

Consolidated Drone/Balloon/Model/Unknown Object Report Sheet for UKAB Meeting on 11th October 2017

Total	Risk A	Risk B	Risk C	Risk D	Risk E
16	4	7	4	0	1

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
2017173	26 Jul 17 1606	B787 (CAT)	Drone	5128N 00023W Hounslow 700ft	Heathrow CTR (D)	<p>The B787 pilot reports on final approach to Heathrow, at 2.5 DME from the threshold of RW27L, when a drone was sighted just below and to the right of the aircraft. The Drone passed below and to the right.</p> <p>Reported Separation: 50ft V/20m H Reported Risk of Collision: High</p>	<p>Cause: The drone was being flown in the vicinity of an airfield approach path such that it was endangering other aircraft at that location and altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the B787.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his inability to avoid the object portrayed a situation where providence had played a major part in the incident and/or a definite risk of collision had existed.</p>	A

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
2017174	24 Jul 17 2035	B757 (CAT)	Drone	5112N 00245W 15nm SW Bristol 4800ft	London FIR (G)	<p>The B757 pilot reports that he was routing direct to Bristol RW27 in a descent under the control of Bristol ATC. Approx 3nm SW of the Mendip transmitter, at 4800ft, he saw a red anti-collision light and a white light was spotted below and right of the aircraft. There were no TCAS indications, but initially they assumed it was a light aircraft, and it appeared to be on a reciprocal course. As they passed abeam it was apparent that the object was closer and smaller than initially assumed. A distinctive drone shape could be seen, with dark coloured arms and a suspended load, possibly a camera along with a red lateral light and a central white light. With this level of detail it would suggest they were fairly close, although distance was hard to judge with light levels, speed and startle factor. It passed below and beyond the right wing-tip.</p> <p>The Bristol Controller reports that the B757 was under a Deconfliction Service, inbound to Bristol from the southwest. When about 8nm to the south of the airfield he reported a drone on his right-hand side between his aircraft and the Wells mast. Just prior to this there had been a primary contact in the vicinity of the Wells mast, which had faded from contact after a couple of seconds.</p>	<p>Cause: The drone was being flown beyond VLOS limits and was endangering other aircraft at that altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the B757.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object portrayed a situation where providence had played a major part in the incident and/or a definite risk of collision had existed.</p>	A
2017175	30 Jul 17 1424	A319 (CAT)	Drone	5558N 00320W Cramond 500ft	Edinburgh CTR (D)	<p>The A319 pilot reports conducting a visual approach to Edinburgh RW24 when a white or grey drone with 2 rotors was seen in the 12 o'clock at 1-1½nm range. A go-around was considered but the drone was moving from left to right and passed clear of the aircraft down the right side. The occurrence was reported to the Edinburgh Tower controller.</p> <p>Reported Separation: 0ft V/100m H Reported Risk of Collision: Medium</p>	<p>Cause: The drone was being flown in the vicinity of an airfield approach path such that it was endangering other aircraft at that location and altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the A319.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his 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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2017176	27 Jul 17 2147	B757 (CAT)	Drone	5553N 00323W 4nm SW Edinburgh 3500ft	Edinburgh CTR (D)	The B757 pilot reports that he was climbing out from Edinburgh. On passing 3500ft, during the flap retraction phase, the First Officer observed a drone to the left of the aircraft at a distance of about 500m. ATC were informed.	Cause: The drone was being flown beyond practical VLOS limits, in the vicinity of an airfield departure lane, and was endangering other aircraft at that altitude and location. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the B757. Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object portrayed a situation where although safety had been reduced, there had been no risk of collision.	C
2017177	29 Jul 17 1845	Drone	Unk ac	5313N 00202W 4nm SE Macclesfield Forest 200ft	London FIR (G)	The drone operator reports that he was flying his drone at approximately 120ft vertically and 100m horizontally when he heard an incoming helicopter, he spotted the helicopter about 2 miles away and decided that flying his drone back to his location could not be done in time. As he was on a ridge he descended the drone below the ridge level and the helicopter passed over his drone. Reported Separation: 300ft V/0m H Reported Risk of Collision: Low	Cause: The drone was entitled to be operated at that location and altitude, and was not endangering other aircraft by being flown in proximity to airfield approach paths etc, and so the Board agreed that the incident was therefore best described as a conflict in Class G airspace. Risk: The Board considered that the drone operator's estimate of separation, allied to his overall account of the incident and his ability to avoid the aircraft portrayed a situation where normal procedures and/or safety standards had applied.	E
2017178	31 Jul 17 0805	B777 (CAT)	Drone	5111N 00001E Lingfield 2600ft	London TMA (A)	The B777 pilot reports conducting an ILS approach to Gatwick RW26L when a large silver or white drone was seen to pass abeam, down the right side of the aircraft, moving in a west to east direction. The pilot noted that there was no time to take avoiding action. The occurrence was reported to the Gatwick Tower controller and to the police on landing. Reported Separation: 0ft V/30m H Reported Risk of Collision: High	Cause: The drone was being flown beyond practical VLOS limits and in the vicinity of an airfield approach path such that it was endangering other aircraft at that location and altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the B777. Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object portrayed a situation where providence had played a major part in the incident and/or a definite risk of collision had existed.	A

