## Consolidated Drone/Balloon/Model/Unknown Object Report Sheet for UKAB Meeting on 13<sup>th</sup> Feb 2019

Total	Risk A	Risk B	Risk C	Risk D	Risk E	
10	2	5	3	0	0	

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Cause/Risk Statement	ICAO Risk
2018318	14 Dec 18 1009	Legacy 500 (Civ FW)	Drone	5604N 00315W 8nm NNE Edinburgh 3000ft	Edinburgh CTR (D)	The Legacy pilot reports that he was the PIC, seated on the right, operating as PM and providing line training to a new Captain. They were in receipt of radar vectors from Edinburgh, downwind righthand for RW24. Having finished the approach briefing, the PIC looked up and saw something black, moving in his peripheral vision on the right. He turned and looked right and clearly saw a 'quadcopter' like drone. There was no time to take avoiding action. The PIC reported the drone to ATC who informed the police, to whom the PIC gave a statement on landing. The pilot commented that he was surprised and angry at the drone's proximity and stated that a mandatory identification device should be fitted to drones before a multi-million pound engine is destroyed, or worse. Reported Risk of Collision: High The Edinburgh controller reports that the Legacy pilot reported an Airprox whilst overland in the vicinity of Burntisland. The drone was not observed on radar.	Cause: The drone was being flown above the maximum permitted height of 400ft such that it was endangering other aircraft at that location. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the Legacy. 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.	A
2018321	23 Dec 18 1457	A330 (CAT)	Drone	5126N 00000W 4nm SSW London City 4000ft	London TMA (A)	<ul> <li>The A330 pilot reports that a blue drone was sighted off the right-hand-side of the aircraft, about 200ft below. The aircraft was 1nm south of an extended 17nm final approach to LHR RW27R.</li> <li>Reported Separation: 200ft V/NK H</li> <li>The Heathrow controller reports that at approximately 1457 the A330 pilot reported seeing a blue drone 'not very big' in size pass 300ft below. The A330 was passing 4000ft at the time and was 4nm SSW of London City Airport.</li> </ul>	<ul> <li>Cause: The drone was being flown above the maximum permitted height of 400ft such that it was endangering other aircraft at that location. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the A330.</li> <li>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.</li> </ul>	С

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Cause/Risk Statement	ICAO Risk
2018322	26 Dec 18 1420	DHC8 (CAT)	Drone	5133N 00045E 5nm E Southend 6000ft	London TMA (A)	<ul> <li>The DHC8 pilot reports inbound to London/City when the crew observed a black drone with 2 red rotors. The crew observed that they were operating above overcast cloud tops. ATC were informed.</li> <li>Reported Separation: 'below'/50m Reported Risk of Collision: High</li> <li>The London controller reports that the DHC8 pilot reported a red drone with 2 propellers. The incident was reported to police.</li> </ul>	<ul> <li>Cause: The drone was being flown above the maximum permitted height of 400ft such that it was endangering other aircraft at that location. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the DHC8.</li> <li>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.</li> </ul>	В
2018323	30 Dec 18 1845 (Night)	EMB175 (CAT)	Unk Obj	5554N 00420W Glasgow 600ft	Glasgow CTR (D)	The EMB175 pilot reports that on approach to Glasgow airport, when passing about 600ft he saw an object pass between 3 and 10ft from the aircraft, at the same level. He couldn't tell was the object was, it was lit up in various places and was more horizontally long than it was vertically. Reported Separation: 0ft V/ 3-10ft H	<ul> <li>Cause: The Board were unable to determine the nature of the object reported and so agreed that the incident was therefore best described as a conflict in Class D.</li> <li>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.</li> </ul>	A
2018324	30 Dec 18 1832 (Night)	A319 (CAT)	Drone	5135N 00036E 3nm W Southend 4000ft	London TMA (A)	The A319 pilot reports that a suspected drone was seen on the right hand side. It had a blue flashing light and 'twinkling' red light. It did not appear to be moving fast relative to the A319, as it would do were it another aircraft, so the crew surmised that it was just their forward speed causing the drone to pass behind them. The pilot noted that the blue/red light intensity was low compared to standard aircraft lighting. TCAS did not display an intruder. The incident was reported to ATC. Reported Separation: Oft V/1nm H Reported Risk of Collision: Low	<ul> <li>Cause: The drone was being flown above the maximum permitted height of 400ft such that it was endangering other aircraft at that location. The Board agreed that the incident was therefore best described as the A319 pilot being concerned by the proximity of the drone.</li> <li>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.</li> </ul>	С

