

## Part 101 Gyrogliders and Parasails, Unmanned Aircraft (including Balloons), Kites, and Rockets – Operating Rules: Summary of changes

Alongside the standard changes outlined in Section 3.1 of the Overview of Rules Realignment for the Civil Aviation Act 2023 document, this Rule Part also contains the following changes.

### **101.15 Dropping of articles**

To improve sentence clarity and readability, rule 101.15 has been re-worded and now consists of 101.15(a) and 101.15(b):

- (a) **This rule applies to any** A person **while they are** 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: or
  - (5) a parasail.
- (b) **The person must not allow any object to be dropped in flight if this creates a hazard to other persons or property.**
  - ~~(1) an unmanned aircraft:~~
  - ~~(2) a kite:~~
  - ~~(3) a rocket:~~
  - ~~(4) a gyroglider:~~
  - ~~(5) a parasail.~~

### **101.202 Approved person or organisation**

To clarify the intent and application of rule 101.202, "but not more than 25kg" has been added after each reference to 15kg in rules 101.202(4), (5), and (6). Aircraft of this type over 25kg are subject to other regulations, such as CAR Part 102:

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:

- (4) authorising the construction or modification of remotely piloted aircraft greater than 15kg **(but not greater than 25kg)**; or
- (5) inspecting and approving the construction of a remotely piloted aircraft greater than 15kg **(but not greater than 25kg)**; or
- (6) authorising the operation of a remotely piloted aircraft greater than 15kg **(but not greater than 25kg)**.

### **101.205 Aerodromes**

To clarify the distance that a remotely piloted aircraft or a free flight model aircraft can operate from an aerodrome, and to align with rule 101.55, the words "from the boundary of" have been added to rule 101.205(a):

- (a) A person must not operate a remotely piloted aircraft or a free flight model aircraft on or within 4 km **from the boundary of**—

To ensure a consistent approach and clarity on who can perform specified activities, as an "approved person or organisation", a cross reference to rule 101.202 Approved Person or organisation has been added to 101.205(a)(3)(A) and (B).

- (3) any aerodrome, unless 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 **(see rule 101.202)**;  
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 **(see rule 101.202)**; or...

### **101.207 Airspace**

The wording of 101.207(c) has reverted to the wording of Amendment 6 as it was changed in error resulting in unintended prohibitions on operations. The change now aligns with the intent and previous wording which was consulted on allowing operators to either operate in a danger area (which would be able to be used in all classes of airspace) OR ensure the operation remains outside of class C, D and E airspace.

To ensure a consistent approach and clarity on who can perform specified activities, as an "approved person or organisation", a cross reference to rule 101.202 Approved Person or organisation has been added to rule 101.207(c)(2):

- (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 **the operation remains within Class G airspace and that** at least 24 hours before the operation, a person authorised by an approved person or organisation **(see rule 101.202)**, notifies the aeronautical information service provider, for the issue of a NOTAM, of the following information:

### **101.215 Aircraft mass limits**

To ensure a consistent approach and clarity on who can perform specified activities as an "approved person or organisation", the cross reference to rule 101.202 (*Approved person or organisation*) in rule 101.215(b)(2) has been reworded:

- (b) A person must not operate a remotely piloted aircraft with a gross mass of between 15 kg and 25 kg unless the aircraft, and any modification made to it, is—
- ...
- (2) operated under the authority of an approved person or organisation **(see defined in rule 101.202)**.

**Part 101**  
**Gyrogliders and Parasails, Unmanned Aircraft**  
**(including Balloons), Kites, and Rockets – Operating**  
**Rules**

**DRAFT**

Intentionally left blank.

## List of Rules

<b>Subpart A — General</b> .....	<b>5</b>
101.1 Applicability .....	5
101.3 Definitions .....	5
101.5 Registration.....	7
101.7 Restricted, military operating, and danger areas .....	7
101.9 Low flying zones.....	8
101.11 Controlled airspace .....	8
101.12 Airspace knowledge.....	9
101.13 Hazard and risk minimisation.....	9
101.15 Dropping of articles.....	9
<b>Subpart B — Moored Balloons and Kites</b> .....	<b>10</b>
101.51 Applicability.....	10
101.53 Aerodrome area .....	10
101.55 Aerodrome boundary.....	10
101.57 Airspace.....	11
101.59 Night operation.....	12
101.61 Balloon mooring line marking.....	12
101.63 Balloon rapid deflation device.....	12
101.65 Balloon escape.....	12
<b>Subpart C — Free Balloons</b> .....	<b>12</b>
101.101 Applicability.....	12
101.103 Meteorological limitations.....	12
101.105 Operating limitation.....	13
101.107 Equipment .....	13
101.109 Termination .....	14
101.111 Night operations .....	14
101.113 Trailing antenna.....	14
101.115 Suspension device .....	14
101.117 Pre-launch notice .....	15
101.119 Launch notice .....	16
101.121 Cancellation notice .....	16
101.123 Balloon position reports.....	16

