collision: Medium</p> <p>The Waddington Radar controller reports that the [Prefect pilot] freecalled across to their frequency inside a busy area of airspace in conflict with multiple other aircraft, not all on the frequency, with one in particular presenting a hazard which the pilot subsequently became visual with. For the duration of the [time the Prefect pilot] was on frequency they do not recall having to call traffic on non-squawking aircraft and they feel it would be highly unlikely that a drone would present on the sensors. The drone sighting was not reported on frequency and the aircraft proceeded on route without further incident, no other pilots on frequency transiting the general geographical area reported any sightings.</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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2023023	24 Feb 23 1521	A320 (CAT)	Unk Obj	5106N 00002W 7NM ESE Gatwick Airport 5000ft	London TMA (A)	<p>The A320 pilot reports climbing through 5000ft when the First Officer (PF) exclaimed that there was a bird ahead. They looked and caught sight of a dark coloured object at about the 11 o'clock that passed very quickly down the left side, within 5-10m of the left wing. It did not look like a bird but like a fairly compact 'package' that glinted in the sun. It was hard to tell but looked stationary as they flew past, i.e. no relative motion. They both concluded that it was possibly a drone as it seemed to move up and then manoeuvred to the left out of the way. They reported it immediately to London ATC.</p> <p>Reported Separation: '5-10m' Reported Risk of Collision: NK</p> <p>The Gatwick controller reports that they were notified the A320 had passed a drone at 5000ft on the SFD SID. The pilot described it as silver in colour and definitely not a bird. Details were passed to Gatwick Tower to warn following departures.</p> <p>The NATS Ltd Investigation Shortly after departure from Gatwick the pilot of [A320 C/S] reported that they had just passed what they believed to have been a drone. Details were passed to another aircraft in the vicinity and to Gatwick Tower, who alerted following departures. Analysis of the radar by Safety Investigations indicated that there were no associated primary or secondary contacts 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 such that they were unable to determine the nature of the unknown object.</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 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)	