

The 2020 amendment to the Air Navigation Order 2016 - Guidance for Unmanned Aircraft users

Introduction

On 31 December 2020, an amendment to the United Kingdom (UK) Air Navigation Order 2016 (ANO) will enter into force. The amendment has been developed by the UK Government to accommodate the introduction of the new UAS regulations¹ within the UK and the European Union on the same day. It is primarily aimed at creating criminal offences for breaches of the new regulations, but it also ensures that there is no conflicting regulation within the text of the ANO.

This amendment has been published as a Statutory Instrument (SI) No. 2020/1555 and entitled “The Air Navigation (Amendment) Order 2020”. It can be located [here](#).

Purpose of this Document

This document explains the amendment and how it relates to the overall regulatory system that relates to unmanned aircraft operations from 31 December 2020 onwards. It has been written with the aim of providing readers, particularly those who are less familiar with the layout and structure of ANO amendments, with guidance on the effect of these changes and with an outline of the revised regulations as they now appear in law. It replaces CAP 1763.

For simplicity within this document,

- The Air Navigation (Amendment) Order 2020 will be referred to as: ‘the 2020 amendment’;
And
- The UAS regulations that will become applicable within the UK and EU on 31 December 2020 (named in footnote 1 below) will be referred to as: ‘the new UAS regulations’.

¹ Regulation (EU) 2019/947 on the rules and procedures for the operation of unmanned aircraft, and Regulation (EU) 2019/945 on unmanned aircraft systems and on third-country operators of unmanned aircraft systems (respectively known as the UAS Implementing Regulation and the UAS Delegated Regulation)

Contents of the Amendment

This section describes each article of the 2020 amendment and how it amends the current articles of the ANO.

Structure of the Amendment

The SI is structured in the form of a series of textual changes that need to be made to the original ANO document, after it has been amended by all previous ANO amendments. While the amendment has introduced six new articles with completely new text, the meaning of some other changes cannot be fully understood by reading the SI on its own. By way of assistance, a consolidated version of the ANO articles that remain directly relevant to unmanned aircraft operations as a result of this amendment can be found at Annex A.

The areas covered by the amendment are relatively few and can be summarised as:

- The removal of any articles that have been superseded by the new UAS regulations (articles (94, 94C, 94D, 94E, 94F, 94G and 95).
- Changes to the text of the remaining articles to ensure that they match the requirements of the new UAS regulations.
- The introduction of articles which create criminal offences if the requirements of the new UAS regulations are not complied with, along with the associated fines (articles 265A, 265B, 265C, 265D and 265F).
- The introduction of a set of rules for the operation of 'tethered small unmanned aircraft' (article 265E).
- A transitional provision which 'converts' a number of documents issued by the CAA under ANO 2016 (permissions, exemptions, 'operator ID' and 'flyer ID') so that they remain valid from 31 December 2020 onwards as if they had been issued under the UAS IR.

Article 7 – meaning of 'commercial operation'

Key point: The text of this article has been reverted to its original (2016) version.

With the removal of the distinction between commercial and non-commercial/leisure operations within the new UAS regulations, the need to make article 7 more closely related to 'small unmanned aircraft' or to an 'SUA operator' is no longer necessary.

Article 20 – application of the Order to the Crown

Key point: This is a simple amendment which replaces the terms 'small unmanned aircraft' and 'SUA operator' (terms that are no longer used) with the terms 'unmanned aircraft' and 'UAS operator', as used within the new UAS regulations.

Article 23 – exceptions from application of provisions of the Order for certain classes of aircraft

Key point: The UAS related elements of this article have been expanded to cover any unmanned aircraft within the Open and Specific categories.

This is an important article, because it exempts the types/classes of aircraft that it lists from the majority of the ANO's provisions, and it then specifies the articles that still apply.

