



PURSUANT to Section 28 of the Civil Aviation Act 1990 and having had regard to the matters specified in section 33 of the Act,

I, **CRAIG FOSS**, Associate Minister of Transport,

**HEREBY MAKE** the following ordinary rules.

**SIGNED AT** Wellington

This 26<sup>th</sup> day of August 2015

by **HON CRAIG FOSS**

A handwritten signature in black ink, appearing to read 'Craig Foss', is written over the printed name.

Associate Minister of Transport

**Civil Aviation Rules**

**Part 101, Amendment 7**

**Gyrogliders and Parasails, Unmanned Aircraft  
(including Balloons), Kites, and Rockets – Operating  
Rules**

*Docket 14/CAR/3*

## Contents

Rule objective.....	3
Extent of consultation.....	3
Summary of submissions.....	3
Effective date of rule.....	3
Availability of rules.....	4
101.1 Applicability.....	5
101.3 Definitions.....	5
101.15 Dropping of articles.....	8
101.202 Approved person or organisation.....	8
101.205 Aerodromes.....	9
101.207 Airspace.....	10
101.209 Visual line of sight operation.....	12

## **Rule objective**

The objective of Amendment 7 to Part 101 is to make minor editorial and technical corrections.

This amendment forms part of the Omnibus 2014 rule project which also contains amendments to the following Parts:

Part 1	Part 93	Part 121
Part 12	Part 101	Part 125
Part 19	Part 102	Part 135
Part 43	Part 108	Part 145
Part 65	Part 115	Part 172
Part 91	Part 119	

## **Extent of consultation**

On 7 May 2015 Amendment 6 of Part 101 was notified in the Gazette. Since Amendment 6 was made, the CAA has identified a number of changes that should be made at the same time as other changes contained in the Omnibus 2014 project.

A change to rule 101.207(c) is required to give effect to the intent behind the rule that was consulted on as part of the Part 101 NPRM, NPRM 14-01 (Docket 15/CAR/1).

The remaining amendments are minor editorial changes that are not controversial.

For these reasons consultation was not considered necessary in this case.

## **Summary of submissions**

No submissions were sought or received on the changes included in this amendment.

## **Insertion of Amendments**

The amendments to the rules in this Part are reflected by replacing the existing rules with the amended rules.

## **Effective date of rule**

Amendment 7 to Part 101 comes into force on 24 September 2015.

### **Availability of rules**

Civil Aviation Rules are available from–

CAA web site: <http://www.caa.govt.nz/>

Freephone: 0800 GET RULES (0800 438 785)

*Replace existing rule 101.1 with the following amended rule 101.1:*

### **101.1 Applicability**

Subject to rule 102.21, this part prescribes rules governing the operation of—

- (1) moored balloons and kites:
- (2) free balloons:
- (3) rockets:
- (4) remotely piloted aircraft, control line model aircraft, and free flight model aircraft:
- (5) gyrogliders and parasails.

*Replace existing rule 101.3 with the following amended rule 101.3:*

### **101.3 Definitions**

In this Part—

**Aerodrome** means an aerodrome that is promulgated in the current AIPNZ:

**Control line model aircraft** means a model aircraft primarily controlled in flight by a single or multiple wire system operated by the person flying the aircraft and restricted to circular flight about a central point:

**Free Balloon** means a pilotless aerostat without propulsion in free flight, having a gas capacity greater than 1.5 m<sup>3</sup>:

**Free flight model aircraft** means a model aircraft with a maximum wing loading of 62 g/dm<sup>2</sup> (20 oz/ft<sup>2</sup>), with a flight path that, once launched, is uncontrollable:

**Gyroglider** means a ground or water towed non-power-driven heavier-than-air aircraft supported in flight by the reaction of the air on one

or more rotors which rotate freely on substantially vertical axes, capable of carrying a person or persons:

