Explanatory Statement

Civil Aviation Safety Regulations 1998

CASA 22/22 – Operation of Certain Unmanned Aircraft – Renewal of Directions Instrument 2022

Purpose

The purpose of CASA 55/20 — Operation of Certain Unmanned Aircraft Directions 2020 (the previous instrument) was to issue directions to regulate the operation of certain unmanned aircraft in the interests of safety, particularly in relation to the operation of unmanned aircraft near emergency operations, near aerodromes, or near people not associated with the operation of the aircraft. The previous instrument expired at the end of 31 March 2022. The purpose of CASA 22/22 — Operation of Certain Unmanned Aircraft — Renewal of Directions Instrument 2022 (the renewal instrument) is to reissue the previous instrument in a somewhat amended form.

The previous instrument was made in response to potential aviation safety risks identified as a result of the exponential growth in the operation of remotely piloted aircraft (*RPA*), commonly known as "drones", and the community concern expressed about risks to the safety of manned aircraft caused by the operation of unmanned aircraft. The renewal instrument responds to these same risks.

The renewal instrument does not include former sections 5 and 6 which dealt with unmanned aircraft near controlled and non-controlled aerodromes. Operations of RPA near controlled and non-controlled aerodromes is governed by Chapters 4 and 9 of the Part 101 Manual of Standards (the *Part 101 MOS*), including, in particular, as amended by the *Part 101 Manual of Standards (Miscellaneous Revisions) Amendment Instrument 2022 (No. 1)*. Both the renewal instrument and the aforementioned MOS amendment commence on 1 April 2022.

Legislation

Section 98 of the *Civil Aviation Act 1988* (the *Act*) empowers the Governor-General to make regulations for the Act and in the interests of the safety of air navigation. Relevantly, the Governor-General has made the *Civil Aviation Safety Regulations 1998* (*CASR*).

Under Part 101 of CASR, rules are prescribed for the operation of unmanned aircraft including RPA and model aircraft.

Under Subpart 101.C of CASR:

- regulation 101.070 prohibits a person from operating an unmanned aircraft above 400 feet (ft) above ground level (AGL) in controlled airspace except in an approved area for the aircraft and in accordance with air traffic control clearance
- regulation 101.075 prohibits a person from operating an unmanned aircraft above 400 ft AGL within 3 nautical miles (*NM*) of an aerodrome, or over an area that is the movement area or runway of an aerodrome or over an area that is the approach or departure path of an aerodrome, unless permitted under Part 101 or by a permission under regulation 101.080

• regulation 101.085 prohibits a person from operating an unmanned aircraft above 400 ft AGL except in an approved area or as otherwise permitted under Part 101.

Under Subpart 101.G of CASR:

- regulation 101.395 relevantly prohibits the operation of model aircraft within 30 metres of a person who is not directly associated with the operation of the aircraft: the prohibition does not apply if the person is standing behind the aircraft while it is taking off, or in relation to a person who is judging the aircraft as part of a model aircraft flying competition
- regulation 101.400 prohibits the operation of a model aircraft, outside an approved area, above 400 ft AGL unless the aircraft is kept in sight and is kept clear of populous areas.

Under Subpart 101.H of CASR:

- regulation 101.440 prohibits the launch of prescribed rockets above 400 ft AGL within 3 NM of an aerodrome, or over an area that is the movement area or runway of an aerodrome or over an area that is the approach or departure path of an aerodrome, unless permitted under Part 101 or by a permission under regulation 101.445
- regulation 101.455 prohibits the launch of a rocket that is not a model rocket to higher than 400 ft AGL except in an approved area or as permitted under Part 101.

Subpart 101.I of CASR prohibits the use of firework projectiles above 400 ft AGL except with CASA approval.

Relevantly for the present instrument, Part 101 does not regulate:

- the operation of unmanned aircraft in an area under the control of an emergency authority, for example, a bushfire zone; or
- how many excluded RPA or model aircraft a person may operate at a single time.

