

## **UNMANNED AIRCRAFT - OPERATIONAL AUTHORISATION**

SPECIFIC CATEGORY – UKPDRA01	
1.	AUTHORITY RELEASING THE AUTHORISATION
1.1. State	United Kingdom (UK)
1.2. Issuing Authority	United Kingdom Civil Aviation Authority (UK CAA)
1.3. Authorising Signatory	SSC Technical Services
1.4. Point of Contact Telephone E-Mail	SSC Technical Services 0330 022 1908 uavenquiries@caa.co.uk
2.	UNMANNED AIRCRAFT SYSTEM (UAS) OPERATOR
2.1. UAS Operator Name Operator ID UK CAA reference	Edinburgh Napier University GBR-OP-5H57G5DHWW9P UAS 14597
2.2. Point of Contact/ Accountable Manager Telephone E-Mail	Dr Brian Davison 01314552373 b.davison@napier.ac.uk
2.3. Authorisation Number	2
2.4. Operations Manual (OM)	2.0 14/12/2023

3.	UNMANNED AIRCRAFT SYSTEM
3.1. Unmanned Aircraft	(1) The Unmanned Aircraft <b>must</b> be equipped with a mechanism that will cause it to land in the event of a disruption to, or a failure of, any of its control systems, including the C2 Link.
	<ul> <li>(a) The Remote Pilot must ensure that this mechanism is in working order before any flight is commenced.</li> </ul>
	(2) The UAS Operator <b>must</b> ensure that the radio spectrum used for the C2 Link, payload, and any other communications complies with the relevant Ofcom requirements and that any licences required for its operation have been obtained.
	(3) The UAS Operator <b>must</b> ensure high energy devices are appropriately stored and transported.
	(4) The UAS Operator ID listed at Section 2.1 of this Operational Authorisation (OA) <b>must</b> be displayed on every Unmanned Aircraft flown under this OA.
3.1.1. Schedule I Manufacturer Model MTOM Classification	Any manufacturer of any model of rotary wing Unmanned Aircraft with an MTOM/flying weight of less than <b>25 kg</b> .
4.	LIMITATIONS AND CONDITIONS FOR THE UAS OPERATION
4.1. Type of Operation	(1) Visual Line of Sight (VLOS) operations and as per the definition within UK Reg (EU) 2019/947, article 2(7).
	(2) Flight(s) within <b>150 m</b> of Residential, Commercial, Industrial or Recreational Areas.
4.2. Operating Times/Periods	24 hrs. Night operation(s) <b>must</b> be carried out in accordance with the procedure(s) in the OM at Section 2.4 of this OA.
4.3. Location(s) of Operation	(1) Any location within the UK subject to the airspace restrictions detailed in Section 4.4 of this OA.
	(2) Flight(s) <b>may</b> be conducted within <b>150 m</b> of Residential, Commercial, Industrial, and/or Recreational Areas.
4.4. Airspace	(1) Flights <b>must not</b> be conducted within the Flight Restriction Zone (FRZ) of a protected aerodrome, or within any Restricted, Prohibited or Danger Area, unless the appropriate clearance or permission to enter has been obtained.
	(2) The Remote Pilot <b>must</b> ensure ANSP notification is completed in accordance with the procedure(s) in the OM at Section 2.4 of this OA.

