

Consolidated Drone/Balloon/Model/Unknown Object Report Sheet for UKAB Meeting on 19th July 2017

| Total | Risk A | Risk B | Risk C | Risk D | Risk E |
|-------|--------|--------|--------|--------|--------|
| 14 | 3 | 4 | 5 | 2 | 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 |
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| 2017101 | 25 May 17 1849 | A320 (CAT) | Drone | 10nm NE Heathrow 5132N 00017W 4500ft | London TMA (A) | <p>The A320 pilot reports during climb on a BKP 6J departure, a drone was observed nearby on the right side and slightly below.</p> <p>Reported Separation: 100ft V/50-100m H Reported Risk of Collision: High</p> | <p>Cause: The drone was being flown beyond practical 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 portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.</p> | B |
| 2017102 | 26 May 17 0150 | A320 (CAT) | Unk Obj | Glasgow Airport 5554N 00421W 1000ft | Glasgow CTR (D) | <p>The A320 pilot reports the he was approx 3nm finals for RW23 when the crew spotted an orange light ahead and slightly above, which appeared to be travelling in the opposite direction. The light passed about 100-200ft above their aircraft. They assumed it to be a drone and reported it to ATC. There was no time to take avoiding action.</p> <p>Reported Separation: 100-200ft V/0m H Reported Risk of Collision: Low</p> | <p>Cause: The unknown object was seen in the vicinity of an airfield approach path. The Board could not determine the identity or proximity of the object.</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 there was insufficient information to make a sound judgement of risk.</p> | D |

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| 2017103 | 31 May 17 1415 | S92 (Civ Comm) | Balloon | Port Soy 5741N 00242W 2000ft | Scottish FIR (G) | <p>The S92 pilot reports in the cruise to Aberdeen at 2000ft. As they coasted in at Port Soy the P2 spotted a large helium balloon with suspended weight directly ahead and avoiding action was taken immediately in order to miss the balloon. Once passed the object the crew returned back on track and reported the incident to ATC.</p> <p>The Aberdeen controller did not submit a report but stated in subsequent correspondence that the S92 pilot did not declare an Airprox with the controller, but did advise him of the balloon for awareness.</p> <p>Reported Separation: Not reported Reported Risk of Collision: Not reported</p> | <p>The balloon could not be traced to the release of a meteorological balloon in the vicinity.</p> <p>Cause: Being an un-tethered and unmanned balloon, the Board agreed that it was 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 account of the incident and his ability 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 |
| 2017104 | 30 May 17 2100 | A139 (Civ Comm) | Drone | Whitstable 5121N 00101W 500ft | London FIR (G) | <p>The A139 pilot reports that he was on a SAR tasking and whilst performing a shore search between Whitstable pier and the harbour, they were alerted by the cooperating lifeboat of a sighting of a drone potentially interfering with the projected path followed by the helicopter. The pilot deviated from his flight path to avoid. Immediately the FLIR operator spotted the drone with the IR camera and illuminated it with the 'trakka beam'. The operator assessed that the height of the drone was the same as that of the helicopter, 500ft. When illuminated by the 'trakka beam' the drone proceeded back to shore. The FLIR operator continued to follow the drone up to the shore, informing the lifeboat crew of the positive ID of the drone and sighting the individual controlling it. However, due to fuel constraints the A139 needed to RTB.</p> | <p>Cause: the Board considered that although entitled to operate in that position and at that altitude, but was required not to operate in close proximity so as to cause a risk of collision. The Board agreed that this was a conflict in Class G airspace resolved by the A139 pilot.</p> <p>Risk: The Board considered that the pilot's overall account of the incident and his ability/inability to avoid the object portrayed a situation where although safety had been reduced, there had been no risk of collision.</p> | C |

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| 2017116 | 15 Jun 17 1139 | F900 (Civ Pte) | Drone | NE Farnborough 5118N 00041W 1300ft | London FIR (G) | <p>The Farnborough controller reports the inbound F900 reported a drone on 3.5 mile final. He reported passing it at 1300ft and it was about 100ft to the right of the plane. The aircraft continued the approach and landed safely. On landing he described the drone as about 40cm in diameter and gold coloured. Further inbounds were advised and no sighting's were made. Given the proximity to the aircraft on final and so close to the ATZ boundary, he has reported it as an Airprox.</p> <p>The F900 pilot reports the he was on the ILS final approach at 2.5nm when the FO saw a drone passing to the right of the aircraft.</p> <p>Reported Separation: 100ft V/20m 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 F900.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his ability/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 |
| 2017118 | 17 Jun 17 1550 | A319 (CAT) | Drone | 7.5nm E Heathrow 5128N 00014W 2500ft | London TMA (A) | <p>The A319 pilot reports on final approach to RW27L at Heathrow. ATC had warned him of possible drone activity when a large black drone of approximately 0.5m diameter was seen ½nm ahead, slightly left of the nose and slightly above. The drone appeared to be in the hover and the crew assessed that the respective flight paths would not result in collision. The pilot stated that due to its location, he suspected the drone was being used to film aircraft landing at Heathrow.</p> <p>Reported Separation: 200ft V/200m 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 A319.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his ability to avoid the object portrayed a situation where although safety had been reduced, there had been no risk of collision.</p> | C |
| 2017119 | 14 Jun 17 1655 | B787 (CAT) | Drone | 8nm ENE Heathrow 5131N 00015W 3500ft | London TMA (A) | <p>The B787 pilot reports that he was on a BUZAD 4J SID. On passing approx 3500ft the PF in the LHS saw a black drone in the 11 o'clock position, slightly above the aircraft. The drone passed down the LHS of the aircraft and there was no time for avoiding action. Only the pilot in the LHS saw it. Once established in the cruise it was reported to ATC. He noted that it was difficult to assess the distance from the aircraft without knowing the size of the drone. He assessed the risk as medium to high, dependant on the size of the drone, if it was small it would have been within 100ft laterally and 200ft vertically, and therefore high risk. If it was large it was assessed as 0.5nm horizontally and medium severity.</p> | <p>Cause: The drone was being flown beyond practical 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 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 accurately describe the separation mean that there was insufficient information to make a sound judgement of risk.</p> | D |