Previously, this article only applied to 'small unmanned aircraft' (20kg or less), but that term no longer applies, and the exception has now been expanded to cover 'any unmanned aircraft other than an unmanned aircraft subject to certification'. The basic effect of this is that:

- Open and Specific category operations are only directly affected by a small number of ANO articles.
- Certified category operations are subject to the whole of the ANO, unless specifically exempted by the CAA.
- Specific category operations which use a UAS that has been certificated are subject to the whole of the ANO, unless specifically exempted by the CAA.

The seven articles that have been **deleted** from the ANO have been removed from the list (94, 94C, 94D, 94E, 94F, 94G and 95).

The six new articles that have been **added** to the ANO as a result of this amendment (265A, 265B, 265C, 265D, 265E and 265F) have been included in the list.

Article 94 - small unmanned aircraft: requirements

Key point: This article has been deleted completely as its requirements are fully covered within the new UAS regulations.

Article 94A - Certain unmanned aircraft: permission for flights that are over or near aerodromes

Key point: The references to a maximum operating height of 400ft above the surface have been deleted as these requirements are fully covered within the new UAS regulations.

The article now only covers the 'flight restriction zone' (FRZ) aspects of protected aerodromes. The following key points should be noted:

- The FRZ limitations now apply to all unmanned aircraft except for 'unmanned aircraft subject to certification':
 - Although this limitation previously only applied to small unmanned aircraft, the equivalent limitation was always included in any exemption issued by the CAA in relation to an unmanned aircraft that had a mass greater than 20kg.
 - Unmanned aircraft that are subject to certification remain subject to the whole of the ANO (in accordance with article 23 above), hence the requirement to comply with the aerodrome traffic zone entry conditions still applies.

- The permission requirements for operation above 400ft (120m) within an FRZ have also been changed. UAS Operators intending to operate above 400ft within an FRZ must now obtain an operational authorisation from the CAA. The air traffic control unit, flight information service unit or aerodrome operator may issue a permission for access to the FRZ, but may not issue authorisation for a UAS to operate above 400ft without a CAA operational authorisation. This is because:
 - The Open category limits all flights to a maximum distance of 400ft (120m) from the closest point of the earth's surface. Therefore, if an unmanned aircraft is flown at a greater distance than this, the flight is no longer in the Open category, and so is in the Specific category;
 - All flights within the Specific category are required to be operated within the conditions of an operational authorisation, which must therefore include a 'height' limitation within its text.

Note: This ANO amendment does not change the reference to 'EASA certified aerodromes' within the meaning of a 'protected aerodrome'. However, from 11pm on 31 December 2020, the references to 'EASA' will be deleted as a result of the EU Exit corrective SIs entering into force, and so the new term will simply be 'certified aerodrome'.

Articles 94C to 94G – certain small unmanned aircraft: registration, competency, meanings

Key point: These articles have been deleted completely as their requirements are now fully covered within the new UAS regulations.

The revocation of article 94C also means that SI 2019/1286, the Air Navigation (Minimum Age for Operators of Small Unmanned Aircraft) Regulations 2019, which introduced a minimum age of 18 years for SUA operators, ceases to have effect. This is instead addressed within the new article 265D.

Article 95 – small unmanned surveillance aircraft

Key point: This article has been deleted completely as its requirements are superseded by the new UAS regulations.

Article 265A – offences: contravention of the UAS Implementing Regulation – UAS operator

Key point: If UAS operators do not comply with the applicable UAS operator requirements of the UAS Implementing Regulation (UAS IR), then an offence has been committed.

Paragraph 1 sets out that a UAS operator must not 'cause or permit' (i.e. require or allow) an unmanned aircraft to be flown unless:

- Open category flights – the Open category requirements in the UAS IR are met;

- Specific category flights – the operator holds a valid operational authorisation, an LUC or the flight can be conducted in accordance with a valid authorisation that has been issued to a model aircraft club or association;
- Certified category flights – the UAS and the UAS operator have been certified in accordance with the UAS IR and those certificates are valid.

Paragraphs 2 and 3 set out what constitutes an offence under this article, and paragraph 4 simply confirms that any other elements of the UAS IR, such as where some form of exemption or derogation can be used, are also relevant.

