

## Consolidated Drone/Balloon/Model/Unknown Object Report Sheet for UKAB Meeting on 24<sup>th</sup> May 2017

Total	Risk A	Risk B	Risk C	Risk D	Risk E
22	5	9	5	2	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
2017004	5 Jan 17 1212	C152 (Civ Pte)	Drone	5118N 00032W 1.5nm SE Woking 310ft agl	London FIR (G)	<p><b>THE DRONE PILOT</b> reports conducting an aerial survey of a building. Fair Oaks aerodrome, Woking police and HMP Send had previously been contacted to advise them of the activity. Fair Oaks were re-contacted on the morning of flight and the drone operator was asked to advise when finished. On the second sortie around the building he heard an aircraft approaching from behind, heading toward the drone. The operator saw a white/cream coloured, high-wing, single-engine aircraft. He started to descend the drone but then stopped because he could not assess whether he was descending into the flight-path of the approaching aircraft. The aircraft passed over the drone.</p> <p><b>THE C152 PILOT</b> reports transiting the area at 1100ft altitude. He did not see a drone.</p>	<p><b>Cause:</b> The drone was entitled to operate at that location and altitude, and was not endangering other aircraft by, for example, being flown in proximity to airfield approach paths. The Board commended the drone pilot for reporting the Airprox and agreed that he had been concerned due to his perception of the C152 aircraft's altitude but that the radar analysis showed it was at an altitude which provided adequate separation from the drone. The incident was therefore best described as a sighting report.</p> <p><b>Risk:</b> The Board considered that the drone's separation, allied to the operator's ability to avoid the C152 portrayed a situation where normal procedures and/or safety standards had applied.</p>	E
2017007	2 Jan 17 1450	A320 (CAT)	Drone	5124N 00004W 5nm NW BIG VOR 6000ft	London TMA (A)	<p><b>THE A320 PILOT</b> reports that they had reached the initial SID altitude when the first officer noticed a 'regular-sized', light grey quadcopter type drone a few hundred meters away in the 1 o'clock position which passed down the right hand side of the aircraft.</p> <p><b>Reported Separation:</b> 300ft V/200m H <b>Reported Risk of Collision:</b> Medium</p>	<p><b>Cause:</b> 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><b>Risk:</b> 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 compromised, there had been no risk of collision.</p>	C

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
2017008	21 Jan 17 1615	S92 (SAR)	Drone	5311N 00413W Menai Strait 500ft	London FIR (G)	<p><b>THE S92 PILOT</b> reports en-route from Bangor Hospital to Caernarfon when a black quadcopter drone was seen. The aircraft was turned away and continued to base.</p> <p><b>Reported Separation:</b> 0ft V/200m H <b>Reported Risk of Collision:</b> High</p>	<p><b>Cause:</b> The drone was entitled to operate 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.</p> <p><b>Risk:</b> 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 compromised, there had been no risk of collision.</p>	C
2017009	22 Jan 17 1437	Bell 206 (Civ Comm)	Drone	5129N 00007W Vauxhall Bridge 1300ft	London CTR (D)	<p><b>THE BELL 206 PILOT</b> reports that whilst on Heliroute H4 at Vauxhall Bridge, he encountered a drone at the same altitude, approx 200ft away.</p> <p><b>Reported Separation:</b> 0ft V/200ft H</p> <p><b>THE LTCC RADAR CONTROLLER</b> reports that at about 1437Z the Bell 206 pilot on Heliroute H4 reported a drone encounter. He reported it as being black and at approx 1500ft in the vicinity of the Oval cricket stadium. Other aircraft in the vicinity were warned, but no further reports were received.</p>	<p><b>Cause:</b> 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 Bell 206.</p> <p><b>Risk:</b> 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
2017011	26 Jan 17 0854	A321 (CAT)	Balloon	5156N 00003W 5nm SW of BKY FL070	London TMA (A)	<p><b>THE A321 PILOT</b> reports that whilst on departure towards CPT an object, probably a weather balloon was observed passing overhead the aircraft within a few hundred feet.</p> <p><b>Reported Separation:</b> 100-200ft V/0m H</p> <p><b>THE SWANWICK NW DEPS RADAR CONTROLLER</b> reports that the A321 was outbound, about 7nm west of BKY, when the crew reported a weather balloon passing them. The following aircraft did not report seeing anything.</p>	<p><b>Cause:</b> Being an un-tethered and unmanned balloon or unknown object, the Board agreed that it was not under direct control and that the incident was therefore best described as a conflict in Class A airspace.</p> <p><b>Risk:</b> 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.</p>	B

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
