

UNMANNED AIRCRAFT - OPERATIONAL AUTHORISATION



Model Aircraft Article 16 Authorisation

FPV-UK

1. AUTHORITY RELEASING THE AUTHORISATION	
1.1 State	United Kingdom
1.2 Issuing Authority	United Kingdom Civil Aviation Authority
1.3 Authorising Signatory Point of Contact	Vikas Dangi – RPAS Sector Lead
2. ASSOCIATION INFORMATION	
2.1 Association Name(s)	FPV UK Ltd
2.2 Point of Contact	Simon Dale
2.3 Authorisation Number	UAS13529
2.4 Application Reference	UAS-72504
2.5 Relevant/Other Comments	Fifth Issue (December 2022) Fourth Issue (July 2022) Third Issue (December 2021). Second Issue (May 2021) First Issue (Jan 2021- joint application) now succeeded by this authorisation.

3.	GENERAL LIMITATIONS AND CONDITIONS FOR ALL OPERATIONS
3.1 Applicability	(1) This authorisation shall only apply to a member of FPV-UK.
3.2 Type of Unmanned Aircraft	<p>(1) This authorisation shall only apply to UAS operators and remote pilots of 'model aircraft'.</p> <p>This includes:</p> <ul style="list-style-type: none"> - Any 'model aircraft' - Any 'control line model aircraft' - Any 'round-the-pole model aircraft' <p>Subject to the mass limitations described in section 3.6.</p> <p>Note 1 <i>'Control Line model aircraft' and 'Round-the-pole model aircraft' with a mass of not more than 1Kg are outside the scope of the Regulation (EU) 2019/947 (the UAS Implementing Regulation) as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018, as set out in the Basic Regulation (Regulation (EU) 2018/1139) and are instead regulated within the Air Navigation Order, article 265E.</i></p> <p>Note 2: <i>Model aircraft operated indoors, or in a location in which there is no possibility of it escaping into the 'outside' airspace (e.g. inside a closed building or mine), do not fall within the scope of the Implementing Regulation, and therefore are also outside the scope of this authorisation.</i></p>
3.3 Minimum Age	<p>(1) The minimum age for a UAS Operator is 18 years.</p> <p>(2) No minimum age for a remote pilot operating within the limits of this authorisation applies to any remote pilot of a model aircraft with a MTOM less than 25 Kg.</p>
3.4 Safety Accountability	(1) The remote pilot is responsible for the safety of the operation and may only fly the model aircraft if reasonably satisfied that the flight can be safely made.
3.5 Registration of the Operator	<p>(1) Any UAS Operator making use of this authorisation must ensure they are registered with the CAA in accordance with Article 14 of the UK Regulation (EU) 2019/947, as defined in section 7.1.</p> <p>(2) The registration number (OP-ID) must be clearly displayed on the aircraft, or within a compartment that can easily be accessed without the use of a tool.</p> <p>(3) 'Small Control line model aircraft' are excluded from the requirement to register as an operator, as set out in UK Regulation (EU) 2019/947 Article 14(5).</p> <p>Note 1: <i>The requirement to register does not apply to the operator of UAS operated only indoors.</i></p> <p>Note 2: <i>The requirement to register only applies to:</i></p>