101.125	Pre-descent position report .....	17
101.127	Completion of operation .....	17
<b>Subpart D — Rockets .....</b>		<b>17</b>
101.151	Applicability .....	17
101.153	Large model rockets .....	18
101.155	Aerodromes .....	18
101.157	Meteorological limitations.....	18
101.159	Night operations .....	18
101.161	Pre-launch notice .....	19
<b>Subpart E — Remotely Piloted Aircraft, Control Line Model Aircraft and Free Flight Model Aircraft .....</b>		<b>19</b>
101.201	Applicability .....	19
101.202	Approved person or organisation.....	19
101.203	Control line model aircraft.....	20
101.205	Aerodromes .....	20
101.207	Airspace.....	22
101.209	Visual line of sight operation.....	23
101.211	Night operations .....	24
101.213	Right of way .....	24
101.215	Aircraft mass limits .....	24
<b>Subpart F — Gyrogliders and Parasails.....</b>		<b>24</b>
101.251	Applicability .....	25
101.253	Aerodromes .....	25
101.255	Airspace.....	25
101.257	Meteorological limitations.....	26
101.259	Night operations .....	26
101.261	Airworthiness .....	26
101.263	Safety equipment.....	26
101.265	Pre-flight briefing.....	27
101.267	Emergency towline release.....	27
101.269	Operating procedures.....	27
101.271	Wind speed.....	27
101.273	Passenger age limitation .....	28

## Subpart A — General

### 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.

### 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 g/cm<sup>2</sup>; 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.

## **101.5 Registration**

The requirements in Part 47 do not apply to unmanned aircraft, kites, rockets, parasails, and gyrogliders.

## **101.7 Restricted, military operating, and danger areas**

- (a) A person must not operate an unmanned aircraft, kite, rocket, gyroglider, or parasail within a restricted area designated under Part 71 unless

the person has approval to do so from the administering authority responsible for the restricted area.

(b) A person must not operate an unmanned aircraft, kite, rocket, gyroglider, or parasail within a military operating area designated under Part 71 unless the person has approval to do so from the administering authority responsible for the military operating area.

(c) A person must not operate a gyroglider or parasail within a danger area designated under Part 71 unless the person has established that the activity associated with the danger area will not affect the safety of the gyroglider or parasail.

### **101.9 Low flying zones**

A person must not operate any of the following within a low flying zone designated under Part 71:

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

### **101.11 Controlled airspace**

A person must not operate any of the following in controlled airspace without prior authorisation from the ATC unit responsible for that airspace unless the operation is a shielded operation:

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

**101.12    Airspace knowledge**

- (a) This rule applies to a person who operates any of the following:
- (1) an unmanned aircraft:
  - (2) a kite:
  - (3) a rocket:
  - (4) a gyroglider:
  - (5) a parasail.
- (b) A person to whom this rule applies must—
- (1) ensure that before each flight, the person is aware of the airspace designation under Part 71 and any applicable airspace restrictions in place in the area of intended operation; or
  - (2) conduct the operation under the direct supervision of a person who is aware of the airspace designation under Part 71 and any applicable airspace restrictions in place in the area of intended operation.

**101.13    Hazard and risk minimisation**

A person operating any of the following must take all practicable steps to minimize hazards to persons, property and other aircraft:

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

**101.15    Dropping of articles**

- (a) This rule applies to any person while they are operating:

- (1) an unmanned aircraft:
  - (2) a kite:
  - (3) a rocket:
  - (4) a gyroglider: or
  - (5) a parasail.
- (b) The person must not allow any object to be dropped in flight if this creates a hazard to other persons or property.

## **Subpart B — Moored Balloons and Kites**

### **101.51 Applicability**

This Subpart prescribes rules governing the operation of moored balloons and kites.

### **101.53 Aerodrome area**

A person must not operate a moored balloon or kite—

- (1) on or over any active aircraft movement area of an aerodrome; or
- (2) on or over any runway or runway strip area.

### **101.55 Aerodrome boundary**

Except for a shielded operation, a person must not operate a moored balloon or kite within 4 km of an aerodrome boundary unless—

- (1) the balloon or kite does not exceed 400 feet AGL; and
- (2) the balloon or kite remains at least 400 feet vertically below cloud; and
- (3) the horizontal visibility is not less than 4 km; and
- (4) if the aerodrome is a controlled aerodrome, they have an ATC authorisation; and

- (5) if the aerodrome is an uncontrolled aerodrome, the operation is performed in accordance with an agreement established with the aerodrome operator.

