

EXPLANATORY MEMORANDUM TO
THE AIR NAVIGATION (AMENDMENT) ORDER 2018
2018 No. 623

1. Introduction

- 1.1 This explanatory memorandum has been prepared by the Department for Transport and is laid before Parliament by Command of Her Majesty.
- 1.2 This memorandum contains information for the Joint Committee on Statutory Instruments.

2. Purpose of the instrument

- 2.1 This instrument makes amendments to the Air Navigation Order 2016 (S.I. 2016/765) (“the ANO 2016”) in relation to small unmanned aircraft (“SUA”), which includes the type of aircraft commonly known as small drones. From 30th July 2018 it introduces restrictions on flights by any SUA at a height of over 400 feet or within the flight restriction zone of a protected aerodrome, and from 30th November 2019 it will prohibit flights by SUA with a mass of 250 grams or more unless the person with management of the SUA (“the SUA operator”) has obtained a certificate of registration and the person with control over the flight controls (“the remote pilot”) has obtained an acknowledgement of competency from the Civil Aviation Authority (“the CAA”). This instrument also makes a minor correction and clarification to the ANO 2016 as explained in paragraph 3.1 below.

3. Matters of special interest to Parliament

Matters of special interest to the Joint Committee on Statutory Instruments

- 3.1 Article 5(a) makes one correction to the ANO 2016, to insert into article 23(3) of that Order a missing cross-reference to article 93 (release of small balloons). Article 5(c) clarifies that certain ancillary articles of the 2016 Order also apply to small unmanned aircraft and certain other small craft (small balloons, kites weighing not more than 2kg, and parachutes). As article 5(a) is the sole correcting provision in this instrument, and makes a minor correction to an obvious error, the Department considers it disproportionate to apply the free issue procedure in this case. The Department has consulted the SI Registrar in accordance with paragraph 4.7.6 of the Statutory Instrument Practice (SIP).

Other matters of interest to the House of Commons

- 3.2 As this instrument is subject to the negative procedure and has not been prayed against, consideration as to whether there are other matters of interest to the House of Commons does not arise at this stage.

4. Legislative Context

- 4.1 Section 60 of the Civil Aviation Act 1982 allows Orders in Council to be made to regulate air navigation, and this is currently done through the ANO 2016. The ANO 2016 already contains provision (in articles 94 and 95) regulating flights by SUA (unmanned aircraft having a mass of no more than 20kg, other than balloons or kites)

and small unmanned surveillance aircraft (SUA which are equipped to undertake surveillance or data acquisition).

- 4.2 Currently, the safe use of unmanned aircraft with a mass of more than 150kg is regulated by European law in Regulation (EC) 216/2008 (the “Basic Regulation”) and its Implementing Regulations. On 22 December 2017, agreement was reached between the Council, the European Commission and the European Parliament on a proposed new Basic Regulation which will cover all civilian unmanned aircraft, regardless of weight. In preparation for the final adoption of the new Basic Regulation, on 6 February 2018 the European Aviation Safety Agency (EASA) published proposals for Implementing Regulations, contained in EASA Opinion No. 01/2018 at <https://www.easa.europa.eu/document-library/opinions/opinion-012018>.
- 4.3 These proposals (and the date from which they must be applied) are still subject to discussion. The Government has taken account of them in drawing up the present instrument, so as to future-proof it as far as possible. Once final proposals have been confirmed by EASA, the Government will review these and put in place a programme to ensure any further alignment within the time required. Paper copies of the EASA Opinion, and other documents referred to in this Explanatory Memorandum, may be obtained using the contact details supplied in section 13 below.

5. Extent and Territorial Application

- 5.1 The extent of this instrument is the United Kingdom.
- 5.2 The territorial application of this instrument is the United Kingdom and in the neighbourhood of an offshore installation.

6. European Convention on Human Rights

- 6.1 As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

7. Policy background

What is being done and why

- 7.1 Additional safeguards on SUA use are being introduced primarily for safety and security reasons, as explained further below.