	<ul style="list-style-type: none"> - the operator of a UAS with a mass greater than 250g; or - the operator of a UAS below 250g which is equipped with a sensor able to capture personal data and which is not a toy as defined in The Toys (Safety) Regulations 2011. <p>Note 3: <i>The definition of a ‘toy’ includes: ‘products designed or intended, whether or not exclusively, for use in play by children under 14 years in age’.</i> <i>Products equipped with combustion engines are specifically excluded from this definition of a toy.</i></p>
<p>3.6 Maximum Take-Off Mass (MTOM)</p>	<p>(1) This authorisation applies only to model aircraft with a MTOM less than 25Kg.</p> <p>(2) The operation of model aircraft with a MTOM of 25Kg or greater requires a separate operational authorisation.</p> <p>Note 1: <i>Model aircraft below 250g, which are operated in accordance with this authorisation, are subject to the limitations and conditions described throughout this authorisation. In most circumstances, however, they may be operated within the Open Category, and subject to the basic requirements for a UAS with a mass less than 250g. There is no additional registration requirement for UAS below 250g, in addition to that set out in section 3.5.</i></p>
<p>3.7 Location(s) of operation</p>	<p>(1) This authorisation may be used throughout the United Kingdom, at:</p> <ul style="list-style-type: none"> a) Any established model flying club site; <ul style="list-style-type: none"> i) Any established model flying club located in a ‘built-up area’ as defined in section 7.1, must conduct a risk assessment, with suitable mitigations. This must be made available to members flying at that site, who must be familiar with it; <p>or</p> <ul style="list-style-type: none"> b) Any other suitable area, which is not a ‘built-up area’, other than in the circumstances defined in 1(b)(i) below; <ul style="list-style-type: none"> i) A built-up area which is <i>only</i> used substantially for <u>recreational</u> purposes may be considered a ‘suitable area’. Operation within such an area must be supported by a risk assessment. <p>(2) A model aircraft flown within the limits of this authorisation must not be flown within any Danger, Restricted or Prohibited airspace, unless it is flown in accordance with the relevant permission requirements of that airspace.</p> <p>Note: <i>Although there is no regulatory requirement to obtain permission to operate within controlled airspace, remote pilots are reminded of their responsibility set out in section 3.10 (3)(b) of this authorisation, and the requirement set out in ANO article 240, that ‘A person must not recklessly or negligently act in a manner likely to endanger an aircraft, or any person in an aircraft’.</i></p>
<p>3.8 Type of Operation</p>	<p>(1) The remote pilot of a model aircraft must maintain direct, unaided visual contact with the aircraft sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions, unless the aircraft is being flown in accordance with the ‘First Person View’ conditions of section 4.3.</p>

	<p>(2) The operation of model aircraft for purposes other than sport, recreation, education or demonstration, places the operation outside the definition of a model aircraft, and therefore this authorisation may not be used for such operations.</p>
<p>3.9 Operating heights/altitudes/levels</p>	<p>(1) The operation of model aircraft within this authorisation is limited to a height of 120m (400ft), unless the conditions below are met.</p> <p>(2) A model aircraft is permitted to fly at a height in excess of 120m (400ft) above the surface, in accordance with the limitations of this authorisation, if all the conditions in sub paragraphs a) to e) below are met.</p> <p>a) The model aircraft is not a rotorcraft with more than two lift generating rotors or propellers;</p> <p>b) The model aircraft is not an ‘automated model aircraft’;</p> <p>c) The model aircraft is not being flown within the Flight Restriction Zone of an aerodrome, unless operating with the appropriate permission from the aerodrome as set out in ANO article 94A.</p> <p>d) The model aircraft remains within the visual line of sight of the remote pilot;</p> <p>e) The mass of the model aircraft (MTOM- see section 3.6) shall not exceed 7.5Kg, with the exception of the circumstances in e(i) below;</p> <p>i. The model aircraft is a glider, the mass (MTOM) of which does not exceed 14Kg. In this case, it <u>may not</u> be flown at a height greater than 120m above the remote pilot but <u>may</u> be flown at a height exceeding 120m above the surface directly beneath the glider.</p>
<p>3.10 Remote Pilot Responsibilities</p>	<p>(1) The remote pilot shall:</p> <p>(a) Not perform duties under the influence of psychoactive substances or alcohol or when they are unfit to perform their tasks due to injury, fatigue, medication, sickness or other causes;</p> <p>(b) Have the appropriate remote pilot competency as defined in section 3.12 and carry a proof of competency while operating the model aircraft.</p> <p>(c) Be familiar with manufacturer’s instructions provided by the manufacturer of the UAS, if applicable.</p> <p>(2) Before starting a UAS operation, the remote pilot shall comply with all of the following:</p> <p>(a) Obtain updated information relevant to the intended operation about any relevant airspace restrictions;</p> <p>(b) Ensure that the operating environment is compatible with the limitations and conditions set out within this authorisation;</p> <p>(c) Ensure that the model aircraft is in a safe condition to complete the intended flight safely;</p> <p>(d) Ensure that any relevant information about the operation has been made available to the relevant air traffic service (ATS) unit, other airspace users and relevant stakeholders, when required.</p>

