

Consolidated Drone/Balloon/Model/Unknown Object Report Sheet for UKAB Meeting on 5th December 2018

Total	Risk A	Risk B	Risk C	Risk D	Risk E
19	10	7	2	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
2018236	29 Aug 18 1745	Chinook (JHC)	Drone	5126N 00007E Sidcup 1600ft	London/City CTA (D)	<p>The Chinook pilot reports departing the London City CTA when a crewman sighted and called a drone at a range of 200m on the left side of the aircraft at the same height, travelling in the opposite direction. Immediately afterwards another crewman called a break right for a second drone, this time in the 10 o'clock position at 50m and at the same height, travelling towards them. The handling pilot broke right to take avoiding action and a large yellow drone was seen to pass down the left side of the aircraft at a distance of 50m. The position of the drone was reported to London City Tower and the sortie continued without further incident.</p> <p>Reported Separation: 0ft V/50m H Reported Risk of Collision: Medium</p>	<p>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 Chinook.</p> <p>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.</p>	B
2018238	22 Jul 18 1725	A380 (CAT)	Drone	5129N 00009W Battersea Park 3400ft	London TMA (A)	<p>The A380 pilot reports conducting an ILS approach to Heathrow RW27R when a large 'commercial drone' was observed passing down the right side of the aircraft within approximately 20m. ATC was notified and the police contacted the Captain to make a report.</p> <p>Reported Separation: 0ft V/20m H Reported Risk of Collision: Not reported</p>	<p>Cause: The drone was being flown above the practical VLOS limit and at an altitude and position in an airfield approach path 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 A380.</p> <p>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.</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
2018242	7 Sep 18 2144	E190 (CAT)	Drone	5554N 00422W Glasgow 800ft	Glasgow CTR (D)	<p>The E190 pilot reports that he was on final approach to Glasgow when a UAS passed immediately above the aircraft. It was estimated to be between 50ft-100ft above and was a shiny white drone which reflected in the landing lights of the aircraft. It was only seen for around a second before it passed over the window. No avoiding action was taken, and a normal approach and landing followed. ATC were informed after landing.</p> <p>Reported Separation: 50-100ft V/0m H Reported Risk of Collision: High</p> <p>The Glasgow Controller reports that the E190 pilot reported a drone had flown very close to them when on 2.5nm final to RW23.</p>	<p>Cause: The drone was being flown above the maximum permitted height of 400ft and at an altitude and position in an airfield approach path 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 E190.</p> <p>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.</p>	A
2018244	4 Aug 18 1130	A380 (CAT)	Drone	5128N 00004W Peckham 4200ft	London TMA (A)	<p>The A380 pilot reports capturing the localiser for Heathrow RW27L when the crew saw a drone pass by on the right side. ATC was informed immediately.</p> <p>Reported Separation: 0ft V/60m H Reported Risk of Collision: High</p>	<p>Cause: The drone was being flown above the maximum permitted height of 400ft and at an altitude and position in an airfield approach path 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 A380.</p> <p>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.</p>	A
2018245	1 Sep 18 1802	A220 (CAT)	Drone	5128N 00011W Heathrow 2700ft	London TMA (A)	<p>The A220 pilot reports that they were between 7-8nm on the ILS for RW27R in VMC conditions, when they saw a drone at around 2700ft. It was white, had 4 propellers and appeared to be hovering in place. They reported the incident to ATC.</p> <p>Reported Separation: 100-500ft V/100m H Reported Risk of Collision: Low</p>	<p>Cause: The drone was being flown above the maximum permitted height of 400ft and at an altitude and position in an airfield approach path 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 A220.</p> <p>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.</p>	B

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2018250	2 Sep 18 1328	DHC8 (CAT)	Drone	5237N 00155W Aldridge 3800ft	Birmingham CTA (D)	<p>The DHC8 pilot reports having just become fully established on the ILS approach for RW15 when the First Officer observed a drone like object slightly right and above the cockpit which passed by on the right very quickly. ATC was informed and the flight continued for a normal landing.</p> <p>Reported Separation: 'slightly above' V/50ft H Reported Risk of Collision: Not reported</p>	<p>Cause: The drone was being flown above the maximum permitted height of 400ft and at an altitude and position in an airfield approach path 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.</p> <p>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.</p>	A
2018251	31 Aug 18 0900	Tutor (HQ Air Trg)	Drone	5237N 00026W 3nm E Wittering 1300ft	Wittering MATZ (G)	<p>The Tutor pilot reports that on departure from Wittering he saw a silver, metallic object 100m to the left. Its motion negated the possibility of it being a silver balloon, and its location was just to the south of Burghley Horse Trials which had a NOTAM of a drone operating up to 400ft.</p> <p>Reported Separation: 0ft V/100m H Reported Risk of Collision: Medium</p>	<p>Cause: The Board agreed that the Burghley Horse Trials NOTAM drone was probably not the drone in question. The subject 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 Tutor.</p> <p>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.</p>	C