2017013	03 Feb 17 1145	Squirrel (HQ Air Trg)	Unknown	5247N 00244W RAF Shawbury 800ft	Shawbury ATZ (G)	<p><b>THE SQUIRREL PILOT</b> reports that he was joining the airfield at 1000ft, on commencing a descending base-leg turn the LHS pilot called out that he had seen a drone in the 11 o'clock position, approx 100ft above. They were already turning and descending away from the drone so no further avoiding action was required. The drone was approx 5ft in diameter and white with red outriggers. It was reported to ATC.</p> <p><b>Reported Separation:</b> 100ft V/0m H <b>Reported Risk of Collision:</b> High</p> <p><b>THE SHAWBURY ADC</b> reports that as the Squirrel approached the airfield, the pilot requested permission to cross the approach lane, immediately after the clearance was given the pilot reported seeing a drone at 800ft QFE, approx 1/2nm north of the airfield. The UAV was not visible from the tower, and all subsequent joining aircraft were warned of its presence.</p>	<p><b>Cause:</b> 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 Squirrel.</p> <p><b>Risk:</b> 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
2017017	13 Feb 17 1930	Q400 (CAT)	Drone	5054N 00123W 3nm SSW Southampton 1000ft	Southampton CTR (D)	<p><b>THE Q400 PILOT</b> reports that at approximately 1000 feet agl &amp; flying a visual approach onto RW02 at SOU, he noticed an object with a light flying towards him. It was slightly above and to the right of his position heading in a Southerly direction. He at first believed it may have been a Chinese lantern however, as it got closer he realised that it was jelly fished shaped and was more likely to be a drone. The wind at 1500ft was 080/35kts &amp; it would be impossible for a Chinese lantern to maintain a southerly direction. He informed ATC at 1.5nm that he believed a drone had come within about 100ft of the aircraft.</p> <p><b>Reported Separation:</b> 100ft V/50-100m H <b>Reported Risk of Collision:</b> Medium</p> <p><b>THE SOUTHAMPTON ADC</b> reports that the Q400 crew reported sight of a drone at approximately 3nm and 1000ft height. Police were informed and attended the area.</p>	<p><b>Cause:</b> 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/model was flown into conflict with the Q400.</p> <p><b>Risk:</b> 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

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
2017018	12 Feb 17 1727	A320 (CAT)	Drone	5127N 00058W 15nm WSW Heathrow 4800ft	London TMA (A)	<p><b>THE A320 PILOT</b> reports that whilst in a right turn and descending he saw a drone passing slightly above the left wing, it was immediately reported to Heathrow Director. The drone was approx 50cm in size, grey and a 'crossbeam' type with 4 rotors.</p> <p><b>Reported Separation:</b> 15-20ft V/20-50m H <b>Reported Risk of Collision:</b> High</p>	<p><b>Cause:</b> 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/model was flown into conflict with the A320.</p> <p><b>Risk:</b> 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
2017025	24 Feb 17 1400	Chinook (JHC)	Drone	5133N 00033W Black Park, Slough 1400ft	London CTR (D)	<p><b>THE CHINOOK PILOT</b> reports that whilst transiting along Heliroute H10 between Cookham and Iver when a small (approx 2ftx2ft) drone was seen to pass about 100m down the left hand side of the aircraft at the same altitude. The sighting was reported to Northolt App.</p> <p><b>Reported Separation:</b> 0ft V/100m H <b>Reported Risk of Collision:</b> High</p> <p><b>THE NORTHOLT APP CONTROLLER</b> reports that the Chinook was on Heliroute H10, when passing Wexham park he reported passing a drone at the same altitude (1400ft). Denham Tower and Northolt Tower were both informed, as were subsequent Northolt departures.</p>	<p><b>Cause:</b> 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/model was flown into conflict with the Chinook.</p> <p><b>Risk:</b> 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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2017027	28 Feb 17 1510	King Air	Balloon	5315N 00002W 10nm NNE Coningsby 6500ft	London FIR (G)	<p><b>THE KING AIR PILOT</b> reports that he was at the start of the descent process at 6500ft approximately 10nm NNE of Coningsby when what appeared to be a dark coloured object of approximately 80cm diameter was spotted late about 20m from the aircraft passing down the left hand side. The crew felt the object passed over the top of the aircraft but could not rule out the possibility of it striking the tail. Once clear of the object a full low speed handling check was completed and the aircraft recovered to base without further incident. The crew felt that the object was most likely a balloon and informed ATC</p> <p><b>Reported Separation:</b> 0ft V/&lt;5m H <b>Reported Risk of Collision:</b> Medium</p>	<p><b>Cause:</b> Being an un-tethered and unmanned balloon or unknown object, the Board agreed that it was not under direct control and that the incident was therefore best described as a conflict in Class G airspace.</p> <p><b>Risk:</b> 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
