Consolidated Drone/Balloon/Model/Unknown Object Report Sheet for UKAB Meeting on 15th July 2020

Total	Risk A	Risk B	Risk C	Risk D	Risk E
3	0	1	1	0	1

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location[1] Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Comments/Risk Statement	ICAO Risk
2020043	28 May 20 1410	FA20 (Civ Com)	Drone	5046N 00154W 2nm W Bournemouth 700ft	Bournemouth CTR (D)	**The FA20 pilot** reports that on crew-in ATC were responding to calls of a drone being flown at 2500ft at 2.5nm from the threshold of RW08 at Bournemouth. All airfield departures and recoveries were temporarily ceased and the Police helicopter was launched in order to conduct an inspection. After conducting a search of the area, the helicopter reported that the approach path appeared to be clear. No further drone sightings were reported and normal airfield movements resumed. An uneventful departure was flown. On recovery a runway inspection was being conducted, which necessitated a join into the circuit to delay the approach. During the finals turn, at approximately 700ft and 2NM, a quadcopter drone was seen passing down the right-hand side of the aircraft at approximately 200ft laterally and 300ft vertically above. This was immediately reported to ATC who passed the information to company traffic. The aircraft was recovered without further incident. **Reported Separation:** 300ft V/ 70m H **Reported Risk of Collision:** High **The Bournemouth Radar Controller** reports that at 1410Z they were advised by the Tower controller that the FA20 pilot had reported a drone at 2.5nm final for RW08 at approximately 1500ft. The FA20 had completed the first approach without incident and was completing a visual circuit to land at the time of the drone encounter. This was the second drone incident of the day in the same location with the first being by a Shadow at around 1200Z [Airprox 2020046].	In the Board's opinion the reported altitude and/or description of the object were sufficient to indicate that it could have been a drone. **Applicable Contributory Factors:** 1, 2, 3, 4, 7 **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.	C

[1] Latitude and Longitude are usually only estimates that are based on the reported time of occurrence mapped against any available radar data for the aircraft's position at that time. Because such reported times may be inaccurate, the associated latitudes and longitudes should therefore not be relied upon as precise locations of the event.

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2020046	28 May 20 1207	Shadow (HQ Air Ops)	Drone	N5046 W00155 Bournemouth 800ft	Bournemouth CTR (D)	**The Shadow pilot** reports that, while on the procedural ILS approach into Bournemouth for RW08, a drone was observed by the PNF. The drone passed 100ft below the aircraft and was identified as a medium-sized (2ft diameter), white, quadcopter similar to a DJI Phantom. The crew elected to go around and, whilst in the hold, managed to acquire the drone briefly using an onboard camera. This information was passed to ATC and local police forces. After 30 minutes the crew had no further sightings and ATC allowed the crew to complete an approach to land. There were no further sightings of the drone. **Reported Separation:** 100ft V/0m H **Reported Risk of Collision:** Very High **The Bournemouth investigation** reports that this was one of two drone encounters on the same day in the same area [cross-refer Airprox 2020043]. Specialist equipment on board the aircraft reporting the encounter was able to identify the type of drone as a Phantom Quadcopter. Initial investigations have discovered that this type of drone is provided with a Geo Zone map offering guidance to users on safe areas to fly, restriction zones and prohibited areas. This map has been found to be inaccurate with regards to restriction areas in the vicinity of the airport. Contact has been made with the company in a bid to rectify this situation and to assist in prohibiting such drones from lifting within the notified FRZ in the future.	In the Board's opinion the reported altitude and/or description of the object were sufficient to indicate that it could have been a drone. **Applicable Contributory Factors:** 1, 2, 3, 4, 6 **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.	B

Airprox Number	Date Time (UTC)	Aircraft (Operator)	Object	Location[1] Description Altitude	Airspace (Class)	Pilot/Controller Report Reported Separation Reported Risk	Comments/Risk Statement	ICAO Risk
2020049	31 May 20 1958	EC145 (PSNI)	Unk obj	N5500 W00720 Londonderry 1700ft	Scottish FIR (G)	**The EC145 pilot** reports that he was flying in an orbit on a tasking when a fast-moving drone was spotted 300-500ft below the aircraft and within 500m. The drone remained in the vicinity of the helicopter for 5-10min and the pilot then lost sight of it. **Reported Separation:** 300-500ft V/500m H **Reported Risk of Collision:** NR **The Belfast/Aldergrove ATC Watch Manager** reports that the pilot did not report the event to Aldergrove ATC, either on the RT at the time of the event, or later by telephone. No tracks were observed on the radar at the time and place of the reported Airprox.	In the Board's opinion the reported altitude and/or description of the object were such that they were unable to determine the nature of the unknown object. **Applicable Contributory Factors:** 4, 8 **Risk:** The Board considered that the pilot's overall account of the incident portrayed a situation where normal procedures and/or safety standards had applied.	E

Relevant Contributory Factor (CF) Table

CF	Factor	Description	Amplification
	Flight Elements		
	• Regulations, Processes, Procedures and Compliance		
1	Human Factors	• Flight Crew ATM Procedure Deviation	The drone operator did not comply with regulations due to flying above 400ft and/or in controlled airspace/FRZ without clearance
	• Tactical Planning and Execution		
2	Human Factors	• Action Performed Incorrectly	The drone operator was flying above 400ft without clearance.
3	Human Factors	• Airspace Infringement	The drone pilot was flying in controlled airspace/FRZ without clearance.
	• Situational Awareness of the Conflicting Aircraft and Action		
4	Contextual	• Situational Awareness and Sensory Events	Pilot had no, or generic, or late Situational Awareness
	• See and Avoid		
5	Contextual	• Near Airborne Collision with Other Airborne Object	An Airprox involving an unknown object or balloon.
6	Contextual	• Near Airborne Collision with RPAS	An Airprox involving a drone or model aircraft.
7	Human Factors	• Perception of Visual Information	Pilot was concerned by the proximity of the other aircraft
8	Human Factors	• Monitoring of Other Aircraft	Sighting report