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2018256	14 Sep 18 1445	Tutor (HQ Air Trg)	Drone	5124N 00326W St Athan 300ft	Cardiff CTR (D)	<p>The Tutor pilot reports that he was returning from a local area familiarisation sortie and joined downwind to land RW25. On final approach, when configured to land, the passenger saw a white drone, which was then confirmed by the Captain. It was just to the north of the final approach path at about 300ft. This would have put it just outside the airfield perimeter, but inside the local flying zone, possibly over the St Athan golf course. There was no requirement to go-around or alter course and the drone passed down the right-hand-side of the aircraft as they passed 300ft. The drone looked like a DJI Phantom 2. After landing he requested that ATC notify the local police and by the time he had returned to the ops room, they had called the golf course as well.</p> <p>Reported Separation: 0ft V/20m H Reported Risk of Collision: High</p> <p>The St Athan ADC reports that after the Tutor pilot had landed he reported that he had encountered a drone 'off his right-hand-side' just outside the airfield perimeter at 300ft. Local police were called on 999 and Cardiff ATC were also informed. Despite efforts with binoculars neither the controller nor colleagues were able to see the drone, even though they continued to look for 15 minutes. The local police response was swift, with officers on the reported scene where the encounter took place within 25-30min, but unfortunately no drone operator was found.</p>	<p>Cause: The Board agreed that the incident occurred below 400ft but in proximity to the 1km boundary of the 'Flight Restriction Zone', as defined in the ANO 2016 Article 94B. Nevertheless, the Board felt that the drone's position was at an altitude and position in an airfield approach path that could endanger other aircraft (ANO 2016 Article 241) and that it had been flown into conflict with the Tutor.</p> <p>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.</p>	B
2018259	16 Sep 18 1151	A321 (CAT)	Drone	5128N 00002W Brockley 4900ft	London TMA (A)	<p>The A321 pilot reports established on the ILS for RW27L when an object was seen below and directly ahead of the aircraft. It was initially thought to be a balloon but as it got closer it appeared to be a white and black drone, the main body being oval or oblong in shape. No manoeuvring to avoid or to increase separation was deemed necessary and the approach continued. ATC was informed of the sighting.</p> <p>Reported Separation: 200ft V/0m H Reported Risk of Collision: Low</p>	<p>Cause: The drone was being flown above the maximum permitted height of 400ft and at an altitude and position in an airfield approach path 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 A321.</p> <p>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.</p>	B

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2018261	19 Sep 18 1135	B737 (CAT)	Drone	5247N 00059W East Midlands 4000ft	East Midlands CTA (D)	<p>The B737 pilot reports that he was on a busy phase of flight, descending, slowing and configuring flap selection for intercept of the ILS. The First Officer alerted him to a drone which passed immediately down the left-hand-side of the aircraft. No impact was observed, felt or indicated by engine instrumentation.</p> <p>Reported Separation: 0ft V/20m H Reported Risk of Collision: High</p>	<p>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 B737.</p> <p>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.</p>	A
2018262	2 Sep 18 1534	A220 (CAT)	Drone	5129N 00040W Windsor 2300ft	London CTR (D)	<p>The A220 pilot reports conducting an approach to RW09L when the Captain (PM) saw a black and grey drone with red and green lights pass by the right side of the aircraft.</p> <p>Reported Separation: 0ft V/NK H Reported Risk of Collision: Not reported</p>	<p>Cause: The drone was being flown above the maximum permitted height of 400ft and at an altitude and position in an airfield approach path 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 A220.</p> <p>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.</p>	A
2018263	16 Sep 18 1708	A321 (CAT)	Drone	5137N 00011W LAM Hold FL95	London TMA (A)	<p>The A321 pilot reports that he was approaching the LAM VOR at about FL140 when the Capt saw something lower than the aircraft, which may have been a drone. They joined the LAM hold to make one orbit and were just about to leave the hold at FL95 when the co-pilot saw a drone to the right, very close, probably just metres away. The shape was similar to a DJI Phantom. ATC were informed.</p> <p>Reported Separation: 0ft V/ 'some metres' Reported Risk of Collision: High</p>	<p>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 A321.</p> <p>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.</p>	A

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2018264	23 Sep 18 1634	B737 (CAT)	Drone	5319N 00220W Manchester 800ft	Manchester CTR (D)	<p>The B737 pilot reports that one of the cabin crew reported seeing a white drone to the left of the aircraft on departure, about 20sec after take-off. It was close enough to see its structure clearly. The occurrence was reported to London Control later in the climb.</p> <p>Reported Separation: 0ft V/100ft H Reported Risk of Collision: Medium</p>	<p>Cause: The drone was being flown above the maximum permitted height of 400ft and at an altitude and position in an airfield departure path 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.</p> <p>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.</p>	B
2018265	25 Sep 18 1310	B787 (CAT)	Drone	5109N 00016E Maidstone FL90	London TMA (A)	<p>The B787 pilot reports that the Captain raised his head from looking at the instrument panel and saw a small silver aircraft pass very rapidly from level with the flight deck to below the left wing. It was a very brief sighting of the craft as it flashed past at high speed. It was silver metallic and appeared to be descending in the opposite direction. He opined that he suspected it was a drone; it was definitely not a balloon or sonde.</p> <p>Reported Separation: 150ft V/ 0m H Reported Risk of Collision: High</p> <p>The London TCC controller reports that the B787 pilot reported an Airprox with a drone. He reported passing the drone when at FL90, however the frequency was extremely busy and so the controller was only able to obtain sketchy details. The pilot reported it as silver, fast-moving and too small to be a manned aircraft. The controller passed the information to subsequent pilots in the area.</p>	<p>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 B787.</p> <p>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.</p>	A

