

Consolidated Drone/Balloon/Model/Unknown Object Report Sheet for UKAB Meeting on 07 Nov 2018

Total	Risk A	Risk B	Risk C	Risk D	Risk E
18	6	7	5	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
2018194	17 Jul 18 1328	B747 (CAT)	Drone	5131N 00001W Heathrow Approach 5100ft	London TMA (A)	<p>The B747 pilot reports that whilst on right base for Heathrow RW27L and descending through 5100ft, a drone was spotted a few hundred metres directly in front of the aircraft. It was in view for 2-3 seconds and then passed overhead the cockpit. It was dark red/magenta in colour and the size of a dustbin lid.</p> <p>Reported Separation: 50ftV/0m H Reported Risk of Collision: High</p> <p>The LL FIN controller reports that he was vectoring the B747 onto base, it was passing 5000ft for 4000ft when the pilot reported flying 50ft beneath a red drone.</p>	<p>Cause: The drone was being flown above the VLOS limit and at an altitude 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 B747.</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
2018195	17 Jul 18 1350	B787 (CAT)	Drone	5129N 00005W Heathrow Approach 4400ft	London TMA (A)	<p>The B787 pilot reports that he had been advised by a general broadcast on a previous Heathrow frequency that a drone had been reported about 3nm north of a point at 10 miles final to RW27L at altitude 5000ft. On handover to Heathrow Director he was advised again of the location and to expect a later descent clearance and a tighter intercept to avoid the original sighting location. During the descent the First Officer (PM) saw a quadcopter drone in the left 10 o'clock position at less than 1nm range. It was apparent that it would pass clear of the left wing. The incident was reported immediately to Heathrow Director, the position of the drone being estimated as just 1 mile north of the centre line for RW27L.</p> <p>Reported Separation: 0ftV/300m H Reported Risk of Collision: High</p> <p>The Heathrow Director reports that having had a previous drone report to the north of the approaches for Heathrow, he had been keeping aircraft at 6000ft (above the reported drone level) until they were clear of the immediate area, notifying crews and asking if they could see anything. The B787 pilot was given further descent followed by an intercept heading to establish on RW27L localiser when the crew reported a new drone sighting in their 9 o'clock at 1nm, at 4500ft, possibly silver or white in colour (approximately 14nm final RW27L and south of the previous report). Nothing was seen on radar therefore no avoiding action was given.</p>	<p>Cause: The drone was being flown above the VLOS limit and at an altitude 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 although safety had been reduced, 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
2018196	24 Jul 18 1855	E190 (CAT)	Drone	5130N 00001W London City 1800ft	London CTR (D)	<p>The E190 pilot reports that he was on an outbound course from London City RW27, at 2nm he commenced a right turn onto north. A metallic drone with 4 propellers was spotted travelling in a south-west direction. It passed about 50ft below the left wing. ATC were advised.</p> <p>Reported Separation: 50ft V/ 500m H Reported Risk of Collision: High</p>	<p>Cause: The drone was being flown at or above the practical VLOS limit and in an airfield departure lane 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: Although the pilot stated that the separation was 500m laterally, the Board felt that his being able to describe the drone in detail indicated that it had been at much closer range. The Board therefore 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
2018197	25 Jul 18 1345	A319 (CAT)	Drone	5323N 00022W Manchester Approach 600ft	Manchester CTR (D)	<p>The A319 pilot reports that on contact with Manchester Radar, the controller advised a drone had been sighted at about 2nm from touchdown, slightly north of the final approach track for RW23R. ATC reported no sightings in the previous ten minutes. A normal approach was flown when about 2nm from touchdown the Captain (PF) observed a quadcopter drone about 200ft below the aircraft, in line with the nose, tracking north, within 300m of the fuselage. He was able to observe the sun glinting off the turning propeller blades. PM did not see the drone.</p> <p>Reported Separation: <100ft V/~150m Reported Risk of Collision: High</p>	<p>Cause: The drone was being flown 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