Under paragraph 11.245 (1) (a) of CASR, for subsection 98 (5A) of the Act, CASA may, by instrument, issue a direction about any matter affecting the safe navigation and operation of aircraft. Under subregulation 11.245 (2), CASA may issue such a direction only if CASA is satisfied that it is necessary in the interests of safety, only if the direction is not inconsistent with the Act, and only for the purposes of CASA's functions.

Under regulation 11.250, a direction ceases to be in force on a day specified in the instrument or, if no day is specified, 1 year after the instrument commences. Under subregulation 11.255 (1), it is an offence to contravene a direction under regulation 11.245 that is applicable to the person.

Background

In 2017, CASA identified that Part 101 of CASR was not sufficiently prescriptive or clear in relation to some types of unmanned aircraft operations which had potentially serious aviation safety implications.

CASA identified that the requirement to not operate an RPA over an area where a fire, police or other public safety or emergency operation is being conducted without the approval of a person in charge of the operation, is found only within the "standard RPA operating conditions". These conditions do not apply in a range of circumstances, including the operation of unmanned aircraft generally for recreational or sport purposes. CASA had previously received reports of emergency operations involving manned aircraft being interrupted due to an unauthorised RPA operating in the emergency area.

CASA considers it paramount to prohibit operation of unmanned aircraft near such emergency or public safety operations unless approved by the person in charge of the operation. Such operations often involve rescue and/or firefighting aircraft operating at low level and in reduced visibility such that obstruction or impact by them with an unmanned aircraft would be a significant risk to aviation safety. Similarly, many emergency service organisations deploy their own unmanned aircraft under the authorisations held by each organisation, and the risk of collision is high.

CASA also seeks to clarify and simplify first, the requirements for operation of unmanned aircraft near other people, and secondly, any flight above 400 ft AGL.

The previous instrument was designed to use CASA's direction power to temporarily remedy these gaps in Part 101 of CASR, pending amendments to Part 101. The directions in the instrument were, therefore, and remain, an interim, precautionary measure. CASA proposes to develop relevant amendments to Part 101 of CASR to address the issues currently addressed by the directions. It was originally anticipated that these amendment regulations would be made by the end of 2021 at which time the previous instrument would be repealed. That has not been possible given the resources available. The amendments are expected to be made by the end of in 2024 or early 2025.

CASA has assessed the impact the instrument will have on aviation safety and is satisfied that it will protect aviation safety as it prohibits the operation of unmanned aircraft in areas in which their operation may result in risk to the safety of other aircraft.

Details of the directions

Sections 1 to 3 are preliminary (naming, duration and definitions).

Section 4 states the application of the instrument. The instrument does not apply to the operation of unmanned aircraft mentioned in subregulation 101.005 (3) of CASR, namely:

- control-line model aircraft
- model aircraft or unmanned airships operated indoors
- small balloons within 100 metres of a structure and not above the top of the structure
- unmanned tethered balloons that remain below 400 ft AGL
- firework rockets not capable of rising more than 400 ft AGL.

Under subsection 5 (1) (originally in section 7), a person controlling an unmanned aircraft must not operate the aircraft higher than 400 ft AGL. The section then contains a number of disapplications of the direction. However, the direction is not disapplied in

any way with respect to micro RPA (that is, with a gross weight of not more than 250 g).

The effect of the direction is to consolidate and simplify the rules relating to the maximum operating height for unmanned aircraft. The direction also supplements the rule in regulation 101.400 relating to model aircraft above 400 ft which would otherwise be permitted only on condition of remaining within visual line of sight and remaining clear of populous areas.

Subsection 5 (2) states the circumstances in which the direction does not apply, including the operation of unmanned aircraft in accordance with Subparts 101.D, 101.E and 101.H of CASR (concerning balloons and rockets).

Subsection 5 (2) also disapplies the direction in respect of the operation of unmanned aircraft in accordance with an "authorisation" under CASR, within the meaning of the word "authorisation" in regulation 11.015 of CASR, or an exemption under CASR, where the authorisation or exemption permits operation of the unmanned aircraft higher than 400 ft AGL.