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| 2017121 | 14 Jun 17 1015 | Hawk (HQ Air Ops) | Unk Obj | EG D307 5329N 00011E 3500ft | Danger Area (G) | <p>The Hawk pilot reports operating at Donna Nook Air Weapons Range. Whilst at about 3500ft and 0.5nm to the east of the 'dive circle', he saw an object to the north east, approximately 500ft vertically and laterally separated from him. The object appeared to be a 'white wing RPAS' flying a constant heading, and did not alter heading during the approximately 1-2 seconds he was visual with it. Although he could not state with certainty that it was a drone, due to the limited time that he was visual with the object, it did appear to 'glint', suggesting a reflection from a metallic surface.</p> <p>Reported Separation: 500ft V/500ft H Reported Risk of Collision: Low</p> | <p>Cause: The Board could not say with certainty that the object was a drone. However, the unknown object was within the limits of the segregated airspace of the AWR, which is airspace designed to provide separation between high-energy military weapon delivery profiles and other airspace users. The Board agreed that the incident was therefore best described as the Hawk pilot was concerned by the proximity of the unknown object.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his ability to avoid the object portrayed a situation where although safety had been reduced, there had been no risk of collision.</p> | C |
| 2017122 | 6 Jun 17 1548 | B757 (CAT) | Drone | Manchester 5322N 00214W 330ft | Manchester CTR (D) | <p>The B757 pilot reports that he was on short finals to RW23, passing 330ft AGL and approx 1nm from the threshold, when he observed a drone ahead and to the left. He estimated it was 200ft to the left and 100ft above. It was a strong crosswind, the surface wind was 280° 35kts and he thought the drone was drifting quickly downwind, it was at a steep angle banked towards the wind and he guessed that it was attempting to fly upwind. It was an x shape with circular outer edges and about 500mm in diameter. He reported it to Man Twr on landing.</p> <p>Reported Separation: 100ft V/60m 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 B757.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his ability/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 |
| 2017123 | 20 Jun 17 1440 | DA20 (Civ Trg) | Drone | 6nm NE Butser Hill Mast VRP 5102N 00002W 1400ft | London FIR (G) | <p>The DA20 pilot reports that he was in the cruise at 1400ft when he thought that initially he saw birds on the port side between 100ft above and below, with one on the starboard side below him. As he got closer they were in his 11 o'clock 50-100ft above them and he identified it as a spider like drone that passed slightly left and above whilst the other one passed on the left below by 100ft. A further drone was also sighted passing on his starboard side below and about 200 yards away.</p> <p>Reported Separation: 100ft V/0m H Reported Risk of Collision: High</p> | <p>Cause: The drone was entitled to operate at that location and altitude and so the Board agreed that the incident was therefore best described as a conflict in Class G Airspace.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his ability/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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| 2017124 | 15 Jun 17 2156 | A320 (CAT) | Drone | 15nm E Gatwick 5110N 00013E 4200ft | London TMA (A) | <p>The A320 pilot reports approaching Gatwick on the RW26L ILS in good visibility with the sun setting. The FO (PM) saw an object in his peripheral vision, just above and to the right of the aircraft. He initially thought it was another aircraft but looked out of the side window to see a flat black object pass just down the right side of the aircraft, very slightly above their level. It appeared to pass close to the wingtip and noticeably increased in apparent size as separation reduced. The FO informed the Captain he had just seen a drone and also informed ATC.</p> <p>Reported Separation: 50ft V/50m H Reported Risk of Collision: Medium</p> | <p>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 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 providence had played a major part in the incident and/or a definite risk of collision had existed.</p> | A |
| 2017126 | 22 Jun 17 2037 | A320 (CAT) | Drone | 13nm W Heathrow 5128N 00006W 4000ft | London TMA (A) | <p>The A320 pilot reports that she was on approach to LHR passing 4000' at 13 miles on the ILS when she spotted what looked like a blue drone passing down her left hand side and slightly below her. No avoiding action was required.</p> <p>Reported Separation: 500ft V/0.5nm 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 A320.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to her overall account of the incident and his ability/inability to avoid the object portrayed a situation where although safety had been reduced, there had been no risk of collision.</p> | C |
| 2017128 | 18 Jun 17 1120 | A320 (CAT) | Drone | 5.5nm NE Gatwick 5110N 00002W 2000ft | Gatwick CTR (D) | <p>The A320 pilot reports that he observed the drone for about 3-4 seconds to the right of the ILS trajectory at the final approach point. No avoiding action was required.</p> <p>Reported Separation: 300ft V/0.1nm H Reported Risk of Collision: Low</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 A320.</p> <p>Risk: The Board considered that the pilot's estimate of separation, allied to his overall account of the incident and his ability/inability to avoid the object portrayed a situation where although safety had been reduced, there had been no risk of collision.</p> | C |

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| 2017129 | 14 Jun 17 1558 | A321 (CAT) | Drone | 'After Lambourne' NK FL70 | London TMA (A) | <p>The A320 pilot reports passing directly underneath a small black drone. He noted that there was no time to react to its presence.</p> <p>Reported Separation: 200ft V/0m H Reported Risk of Collision: High</p> | <p>Cause: The drone was being flown beyond practical 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 A321.</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 |