	<p>(3) During the flight, the remote pilot shall:</p> <ul style="list-style-type: none"> (a) Comply with the limitations and conditions set out within this authorisation; (b) Avoid any risk of collision with any manned aircraft and discontinue a flight when continuing it may pose a risk to other aircraft, people, animals, environment or property; (c) Comply with any applicable airspace restrictions; (d) Comply with the rules and procedures of FPV UK LTD; (e) not fly close to or inside areas where an emergency response effort is ongoing unless they have permission to do so from the responsible emergency response services. <p>Note 1: <i>It is acknowledged that in many instances, the UAS Operator and the remote pilot is the same person. In such cases, this person must discharge the responsibilities of both the remote pilot and the UAS Operator (Section 3.16).</i></p>
<p>3.11 Separation Distances for model aircraft</p>	<ul style="list-style-type: none"> 1. A model aircraft that is not a free flight model aircraft, and with a MTOM above 250g and not more than 7.5Kg shall not be flown: <ul style="list-style-type: none"> a) Within a horizontal distance of 30m of ‘assemblies of people’; b) Within 30m of any ‘uninvolved person’. This distance may be reduced to 15m for take-off and landing if required for practical operations and there are locally applied mitigations to protect uninvolved persons, following a local risk assessment. 2. A model aircraft with a MTOM greater than 7.5Kg, and less than 25kg shall not be flown: <ul style="list-style-type: none"> a) Within a horizontal distance of 50m of ‘assemblies of people’. This distance may be reduced to 30m for take-off and landing if required for practical operations and there are locally applied mitigations to protect uninvolved persons, following a local risk assessment. b) Within 30m of any ‘uninvolved person’. <p>Note 1: <i>Specific limitations for the operation of free flight model aircraft are set out in section 4.2.</i></p>
<p>3.12 Remote Pilot Competence</p>	<p>(1) Any remote pilot operating in accordance with this authorisation must demonstrate a suitable level of pilot competence, by either (a) or (b) below:</p> <ul style="list-style-type: none"> (a) Passing one of the following online tests: <ul style="list-style-type: none"> i. CAA online DMARES test; ii. FPV UK LTD Certificate of Competency: Drone Law; (b) Having passed the test (prior to 31/12/2020) for: <ul style="list-style-type: none"> i. FPV UK LTD Certificate of Competency: Drone Law ('A' Certificate);

	<p>(2) Remote pilots demonstrating competence through method 1b must also confirm to FPV UK LTD that they have read and understood the conditions and restrictions that apply to them when flying unmanned aircraft in accordance with this authorisation.</p> <p>(3) FPV UK LTD must keep a record of such confirmations that can be made available for audit on request.</p> <p>Note 1: <i>The requirements of section 3.12 apply to a model aircraft of any mass, within the scope of this authorisation, including those below 250g.</i></p>
<p>3.13 Reporting Requirement</p>	<p>(1) Correct reporting to the AAIB <i>and</i> the CAA must be carried out.</p> <p>(2) The following must be reported to the AAIB in accordance with Regulation (EU)996/2010 (as retained in UK domestic law) and the AAIB website:</p> <ul style="list-style-type: none"> ▪ Accidents ▪ Serious Incidents <p>(3) The following must be reported to the CAA, in accordance with Regulation (EU) 376/2014 (The reporting regulation) (as retained in UK domestic law):</p> <ul style="list-style-type: none"> ▪ Occurrences which involve any of the following: <ul style="list-style-type: none"> ○ Fatality ○ Serious Injury ○ Manned aircraft <p>The following must be reported to the CAA, as a condition of this authorisation:</p> <ul style="list-style-type: none"> ▪ Serious Incidents or Other Occurrences which involve any of the following: <ul style="list-style-type: none"> ○ Manned aircraft ○ Operating above 400ft ○ Operating less than 50m from uninvolved people ▪ Any instances of flight beyond the visual line of sight of the remote pilot <p>Note 1: <i>Further guidance on reporting requirements and relevant definitions can be found in CAP 722.</i></p>
<p>3.14 Dropping of Articles</p>	<p>(1) Only insofar as it relates to the dropping of material, model aircraft operations are exempt from the requirements in UK Regulation (EU) 2019/947 Article 4(1)(f), subject to the condition that:</p> <p>a) The remote pilot must not cause or permit any article or animal to be dropped from an unmanned aircraft so as to endanger persons or property.</p>
<p>3.15 Member Compliance</p>	<p>(1) Any member of FPV UK LTD making use of this authorisation shall comply with the procedures and rules set out by the association.</p> <p>(2) The rules and procedures of FPV UK LTD shall reflect the conditions and limitations of this authorisation.</p>
<p>3.16 Operator Responsibilities</p>	<p>1) The registered operator (The '<u>UAS operator</u>') for the model aircraft must comply with the following requirements:</p>