“SUA operator” and “remote pilot”

- 7.2 This instrument amends the ANO 2016 to introduce the terms “remote pilot” and “SUA operator” (see new article 94G) to reflect the different responsibilities arising from management of an SUA (such as maintenance and risk registers) and the actual flying of the SUA (such as ensuring a safe flight by maintaining visual oversight of the SUA and ability to take action to avoid a collision). The SUA operator will be the person who has the management of the SUA, and can be an individual or other legal person. The remote pilot will be an individual who remotely operates the flight controls (or monitors the aircraft when it is flying automatically, and is able to intervene by operating the flight controls if required). Currently articles 94 and 95 of the ANO 2016 set out the responsibilities of and prohibitions on the “person in charge” of an SUA. These provisions are being amended to tailor them to the specific roles of the SUA operator and remote pilot.

Flight restrictions coming into force on 30th July 2018

- 7.3 The ANO 2016 currently prohibits flights above 400 feet by SUA with a mass of over 7kg. Articles 6 and 7 of this instrument replace this with a similar restriction applying to all SUA (see new article 94A). In 2017, the UK Airprox Board recorded 92 reports of unmanned aircraft coming into close proximity with manned aircraft, up from 71 in 2016 and 29 in 2015. In 2017, 90% took place above 400ft. Research suggests that even small drones of 400g could pose a critical risk to helicopter safety. Heavier drones of 2kg or more could also pose a critical risk to airliners if flown at higher altitudes. The 400 feet height limit is therefore to reduce the potential for a collision between an SUA and general manned aviation (which should usually not be flown at a height less than 500 feet except for take-off or landing). It will still be possible to operate SUA above 400ft, by obtaining the CAA's permission.
- 7.4 In addition this instrument will restrict flights by all SUA within the flight restriction zone of a protected aerodrome (see new article 94B). This is being done to help reduce incidents of drones coming into close proximity with airliners taking off or landing. The closer a drone is flown to an aerodrome, particularly around the flightpath, the higher the risk of the drone coming into close and unsafe proximity with manned aircraft during take-off or landing. A "protected aerodrome" is defined as an EASA certified aerodrome, a Government aerodrome, or a national licensed aerodrome (all defined in Schedule 1 to the ANO 2016), or any additional aerodrome prescribed in regulations by the Secretary of State.
- 7.5 The flight restriction zone of a protected aerodrome will consist of an "Inner Zone" up to the aerodrome boundary and an "Outer Zone" up to 1km from the boundary. During the notified hours of watch of any air traffic control unit or flight information safety unit at the aerodrome, all flights in the Inner and Outer Zone will be prohibited unless the permission of the air traffic control unit or flight information safety unit has been obtained. Outside the notified hours of watch, or if there is no air traffic control unit or flight information safety unit at the aerodrome, flights in the Inner or Outer Zone above 400 feet will require the permission of the CAA, and flights in the Inner Zone will also require the permission of the aerodrome operator. The restrictions within the Inner Zone are being introduced for security as well as safety reasons as SUA are capable of being used to deliver items inside an airport boundary at any time of the day or night, circumventing standard security measures (such as airport scanners) that would prevent a passenger from taking the item "airside".
- 7.6 "Air traffic control unit", "flight information service unit" and "notified" are defined in Schedule 13 to the ANO 2016. "Notified" means notified in the United Kingdom Aeronautical Information Publication, which is available at www.nats-uk.ead-it.com by selecting "IAIP" and then "eAIP AIRAC". Members of the public may also obtain it in printed form (or on DVD) by writing to Aeronautical Information Service (AIS), NATS Swanwick, Room 3115, Sopwith Way, Southampton, Hants SO31 7AY.

Registration and competency requirements coming into force on 30th November 2019

- 7.7 The registration and competency requirements introduced by this instrument will apply to flights by an SUA only if the SUA has a mass of 250 grams or more without its fuel, but including any articles or equipment installed in or attached to the aircraft at the commencement of its flight.

