

## Consolidated Drone/Balloon/Model/Unknown Object Report Sheet for UKAB Meeting on 24<sup>th</sup> January 2018

Total	Risk A	Risk B	Risk C	Risk D	Risk E
7	3	1	2	1	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
2017270	24 Nov 17 1000	PA31 (Civ Comm)	Drone	5324N 00251W 4nm north Liverpool Airport 2000ft	Liverpool CTR (D)	<p><b>The PA31 pilot</b> reports heading east and passing 2000ft in the climb when an object was sighted by the P2 at 2 o'clock, same level, at a range of 200m and on an opposite track. On passing 25m laterally, 20ft below the starboard side of the aircraft, the object was identified as a drone, apparently maintaining its altitude and course. There was insufficient time for the handling pilot to visually acquire the object before it passed, so no evasive action was taken. The incident was immediately reported to Liverpool and there were no further sightings of the drone.</p> <p><b>Reported Separation:</b> 20ft V/25m H <b>Reported Risk of Collision:</b> Medium</p>	<p><b>Cause:</b> The drone was being flown above the practical VLOS limit such that it was endangering other aircraft at that altitude and position. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the PA31.</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 drone portrayed a situation where providence had played a major part in the incident and/or a definite risk of collision had existed.</p>	A
2017271	1 Dec 17 1005	B787 (CAT)	Drone	5136N 00027W 10nm N Heathrow 7500ft	London TMA (A)	<p><b>The B787 pilot</b> reports that they were just leaving the BDN hold, the aircraft was in a right-hand turn and descending when the P3 spotted an object coming towards the aircraft, at speed. It was small and tracked from ahead to beneath the right wing. Neither of the operating pilots saw it. As it passed beneath the right wing he could see it was a small drone, but because of its size he could not make out anyway identifying features or colours. No avoiding action was necessary because it was obviously going to pass by.</p> <p><b>Reported Separation:</b> 500ft V/200m H <b>Reported Risk of Collision:</b> Medium</p>	<p><b>Cause:</b> The drone was being flown above the practical VLOS limit such that it was endangering other aircraft at that altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the B787.</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 drone 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
2017273	10 Dec 17 1439	BN2 Islander (Civ Comm)	Drone	5859N 00255W 1nm NW Kirkwall 400ft	Scottish FIR (G)	<p><b>The BN2 pilot</b> reports that after take-off from RW32 a right turn was made to remain right of the coast line. After passing 400ft, and before Berstane House, an object to the left caught his attention. It appeared to look like a large drone. The aircraft was already in a turn and no avoiding action was required. ATC were informed.</p> <p><b>Reported Separation:</b> NK <b>Reported Risk of Collision:</b> Low</p>	<p><b>Cause:</b> The drone was being flown in the vicinity of an airfield departure path such that it was endangering other aircraft at that location and altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the BN2.</p> <p><b>Risk:</b> The Board considered that the pilot's account of the incident was such that there was insufficient information to make a sound judgement of risk.</p>	D
2017279	8 Oct 17 1130	A320 (CAT)	Drone	5123N 00029W 5.5nm SSW LHR 6000ft	London TMA (A)	<p><b>The A320 pilot</b> reports that he was climbing out of a cloud layer, at about 5700ft, and levelled off at 6000ft. His F/O reported seeing something like a drone just on top of the cloud layer, which passed below the right-hand wing.</p> <p><b>Reported Separation:</b> 300ft V/0nm H <b>Reported Risk of Collision:</b> Low</p>	<p><b>Cause:</b> The drone was being flown above the VLOS limit such that it was endangering other aircraft at that altitude. The Board agreed that the incident was therefore best described as the drone was flown into conflict with the A320.</p> <p><b>Risk:</b> The Board considered that the pilot's estimate of separation, allied to his overall account of the incident, his inability to avoid the drone and the fact he had already climbed through the drone's level portrayed a situation where providence had played a major part in the incident and/or a definite risk of collision had existed.</p>	A
2017281	19 Nov 17 1220	A319 (CAT)	2 x Drones	5326N 00257W 7nm NW Liverpool 3500ft	Liverpool CTA (D)	<p><b>The A319 pilot</b> reports he was positioning right downwind for RW27 at Liverpool at 3500ft when he spotted 2 drones, of the DGI Phantom type, on a bearing of 110° and below him. Both were white in colour and were not in proximity to his aircraft, so avoiding action was not necessary.</p> <p><b>Reported Separation:</b> 1000ft V/300m H <b>Reported Risk of Collision:</b> None</p>	<p><b>Cause:</b> The drone was being flown above the practical VLOS limit such that it was endangering other aircraft at that altitude. However, in this instance the Board agreed that separation was such that this was considered a sighting report.</p> <p><b>Risk:</b> 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
2018001	1 Jan 18 1140	ASK21 (Civ Club)	Drone	5151N 00032W WSW Dunstable 550ft	London FIR (G)	<p><b>The ASK21 pilot</b> reports that he was performing a standard circuit at Dunstable. The weather was grey and overcast with a rain front approaching from the west. A drone was encountered at 550ft just prior to the final turn for approach. The drone was 20-50m in front of the nose of the glider and a few metres below. It was grey in colour and therefore difficult to see in the overcast weather against a backdrop of Dunstable town. It passed rapidly to the right of the glider, remaining a few metres below; there was no time to take avoiding action. Had the drone been on a collision course it was unlikely that the glider would have responded to control inputs rapidly enough to allow avoiding action to be effective.</p> <p><b>Reported Separation:</b> 15ft V/20m H <b>Reported Risk of Collision:</b> High</p>	<p><b>Cause:</b> The drone was being flown in the vicinity of an airfield circuit 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 glider.</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 drone portrayed a situation where providence had played a major part in the incident and/or a definite risk of collision had existed.</p>	A
2018004	7 Jan 18 1330	B747 (CAT)	Drone	5129N 00053W 15nm W Heathrow 5000ft	London TMA (A)	<p><b>The B747 pilot</b> reports lined up on a long final for RW09L when the First Officer saw a drone in the 1 o'clock position, moving rapidly along the window as the aircraft flew past it. The rest of the crew and ATC were informed immediately. There was insufficient time to take avoiding action.</p> <p><b>Reported Separation:</b> 50ft V/100m H <b>Reported Risk of Collision:</b> Medium</p>	<p><b>Cause:</b> The drone was being flown above the VLOS limit 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 B747.</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 drone portrayed a situation where safety had been much reduced below the norm to the extent that safety had not been assured.</p>	B