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2017184	2 Jul 17 1915	A320 (CAT)	Drone	5136N 00021W Lambourne Hold FL113	London TMA (A)	<p>The A320 pilot reports descending on the outbound leg of the Lambourne hold when a drone was seen on the right side.</p> <p>Reported Separation: 1000ft V/100m H Reported Risk of Collision: Medium</p>	<p>Cause: The drone was being flown beyond VLOS limits and was endangering other aircraft at that location and altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the A320.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident portrayed a situation where although safety had been reduced, there had been no risk of collision.</p>	C
2017189	13 Aug 17 1830	AW139 (SAR)	Unk Obj	5147N 00312W Ebbw Vale 2800ft	London FIR (G)	<p>The AW139 pilot reports that they were flying a casualty to hospital when the LHS pilot, who was the PF called a verbal warning and manoeuvred the aircraft to avoid what appeared to be multiple small white parachutes. All crew members saw the objects, which appeared to be approx 1m wide with small suspended loads. No impact was heard or felt and post landing checks did not reveal any damage. As quickly as the aircraft had come into conflict with the objects, then the objects had passed, due to there being a casualty on board no attempt was made to turn around and investigate further.</p> <p>Reported Separation: 50ft V/200m H Reported Risk of Collision: High</p>	<p>UKAB Secretariat: There were no NOTAMs outlining any parachuting activity for this date and time, or indeed for the week either side of the incident.</p> <p>Cause: Being unknown objects, the Board agreed that they were not under direct control and that the incident was therefore best described as a conflict in Class G.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the objects portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.</p>	B
2017193	16 Aug 17 1050	A320 (CAT)	Drone	5127N 00015W 6.5nm Finals RW27 Heathrow 1800ft	London CTR (D)	<p>The A320 pilot reports that he was flying an ILS Approach to Heathrow RW27L. Passing about 2000ft and 7nms on the approach he noticed an object to the RHS of the aircraft. The object passed under the right wing, about 200ft below and was either stationary or heading east. It was white and moved through the air steadily, unlike a bird. He identified it as a drone, but it moved too quickly to get any further details. The aircraft behind also reported it on frequency.</p> <p>Reported Separation: 200ft V/200ft H Reported Risk of Collision: Medium</p>	<p>Cause: The drone was being flown near to the practical VLOS limits, in the vicinity of an airfield approach path, and was endangering other aircraft at that altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the A320.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object 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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2017195	14 Jul 17 1920	A319 (CAT)	Unk Obj	5056N 00003E Uckfield, Sussex FL70	London TMA (A)	<p>The A319 pilot reports that he was holding at WILLO at FL070, ATC gave a heading of 280° and when passing southwest of the MAY VOR by 5nm the FO, in the right-hand seat noticed an object close to the aircraft. He commented on the object to the Captain who then also saw it. Both pilots made an assessment that the object was not close enough to hit the aircraft, and that they were on a trajectory to miss it. It was a black and shiny/metallic in colour and appeared to be a square/rectangular cube. It appeared to be maintaining altitude and took a while (7 seconds) to pass by, making them believe it was hovering in a stationary position. It was definitely not a weather balloon, but because they couldn't make out any propellers on the side of the object, they weren't sure whether it was a drone. The FO alerted ATC, who passed the information on to the aircraft behind, however, they did not report seeing it.</p> <p>Reported Separation: 0ft V/<500m H Reported Risk of Collision: None</p> <p>The TCC Controller reports that he didn't remember the incident clearly. He remembered that the A319 pilot reported an object at FL70, but was unable to identify it. Other aircraft in the vicinity were then informed about it.</p>	<p>Cause: Being an unknown object, the Board could not determine whether it was under direct control and therefore decided that the incident was best described as a conflict in Class A.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident portrayed a situation where although safety had been reduced, there had been no risk of collision.</p>	C
2017199	12 Aug 17 1535	A320 (CAT)	Unk Obj	5109N 00002E 2nm NE East Grinstead FL080	London TMA (A)	<p>The A320 pilot reports that he was passing FL080 in the climb when he saw a silver ball type object pass directly under the aircraft, very close. He reported it to ATC.</p> <p>Reported Separation: 200ft V/0m H Reported Risk of Collision: High</p>	<p>Cause: Being an unknown object, the Board could not determine whether it was under direct control and therefore decided that the incident was best described as a conflict in Class A.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object 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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2017204	22 Aug 17 1825	Saab 2000 (CAT)	Drone	5324N 00209W MCT VOR 053° 5nm 1500ft	Manchester CTR (D)	<p>The Saab 2000 pilot reports that the aircraft was being configured for final approach into Manchester RW23R. Passing approximately 1500ft in the descent a drone was seen to pass the nose of the aircraft and down the right hand side. It was estimated to be within 50ft of the aircraft, white/silver in colour and estimated to be up to 2ft across in size. Remainder of approach continued normally after it was apparent that the drone had not struck the aircraft. Reported sighting to Manchester Tower on the radio after landing as there was no time to do so at the time as they were in the middle of configuring the aircraft for landing. The pilot called Manchester ATC by phone after landing to discuss the incident.</p> <p>Reported Separation: 20ft V/15m H Reported Risk of Collision: Medium</p>	<p>Cause: The drone was being flown in the vicinity of an airfield approach path such that it was endangering other aircraft at that location and altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the Saab 2000.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object portrayed a situation where providence had played a major part in the incident and/or a definite risk of collision had existed.</p>	A