Paragraphs 5 to 9 then provide a list of the relevant Articles and points within the UAS Implementing Regulation that are applicable; naturally, these cover all of the aspects where the UAS operator is considered responsible.

Article 265B – offences: contravention of the UAS Implementing Regulation – remote pilot

Key point: If remote pilots do not comply with the applicable remote pilot requirements of the UAS Implementing Regulation (UAS IR), then an offence has been committed.

The article is set out in a similar pattern to 265A above.

Paragraph 1 sets out that a remote pilot must not fly an unmanned aircraft unless:

- Open category flights – at the time of take-off, the remote pilot reasonably holds the view that the Open category requirements in the UAS IR can be met;
- Specific category flights – at the time of the flight, there is a valid operational authorisation, an LUC, or the flight can be conducted in accordance with a valid authorisation that has been issued to a model aircraft club or association;
- Certified category flights – the UAS and the UAS operator have been certified in accordance with the UAS IR and those certificates are valid.

Paragraphs 2 and 3 set out what constitutes an offence under this article, and paragraph 4 simply confirms that any other elements of the UAS IR, such as where some form of exemption or derogation can be used, are also relevant.

Paragraphs 5 to 8 then provide a list of the relevant Articles and points within the UAS Implementing Regulation that are applicable; naturally, these cover all of the aspects where the remote pilot is considered responsible.

Paragraph 6 includes a table which links the different types/kinds of UAS that are available for use in the Open category, with the corresponding operating limits that are associated with these UAS types. The table is reproduced below, but with an additional column added, which relates each provision to the subcategory that it corresponds with:

Subcategory	UAS IR Provision that specifies the type of UAS <i>with additional description</i>	'Relevant requirements' (operating limits) found in
A1	Article 22(a) <i>'A1 transitional' (less than 500g)</i>	Point UAS.OPEN.020(1)
A1	Point UAS.OPEN.020(5)(a), (b) or (c) <i>privately built less than 250g, 'legacy' less than 250g, Class C0</i>	Point UAS.OPEN.020(2)
A1	Point UAS.OPEN.020(5)(d) <i>Class C1</i>	Point UAS.OPEN.020(1)
A2	Point UAS.OPEN.040(4)(c) if, at the time of take-off, the remote pilot does not intend to comply with points UAS.OPEN.040(1) and (2) of that Annex <i>Class C2 and the remote pilot is not intending to fly it within subcategory A3</i>	Point UAS.OPEN.030(1)
A2	Article 22(b) <i>'A2 transitional' (less than 2kg)</i>	Article 22(b)
A3	Point UAS.OPEN.040(4)(c) if, at the time of take-off, the remote pilot intends to comply with points UAS.OPEN.040(1) and (2) of that Annex <i>Class C2 and the remote pilot intends to fly it within subcategory A3</i>	Points UAS.OPEN.040(1) and (2)
A3	Point UAS.OPEN.040(4)(a), (b), (d) or (e) <i>Privately built less than 25kg, 'legacy' less than 25kg, Class C3 or C4</i>	Points UAS.OPEN.040(1) and (2)
A3	Article 22(c) <i>'legacy' less than 25kg</i>	Points UAS.OPEN.040(1) and (2)

Article 265C – offences: registration of certified unmanned aircraft

Key point: This article simply states that if a certified unmanned aircraft has not been registered, but is flown, then its owner has committed an offence.

Article 265D – minimum age requirements: UAS operators and remote pilots

Key point: This article sets out the minimum ages for remote pilots in the Open and Specific categories and for UAS operators. It also sets out the associated offence, although this only applies until the end of the transition period (11pm on 31 December 2020).

The article lowers the minimum age for a remote pilot (as permitted by paragraph 3 of Article 9 of the UAS IR) as follows:

- **Open category** – minimum age lowered from 16 to 12 years;
- **Specific category** – minimum age lowered from 16 years to:
 - 14 years; or,
 - when operating under an Article 16 authorisation (model aircraft), any lower age as provided for in that authorisation.