- 7.8 New article 94D will prohibit an SUA operator from causing or permitting an SUA to be flown unless the SUA operator has a valid certificate of registration and the SUA operator's registration number is displayed on the SUA. The remote pilot of an SUA will not be permitted to fly the aircraft unless the remote pilot has reasonably formed the view that the SUA operator complies with those requirements. The registration of SUA operators, and the display of the SUA operator's registration number on the SUA, will enable easier identification of SUA operators. Currently where an SUA is retrieved following the commission of an offence, it is extremely difficult to identify the operator or remote pilot. The registration number will enable the police and CAA to identify the registered SUA operator, which will also improve the ability to investigate the identity of the remote pilot where an offence is suspected.
- 7.9 New article 94C will require the CAA to issue certificates of registration where the SUA operator has supplied such information and evidence as the CAA may require and, if they are an individual, has attained the age (if any) prescribed by the Secretary of State in regulations. The Department intends to consult on the appropriate age later in 2018, so that any regulations may be made well in advance of the date on which the CAA starts accepting applications, which itself will be at least 2 months before the prohibition takes effect on 30th November 2019 (see paragraph 7.13 below).
- 7.10 Remote pilots who fly SUA for the purpose of commercial operations already require the CAA's permission under article 94(5) of the ANO 2016, which enables the CAA to apply competency requirements to them. However new article 94F will make provision for competency requirements for remote pilots generally, extending such requirements to leisure use of SUA. Under the new provisions, an individual will not be permitted to act as a remote pilot of an SUA unless they have a valid acknowledgment of competency issued by the CAA. The SUA operator will not be permitted to cause or permit the SUA to be flown unless the SUA operator is reasonably satisfied the remote pilot has a valid acknowledgment of competency.
- 7.11 These competency requirements are being introduced to improve the education and awareness of remote pilots about the legal rules and best practice which apply when flying an SUA. Airspace regulation is complicated, and many leisure users buying a drone from their local high street or online may not be aware of the rules and best practice that apply or the potential risks of not complying with these. For example, a CAA consumer survey in 2016 suggested, that whilst 54% of SUA owners surveyed were aware of the name of the Drone Code (the CAA's guidance on safe SUA use – see paragraph 9.1 below), few could recall specific rules when asked.
- 7.12 New article 94E will require the CAA to issue acknowledgements of competency where the remote pilot has supplied such information and evidence as the CAA may require, and has undertaken such training and undergone such tests as the CAA may require. It is currently anticipated that the CAA will require the successful completion of an online test on the law relating to SUA although it is possible that in future they may require the completion of practical assessments, especially for heavier SUA.
- 7.13 The prohibitions on flying SUA without the SUA operator having a certificate of registration and the remote pilot having an acknowledgment of competency will come into force on 30th November 2019. The provisions enabling the CAA to issue these certificates and acknowledgements will come into force on 30th July 2018 but the CAA will not be required to accept applications before 1st October 2019. This is to allow the CAA the time to develop, design, procure, build and test the necessary IT systems. The CAA will also consider whether any changes are required to the Civil

Aviation Authority Regulations 1991 (S.I. 1991/1672) to provide a process for review of decisions to refuse or revoke certificates of registration or acknowledgements of competency, or whether a different process of review will need to be set up.

Penalties

- 7.14 Breach of a prohibition introduced by this instrument will be an offence punishable on summary conviction with a fine. Flying above 400 feet or within the flight restriction zone of a protected aerodrome will attract a fine up to level 4 on the standard scale (currently £2,500) to match existing penalties for flying an SUA over 400 feet or within protected airspace. Breach of the registration and competency requirements will attract a lesser fine up to level 3 on the standard scale (currently £1,000).

Other amendments

- 7.15 Article 3 of this instrument amends the definition of “commercial operation” in article 7 of the ANO 2016 to reflect the new terms “remote pilot” and “SUA operator”. Article 4 makes a minor amendment to article 20 of the ANO 2016, which applies the provisions of the ANO 2016 to Crown aircraft, ensuring this works correctly for SUA. Article 5 makes consequential and other minor amendments to article 23 of the ANO 2016 as explained at paragraph 3.1 above. These amendments come into force on 30th July 2018, except for the insertion of references to articles 94D and 94F which come into force on 30th November 2019.

