## Consolidated Drone/Balloon/Model/Unknown Object Summary Sheet for UKAB Meeting on 15th January 2025

Total	Risk A	Risk B	Risk C	Risk D	Risk E
5	0	0	4	1	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
2024286	22 Nov 24 1430	EMB190 (CAT)	Drone	5146N 00007W IVO Little Berkhamsptead 8500ft	London TMA (A)	The EMB190 pilot reports climbing through 8500ft overhead BPK. The Captain, who was Pilot Monitoring, observed an unidentified object flying towards them at approximately 250ft below. This was observed to be silver or metallic, approximately one metre wide and with four motors, and is therefore believed to have been a drone. It is worth noting that the incident happened very quickly with less than 5sec between first observing the object and it passing below, so identification was difficult.  Reported Separation: 250ft V/0NM H Reported Risk of Collision: Medium  The Swanwick TC Controller reports that the EMB190 had been on a BPK departure from [] reported passing a drone at approx. 8500ft, 2NM NW of BPK. The crew were unable to provide any details on the size or colour of the drone. Details were passed on to the GS. These were then passed to EGGW Twr due to the proximity to their zone.  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. The pilot did not report the event as an Airprox over the RT; Safety Investigations were subsequently informed that the pilot had submitted an Airprox report in relation to the event.	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
2024287	22 Nov 24 0950	A319 (CAT)	Balloon	5323N 00212W 3NM NE Manchester Airport 1100ft	Manchester CTR (D)	The A319 pilot reports that a flying object [was sighted] directly on the final approach path to RW23R (~4NM) around 50ft above them. They called it out aloud as they went under it. They did not say or take any corrective orders/measures as they were clearly going below it. The balloon/drone had a small round red object on top and a black square object attached to it with string or such. They continued their approach with a safe landing. They told Manchester Ground about the drone/balloon after vacating the runway.  Reported Separation: 50ft V/0m H Reported Risk of Collision: Low	In the Board's opinion the reported altitude or description of the object were sufficient to indicate that it was probably a balloon.  Applicable Contributory Factors: 4, 5  Risk: The Board considered that although safety had been reduced, there had been no risk of collision.	С
2024291	26 Nov 24 1545	Paraglider (Civ Hang)	Model ac	5453N 00605W Slemish Mountain, Antrim 1522ft	Scottish FIR (G)	The Paraglider pilot reports that they were ridge soaring in the Slemish Mountain on their unpowered paraglider. They were the sole pilot and observed no other aircraft until the Airprox. As they were turning 180° to remain in the ridge lift, they spotted the fast-moving drone about 200ft horizontally and vertically away. They had no idea if the drone pilot saw their aircraft and it continued flying past. They didn't see it for the remainder of their flight. They were recording the flight, and the incident can be seen on the recording.  Reported Separation: 164ft V/ 160ft 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 was probably a model aircraft.  Applicable Contributory Factors: 1, 2, 4, 5  Risk: The Board considered that although safety had been reduced, there had been no risk of collision.	С

2024293	14 Nov 24 1700	ATR72 (CAT)	Unk Obj	5107N 00030W SE of Dunsfold 3500ft	London TMA (A)	The ATR72 pilot reports that they were on right base about to turn onto the ILS for RW08R at Gatwick when they observed 5 other aircraft at a similar level passing from right to left at high speed (two pairs and one singleton). They reported it to Gatwick Director who stated that they had nothing on radar. After landing, the ground controller informed them that an ops vehicle would attend the aircraft on stand to pass a telephone number to the captain. They called the number and spoke to someone who said they were 'TC supervisor'. They described the event in as much detail as possible and [the supervisor] stated that they were unaware of any military activity in the area.  Reported Separation: Oft V/5NM H Reported Risk of Collision: Low  The Gatwick Approach Controller reported operating Gatwick in a bandboxed configuration, and the sector was fairly quiet at the time of the incident. [The ATR72] was on a base leg heading, pointing towards a 12 mile final for RW08R. When they were approximately 2 or 3 miles south of the centreline and just before they were turned on to a closing heading they reported that they had just seen 5 fast-moving contacts pass right-to-left in front of them and that they had encountered their wake. The [ATR72] was at approximately 3500ft at the time that they had nothing showing on TCAS and they, [the controller], also had nothing showing on radar, information that they immediately passed on to the pilot. The pilot then reported that they had seen 5 aircraft pass them very quickly and that they were heading towards the south west. [The pilot] indicated that they were in 2 pairs and a single, thus making the 5 aircraft. When they quizzed the pilot about what they thought the objects were and whether they were drones or something similar. [The pilot] said that they were fighters. The following pilot said they would keep an eye out but made no indication to suggest that they had seen anything. The [ATR72] and all subsequent aircraft were vectored for the approach without any further issues	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 there was insufficient information to make a sound judgement of risk.	D
						NATS Safety Investigation reports that [the ATR72] was on base leg approach, inbound to Gatwick, descending through altitude 3600ft for		

	3000ft, 11.7NM bearing 243° from Gatwick Airport. At 1729:22, the pilot of [the ATR72] reported to the Gatwick-INT controller: "Just visual with five multiple fast-moving targets, right to left. Nothing on TCAS and we got quite severe wake turbulence". The Gatwick-INT controller confirmed to the pilot that there was nothing visible on radar. The pilot stated the targets were at a "similar level and were two pairs and one singleton", heading in a south-westerly direction. The Gatwick-INT controller requested further information on the appearance of the targets. The pilot asserted they were "two pairs of fighters I would guess, followed by one on his own."  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, nor 30min either side of the pilot's RT report.  The pilot of [an aircraft], following on downwind approach, stated they would "keep an eye out", but no sighting was reported.  An email describing the subsequent telephone conversation between the TC Operational Supervisor and the pilot of [the ATR72] stated when 'asked if [the pilot] had seen fighters as detailed, [they] replied that [they had] seen strobe lights as it was dark but indicated that there had been 5 sets, 2 pairs of 2 and a single, fast moving to the southwest towards [Southampton] and [Bournemouth].' Safety Investigations attained confirmation from Swanwick Military that no military aircraft were operating in this area. It was further stated "it would be highly unlikely that we would be operating fast jets in the vicinity of Gatwick. The only time fast jets operate down there is if they are doing a tour of the coastline (normally under [NATS] control) or after a flypast over London or in the south of England.' Safety Investigations also checked for any NOTAM activity which could explain this sighting, but none were found. Safety Investigations are therefore unable to ascertain which aerial system was part of this sighting and	

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2024298	10 Dec 24 1008	A319 (CAT)	Drone	5323N 00212W 3NM NE Manchester Airport 3000ft	Manchester CTR (D)	The A319 pilot reports that, during their initial climb when passing 3000ft, they sighted a round black object with a diameter of approximately 50cm (most likely a drone) passing their left side below the aircraft. Vertical distance was approximately 200ft and laterally the same. ATC was informed.	and/or description of the object were sufficient to	O
						Reported Separation: 200ft V/60m H Reported Risk of Collision: Low	<b>Risk:</b> The Board considered that although safety had been reduced, there had been no risk of collision.	

## **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	ng 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 Aw	areness of the Conflicting Aircraft and A	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	I CONTEXTUAL I • NEAR AIRDORNE COUISION WITH RPAS I		An event involving a near collision with a remotely piloted air vehicle (drone or model aircraft)							