### **101.57 Airspace**

(a) Except for a shielded operation, each person operating a moored balloon or kite at a height of more than 400 feet AGL must—

- (1) operate in a danger area designated for that purpose under Part 71; or
- (2) operate in accordance with the restrictions specified in paragraph (b).

(b) Each person operating a moored balloon or kite at a height of more than 400 feet AGL outside of a danger area must ensure that—

- (1) the balloon or kite remains more than 4 km from any aerodrome boundary; and
- (2) the balloon or kite remains within Class G airspace; and
- (3) the weight of the kite does not exceed 15 kg; and
- (4) the balloon or kite remains at least 400 feet vertically below cloud; and
- (5) the horizontal visibility is not less than 4 km; and
- (6) they provide the following information to the New Zealand NOTAM office at least 24 hours before the operation:
  - (i) their name, address and telephone numbers:
  - (ii) the date, time and duration of the operation:
  - (iii) a brief description of the moored balloon or kite, including size and predominant colour:
  - (iv) the weight of the moored balloon or kite:

- (v) the height to which the moored balloon or kite will be operated.

### **101.59 Night operation**

A person must not operate a moored balloon or kite at night.

### **101.61 Balloon mooring line marking**

A person must not operate a moored balloon by day unless the mooring lines have coloured streamers or pennants attached at intervals of not more than 15 m commencing no more than 150 feet above ground level and visible for at least 1NM.

### **101.63 Balloon rapid deflation device**

A person must not operate a moored balloon unless it contains a device that will automatically and rapidly deflate the balloon if it escapes from its moorings.

### **101.65 Balloon escape**

Each person operating a moored balloon that escapes from its mooring without the deflation device functioning properly must immediately notify the nearest ATS unit of—

- (1) the original location of the balloon; and
- (2) the time the balloon broke free; and
- (3) the estimated flight path of the balloon.

## **Subpart C — Free Balloons**

### **101.101 Applicability**

This Subpart prescribes rules governing the operation of free balloons.

### **101.103 Meteorological limitations**

Except where authorised by the appropriate ATS, a person must not operate a heavy free balloon at or through any altitude below 60 000 feet pressure-altitude at which—

- (1) there are clouds or obscuring phenomena of more than four-eighths coverage; and

- (2) the horizontal visibility is less than 8 km; and
- (3) unauthorised entry into airspace of another State's territory is imminent.

### **101.105 Operating limitation**

A person must not release a heavy or medium free balloon in a manner that will cause it to fly—

- (1) below 1000 feet over a congested area of a city, town, or settlement; or
- (2) over an open-air assembly of persons.

### **101.107 Equipment**

A person must not operate a heavy free balloon unless—

- (1) it is equipped with—
  - (i) at least 2 payload flight-termination devices or systems, whether automatic or by telemetry, that operate independently of each other; and
  - (ii) an ADS-B system, if the balloon is to operate in transponder mandatory controlled airspace designated under Part 71 within the New Zealand FIR; and
- (2) for polyethylene zero pressure balloons, at least 2 methods, systems, devices, or combinations of methods, systems and devices, that function independently of each other and are employed for terminating the flight of the balloon envelope; and
- (3) the balloon envelope is equipped with—
  - (i) at least 1 radar reflective device; or
  - (ii) radar reflective material that will present an echo to surface radar operating in the 2,700 MHz to 2,900 MHz frequency range.

### **101.109 Termination**

Each person operating a heavy free balloon must activate the respective termination devices required by rule 101.107(1)(i) and (2) to terminate the flight where—

- (1) meteorological conditions are less than those prescribed in rule 101.103; or
- (2) further operation is hazardous to other air traffic or to persons and property on the surface; or
- (3) unauthorised entry into airspace of another State's territory is imminent.

### **101.111 Night operations**

A person must not operate a heavy free balloon below 60 000 feet pressure-altitude at night unless the balloon and its attachments and payload, whether or not they become separated during the operation, are each equipped with lights that—

- (1) are visible at a distance of at least 5NM; and
- (2) have a flash frequency of between 40 and 100 cycles per minute; and
- (3) each have their own power supply.

### **101.113 Trailing antenna**

A person must not operate a free balloon that is equipped with a trailing antenna that requires a force of more than 230 N to break it at any point unless the antenna has coloured pennants or streamers that—

- (1) are attached at not more than 15 m intervals; and
- (2) are visible at a distance of at least 1NM.