	<ul style="list-style-type: none"> a) Ensure the remote pilot is in possession of the relevant remote pilot competence requirements, as set out in section 3.12; b) Ensure that the model aircraft is sufficiently maintained, and that any repairs carried out to it are satisfactorily made, such that it is in a safe condition to be flown; c) Ensure that the remote pilot is aware of the limitations and conditions of this authorisation; d) Ensure that the remote pilot is aware of the rules and procedures of FPV UK LTD; e) Ensure that any necessary additional permissions or authorisations are obtained for any specific flight; f) Ensure the remote pilot is aware of any relevant airspace limitations; g) Ensure that the registration of the UAS Operator is carried out, in accordance with section 3.5 of this authorisation. <p>Note 1: <i>It is acknowledged that in many instances, the UAS operator and the remote pilot is the same person. In such cases, this person must discharge the responsibilities of both the remote pilot (Section 3.10), and the UAS Operator.</i></p>
4	SPECIFIC CONDITIONS
<p>4.1 Physically Constrained unmanned aircraft</p>	<p>(1) Permission is not required to operate a ‘control line model aircraft’ or ‘round-the-pole model aircraft’ within an Aerodrome Flight Restriction Zone, providing all the following conditions are met:</p> <ul style="list-style-type: none"> a) The tether line does not exceed 25m; b) The flight does not take place within the Runway Protection Zone (RPZ) part of the FRZ; c) The MTOM does not exceed 7.5Kg; d) The flight does not take place over, or within the boundary of the protected aerodrome unless permission for the flight has been obtained, as described in ANO article 94A. <p>Note 1: <i>This exemption is set out in in section 8.1.</i></p> <p>Note 2: <i>Model aircraft, that are operating indoors, are not subject to the FRZ requirement set out in ANO article 94A.</i></p> <p>(2) ‘Control line model aircraft’ and ‘round-the-pole model aircraft’ operated within the limits of this authorisation, are exempt from the competency requirements set out in section 3.12.</p> <p>(3) ‘Control line model aircraft’ and ‘round-the-pole model aircraft’ are exempt from all the requirements set out in ANO article 265E, providing all the following conditions are met:</p> <ul style="list-style-type: none"> a) The tether line does not exceed 25m; b) The MTOM does not exceed 1Kg. <p>Note 3: <i>The Basic Regulation excludes powered tethered unmanned aircraft with a mass of not more than 1kg from the requirements of the UK Regulation (EU) 2019/947.</i></p>