Consolidation

- 7.16 No consolidation is planned at present.

8. Consultation outcome

- 8.1 The Government ran a consultation on the use of SUA in the UK from December 2016 to March 2017. The consultation can be found at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/579562/consultation-on-the-safe-use-of-drones.pdf. It covered registration (pages 39-43), leisure user tests (pages 32-34), and flight restrictions (page 35).
- 8.2 The Government response was published in July 2017. The Executive Summary (pages 8-9) outlined the Government’s proposed next steps, including with regard to the introduction of registration and competency requirements and further work on possible flight restrictions. The response can be found at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/631638/unlocking-the-uks-high-tech-economy-consultation-on-the-safe-use-of-drones-in-the-uk-government-response.pdf. An overall summary of the consultation responses received with regard to the proposals in this instrument can be found at pages 10-21. Feedback from the consultation was measured; some respondents expressed strong opposition to registration and competency requirements, although there was a slight majority in favour of registration and broader support for an online competency test. Proposals for flight restrictions received a similar mix of responses. Having considered the consultation responses, however, the Government has decided to proceed with these measures given the importance of ensuring safety and security, and to monitor their effectiveness as explained in paragraph 12.2 below. As stated in its consultation response, the Government recognises the long-standing safety culture adopted by model aircraft flying associations and how regulations aimed at drones can negatively impact on their activity. Work is underway with the

CAA and model aircraft flying associations to explore ways in which we can reduce any unnecessary impacts of drone regulations on their activities.

9. Guidance

- 9.1 Guidance on drone use is provided by the CAA on its website, at: <http://www.caa.co.uk/Consumers/Unmanned-aircraft/Recreational-drones/Recreational-drone-flights/> and this will be updated in light of the amendments made by this instrument. The Drone Code already advises that it is best practice to keep SUA well away from aircraft, airports and airfields, and below 400 feet, to reduce the likelihood of a conflict with manned aircraft. The Code is available at www.dronesafe.uk/drone-code. Paper copies of these documents can be obtained using the contact details at 13.1.

10. Impact

- 10.1 The impact on business, charities or voluntary bodies is expected to be under the £5m de minimis threshold above which an Impact Assessment is required. Those impacted by this instrument may need to update procedures but this is likely to be achieved at minimal additional cost. There will also be a charge for registration as an SUA operator, but as laid out on page 19 of the Government's consultation response, the basis of the charge is only "to cover the cost of running the scheme. Every effort will be made to keep the process of registration as simple and 'admin-light' as possible, which will reduce the charge required." When setting charges, the CAA is legally required to have regard to the expense incurred by them, and will consult on charging schemes before they are introduced. They currently plan to do so in November 2018.
- 10.2 The impact on the public sector is expected to be similarly minimal for the same reasons as set out in paragraph 10.1.
- 10.3 An Impact Assessment has not been prepared for this instrument.

11. Regulating small business

- 11.1 The legislation applies to activities that are undertaken by small businesses.
- 11.2 Given this, no mitigating actions are considered necessary.

12. Monitoring & review

- 12.1 Article 275 of the ANO 2016 requires the Secretary of State to review it and publish a report within five years after it comes into force and within every five years after that. This includes reviewing provisions which are amended or inserted by this instrument. Following a review it will fall to the Secretary of State to consider whether provisions in the ANO 2016 should remain as they are, or be revoked or amended.
- 12.2 The Department also intends to carry out a safety review within 2 years of the new restrictions on flights by SUA within 1km of a protected aerodrome coming into force. It will assess the impact of this restriction, and consider other relevant safety and risk questions, which may result in a further future amendment to the ANO 2016.

13. Contact

- 13.1 Elena Lynch at the Department for Transport (0300 330 3000 or elena.lynch@dft.gov.uk) can answer any queries regarding the instrument and provide paper copies of any of the documents referred to in this Memorandum if required.