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2018270	28 Sep 18 1435	Prefect (HQ Air Trg)	Drone	5249N 00015W 4nm NW Spalding FL067	London FIR (G)	<p>The Prefect pilot reports instructing a steep turn and aerobatics sortie when the student saw what appeared to be a drone in the 2 o'clock position at the same level with about 400-500ft lateral separation and passing in the opposite direction. As it passed down the right side the instructor took control and turned right to keep it in sight. As he did so the drone also turned right and matched their orbit for approximately 1½ turns with about 200-300ft lateral separation at the same level. The instructor rolled wings level and accelerated away to the northwest. The drone also 'levelled wings' and was last seen heading west. The Instructor made an airborne Airprox report and continued with the sortie further to the northwest. The drone was dark grey and black in colour and generally rectangular in shape. As it turned there appeared to be small wings, or possible rotor arms, visible.</p> <p>Reported Separation: 0ft V/200ft H Reported Risk of Collision: Low</p> <p>The Cranwell controller reports that the Prefect pilot reported a large drone operating in close proximity to his aircraft. The pilot reported it was approximately 'dustbin lid' sized, was following the movements of the aircraft and advised that they were manoeuvring away from that location. The ATC supervisor was informed who then passed the details to the relevant civilian agencies.</p>	<p>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 Prefect.</p> <p>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.</p>	C
2018272	29 Sep 18 1348	A380 (CAT)	Drone	5140N 00042W Holmer Green FL073	London TMA (A)	<p>The A380 pilot reports that on the climb-out a 'medium size' drone was seen about 50m ahead, which then passed overhead the aircraft.</p> <p>Reported Separation: 200ft V/0m H Reported Risk of Collision: Medium</p>	<p>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 A380.</p> <p>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.</p>	B

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2018274	5 Oct 18 0750	B737 (CAT)	Balloon	5354N 00206W NE Burnley FL130	Manchester TMA (A)	<p>The B737 pilot reports during an approach to Manchester, they came very close to a weather balloon. It passed at exactly the same altitude on their left-hand-side, less than a wingspan away.</p> <p>The Manchester ACC controller reports that the B737 pilot reported a weather balloon when passing FL130 inbound to Manchester. The information was passed to subsequent pilots in the area.</p> <p>The Met Office reports that having checked their records only 2 of their radiosondes were in the air around that time and were ones released from Larkhill and Herstmonceux, both in southern England. Further analysis of the wind and synoptic data from the day indicate that neither of these would have been carried towards the North West of England, indicating that it could not have been one of their radiosondes.</p>	<p>Cause: The Board were unable to determine the nature of the balloon and therefore agreed that the incident was best described as a conflict in Class A.</p> <p>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.</p>	A
2018275	30 Sep 18 1125	A319 (CAT)	Drone	5127N 00014W Heathrow 2400ft	London CTR (D)	<p>The A319 pilot reports that they were at 7nm final on the ILS to Heathrow RW27L, when they passed a flying object. It was V shaped, yellow and about 1m in diameter. The type of the object was not clearly identifiable, but it was thought to be a drone.</p> <p>Reported Separation: 0ft V/ 150m H Reported Risk of Collision: Not reported</p>	<p>Cause: The drone was being flown above the maximum permitted height of 400ft and at an altitude and position in an airfield approach path 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 A319.</p> <p>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.</p>	B

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2018281	7 Oct 18 1300	HS125 (Civ Comm)	Drone	5114N 00046W Farnborough 3800ft	London TMA (A)	<p>The HS125 pilot reports that during descent downwind, when passing 2800ft [actually 3800ft], a drone was observed head-on and passing about 10m above the canopy. From initial contact to near-miss there was no time to react. The drone was black with a gold top and about 50cm in diameter. The event was immediately reported to ATC.</p> <p>Reported Separation: 10m V/0m H Reported Risk of Collision: Not reported</p> <p>The Farnborough Controller reports the HS125 pilot had been given cleared to descend and whilst in the descent reported just missing a drone. At the time of the Airprox the aircraft was still in the London TMA, just SSW Farnborough. He reported it had several colours and had been directly in front of the aircraft as they descended. He later reported it was black/yellow/gold/red and was about 50cm wide, with a camera hanging underneath, and that it passed very, very close and that he thought it would hit the tail of the aircraft.</p>	<p>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 HS125.</p> <p>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.</p>	A