	<p><i>ANO Article 265E re-applies certain requirements of the UK Regulation (EU) 2019/947 to tethered unmanned aircraft with a mass of not more than 1Kg. Section 8.2 contains an exemption that sets out that ‘control line model aircraft’ and ‘round the pole model aircraft’ are exempt from the requirements of article 265E.</i></p>
<p>4.2 Free Flight Model Aircraft</p>	<p>(1) Before launching a ‘free flight model aircraft’ the remote pilot, taking into account the expected performance of the aircraft, the weather conditions, and any flight termination device fitted to the aircraft, shall be reasonably satisfied that the expected flight path will not infringe a Flight Restriction Zone, or any other airspace restriction (unless prior permission for flight within the airspace has been obtained).</p> <p>(2) The operation of free flight model aircraft must only be carried out within the limits and conditions of this authorisation, or within the Open category of operations.</p> <p>(3) A ‘free flight model aircraft’ shall not be:</p> <ul style="list-style-type: none"> a. Launched, unless from an area which the remote pilot is able to satisfy themselves is free from uninvolved people. b. Launched, until the remote pilot has identified the area within which he or she believes the aircraft will remain (the ‘flight volume’) based on the considerations in (1). c. Flown, unless the remote pilot is satisfied that the aircraft will remain within the flight volume. d. Flown, unless the remote pilot is satisfied at the point of launch, that no uninvolved persons will enter flight volume and may be endangered by the flight of the free flight model aircraft. <p>(4) A ‘free flight model aircraft’ shall not be deliberately flown beyond the visual line of sight of the remote pilot, unless otherwise in accordance with a suitable authorisation.</p>
<p>4.3 First Person View model aircraft</p>	<p>(1) A model aircraft may be flown by a remote pilot using first person view (FPV) equipment subject to the limitations of this authorisation, and following conditions (a) or (b), either:</p> <ul style="list-style-type: none"> a) The aircraft is flown in accordance with all of the following conditions: <ul style="list-style-type: none"> i. Within a sterile area- meaning a cordoned off, closed area that uninvolved persons are excluded from; and ii. The aircraft is not flown at a height in excess of 160 feet (50 metres) from the surface; and iii. In accordance with procedures specifically set out for the purpose of the event, and in accordance with instruction from the race director or other nominated person, including any ‘terminate race and land immediately’ instruction; and iv. Any observers are suitably briefed and aware of their responsibilities, including the monitoring of people or aircraft entering the cordoned off area; or b) The aircraft is flown in accordance with all of the following conditions: <ul style="list-style-type: none"> i. The remote pilot is accompanied by a competent observer who maintains direct unaided visual contact with the unmanned aircraft sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions and advises the remote pilot accordingly; ii. The MTOM of the aircraft does not exceed 3.5Kg;

	<p>iii. The aircraft is not flown:</p> <ul style="list-style-type: none"> A. Within an aerodrome FRZ, unless appropriate permission has been obtained; B. At a height of more than 1000ft above the surface, unless it is a rotorcraft with more than 1 lift generating rotor or propeller in which case the height shall not exceed 400ft above the surface; C. Unless within an area as set out in section 3.7; D. Over or within 50m of any ‘assemblies of people’; E. Within 30m of any vessel, vehicle or structure which is not under the control of the remote pilot; F. Within 30m of any ‘uninvolved person’.
<p>4.4 Model Aircraft Display Events</p>	<p>(1) With the exception of first person view events conducted within the limits of section 4.3, the operator of a model aircraft flown under this authorisation, must not permit the model aircraft to be flown for the purposes of a ‘model aircraft flying display’, unless a separate authorisation from the CAA is held.</p> <p>(2) With the exception of first person view events conducted within the limits of section 4.3, the remote pilot of a model aircraft flown under this authorisation, must not fly the model aircraft for the purposes of a ‘model aircraft flying display’, unless a separate authorisation from the CAA is held.</p>
<p>4.5 Operation of Model Aircraft by non-UK persons</p>	<p>(1) Non-UK residents may operate model aircraft in accordance with all operating conditions of this authorisation, provided that they meet all the following conditions:</p> <ul style="list-style-type: none"> a) Hold temporary or full membership of FPV UK LTD; b) Comply with the rules and practices of FPV UK LTD; <p>Note 1: <i>Any non-UK remote pilot must meet the requirements of section 3.12 in respect to pilot competence.</i></p> <p>Note 2: <i>Any non-UK UAS operator must comply with the registration requirements set out in 3.5. This may be achieved by displaying the operator ID of a UK ‘host’ operator, with their agreement and understanding of their legal obligations as a UAS operator of the aircraft.</i></p>
<p>4.6 Operations of Model Aircraft by non-members under instruction</p>	<p>(1) For the purposes of conducting ‘trial flights’ by non-members, the non-member may operate the controls of the model aircraft whilst under the direct instruction and supervision of a member. In such an instance, the remote pilot receiving instruction does not need to comply with the competence requirements of set out in section 3.12.</p> <p>(2) The registration requirements and registration display requirements (as set out in section 3.5) still apply.</p>
<p>4.7 UAS Operator ID Registration</p>	<p>(1) FPV UK LTD may register a UAS Operator with the CAA in accordance with Article 16 (4) of UK Regulation (EU) 2019/947:</p> <ul style="list-style-type: none"> a. FPV UK LTD shall provide the CAA with details of any UAS Operator that wishes to register or revalidate.