**Heavy free balloon** means a free balloon, that—

- (1) carries a payload with—
  - (i) a combined mass of 6 kg or more; or
  - (ii) a payload package of 3 kg or more; or
  - (iii) a payload package of 2 kg or more with an area density of more than  $13 \text{ g/cm}^2$ ; and
- (2) uses a rope or other device for suspension of the payload that requires an impact force of 230 N or more to separate the suspended payload from the balloon:

**Kite** means a pilotless aerodyne without propulsion that is tethered to a fixed point, or is hand held, and is sustained by the wind:

**Large model rocket** means a rocket that—

- (1) uses more than 25 g but not more than 125 g of propellant; and
- (2) produces more than 20 but not more than 320 Newton seconds of total impulse; and
- (3) uses a slow-burning propellant; and
- (4) is made of lightweight materials such as paper, wood, rubber and plastic; and
- (5) does not have the nose cone, fins, or body fabricated from metal; and
- (6) has a gross mass, including the propellant of more than 453 g but not more than 1.5 kg:

**Medium free balloon** means a free balloon, that—

- (1) carries a payload of 2 or more payload packages with a combined mass of—
  - (i) more than 4 kg; and
  - (ii) less than 6 kg; and
- (2) does not meet any of the criteria specified in the definition of the term heavy free balloon:

**Model Rocketry Safety Code** means the code of that name that is approved by the New Zealand Rocketry Association:

**Moored balloon** means a pilotless balloon that is moored to the surface of the earth, or to an object on the surface of the earth, and has a maximum diameter of more than 1.5 m or a gas capacity of more than 3 m<sup>3</sup>:

**Parasail** means an aerodyne, having the general form of an open, circular parachute carrying a person or persons towed behind a vehicle or motorboat to sustain flight:

**Remotely piloted aircraft** means an unmanned aircraft that is piloted from a remote station and—

- (1) includes a radio controlled model aircraft; but
- (2) does not include a control line model aircraft or a free flight model aircraft:

**Rocket** means a pilotless vehicle propelled by a system that contains every ingredient needed to form its own jet other than—

- (1) an aerial firework; or
- (2) a rocket propelled by a model rocket motor of size A-D which achieves no more than 20 Newton-seconds of total impulse:

**Shielded operation** means an operation of an aircraft within 100 m of, and below the top of, a natural or man-made object.

***Replace existing rule 101.15 with the following amended rule 101.15:***

**101.15 Dropping of articles**

A person operating any of the following must not allow any object to be dropped in flight if such action creates a hazard to other persons or property:

- (1) an unmanned aircraft:
- (2) a kite:
- (3) a rocket:
- (4) a gyroglider:
- (5) a parasail.

***Replace existing rule 101.202 with amended rule 101.202:***

**101.202 Approved person or organisation**

In this Subpart, an approved person or organisation means a person or organisation having appropriate expertise in the design, construction or operation of remotely piloted aircraft, or appropriate knowledge of airspace designations and restrictions, and who has been approved by the Director to perform one or more of the following specified functions:

- (1) issuing a pilot qualification for operating remotely piloted aircraft; or
- (2) appointing persons to give instruction to operators of remotely piloted aircraft; or
- (3) authorising a person to notify the aeronautical information service provider, for the issue of a NOTAM, of remotely piloted aircraft operations; or



- (4) authorising the construction or modification of remotely piloted aircraft greater than 15kg; or
- (5) inspecting and approving the construction of a remotely piloted aircraft greater than 15kg; or
- (6) authorising the operation of a remotely piloted aircraft greater than 15kg.

