

## Consolidated Drone/Balloon/Model/Unknown Object Report Sheet for UKAB Meeting on 12th February 2020

Total	Risk A	Risk B	Risk C	Risk D	Risk E
2	0	1	1	0	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
2020004	12 Jan 20 1214	B787 (CAT)	Drone	5121N 00013W 5nm W BIG VOR 6000ft	London TMA (A)	<p><b>The B787 pilot</b> reports that while being vectored downwind left-hand for LHR and in level flight, the Captain's attention was suddenly drawn to a black object below and to the left of the aircraft, a few hundred metres ahead. The object was very visible because it was against the white cloud below it. No avoiding action was required because it was obvious the object would pass below and down the left-hand side of the aircraft. Initially the captain thought it might be a balloon but as the object passed abeam the aircraft it was obvious it was a large black drone.</p> <p><b>Reported Separation:</b> 200ft V/ 100m H <b>Reported Risk of Collision:</b> None</p> <p><b>A NATS Safety Investigation</b> found that at 1214z the B787 pilot reported the large drone had passed down the left-hand side about 100ft below. The controller acknowledged the report and advised that nothing was seen on radar in his vicinity. Information relating to the drone was passed to subsequent arrivals. Analysis of the radar by safety investigators confirmed that there were no associated primary or secondary contacts visible on the radar at the 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><b>Applicable Contributory Factors:</b> 1,2,3,4,7</p> <p><b>Risk:</b> 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

<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
2020007	19 Jan 20 1404	B737 (CAT)	Drone	5232N 00144W 5nm north of BHX 3500ft	Birmingham CTR (D)	<p><b>The B737 pilot</b> reports that, during the first turn of the ADMEX 1M SID from BHX, at approximately 3000ft QNH, the First Officer (PF) sighted and alerted the Captain to the presence of a drone at the same level, moving from nose to tail on the port side of the aircraft. The drone was black and possibly silver, with 4 rotors, and was approximately the size of a wheelie-bin lid. The drone remained unsighted by the Captain. The incident was immediately reported to ATC and the flight continued uneventfully with no indications of damage to the aircraft.</p> <p><b>Reported Separation:</b> 0ft V/50-100m H <b>Reported Risk of Collision:</b> 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><b>Applicable Contributory Factors:</b> 1,2,3,4,6</p> <p><b>Risk:</b> 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

### Relevant Contributory Factor (CF) Table

CF	Factor	Description	Amplification
	<b>Flight Elements</b>		
	<b>• Regulations, Processes, Procedures and Compliance</b>		
1	Human Factors	• Flight Crew ATM Procedure Deviation	The drone operator did not comply with regulations due to flying above 400ft and/or in controlled airspace/FRZ without clearance
	<b>• Tactical Planning and Execution</b>		
2	Human Factors	• Action Performed Incorrectly	The drone operator was flying above 400ft without clearance.
3	Human Factors	• Airspace Infringement	The drone pilot was flying in controlled airspace/FRZ without clearance.
	<b>• Situational Awareness of the Conflicting Aircraft and Action</b>		
4	Contextual	• Situational Awareness and Sensory Events	Pilot had no, or only generic, or late Situational Awareness
	<b>• See and Avoid</b>		
5	Contextual	• Near Airborne Collision with Other Airborne Object	An Airprox involving an unknown object or balloon.
6	Contextual	• Near Airborne Collision with RPAS	An Airprox involving a drone or model aircraft.
7	Human Factors	• Perception of Visual Information	Pilot was concerned by the proximity of the other aircraft
8	Human Factors	• Monitoring of Other Aircraft	Sighting report