The subsection also disapplies the direction in respect of the operation of an unmanned aircraft in an area that is approved under regulation 101.030 of CASR (concerning areas specifically approved by CASA), if the operation is conducted in accordance with the terms of the approval.

The subsection also disapplies the directions in respect of operations of RPA by the holder of a remote pilot licence under the auspices of a certified RPA operator in accordance with the privileges and limitations of the remote pilot licence and the certification of the RPA operator. The direction still applies to the operation of an RPA by the holder of a remote pilot licence who is controlling the RPA for other purposes, for example, sport or recreation.

Paragraph (f) of subsection 5 (2) also disapplies the directions from application to the operation of model aircraft in accordance with an approval given by CASA for the purpose of the paragraph. CASA will assess applications for a person to operate model aircraft above 400 ft AGL on a case-by-case basis by reference to safety considerations. A decision by CASA to refuse to grant an approval is subject to merits review by the Administrative Appeals Tribunal.

Under subsection 6 (1) (originally in section 8), a person controlling an unmanned aircraft must not operate the aircraft over an area where a fire, police, or other public safety or emergency operation is being conducted.

The direction is, however, disapplied to the extent that a person in charge of the emergency operation approves the operation of the unmanned aircraft.

Under subsection 7 (1) (originally in section 9), a person controlling an RPA or model aircraft must ensure that the aircraft is not operated within 30 metres from a person unless the person has duties essential to the control or navigation of the aircraft. The direction supplements the present restrictions in CASR concerning operation of RPA near people.

An RPA must not be operated near a person who may be associated with the person controlling an RPA but who is not associated with the control of the RPA, for example, a person being photographed or filmed by the RPA.

Subsection 7 (2) explains that the measurement of 30 metres is taken in every direction from the point on the ground or surface of the water directly below the aircraft at any given time. This clarifies the existing requirement in Part 101 in relation to the operation of RPA. The inclusion of the reference to the point on the ground *or surface* of the water clarifies that the direction does not only apply to over ground operations.

The direction does not apply in the circumstances mentioned in subsection 7 (3). The first circumstance is the operation of an RPA or model aircraft in accordance with an "authorisation" under CASR, within the meaning of the word "authorisation" in regulation 11.015 of CASR, or an exemption under CASR, where the authorisation or exemption permits operation of the unmanned aircraft less than 30 metres from another person. Relevantly, an "authorisation" mentioned in subsection (3) includes a relevant approval under regulation 101.029 of CASR.

This first circumstance in which the direction does not apply will permit people who have legitimate reasons to operate an RPA or a model aircraft under Subpart 101.F near people to seek approval for such operations, subject to an assessment of safety risks.

The second circumstance is if the person is controlling an RPA that is an airship that approaches no closer to the second person than 10 metres horizontally and 30 ft vertically. Therefore, subsection 9 (3) disapplies the direction in the circumstances mentioned in subregulation 101.245 (4) for RPA to which Subpart 101.F applies. The direction is not disapplied in respect of micro RPA generally.

Under subsection 8 (1) (originally in section 10), a person controlling an RPA or model aircraft must only operate 1 aircraft at a time. The direction reflects the limitation on the holders of remote pilot licences in subregulation 101.300 (5) that is appropriate to apply to other operators of RPA and model aircraft. The direction applies to micro RPA.

The direction does not apply in relation to the operation of an RPA in accordance with an "authorisation" under CASR, within the meaning of the word "authorisation" in regulation 11.015 of CASR, or an exemption under CASR, where the authorisation or exemption permits a person to control multiple RPA or model aircraft.

Legislation Act 2003 (the LA)

Paragraph 98 (5A) (a) of the Act provides that CASA may issue instruments in relation to matters affecting the safe navigation and operation or the maintenance of aircraft. Additionally, paragraph 98 (5AA) (a) of the Act provides that an instrument issued under paragraph 98 (5A) (a) is a legislative instrument if the instrument is expressed to apply in relation to a class of persons, and paragraph 98 (5AA) (b) of the Act provides that an instrument issued under paragraph 98 (5A) (a) is a legislative instrument if the instrument is expressed to apply in relation to a class of aircraft.