UAS operators must not ‘cause or permit’ an unmanned aircraft to be flown by a remote pilot who does not meet the minimum age requirements above or in the remainder of Article 9 of the UAS IR. Should this happen during the period up to and including 11pm on 31 December 2020 (the end of the EU Exit transition period), the UAS operator has committed an offence.

Finally, the article states that the CAA must not issue an operator registration number (generally referred to as an ‘operator ID’) to an individual who is less than 18 years of age. This replaces SI 2019/1286, the Air Navigation (Minimum Age for Operators of Small Unmanned Aircraft) Regulations 2019, as mentioned in the reference to article 94C above.

Article 265E – offences: tethered small unmanned aircraft

Key point: This article establishes a set of regulations for unmanned aircraft that are less than 1kg in mass and are tethered.

The reason for this article is that ‘tethered aircraft with a MTOM of no more than 1kg’ are not covered by the requirements of the UAS IR², and so need to be covered by the ANO.

A tethered small unmanned aircraft has been defined in the amended Schedule 1 of the ANO as:

an unmanned aircraft:

- (a) having a MTOM, within the meaning of Article 2 of the UAS IR, of not more than 1kg; and*
- (b) which is flown within limits imposed by a restraining device which attaches the aircraft to the surface or to a person on the surface.*

The article itself contains a great deal of ‘legal text’, but the overall effect of the article is that for UAS operators and remote pilots, it ‘equalises’ the operation of tethered small unmanned aircraft with the equivalent Open category ‘untethered’ unmanned aircraft. This is achieved by:

² Annex I, paragraph 2, of REGULATION (EU) 2018/1139 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency (known as the ‘Basic Regulation’) makes these aircraft ‘exempt’.

- If the tethered small unmanned aircraft's mass is:
 - Less than 250g – the requirements for flights conducted in subcategory A1 apply.
 - 250g or more (up to 1kg) – the requirements for flights conducted in subcategory A3 apply.
 - Permission from the CAA is required to operate outside of these requirements.
- When considering the points above, any references to 'unmanned aircraft' or 'UAS' in the UAS IR should be read as if they include a tethered system as well.
- No dropping of materials, or carriage of dangerous goods without permission from the CAA.
- Maximum tether length is 25m, unless in accordance with a permission from the CAA.
- An offence is committed if the above are contravened.

Article 265F – penalties

Key point: This article sets out the penalty levels (fines) for any offences committed under articles 265A-265E.

The general approach for setting the level of fines that has been taken is:

- For 'minor administrative' offences – Level 2 (up to £500)
- For other 'administrative offences' – Level 3 (up to £1000)
- For 'operational/in flight' offences – Level 4 (up to £2500)

Additionally, for offences relating to flights conducted entirely outside of the framework of the UAS IR (see the references to paragraph 1 of articles 265A and 265B above) – an unlimited fine in England and Wales, and a fine up to the statutory maximum in Scotland and Northern Ireland will apply.

This approach equates to the levels of fines that were set in the ANO (at schedule 13) prior to the amendment.

Article 270 – competent authority

Key point: This article makes the CAA the 'competent authority for the new UAS regulations for the period that they are applicable as 'EU regulations'.

As with a number of other EU regulations (Air Ops, Airworthiness, Aircrew, SERA etc), article 270 nominates the CAA as the competent authority for the UAS IR and the UAS Delegated Regulation (UAS DR).

Note: This is merely a technicality to cover the 23-hour period on 31 December 2020 (until 11pm that night when the EU Exit transition period ends), at which point ANO article 270 is deleted as a result of the Aviation Safety 'corrective SI'. After this point, another corrective SI (The Unmanned Aircraft [Amendment] [EU Exit] Regulations 2020) comes into force and specifically identifies the CAA's responsibilities within the UAS IR and UAS DR (as they are retained in UK domestic law).