2017033	6 Mar 17 2010	DH8 (CAT)	Unknown Object	5130N 00003E W London City 1500ft	London TMA (A)	<p><b>THE DH8 PILOT</b> reports that after a normal departure from London City RW27 the crew were 'heads-in' undertaking after take-off checks, the CP was reading the checks and the FO responding. On passing approx 1500 -1700ft both pilots' attention was drawn to something passing overhead the aircraft. Neither could be sure exactly what they saw, but independently witnessed an object that had at least 4 white lights, travel up the view of the windscreen to pass directly overhead the centre of the aircraft. No other detail could be made out, the size and speed of the object could not be assessed, it was assumed to be in very close proximity, at around 100ft. Both pilots assumed it to be a drone, due to the lights, although it may have been another object reflecting the aircraft's own landing lights. The traffic ahead (approx 3000ft above) was on TCAS, but no other TCAS contacts were observed. The event happened too quickly for either pilot to react to.</p> <p><b>Reported Separation:</b> 100ft V/0m H</p>	<p><b>Cause:</b> The Board agreed that here was not enough information to identify the unknown object and the incident was therefore classified as a conflict in Class A.</p> <p><b>Risk:</b> The Board considered that the incident portrayed a situation where there was insufficient information to make a sound judgement of risk.</p>	D

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
2017034	7 Mar 17 1125	Eurostar (Civ Pte)	Drone	5410N 00242W 6nm NE Hest Bank 4600ft	London FIR (G)	<p><b>THE EUROSTAR PILOT</b> reports in level cruise when a white two-rotor drone passed 200 feet below and 50 feet to the left of his aircraft. He noted that he was operating in broken cloud and that it was unlikely the drone was visible to an operator on the ground as it was white against a cloudy sky.</p> <p><b>Reported Separation:</b> 200ft V/50ft H <b>Reported Risk of Collision:</b> Medium</p>	<p><b>Cause:</b> 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 Eurostar.</p> <p><b>Risk:</b> 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 compromised, there had been no risk of collision.</p>	C
2017035	2 Feb 17 1603	A319 (CAT)	Unknown	5438N 00157W 6nm N Barnard Castle FL170	Airway P18 (A)	<p><b>THE A319 PILOT</b> reports in the climb to cruise level. As the aircraft was approaching FL180 (with a higher cleared level), positioned approximately 5nm west abeam P18 airway between waypoints GIRLI &amp; TILNI, a moving object/aircraft caught the attention of the Captain (PF), heading almost directly overhead the aircraft in the opposite direction. The object/aircraft passed at high speed, very quickly, only being in view for approximately 2 seconds. It passed overhead, in-line with engine 2 [right engine], estimated to be about 200ft above the aircraft. It was angular &amp; appeared fast moving. PF initially believed it was a military fast jet. PF took the radio and enquired with controller what had passed overhead. Controller responded to say there was only an aircraft about 20,000ft above their level. A subsequent ATC call enquired if the conflicting traffic could have been a drone to which the Captain responded that it could have been. ATC advise they would be submitting a report.</p> <p><b>Reported Separation:</b> 200ft V/0m H <b>Reported Risk of Collision:</b> Low</p>	<p><b>Cause:</b> Being an unknown object, the Board agreed that it was not under direct control and that the incident was therefore best described as a conflict in Class A.</p> <p><b>Risk:</b> 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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2017039	5 Feb 17 1250	A319 (CAT)	Drone	5320N 00259W 4.5nm W Liverpool Airport 1550ft	Liverpool CTR (D)	<p><b>THE A319 PILOT</b> reports approaching LPL RW09, at 4.5nm from the runway threshold, when he saw a white quadcopter pass down the left side at the same level. He noted there was no time to manoeuvre but that this would have been unwise in any case due to the high-drag configuration at relatively low speed whilst in proximity to the ground The incident was reported to ATC.</p> <p><b>Reported Separation:</b> 0ft V/200m H <b>Reported Risk of Collision:</b> Medium</p>	<p><b>Cause:</b> 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><b>Risk:</b> 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