4.5. Operating	ne gle nd ed
(2) Obstacles taller than 105 m may be overflown by a maximum of 15 m under the following conditions:  (a) The person in charge of the obstacle must have requested this, and; (b) The Unmanned Aircraft must not be flown more than 50 m horizontally from the obstacle.  4.6.  Maximum Operating Range  (1) Flight(s) must be conducted within VLOS and must not exceed 500 m from the Remote Pilot.  (2) When operating within VLOS, the Remote Pilot may be assisted by a sing Unmanned Aircraft Observer, who must be co-located with the Remote Pilot at able to communicate with them clearly and effectively. If present, the Unmanned Aircraft Observer must maintain VLOS of the aircraft at all times.  4.7.  Separation from Uninvolved Persons  (1) Flight(s) must not be carried out within 50 m of Uninvolved Persons, except during take-off and landing, where this distance may be reduced to 30 m.  (2) Any overflight of Uninvolved Persons must be kept to a minimum. The guidance in CAP 722 (Section 2.1.5.1) must be followed in conjunction with the procedure(s) in the OM at Section 2.4 of the OA.  (3) Flight(s) must not be carried out within 50 m horizontally of Assemblies of People must not be conducted:  (a) Lone Remote Pilots must have an appropriately set maximum allow distance from launch/pilot and an appropriately set minimum Return to Horizontally of Assemblies of People must not be conducted:	ne ne nd ed
(b) The Unmanned Aircraft must not be flown more than 50 m horizontally from the obstacle.  4.6.  Maximum Operating Range  (1) Flight(s) must be conducted within VLOS and must not exceed 500 m from the Remote Pilot.  (2) When operating within VLOS, the Remote Pilot may be assisted by a sing Unmanned Aircraft Observer, who must be co-located with the Remote Pilot a able to communicate with them clearly and effectively. If present, the Unmanne Aircraft Observer must maintain VLOS of the aircraft at all times.  4.7.  Separation from Uninvolved Persons  (1) Flight(s) must not be carried out within 50 m of Uninvolved Persons, except during take-off and landing, where this distance may be reduced to 30 m.  (2) Any overflight of Uninvolved Persons must be kept to a minimum. The guidance in CAP 722 (Section 2.1.5.1) must be followed in conjunction with the procedure(s) in the OM at Section 2.4 of the OA.  (3) Flight(s) must not be carried out within 50 m horizontally of Assemblies of People Any overflight of Assemblies of People must not be conducted:  (a) Lone Remote Pilots must have an appropriately set maximum allow distance from launch/pilot and an appropriately set minimum Return to Horizontally of Assemblies of People must not be conducted:	ne Ijle nd ed
Maximum Operating Range  (1) Flight(s) must be conducted within VLOS and must not exceed 500 m from the Remote Pilot.  (2) When operating within VLOS, the Remote Pilot may be assisted by a sing Unmanned Aircraft Observer, who must be co-located with the Remote Pilot at able to communicate with them clearly and effectively. If present, the Unmann Aircraft Observer must maintain VLOS of the aircraft at all times.  4.7.  Separation from Uninvolved Persons  (1) Flight(s) must not be carried out within 50 m of Uninvolved Persons, except during take-off and landing, where this distance may be reduced to 30 m.  (2) Any overflight of Uninvolved Persons must be kept to a minimum. The guidance in CAP 722 (Section 2.1.5.1) must be followed in conjunction with the procedure(s) in the OM at Section 2.4 of the OA.  (3) Flight(s) must not be carried out within 50 m horizontally of Assemblies of People Any overflight of Assemblies of People must not be conducted:  (a) Lone Remote Pilots must have an appropriately set maximum allow distance from launch/pilot and an appropriately set minimum Return to Hor	ille nd ed ng
Maximum Operating Range  (1) Flight(s) must be conducted within VLOS and must not exceed 500 m from the Remote Pilot.  (2) When operating within VLOS, the Remote Pilot may be assisted by a sing Unmanned Aircraft Observer, who must be co-located with the Remote Pilot a able to communicate with them clearly and effectively. If present, the Unmann Aircraft Observer must maintain VLOS of the aircraft at all times.  4.7.  Separation from Uninvolved Persons  (1) Flight(s) must not be carried out within 50 m of Uninvolved Persons, except duritake-off and landing, where this distance may be reduced to 30 m.  (2) Any overflight of Uninvolved Persons must be kept to a minimum. The guidance in CAP 722 (Section 2.1.5.1) must be followed in conjunction with the procedure(s) in the OM at Section 2.4 of the OA.  (3) Flight(s) must not be carried out within 50 m horizontally of Assemblies of Peop Any overflight of Assemblies of People must not be conducted:  (a) Lone Remote Pilots must have an appropriately set maximum allow distance from launch/pilot and an appropriately set minimum Return to Hor	yle nd ed ng
Unmanned Aircraft Observer, who must be co-located with the Remote Pilot a able to communicate with them clearly and effectively. If present, the Unmann Aircraft Observer must maintain VLOS of the aircraft at all times.  4.7.  Separation from Uninvolved Persons  (1) Flight(s) must not be carried out within 50 m of Uninvolved Persons, except duritake-off and landing, where this distance may be reduced to 30 m.  (2) Any overflight of Uninvolved Persons must be kept to a minimum. The guidance in CAP 722 (Section 2.1.5.1) must be followed in conjunction with the procedure(s) in the OM at Section 2.4 of the OA.  (3) Flight(s) must not be carried out within 50 m horizontally of Assemblies of Peop Any overflight of Assemblies of People must not be conducted:  (a) Lone Remote Pilots must have an appropriately set maximum allow distance from launch/pilot and an appropriately set minimum Return to Hor	nd ed ng
<ul> <li>(1) Flight(s) must not be carried out within 50 m of Uninvolved Persons, except duritake-off and landing, where this distance may be reduced to 30 m.</li> <li>(2) Any overflight of Uninvolved Persons must be kept to a minimum. The guidance in CAP 722 (Section 2.1.5.1) must be followed in conjunction with the procedure(s) in the OM at Section 2.4 of the OA.</li> <li>(3) Flight(s) must not be carried out within 50 m horizontally of Assemblies of People Any overflight of Assemblies of People must not be conducted:         <ul> <li>(a) Lone Remote Pilots must have an appropriately set maximum allow distance from launch/pilot and an appropriately set minimum Return to Hor</li> </ul> </li> </ul>	
<ul> <li>(1) Flight(s) must not be carried out within 50 m of Uninvolved Persons, except duritake-off and landing, where this distance may be reduced to 30 m.</li> <li>(2) Any overflight of Uninvolved Persons must be kept to a minimum. The guidance in CAP 722 (Section 2.1.5.1) must be followed in conjunction with the procedure(s) in the OM at Section 2.4 of the OA.</li> <li>(3) Flight(s) must not be carried out within 50 m horizontally of Assemblies of People Any overflight of Assemblies of People must not be conducted:         <ul> <li>(a) Lone Remote Pilots must have an appropriately set maximum allow distance from launch/pilot and an appropriately set minimum Return to Hor</li> </ul> </li> </ul>	
<ul> <li>in CAP 722 (Section 2.1.5.1) must be followed in conjunction with the procedure(s) in the OM at Section 2.4 of the OA.</li> <li>(3) Flight(s) must not be carried out within 50 m horizontally of Assemblies of Peop Any overflight of Assemblies of People must not be conducted:         <ul> <li>(a) Lone Remote Pilots must have an appropriately set maximum allow distance from launch/pilot and an appropriately set minimum Return to Hor</li> </ul> </li> </ul>	<b>;</b>
Any overflight of Assemblies of People must not be conducted:  (a) Lone Remote Pilots <b>must</b> have an appropriately set maximum allow distance from launch/pilot and an appropriately set minimum Return to Hor	
distance from launch/pilot and an appropriately set minimum Return to Hor	e.
(4) Horizontal separation between the Unmanned Aircraft and Assemblies of Peoplemust not be less than the height of the Unmanned Aircraft (i.e., the 1:1 rule).	Э
4.8.	
Security of Loads/Equipment  (1) The Remote Pilot must ensure that any load carried by, or equipment on, t Unmanned Aircraft is properly secured and that the aircraft is in a safe conditi for the specific flight.	
(2) Articles <b>must not</b> be dropped.	
(3) Dangerous Goods must not be carried.	
4.9.	
Remote Pilot (1) The Remote Pilot must: Requirements	
(a) be employed or contracted by the UAS Operator;	
(b) hold a UK Flyer ID;	
(c) Hold a valid General VLOS Certificate (GVC);	
(d) follow the requirement(s) of UK Reg (EU) 2019/947, Annex B, UAS.SPEC.06	_
and; (e) be qualified as per the requirement(s) of the OM at Section 2.4 of this OA.	0,