	<ul style="list-style-type: none"> b. The CAA shall process the details provided by FPV UK LTD and issue a unique digital registration number (OP-ID) to the UAS Operator. c. The registration number is valid for a period of 1 year. d. The registrations must be in accordance with the MAIS Specification provided to FPV UK LTD by the CAA.
4.8 UAS Flyer ID Registration	<p>(1) FPV UK LTD may request the issuing of confirmation of theoretical competency from the CAA:</p> <ul style="list-style-type: none"> a. FPV UK LTD shall provide the CAA with theoretical learning material, the online theoretical examination along with the associated procedures and shall be equivalent with the CAA's online theoretical examination. b. FPV UK LTD shall provide the CAA with details of any remote pilot who wishes to register or revalidate their competency through FPV UK LTD along with proof of successful completion of the 'FPV UK LTD Certificate of Competency: Drone Law' examination. c. The CAA shall process the details provided by FPV UK LTD and issue a confirmation of theoretical competency (Flyer-ID) to the remote pilot. d. The confirmation of theoretical competency is valid for a period of 5 years from date of issue. e. FPV UK LTD must maintain and update FPV UK LTD learning material, Certificate of Competency: Drone Law examination in accordance with any relevant legislative or safety related changes and make these changes known to the CAA. f. The registrations must be in accordance with the MAIS Specification provided to FPV UK LTD by the CAA.
5	VALIDITY
5.1 Duration of the Authorisation	<p>This authorisation is valid:</p> <p>From: 22/12/2022</p> <p>To: 31/12/2023</p> <p>Unless otherwise suspended.</p>
5.2 Regulation references	<p>This authorisation is issued under: UK Regulation (EU) 2019/947 Article 16</p> <p>The operation described in section 4.1 is authorised under: ANO 2016, as amended, article 266. These exemptions are set out in section 8.</p>
5.3 Combination of Authorisations	<p>This authorisation may not be used in conjunction with any other operational authorisation, other than any General Exemption or General permission issued by the CAA.</p>