2017041	24 Feb 17 1108	A319 (CAT)	Drone	5135N 00027W 7nm N of Heathrow FL080	London TMA (A)	<p><b>THE A319 PILOT</b> reports that he was leaving BNN on a heading of 165 degrees and about 7nm north of LHR when he saw a drone pass underneath the aircraft.</p> <p><b>Reported Separation:</b> 100-200ft V/0m H <b>Reported Risk of Collision:</b> Not reported.</p>	<p><b>Cause:</b> 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 A319.</p> <p><b>Risk:</b> 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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2017055	08 Apr 17 1452	B737 (CAT)	Drone	5458N 00130W 12nm SSE Newcastle VOR FL095	Newcastle CTA (D)	<p><b>THE B737 PILOT</b> reports that during the climb from NCL with autopilot engaged an object passed down the left and side of the aircraft within 1000ft vertically, 0.5nm horizontally. The object appeared to be a drone dark in colour and was glinting in the sun. The location was approximately 12nm SSE from NEW VOR.</p> <p><b>Reported Separation:</b> 1000ft V/0.5nm H <b>Reported Risk of Collision:</b> Low</p> <p><b>THE NEWCASTLE CONTROLLER</b> reports that the B737 departed RW07 climbing straight ahead to FL80 due to a survey aircraft to the south of him. He instructed the B737 to climb to FL150 and when he was clear of the survey aircraft he turned him right onto a heading of 190 degrees and then further right onto 220 degrees. At 1452 the B737 reported sighting a Drone on his left hand side about 1000ft below him as he was passing about 9500ft. No Drone activity had been advised to Newcastle in our Controlled Airspace. Nothing significant was observed on the Radar near the B737 however an intermittent contact did appear on the Radar very briefly but disappeared immediately, he regarded this as spurious or anoprop as it was inside Controlled Airspace.</p>	<p><b>Cause:</b> 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 B737.</p> <p><b>Risk:</b> 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 compromised, there had been no risk of collision.</p>	C
2017058	6 Apr 17 1600	Hawk (RN)	Drone	5005N 00515W RNAS Culdrose 800ft	Culdrose ATZ (G)	<p><b>THE HAWK PILOT</b> reports that on the downwind leg for Culdrose RW30, at 1200 for a PFL, he saw a large black quadcopter type drone hovering at a height of about 800ft. It was between his position and the ATC Tower. He informed the ADC then broke off the PFL and climbed to 1500ft to try and regain visual contact, but couldn't see it again. He noted that had he been flying a normal visual circuit he would have been much closer to it.</p> <p><b>Reported Separation:</b> 500ft V/0.5nm H <b>Reported Risk of Collision:</b> High</p>	<p><b>Cause:</b> The drone was being flown in the vicinity of an airfield 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 Hawk.</p> <p><b>Risk:</b> 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 compromised, there had been no risk of collision.</p>	C

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2017061	11 Apr 17 1912	DH8 (CAT)	Balloon	5257N 00127W NW Derby FL240	London UIR (A)	<p><b>THE DH8 PILOT</b> reports that whilst cruising at FL240, approx 7nm SE of TNT VOR, a dark object, about 1-2ft in diameter, rapidly passed the right-hand-side of the aircraft. Both pilots witnessed it and exclaimed loudly. It was estimated to be within 5-10m of the right wing. ATC were informed and were asked whether any Met Balloons were due to be released in the area. They advised that a Met balloon was launched from Sheffield, although this was East of their position and had been planned for 3 hours earlier.</p>	<p><b>Cause:</b> Being an un-tethered and unmanned balloon or unknown object, the Board agreed that it was not under direct control and that the incident was therefore best described as a conflict in Class A airspace.</p> <p><b>Risk:</b> 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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2017063	10 Apr 17 1230	Puma (JHC)	Drone	5200N 00027W NW Maulden 350ft	London FIR (G)	<p><b>THE DRONE OPERATOR</b> reports that the drone was at approximately 350ft and hovering stationary above the flying field. He heard a loud Helicopter noise which and seemed very close by, so he started to descend immediately. He asked his spotter if he could see the helicopter, he saw it almost immediately appear just above the tree line coming from the west at very low level, the spotter shouted to stop descending as the Helicopter was lower than the drone and on a course to where the drone currently was. He had only been descending for a couple of seconds so he estimates the drone would now be between 250 and 320 feet. The helicopter, which he is confident was a military Merlin type, then flew underneath the drone. It was hard to estimate the separation, but given his drones altitude was approximately 300ft, it would not have been a large margin. The Helicopter then proceeded towards the East at "tree top" level until out of sight. He estimates the time frame from hearing the Helicopter to it being overhead was less than 10 seconds and it was travelling at a very fast speed.