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
2018198	25 Jul 18 1321	B737 (CAT)	Drone	5323N 00211W Manchester 1100ft	Manchester CTR (D)	<p>The B737 pilot reports that at 2.5- 3nm on approach to Manchester RW23R, the aircraft was fully configured for landing, with gear down and checks complete, when he saw a sun flash, which on glancing right he saw to be a white, medium sized drone. It was below and right no more that 100-200ft vertically from the aircraft. The Captain (PF) did not see it. The FO passed brief details to ATC and on landing to the Police.</p> <p>Reported Separation: 100-200ft V/30m H Reported Risk of Collision: Not reported</p> <p>The Manchester Controller reports that at 1321 the B737 pilot reported seeing a white drone abeam 2nm final for RW23R, just on their right-hand-side by about '100yds' and slightly below. Traffic Information was passed to other aircraft on approach and at 1348 another pilot reported seeing the drone in the same location on the approach [Airprox 2018197].</p>	<p>Cause: The drone was being flown 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 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
2018199	24 Jul 18 1102	DA42 (MoD)	Drone	5044N 00322W Exeter Approach 600ft	Exeter ATZ (G)	<p>The DA42 pilot reports conducting an ILS approach to RW26 when a small white object was noticed by the left-seat non-handling pilot, to the left (south) of the final approach track. It appeared initially to be a seabird but the speed of movement and left to right flight path across the approach lane made it appear unusual. At CPA the object was clearly identifiable as a moderate sized white quadcopter, however, reliable distance estimation was difficult due to the unknown size of the drone. Exeter Tower were informed of the position of the drone on frequency (with 2 aircraft behind on the approach) and a report submitted on landing.</p> <p>Reported Separation: '500-1000ft' Reported Risk of Collision: Low</p>	<p>Cause: The drone was being flown 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 DA42.</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

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
2018200	15 Jul 18 1327	E190 (CAT)	Drone	5131N 00001W London City 3000ft	London TMA (A)	<p>The E190 pilot reports that he was departing from London City RW27. On passing 3000ft he saw a small drone approximately 10-30m away. He reported the incident to Thames Radar.</p> <p>Reported Separation: 10-30m H Reported Risk of Collision: Not reported</p>	<p>Cause: The drone was being flown above the VLOS limit and in an airfield departure lane 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
2018201	25 Jul 18 1518	B787 (CAT)	Drone	5143N 00007W Brookmans Park VOR 6200ft	London TMA (A)	<p>The B787 pilot reports that as they left 6000ft with a clearance to climb to FL150, the Captain saw a red and black drone through his side window. Their trajectory was taking them up and away from the drone, which was reported to ATC.</p> <p>Reported Separation: 100ft V/30m Reported Risk of Collision: High</p>	<p>Cause: The drone was being flown above the VLOS limit and at an altitude 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
2018203	30 Jul 18 1637	Saab 2000 (CAT)	Unk Obj	5208N 00014E 4nm NE Duxford FL200	London TMA (A)	<p>The Saab 2000 pilot reports in the descent towards NUDNA when an object resembling a Chinese Lantern was seen as it passed down the left side of the aircraft, slightly above. ATC were notified.</p> <p>Reported Separation: ~0ft V/<100ft H Reported Risk of Collision: Not reported</p>	<p>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 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

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
2018210	16Jul 18 1752	Saab 2000 (CAT)	Drone	5130N 00005E London City 1800ft	London CTR (D)	<p>The Saab 2000 pilot reports that during the final approach phase to RW27 at LCY, when passing 1800ft, a drone passed down the right-hand-side of the aircraft, about 150m away.</p> <p>Reported Separation: '150m' Reported Risk of Collision: Not reported</p> <p>The London City Tower controller reports that an inbound Saab pilot reported seeing a drone just off their right wing, 1nm from touchdown on RW27. The incident was reported to the police.</p>	<p>Cause: The drone was being flown at or above the practical VLOS limit and in an airfield approach lane 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 Saab 2000.</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
2018214	2 Aug 18 1442	A321 (CAT)	Drone	5127N 00024W Heathrow 2000ft	London CTR (D)	<p>The A321 pilot reports that during an approach to Heathrow RW27R he saw a drone about 100m left of the aircraft at the same altitude. It was reported to Tower and to the police.</p> <p>Reported Separation: 0ft V/ 100m H Reported Risk of Collision: None</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 although safety had been reduced, there had been no risk of collision.</p>	C
2018215	30 Jul 18 1935	A319 (CAT)	Drone	5141N 00023W ivo Bovingdon VOR FL080	London TMA (A)	<p>The A319 pilot reports that they were being vectored for RW27R when they saw in front and slightly above what was thought to be a helium party balloon with string dangling underneath, as is commonly seen in the FIR. As they got closer it became obvious that it was a black quadcopter drone of fairly large size with some sort of underslung camera system. As they passed underneath and slightly to the left they could see a green-blue light being emitted from the underslung assembly. The object was moving in the windscreen and it was assessed that they were not on a collision course, hence no avoiding action was necessary.</p> <p>Reported Separation: ~200ftV/~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 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