	,
4.10. UAS Operator Responsibilities	(1) The UAS Operator <b>must</b> :
	<ul> <li>(a) comply with the responsibilities set out in UK Reg (EU) 2019/947, Annex B, UAS.SPEC.050;</li> <li>(b) maintain records of each flight made under this OA, and;</li> <li>(c) make such records available to the UK CAA on request as per UK Reg (EU) 2019/947, Annex B, UAS.SPEC.090.</li> </ul>
4.11. Occurrence Reporting Requirements	(1) Any occurrences that take place while operating under this OA <b>must</b> be reported in accordance with:
	<ul> <li>(a) UK Reg (EU) No. 376/2014;</li> <li>(b) UK Reg (EU) 2015/1018;</li> <li>(c) UK Reg (EU) No. 996/2010, and;</li> <li>(d) the requirements set out in CAP 722 Section 2.7.</li> </ul>
4.12. Insurance	Insurance cover meeting the requirements of UK Reg (EC) No. 785/2004 <b>must</b> be held.
4.13. Requirements relating to personnel essential to the UAS operation	Any additional personnel <b>must</b> be qualified and competent as per the details in the OM at Section 2.4 of this OA.
4.14. Relevant/Other Comments	The Remote Pilot <b>must not</b> be operating a moving vehicle whilst operating the Unmanned Aircraft. If the Remote Pilot operates the Unmanned Aircraft from a moving vehicle as a passenger, the speed and stability of the vehicle <b>must</b> be sufficient for the Remote Pilot to maintain VLOS and control of the Unmanned Aircraft at all times.