</p> <p><b>Reported Separation:</b> 150ft V/0m H <b>Reported Risk of Collision:</b> High</p> <p><b>THE PUMA PILOT</b> reports that he was on a training sortie which included a transit through the London heli-lanes. After the sortie, an Airprox was filed from a UAS operator stating his aircraft passed close to the drone's area of operation. Upon checking the NOTAMS there was nothing notified and the crew did not observe the aforementioned UAS.</p>	<p><b>Comments:</b> The Board were heartened that that the drone operator submitted the original Airprox report, they acknowledged this displayed a good example of best practice. The Board they looked at the actions of the drone operator, they agreed that the operator had endeavoured to separate his drone from the helicopter to the best of his ability by firstly trying to descent his done then, when he realised the helicopter would pass beneath his drone, stopping the descent until the helicopter had passed. The Board agreed that both aircraft were entitled to operate in the area and therefore see and avoid was an effective barrier in this situation.</p> <p><b>Cause:</b> 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.</p> <p><b>Risk:</b> 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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2017067	12 Apr 17 1001	A320 (CAT)	Unk Obj	5049N 00027E 10nm SE TIMBA FL100	London TMA (A)	<p><b>THE A320 PILOT</b> reports that he was descending through FL100, routing direct to TIMBA, after sequencing vectors from the TIMBA4B arrival, approximately 10DME SE of TIMBA at 220kts IAS, CM2 caught sight of an object passing almost directly above the aircraft in the opposite direction at speed. The appearance was metallic/reflective, with an angular shape, not round. Object only in field of view for 2 seconds maximum at 11 o'clock, high, opposite direction. No actions were taken other than PIREP to LGW DIR. The object was not in conflict, although had it been there would have been no time for avoiding action. TCAS briefly set to above to look for fast moving traffic on an opposite track, nothing seen. No traffic information sought, as he had been handed over to LGW DIR, from LONDON a couple of minutes prior to the event. CM1 did not see the object. His immediate perception was a small object close by moving slowly or drifting, with the high closure rate perceived as a result of his own speed. An alternative could be fast jet traffic well above, in which case no loss of separation existed. He is not used to seeing southbound aircraft in this area at these levels, which is usually dominated by LGW and LHR inbounds. Bright environment, with reflections on windscreens, may also have factored.</p> <p><b>Reported Separation:</b> 1000ft V/200m H</p>	<p><b>Cause:</b> The A320 pilot was concerned by the proximity of the unknown object.</p> <p><b>Risk:</b> The Board agreed that there was insufficient information to make a sound judgement of risk.</p>	D
2017068	22 Apr 17 1733	A319 (CAT)	Drone	5325N 00251W 5nm N Liverpool Airport 2500ft	Liverpool CTR (D)	<p><b>THE A319 PILOT</b> reports the he was 5nm N of the Airfield on a downwind approach to RW27. The FO noticed something flying towards the aircraft. It was initially presumed to be a bird. However, as it got closer the FO realised it was a blue drone with flashing lights. It passed at the same level within a metre of the wing-tip. Had the aircraft been in manual control the FO would have taken avoiding action, the only reason there was not a collision was down to luck.</p> <p><b>Reported Separation:</b> 0ft V/1m H <b>Reported Risk of Collision:</b> High</p>	<p><b>Cause:</b> 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 A319.</p> <p><b>Risk:</b> 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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2017070	15 Apr 17 1704	A320 (CAT)	Drone	5128N 00006W 2.3nm E LHR 870ft alt	London CTR (D)	<p><b>THE A320 PILOT</b> reports that the RPAS crossed their flight path from their 2 o'clock position on a heading of about 130 degrees in level flight. It was about 100ft below their altitude at the crossing point of both trajectories</p> <p><b>Reported Separation:</b> 100ft V/50m H</p>	<p><b>Cause:</b> 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><b>Risk:</b> 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