***Replace existing rule 101.205 with the following amended rule 101.205:***

**101.205 Aerodromes**

- (a) A person must not operate a remotely piloted aircraft or a free flight model aircraft on or within 4 km of—
- (1) an uncontrolled aerodrome, unless—
    - (i) the operation is undertaken in accordance with an agreement with the aerodrome operator; and
    - (ii) in the case of a free flight model aircraft, the aircraft is launched downwind of an active runway; and
    - (iii) in the case of a remotely piloted aircraft –
      - (A) each pilot has an observer in attendance while the aircraft is in flight; and
      - (B) the aircraft is not operated at a height of more than 400 feet above ground level unless the operator has been approved by the Director to operate the aircraft above 400 feet above ground level; and
  - (2) a controlled aerodrome, unless it is operated in accordance with an authorisation from the relevant ATC unit; and
  - (3) any aerodrome, unless—

- (i) the person—
  - (A) is the holder of, or is under the direct supervision of the holder of, a pilot qualification issued by an approved person or organisation; or
  - (B) is under the direct supervision of a person appointed to give instruction in the operation of remotely piloted aircraft by an approved person or organisation; or
  - (C) is the holder of a pilot licence or certificate issued under Part 61 or Part 149.
- (b) A person must not operate a remotely piloted aircraft, a control line model aircraft or a free flight model aircraft—
  - (1) on or over any active movement area of an aerodrome; or
  - (2) on or over any active runway strip area.
- (c) Paragraph (a) does not apply to a shielded operation that is conducted—
  - (1) outside of the boundary of the aerodrome; and
  - (2) in airspace that is physically separated from the aerodrome by a barrier that is capable of arresting the flight of the aircraft.
- (d) Paragraph (a)(3) does not apply to a free flight model aircraft.

*Replace existing rule 101.207 with the following amended rule 101.207:*

**101.207 Airspace**

- (a) A person operating a remotely piloted aircraft must—

- (1) unless operating in a danger area under Part 71, avoid operating—
    - (i) in airspace above persons who have not given consent for the aircraft to operate in that airspace; and
    - (ii) above property unless prior consent has been obtained from any persons occupying that property or the property owner; and
  - (2) maintain observation of the surrounding airspace in which the aircraft is operating for other aircraft; and
  - (3) not operate the aircraft at any height above 400 feet above ground level except in accordance with paragraph (c).
- (b) Nothing in paragraph (a) requires a person to obtain consent from any person if operating—
- (1) under the authority of an approved organisation; and
  - (2) in airspace used by that organisation before 1 August 2015.
- (c) A person operating a remotely piloted aircraft more than 4 km from an aerodrome boundary and above 400 feet above ground level must ensure that the operation remains within Class G airspace and must—
- (1) operate in a danger area designated for that purpose under Part 71; or
  - (2) ensure that at least 24 hours before the operation, a person authorised by an approved person or organisation, notifies the aeronautical information service provider, for the issue of a NOTAM, of the following information:
    - (i) the name, address, and telephone number of the operator;
    - (ii) the location of the proposed operation;
    - (iii) the date, time and duration of the proposed operation;

- (iv) the maximum height above ground level proposed for the aircraft operation.

***Replace existing rule 101.209 with the following amended rule 101.209:***

**101.209 Visual line of sight operation**

- (a) This rule applies to the following types of aircraft:
  - (1) a remotely piloted aircraft;
  - (2) a free flight model aircraft.
- (b) A person must not operate an aircraft to which this rule applies in—
  - (1) any area in which the person’s view of the surrounding airspace in which the aircraft will operate is obstructed; or
  - (2) meteorological conditions that obstruct the person’s ability to maintain visual line of sight of the aircraft.
- (c) A person who operates an aircraft to which this rule applies must at all times—
  - (1) maintain visual line of sight with the aircraft; and
  - (2) be able to see the surrounding airspace in which the aircraft is operating; and
  - (3) operate the aircraft below the cloud base.
- (d) For the purposes of this rule visual line of sight means a straight line along which an observer has a clear view and which may be achieved with the use of—
  - (1) spectacles, contact lenses, or a similar device used to correct subnormal vision of the user to no better than normal vision but not the use of an electronic, mechanical, electromagnetic, optical, or electro-optical instrument; or

- (2) a first person view system and a trained and competent observer who maintains—
  - (i) visual line of sight of the aircraft; and
  - (ii) sight of the surrounding airspace in which the aircraft is operating; and
  - (iii) direct communication with the person who is operating the aircraft.