5.	DURATION AND VALIDITY
5.1. Duration	From: 09/01/2024  To: 09/01/2025
5.2. Validity	<ul> <li>(1) This Operational Authorisation is issued under Article 5 of UK Reg (EU) 2019/947 and remains valid for the duration at Section 5.1 of this OA, unless otherwise amended, suspended, limited, or revoked, provided that the UAS Operator: <ul> <li>(a) remains compliant with the relevant requirements of UK Reg (EU) 2019/947, and;</li> <li>(b) complies with the conditions and limitations defined in this Operational Authorisation.</li> </ul> </li> </ul>
6.	AUTHORISING SIGNATURE
6.2. Authoriser Signature/Stamp	CAA CAA
6.3. Provisions and Limitations	Under this Operational Authorisation, the UAS Operator detailed in Section 2 is authorised to conduct UAS operations with the UAS defined in Section 3, and according to the conditions and limitations in Section 4, provided that they comply with this Operational Authorisation, Annex IX to UK Reg (EU) 2018/1139, and its implementing rules. Any changes to the technical or operational characteristics detailed herein will invalidate this Operational Authorisation. Any proposed changes <b>must</b> be submitted to the UK CAA for approval before implementation.  This Operational Authorisation <b>must</b> be carried by the Remote Pilot during the UAS operation.
6.4. Date	09/01/2024

- Note 1. UAS Operators and Remote Pilots **should** be aware that the collection of images of identifiable individuals, even inadvertently, when using surveillance cameras mounted on an Unmanned Aircraft **may** be subject to the General Data Protection Regulation and Data Protection Act 2018. Further information about these regulations and the circumstances in which they apply can be obtained from the Information Commissioner's Office and website: <a href="https://ico.org.uk/for-the-public/drones/">https://ico.org.uk/for-the-public/drones/</a>
- **Note 2.** UAS Operators and Remote Pilots **must** be aware of their responsibilities regarding operations from private land and any requirements to obtain the appropriate permission before operating from a particular site. They **must** ensure that they observe the relevant trespass laws and **must not** unwittingly commit a trespass whilst conducting a flight.
- **Note 3.** UAS Operators **must** ensure that the appropriate aircraft radio licence has been obtained for any transmitting radio equipment that is installed or carried on the aircraft, or that is used in connection with the conduct of the flight and that operates in an aeronautical band.
- **Note 4.** 'Night' means the time from half an hour after sunset until half an hour before sunrise (both times inclusive), sunset and sunrise being determined at surface level.
- **Note 5.** The following editorial practices are used throughout the Operational Authorisation above:
  - MUST or SHALL denotes a mandatory requirement.
  - **SHOULD** implies a strong obligation. The UK CAA would expect a clear justification if the UAS Operator does not follow such an obligation.
  - MAY indicates a discretionary practice.
- Note 6. Any reference to UK Reg (EU) 2018/1139 should be taken to refer to Assimilated Regulation (EU) 2018/1139.
- Note 7. Any reference to UK Reg (EC) No. 785/2004 should be taken to refer to Assimilated Regulation (EC) No. 785/2004.
- Note 8. Any reference to UK Reg (EU) 2019/947 should be taken to refer to Assimilated Regulation (EU) 2019/947.
- Note 9. Any reference to UK Reg (EU) No. 376/2014 should be taken to refer to Assimilated Regulation (EU) No. 376/2014.
- Note 10. Any reference to UK Reg (EU) No. 996/2010 should be taken to refer to Assimilated Regulation (EU) No. 996/2010.
- Note 11. Any reference to UK Reg (EU) 2015/1018 should be taken to refer to Assimilated Regulation (EU) 2015/1018.
- **Note 12.** This Operational Authorisation is deemed as a certificate for the operation of Unmanned Aircraft as per UK Reg (EU) 2018/1139, article 56(1). Therefore, all safety-related occurrences **must** be reported in accordance with the regulations as set out in notes 8, 9, 10, and 11.
- **Note 13.** The "Flight Restriction Zone" of a protected aerodrome can be determined by reference to the table contained within ANO 2016, article 94A, paragraph 7 and is described in CAP 722.
- **Note 14.** A lone Remote Pilot is when a Remote Pilot does not have any support crew (Observer(s)/payload operator(s)) positioned alongside the Remote Pilot for the duration of the flight.