6	AUTHORISATION SIGNATURE
Signature / Stamp	<p>FPV UK LTD is authorised to conduct UAS Operations within the limitations and conditions set out within this authorisation, providing they comply with this authorisation, Annex IX to Regulation (EU) 2018/1139 and its implementing rules.</p>
Date DAY/MONTH/YEAR	22/12/2022
7	APPENDIX
<p>7.1 Definitions These definitions are included for the purpose of this specific authorisation only.</p>	<p>1) Assemblies of People: <i>Gatherings where persons are unable to move away due to the density of the people present.</i></p> <p>2) Automated model aircraft: <i>A model aircraft with autonomous or automatic flight capability. This does not include systems which are fitted for flight stabilisation purposes or flight termination purposes, such as free-flight termination devices.</i></p> <p>3) Built-Up Area: <i>An area substantially used for industrial, recreational, commercial or residential purposes.</i></p> <p>4) Control Line model aircraft: <i>A model aircraft that is controlled in flight by one or more lines, attached to a handle, that work the required flight functions. The aircraft is connected to the remote pilot by these lines and so its flight is constrained to the surface of a hemisphere around the remote pilot with a radius equal to the length of the lines.</i></p> <p>5) First Person View (FPV): <i>In First Person View operations the remote pilot flies the aircraft using images provided by cameras aboard the aircraft. When flying FPV the remote pilot cannot monitor the flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions to the same extent as a remote pilot maintaining external direct, unaided visual contact with the aircraft.</i></p> <p>6) Free flight model aircraft: <i>A free-flight model aircraft cannot be remotely piloted and does not have software or systems for autonomous control of the flight path. A flight termination device may be fitted. The aircraft trim is adjusted prior to flight. The aircraft is trimmed (and fuelled if applicable) with the intent that it will follow a substantially circular path relative to the air and ultimately glide to a low velocity landing. A free-flight unmanned aircraft will drift relative to the user depending upon the speed and direction of the wind. The person in charge of the free-flight unmanned aircraft is deemed to be the remote pilot for the purposes of this authorisation.</i></p>

7) Large Model Aircraft:

A model aircraft with a MTOM of 25Kg or greater, and less than 150Kg.

8) Maximum Take Off Mass (MTOM):

MTOM or 'take-off mass' means the mass of the unmanned aircraft when it is ready for flight with all required equipment and batteries installed and all installed fuel tanks full.

9) Model aircraft:

An unmanned aircraft used for sporting and recreational purposes, flown by direct control inputs made by the remote pilot without any autonomous capability other than for flight stabilisation purposes. A model aircraft may be flown under the auspices of an association, or individually.

Note:

The definition of a model aircraft may include multi-rotor type 'drones'. Any unmanned aircraft being flown in accordance with the definition above is considered a model aircraft. The use of any automation, such as automatic flight modes which alter the position of the aircraft, places the operation outside the definition of a model aircraft, and therefore outside the scope of Article 16. The aircraft must be flown with direct control inputs from the remote pilot.

It is acknowledged that many unmanned aircraft have built in failsafe modes, which may be activated in some instances, for example- loss of control link. Activation of such a mode, although possibly automatic in nature, does not necessarily place the aircraft outside the scope of the definition of a model aircraft.

10) Physically constrained model aircraft:

A model aircraft that:

- a. is flying within a closed building or other physical construction forming a safely enclosed area; or*
- b. is a control-line model aircraft; or*
- c. is a round-the-pole aircraft.*

11) Model Aircraft Flying Display:

Any flying activity deliberately performed, by model aircraft, for the purpose of providing an exhibition or entertainment at an advertised event.

12) Round-the-pole model aircraft:

A model aircraft that is tethered to a fixed point by one or more lines so that its flight is constrained to the surface of a hemisphere around the tether point with a radius equal to the length of the lines.

13) Small Control Line Model Aircraft:

(for the purpose of UK Regulation (EU) 2019/947 Article 14)

A fixed-wing unmanned aircraft having a MTOM of not more than 7.5 kg and which is flown within limits imposed by a restraining device of not more than 25 metres in length which attaches the aircraft to the surface or to a person on the surface.

14) Uninvolved Persons:

Persons who are not participating in the UAS operation or who are not aware of the instructions and safety precautions given by the UAS operator.

15) MAIS Specification:

The integration service developed to allow the model associations to perform registration and renewals.

8 Air Navigation Order Exemptions

8.1 Control line and Round-the-pole Model Aircraft: Flight Restriction Zone Exemption

Note 1:

This exemption facilitates section 4.1(1) of this authorisation.

- 1) The Civil Aviation Authority (CAA), in exercise of its powers under article 266 of the Air Navigation Order 2016 ('the Order') as amended, exempts the remote pilot and UAS operator of a Control Line model aircraft or a round-the-pole model aircraft, as defined in section 7.1 of this authorisation, from the requirement at article 94A to obtain permission to fly within the flight restricted zone of a protected aerodrome subject to the conditions in paragraphs 2 to 4 below.