The instrument directs a class of persons in relation to the operation of a class of aircraft. The instrument is, therefore, a legislative instrument, and subject to registration,

and tabling and disallowance in the Parliament, under sections 15G, and 38 and 42, of the LA.

Consultation

Under section 16 of the Act, in performing its functions and exercising its powers, CASA must consult government, industrial, commercial consumer and other relevant bodies and organisations insofar as CASA considers such consultation to be appropriate.

Under section 17 of the LA, before a legislative instrument is made, CASA must be satisfied that it has undertaken any consultation it considers appropriate and practicable in order to draw on relevant expertise and involve persons likely to be affected by the proposals.

CASA consulted in 2017 with industry stakeholders in relation to a predecessor instrument. Direct consultation was undertaken with the Australian Association for Unmanned Systems, Australian Certified UAV Operators Inc., Australian Miniature Aerosports Society Inc. and Model Aeronautical Association of Australia Inc. In addition, CASA consulted with members of the former Unmanned Aircraft Systems Sub Committee that was established under CASA's previous consultation framework as a forum to discuss unmanned aircraft policy issues.

The directions in the instrument are substantially the same as those previously the subject of consultation. Given this, CASA is satisfied that no consultation is appropriate or reasonably practicable for this instrument for section 16 of the Act, or 17 of the LA.

Office of Best Practice Regulation (OBPR)

A Regulation Impact Statement (*RIS*) is not required in this case as the instrument is covered by a standing agreement between CASA and OBPR under which a RIS is not required for directions (OBPR id: 14507).

Sector risk, economic and cost impact

Subsection 9A (1) of the Act states that, in exercising its powers and performing its functions, CASA must regard the safety of air navigation as the most important consideration. Subsection 9A (3) states that, subject to subsection 9A (1), in developing and promulgating aviation safety standards under paragraph 9 (1) (c), CASA must:

- (a) consider the economic and cost impact on individuals, businesses and the community of the standards; and
- (b) take into account the differing risks associated with different industry sectors.

The cost impact of a standard refers to the direct cost (in the sense of price or expense) which a standard would cause individuals, businesses and the community to incur. The economic impact of a standard refers to the impact a standard would have on the production, distribution and use of wealth across the economy, at the level of the individual, relevant businesses in the aviation sector, and the community more broadly. The economic impact of a standard could also include the general financial impact of that standard on different industry sectors.

The instrument replaces an expired instrument and there will be no change to the economic or cost impact on individuals, businesses or the community. OBPR has also made an assessment that a RIS is not required for directions.

Rural and regional impacts

The Minister's Statement of Expectations for the CASA Board states: "I expect that CASA will: ... (b) fully consider the impact of new regulations on general aviation, with a particular focus on regional and remote Australia. All Explanatory Statements drafted by CASA for subordinate legislation should identify the impact on the various categories of operations as well as on communities in regional and remote Australia served by those operations and how these impacts have been considered."

There are no identified rural and regional impacts that differ in any material way from any general economic and cost impacts described above.

Statement of Compatibility with Human Rights

The Statement of Compatibility with Human Rights at Attachment 1 has been prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Making, commencement and repeal

The instrument has been made by the Director of Aviation Safety, on behalf of CASA, in accordance with subsection 73 (2) of the Act.

The instrument commences on 1 April 2022 and is repealed at the end of 31 March 2025. The instrument will be repealed sooner if it proves possible to have relevant regulatory amendments to CASR made.

Attachment 1

Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

CASA EX22/22 – Operation of Certain Unmanned Aircraft – Renewal of Directions Instrument 2022

This legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the legislative instrument

This legislative instrument gives directions to regulate the operation of certain unmanned aircraft in the interests of safety, particularly in relation to the operation of unmanned aircraft in the area of emergency operations, and near people not associated with the operation of the aircraft.

Human rights implications

This legislative instrument does not engage any of the applicable rights or freedoms.

Conclusion

This legislative instrument is compatible with human rights as it does not raise any human rights issues.

Civil Aviation Safety Authority