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2018325	2 Jul 18 1145	EMB135 (Civ Com)	Drone	5132N 00034W 10nm W Northolt 1800ft	London CTR (D)	The EMB135 pilot reports that a red drone was spotted from the cabin by the cabin crew on the starboard side of the aircraft when on extended base leg for Northolt RW07. The drone was reported to be higher than the aircraft and turning away in a westerly direction. Cabin crew reported the incident to the Captain after landing. Reported Separation: NK V/ 150m H	<b>Cause</b> : The drone was being flown at the practical limit of VLOS and in a position such that it was endangering other aircraft at that location. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the EMB135. <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.	В
2019005	12 Jan 19 0945	A320 (CAT)	Drone	5118N 00003E IVO BIG VOR FL080	London TMA (A)	The A320 pilot reports that they were approaching the BIG hold at FL080 when an object was noticed by both pilots in the distance. As it approached it became clear it was a drone and was possibly being manoeuvred close to them. It passed by the port wing at a distance of about 30-50 metres. It was large in size and black in colour with twin rotors. No avoiding action needed or taken, but both crew agreed that had it been closer, they would probably have had to manoeuvre to avoid. It was reported to LHR approach controller and the crew requested to move to another hold to avoid re-crossing the drone next time round the hold. They were rerouted to OCK at FL070. <b>Reported Separation:</b> Oft V/30-50m H <b>Reported Risk of Collision:</b> Low <b>The Heathrow Int South controller</b> reports that the A320 pilot reported a large black drone passing down his left-hand-side whilst inbound to the BIG hold at FL080.	Cause: The drone was being flown above the maximum permitted height of 400ft such that it was endangering other aircraft at that location. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the A320. <b>Risk:</b> The Board disagreed with the A320 pilot's assessment of risk and considered that separation was such that the incident portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.	В

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2019006	9 Jan 19 1458	B737 (CAT)	Drone	5049N 00044W Chichester FL190	London FIR (A)	A B737 pilot qualified passenger reports that he saw a large drone pass on the right side which, after a few seconds, appeared to turn away and start descending. The passenger stated that he was certain the object was not a helicopter or other aircraft. Reported Separation: ~0ft V/<500m H Reported Risk of Collision: Not reported.	<b>Cause</b> : The drone was being flown above the maximum permitted height of 400ft such that it was endangering other aircraft at that location. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the B737. <b>Risk:</b> The Board considered that the pilot's overall account of the incident portrayed a	С
							situation where although safety had been reduced, there had been no risk of collision.	
2019009	13 Jan 19 1050	A320 (CAT)	Unk Obj	5127N 00002E Heathrow 5000ft	London TMA (A)	The A320 pilot reports that during descent to Heathrow, passing about 5000ft on heading 300° he saw an unknown object passing on the left-hand- side of the aircraft, slightly below. The object was only in sight for a short moment. It was of a "roundish" irregular shape with black/white/orange stripes on the top and approximately 50cm - 1m in size. It could even have been a small parachute. As it all happened extremely quickly, and the object was only in sight for a very short moment, a better description of the object or the judgement of the closest point was difficult, but he estimated it to be vertical separation 100ft and lateral separation 100m. He reported the event to ATC.	Cause: The Board were unable to determine the nature of the object reported and so agreed that the incident was therefore best described as a conflict in Class D. 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.	В
2019012	22 Jan 19 1026	C406 (Civ FW)	Drone	5206N 00100W Silverstone FL067	Daventry CTA (A)	The C406 pilot reports flying survey lines when he saw a large dark coloured drone pass by on the left hand side. Reported Separation: Oft V/50m H Reported Risk of Collision: Low	<b>Cause</b> : The drone was being flown above the maximum permitted height of 400ft such that it was endangering other aircraft at that location. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the C406. <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.	В