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2017207	26 Aug 17 1720	C152 (Civ Club)	Drone	5125N 00012E 3nm SSW QE2 Bridge 1800ft	London FIR (G)	<p>The C152 pilot reports that he reported the matter at the time to Biggin Tower, having just changed frequency from Southend Radar. At the time he was heading inbound to the Biggin reporting point of Swanley. He did not personally notice the object, however it was seen by his passenger (a non-pilot who had been briefed to notify him of any traffic seen). Whilst communicating with Biggin Hill ATC, he was aware of his passenger paying particular attention to the environment to the starboard, and rapidly to the rear starboard. He looked in the same direction, yet could not see any other traffic. Once he had completed his transmission he was informed of the passing of a drone. He requested the Biggin Hill controller notify other ATS units in the area, which he kindly agreed to. Biggin Hill ATC clarified whether this was an Airprox, he informed them it was not, as at the time of reporting via the radio, he did not realise the small horizontal separation. He had since notified the ATC Manager at Biggin Hill (by email). Once on the ground he discussed the matter fully with his passenger and was informed that the object was vertically level with them, and as close as two or three light aircraft lengths from them horizontally, passing down their starboard side, and not seen again. The drone was described as about the size of a football, perhaps slightly larger and either blue or silver in colour. His passenger was confident it was a drone as had seen a drone before.</p> <p>Reported Separation: 0ft V/18m H Reported Risk of Collision: Medium</p>	<p>Cause: The drone was being flown near to practical VLOS limits. The Board agreed that the incident was therefore best described as a conflict in Class G.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.</p>	B
2017211	28 Aug 17 1650	A319 (CAT)	Drone	5130N 00218W 17nm ENE Bristol Airport 6000ft	Bristol CTR (D)	<p>The A319 pilot reports in the descent towards Bristol when a blue/black drone was seen 1-200m ahead. There was insufficient time to react and the drone passed overhead the aircraft's left side. The occurrence was reported to the Bristol Radar controller.</p> <p>Reported Separation: 200ft V/0m H Reported Risk of Collision: High</p>	<p>Cause: The drone was being flown beyond VLOS limits and was endangering other aircraft at that location and altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the A319.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object 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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2017213	27 Aug 17 1450	B787 (CAT)	Drone	5131N 00039W Burnham 3500ft	London TMA (A)	<p>The B787 pilot reports departing Heathrow on a SID when the crew saw an orange and white object in the 12 o'clock, slightly below and at a range of about 300m. One of the pilots perceived the object to be a small drone. The object/drone passed directly under the right hand half of the nose and although its initial movement suggested that it would not collide with the B787, the pilot noted that there was no time to react. The occurrence was immediately reported to ATC.</p> <p>Reported Separation: 300ft V/0m H Reported Risk of Collision: Medium</p>	<p>Cause: The drone was being flown beyond VLOS limits and in the vicinity of an airfield departure path such that it was endangering other aircraft at that location and altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the B787.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.</p>	B
2017214	23 Aug 17 1601	A320 (CAT)	Drone	5102N 00050W 20nm NE SAM VOR FL120	London TMA (A)	<p>The A320 pilot reports the he was on the 077 radial from the SAM VOR and at FL120 when he saw a drone pass down the right-hand-side of the aircraft at between 50 and 100ft above them and 150-200ft laterally. It was difficult to judge the exact proximity due to the speed of the event, in the time it took to communicate the drone's existence to the First Officer it had passed, therefore there was no time for avoiding action. There was a clear silhouette of the drone against the grey sky, it was a small square shaped quadcopter, with either 6 or 8 arms. The height of the drone implied that it must have been a larger more powerful drone than average, and the pilot opined that it raised concerns about the consequences of one hitting the engines, or even the wing. It was reported to ATC.</p>	<p>Cause: The drone was being flown beyond VLOS limits and was endangering other aircraft at that location and altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the A320.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his inability to avoid the object portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.</p>	B