Consolidated Drone/Balloon/Model/Unknown Object Summary Sheet for UKAB Meeting on 12th March 2025

Total	Risk A	Risk B	Risk C	Risk D	Risk E
2	0	0	1	1	0

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
2025006	28 Jan 25 1411	P2002 (Civ FW)	Unk Obj	5621N 00328W 2NM S of Perth City 3100ft	Scottish FIR (G)	**The P2002 pilot** reports they were flying with a student on a north-westerly heading, south of Perth. Scottish Info had made them aware of traffic in the Auchterarder area, which they were looking out for. They were about to commence a left turn on to a southerly heading when they saw traffic below them on a similar heading, going significantly faster than them. They and their student both identified it as a quadcopter drone. Then another identical one appeared, following the first. By that time they were past them and flying away from them so no avoiding action was required. The NOTAMs had been checked and there was no notified activity in that area. It was difficult to judge vertical separation but since they could clearly see that they were quadcopters they must have been pretty close. The pilot later reported that it had been pointed out to them that quadcopters cannot fly at speeds significantly in excess of 100kt. They had therefore spoken again to their student, who also saw the drones, and they advised that they appeared to have a light grey body with two other elements, which they took to be engines or propellors, one each on either side of the fuselage at the rear of the aircraft. This 'squared' with what they saw, which was a light grey body with two other structures, one on each side, which seemed to be whiter in colour. They took those structures to be two of the assumed four rotors of a quadcopter, but it now seems that cannot have been the case. They had also looked at [aircraft tracking software] for the period of the Airprox and had found that a Typhoon had flown underneath them immediately prior to them seeing the	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. The Board noted that the P2002 pilot had reviewed a flight-tracking application and identified a Typhoon around the time and location of the Airprox. Due to a lack of recorded data available to the Board it could not be established if the drones reported by the P2002 pilot were in fact Typhoons flying at low level. **Applicable Contributory Factors:** 4, 5 **Risk:** The Board considered that there was insufficient information to make a sound judgement of risk.	D

[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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						drones. They did not see the Typhoon, probably because it was directly underneath them. **Reported Separation:** 400ft V/ 250m H **Reported Risk of Collision:** Low **The Scottish Information FISO** reports they were sat at OP37J and had taken over the position of FISO at 1430. [The P2002] was already on frequency when the handover was taken, having called on at 1402. At some point between 1430 and 1441, they provided [the P2002 pilot] with the information that Fife paradropping was still active. At 1441 [the P2002 pilot] then called to say that they would be leaving the frequency for [Fife]. They were advised to squawk conspicuity and free call [Fife] on 130.455MHz, which was relayed back. The pilot then stated that they would be filing an Airprox on "a couple of drones just south of Perth about half an hour ago". This was noted on the flight progress strip with an approximate time of 1412. No other information was given and the pilot was advised that they would pass this on to the Supervisor. The Ops Supervisor was then called and advised of the situation. **The NATS Investigation** reported that the pilot of [the P2002] was on the Scottish Flight Information Service (FIS) frequency at the reported time of the event, in receipt of a Basic Service as requested. The pilot reported the drones were "…*just south of Perth"*. Around the time the pilot reported they had experienced the encounter, the [P2002] was operating between 5NM and 6NM south of Perth. The encounter was estimated to be at around 1411 but was not reported to the Flight Information Service Officer (FISO) until 1441. At that time the pilot stated the Airprox occurred, *"…about half an hour ago".* Around 1411 [the P2002] was operating around 3000ft, between 5NM and 6NM south of Perth. The pilot did not report the level of the drones to the FISO. The pilot did not describe the UAS but stated that there were a "couple" of them.		

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						The pilot of [the P2002] called on the FIS frequency at 1401:55 and requested a Basic Service. The pilot stated they would be operating between the Lomond Hill and Perth for 45min not above 3000ft, VFR. A Basic Service was duly agreed and the pilot instructed to squawk the FIS conspicuity code (7401). At 1441:35 the pilot of [the P2002] reported that their detail was complete and requested to change frequency to Fife. The FISO instructed the pilot to squawk conspicuity (7000) and QSY to the Fife frequency. The pilot read this back and then added, "*Just before we go just to advise we'll be filing an Airprox on a couple of drones that we saw about half an hour ago just south of Perth".* This sighting was not reported to the FISO by the pilot on the frequency at the time it occurred. The pilot did not provide any further details of the encounter. Analysis of the radar by Safety Investigations indicated that there were no associated primary or secondary contacts associated with the drone report, visible on radar at the approximate time of the event.		
2025019	18 Feb 25 1330	Juno (HQ Air Trg)	Drone	5252N 00229W 2NM SE of Ternhill Airfield 1000ft	Ternhill ATZ (G)	**The JUNO pilot** reports that on join to Ternhill RW10, whilst approximately 2NM SE of the field at 1000ft QNH, they received a call from ATC alerting them to a nearby slow-moving radar contact with no height information. Almost simultaneously the crewman called visual with a small drone in their 9 o'clock, level with the aircraft at an estimated 10 spans. The pilot took control of the aircraft and, after opening from the drone for a few seconds, commenced a turn toward it to attempt to locate its controller. They lost visual contact with the drone due to poor into sun visibility so abandoned their attempt to locate the pilot and continued the join downwind for area left. ATC passed two further reports of a slow moving contact north and east of their location during the sortie, but the pilot had no further sightings of the drone. **Reported Separation:** 0ft V/100m H **Reported Risk of Collision:** Medium	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, 4, 5 **Risk:** The Board considered that although safety had been reduced, there had been no risk of collision.	C

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						The SHAWBURY Controller reports that at time 1323 [they recall], they called traffic to [uninvolved aircraft] pilot who had been SE of Ternhill by 7NM. The Juno pilot responded to say they were visual with a drone that matched the range and direction flying up to 1000ft QNH and declared an Airprox on frequency. The drone was not seen on radar and ATC had no prior warning.		

Relevant Contributory Factor (CF) Table

CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Flight Elements			
	• Regulations, Processes, Procedures and Compliance			
1	Human Factors	• Flight Crew ATM Procedure Deviation	An event involving the drone operator deviating from applicable Air Traffic Management procedures	If the reported object was a drone, then the drone operator did not comply with regulations by flying above 400ft and/or in controlled airspace/FRZ without clearance
	• Tactical Planning and Execution			
2	Human Factors	• Action Performed Incorrectly	Events involving the drone operator performing the selected action incorrectly	If the reported object was a drone, then the drone operator was flying above 400ft without clearance.
3	Human Factors	• Airspace Infringement	An event involving an infringement / unauthorized penetration of a controlled or restricted airspace	If the reported object was a drone, then 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	Events involving a flight crew's awareness and perception of situations	Pilot had no, generic, or late Situational Awareness
	• See and Avoid			
5	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft
	• Outcome Events			
6	Contextual	• Near Airborne Collision with Other Airborne Object	An event involving a near collision by an aircraft with an unpiloted airborne object (unknown object or balloon)	
7	Contextual	• Near Airborne Collision with RPAS	An event involving a near collision with a remotely piloted air vehicle (drone or model aircraft)	