- 2) General requirements:
 - a) The remote pilot (within the meaning given in article 94G of the Order), is:
 - In the case of a control line model aircraft: the person that is holding the control lines while the Control Line model aircraft is in flight. Or;
 - In the case of a round-the-pole model aircraft: the remote pilot of the model aircraft.

 - b) The maximum length of the tether line of the control line or round-the-pole model aircraft shall not exceed 25 metres.

 - c) The flight does not take place within the Runway Protection Zone (RPZ) part of the FRZ.

 - d) The maximum take-off mass of the model aircraft shall not exceed 7.5kg, including any batteries, fuel or payloads.

- 3) The remote pilot shall not fly the aircraft over, or within the boundary of the protected aerodrome unless permission for the flight has been obtained from:
 - a) any air traffic control unit at the protected aerodrome, if the flight, or the part of the flight, takes place during the operational hours of the

	<p>air traffic control unit;</p> <p>b) any flight information service unit at the protected aerodrome, if the flight, or the part of the flight, takes place during the operational hours of the flight information service unit and either:</p> <p>(i) there is no air traffic control unit at the protected aerodrome, or</p> <p>(ii) the flight, or the part of the flight, takes place outside the operational hours of the air traffic control unit at the protected aerodrome;</p> <p>c) from the operator of the protected aerodrome, if:</p> <p>(i) there is neither an air traffic control unit nor a flight information service unit at the protected aerodrome; or</p> <p>(ii) the flight, or the part of the flight, takes place outside the operational hours of any such unit or units at the protected aerodrome.</p> <p>4) This exemption only applies to control line model aircraft or round-the-pole model aircraft that are flown for the purposes of sport or recreation. It does not apply to ‘tethered’ flights of small unmanned aircraft that are capable of vertical take-off/landing or hovering, such as helicopters or multi copters.</p> <p>Note 2: <i>This exemption supersedes General Exemption ORS4 1296, which is now revoked. This is now contained within this Article 16 authorisation, and is no longer a general exemption. Compliance with the entire authorisation is necessary to make use of this exemption.</i></p>
<p>8.2 Control line and Round-the-pole Model Aircraft: Registration and Pilot Competence Exemption</p>	<p>Note 1: <i>This exemption facilitates section 4.1(3) of this authorisation.</i></p> <p>1) The Civil Aviation Authority (‘the CAA’), in exercise of its powers under article 266 of the Air Navigation Order 2016 (‘the ANO’), exempts any person involved in the flight of a control line model aircraft, or round-the-pole model aircraft (as defined in section 7.1 of this authorisation) from the requirements of article 265E in relation to the flight of such an aircraft.</p> <p>2) This exemption only applies to the flight of control line model aircraft or round-the-pole model aircraft (as defined in section 7.1 of this authorisation) that are conducted for the purposes of sport or recreation. It does not apply to ‘tethered’ flights of small unmanned aircraft that are capable of vertical take-off/landing or hovering, such as helicopters or multicopters.</p>

3) This exemption only applies to the flight of control line model aircraft or round-the-pole model aircraft (as defined in section 7.1 of this authorisation) which have a MTOM (as defined in section 7.1 of this authorisation) of not more than 1Kg, and which are flown with a restraining device of not more than 25m.

Note 2:

This exemption supersedes Official Record Series 4 No.1396, which is revoked. This is now contained within this Article 16 authorisation, and is no longer a general exemption. Compliance with the entire authorisation is necessary to make use of this exemption.

Note 3:

The Basic Regulation excludes powered tethered unmanned aircraft with a mass of not more than 1kg from the requirements of the UK Regulation (EU) 2019/947. ANO Article 265E re-applies certain requirements of the UK Regulation (EU) 2019/947 to tethered unmanned aircraft with a mass of not more than 1Kg. This exemption sets out that control line model aircraft and round the pole model aircraft (as defined in section 7.1) are exempt from the requirements of article 265E.