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
2018220	19 Aug 18 1520	AW189 (SAR)	Unk Obj	5116N 00117E Ash 700ft	London FIR (G)	<p>The AW189 pilot reports that he was in transit when an object, believed to be a white and grey large kite or balloon, was seen directly ahead of the aircraft by the co-pilot at a range of about ¼nm. As soon as it was realised that the object was a collision risk the co-pilot called for an immediate 'break right'. The commander (PF) immediately responded and the object passed down the left side of the aircraft at a distance estimated to be 150m. Although the object could not be clearly identified by the co-pilot, it was suspected to be a balloon or kite which was estimated to be 3m-4m in height. On return to base the incident was reported to the local ATC unit. The pilot noted that another workload factor was the assessment of TCAS II contacts in the vicinity.</p> <p>Reported Separation: 0ft V/150m H Reported Risk of Collision: High</p>	<p>Cause: The Board were unable to determine the nature of the object so agreed that the incident was therefore best described as a conflict in Class G.</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
2018222	17 Aug 18 1636	B737 (CAT)	Drone	5153N 00007E ivo Stansted FL100	London TMA (A)	<p>The B737 pilot reports that they were being vectored for RW22 at Stansted when the Captain called 'drone', at which point the FO looked up and saw a dark coloured square/rectangle shaped object pass down the right side of the aircraft with minimal separation. The airframe was inspected on the ground after landing for any evidence of suspected contact or damage and none was observed. The incident was reported to ATC immediately after making visual contact and, following confirmation, ATC confirmed they would be filing a report.</p> <p>Reported Separation: ~50ft V/~50-200m 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

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
2018225	20 Aug 18 1547	A319 (CAT)	Drone	5129N 00034W Heathrow 3000ft	London CTA (A)	<p>The A319 pilot reports that on departure from Heathrow RW27R, passing 4DME and 3000ft he saw a drone about 200-300m ahead and 30m right of the nose, about 200ft above. The drone was black in colour, which contrasted with the white overcast cloud above, which is why it caught his attention. It appeared to be hovering just to the right of the departure track and as they climbed out they passed about 100ft below it and 30m horizontally. By the time he had seen it and communicated it to the Captain who was the handling pilot, they had passed it. It was only visible for 2-3 seconds. He opined that they were relatively heavy and therefore had a poor climb performance, if they had been lighter they would have passed much closer to the hovering altitude of the drone and risk of impact would have been very high. They reported it to ATC. The drone looked similar in size and design to the DJI Mavic Pro, a rectangular bodied quadcopter and they were between cloud layers, so it was unlikely to be flown by visual line of sight.</p> <p>Reported Separation: 100ft V/30m H Reported Risk of Collision: High</p> <p>The NE Deps Controller reports that the A319 pilot reported a drone whilst on departure. He informed the following aircraft and the Heathrow Tower Controller. No other pilots reported seeing the drone.</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 A319.</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
2018227	24 Aug 18 1645	A320 (CAT)	Drone	5127N 00013W Heathrow 2600ft	London CTA (A)	<p>The A320 pilot reports that whilst established on the Heathrow ILS he observed a bright blue drone, probably hovering (it was difficult to tell because of the closing speed) at around 100ft above them. The drone was roughly in the 1 o'clock when first spotted and passed down the right-hand-side. There was no time to take avoiding action. He noted that the drone was medium sized and appeared to be of a vertical plan form rather than the more normal horizontal form.</p> <p>Reported Separation: 100-150ftV/'difficult to tell' 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 A320.</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

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
2018228	6 Aug 18 1858	A320 (CAT)	Drone	5130N 00037W 6nm WNW Heathrow	London TMA (A)	<p>The A320 pilot reports that on initial climb out from Heathrow RW27R a red and yellow quadcopter drone was sighted. It passed down the right side, from left to right. The drone was not considered a threat given the A320 flight path and no avoiding action was taken.</p> <p>Reported Separation: 800ft V/200m H Reported Risk of Collision: Low</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 A320.</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
2018234	25 Aug 18 1220	A321 (CAT)	Drone	5226N 00204W Manchester 3000ft	Manchester CTR (D)	<p>The A321 pilot reports that he was fully established on the Manchester ILS for RW23R when he saw a medium sized red drone pass down the right-hand-side of the aircraft at the same level and a distance of about 100m. ATC were informed.</p> <p>Reported Separation: ~0ft V/100m H Reported Risk of Collision: Not reported</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 safety had been much reduced below the norm to the extent that safety had not been assured.</p>	B