### **101.115 Suspension device**

A person must not operate a heavy free balloon that is equipped with a suspension device more than 15 m long, other than a highly coloured open parachute, by day below 60 000 feet pressure-altitude unless the suspension



device—

- (1) is coloured in alternate bands of high visibility colours; or
- (2) has coloured pennants or streamers attached which are visible for at least 1NM.

### **101.117 Pre-launch notice**

(a) Except as provided in paragraph (b), a person must not launch a medium or heavy free balloon unless they provide the following information to the New Zealand NOTAM office at least 24 hours prior to the estimated launch time:

- (1) their name and telephone number:
- (2) the balloon identification or project code name:
- (3) the balloon classification and description including—
  - (i) the length and diameter of the balloon; and
  - (ii) the length of the suspension device; and
  - (iii) the weight of the payload; and
  - (iv) the length of the trailing antenna:
- (4) the SSR code as applicable:
- (5) the location of the launch site:
- (6) the estimated time of launch, or time of commencement and completion of multiple launches:
- (7) the number of balloons to be launched or, for multiple launches, the scheduled interval between launches:
- (8) the expected direction of ascent:
- (9) the estimated time to reach cruising level or to pass 60 000 feet pressure-altitude, whichever is lower:

- (10) the planned cruising levels (pressure-altitude):
  - (11) the planned duration of the flight:
  - (12) the estimated time and location of impact with the surface of the earth.
- (b) A person operating a medium or heavy free balloon for solar or cosmic disturbance investigations involving a critical time element must supply the information in paragraph (a) not less than 30 minutes prior to the estimated time of commencement.
- (c) Where there are changes to the information supplied under paragraph (a), the operator must forward the changes to the New Zealand NOTAM office, at least 6 hours prior to the projected launch time.

#### **101.119 Launch notice**

Each person operating a medium or heavy free balloon must notify the nearest ATS unit of the following information immediately after the balloon is launched:

- (1) the balloon flight identification:
- (2) the launch site:
- (3) the actual time of launch:
- (4) the estimated time at which 60 000 feet pressure-altitude will be passed, or the estimated time at which the cruising level will be reached if at or below 60 000 feet, and the estimated location:
- (5) any changes to the information provided under rule 101.117(a)(7) or (8).

#### **101.121 Cancellation notice**

Each person who has provided a pre-launch notice in accordance with rule 101.117 who subsequently cancels the operation must immediately notify the ATS unit of the cancellation.

#### **101.123 Balloon position reports**

Each person operating a medium or heavy free balloon must—

- (1) unless otherwise required by the ATS unit, monitor the course of the balloon and record its position at least every 2 hours; and
- (2) forward any balloon position reports requested by the ATS; and
- (3) immediately notify the nearest ATS unit when a balloon position report is not recorded for any 2 hour period of flight. This notification must include—
  - (i) the last recorded position; and
  - (ii) any revision of the forecast trajectory; and
- (4) immediately notify ATS when tracking of the balloon is re-established.

#### **101.125 Pre-descent position report**

Each person operating a medium or heavy free balloon must provide the following information to the nearest ATS unit not less than one hour before the beginning of the planned descent:

- (1) the current geographical position:
- (2) the current altitude:
- (3) where applicable, the forecast time of penetration of 60 000 feet pressure-altitude:
- (4) the forecast descent trajectory:
- (5) the forecast time and location of the impact with the surface of the earth.

#### **101.127 Completion of operation**

Each person operating a medium or heavy free balloon must notify the nearest ATS unit when the operation has ended.

### **Subpart D — Rockets**

#### **101.151 Applicability**

This Subpart prescribes rules governing the operation of rockets.

**101.153 Large model rockets**

A person must not operate a large model rocket except in accordance with the Model Rocketry Safety Code.

**101.155 Aerodromes**

(a) Except as provided in paragraph (b), a person must not operate a rocket on or within 4 km of an aerodrome boundary.

(b) A person may operate a rocket within 4 km of an aerodrome boundary providing—

- (1) the rocket does not fly above 400 feet AGL; and
- (2) at uncontrolled aerodromes, it is operated in accordance with an agreement with the aerodrome operator; and
- (3) at controlled aerodromes, it is operated in accordance with an authorisation from ATC; and
- (4) it is not operated on or over any active aircraft movement area of an aerodrome; and
- (5) it is not operated on or over any active runway strip area.

(c) A person must not operate a rocket between 4 and 8 km of an aerodrome boundary above 400 feet AGL.

**101.157 Meteorological limitations**

(a) A person must not operate a rocket at any altitude where—

- (1) there are clouds or obscuring phenomena of more than four-eighths coverage; and
- (2) the horizontal visibility is less than 8 km.

(b) A person must not operate a rocket into cloud.

**101.159 Night operations**

Except for a large model rocket, a person must not operate a rocket at night.

### **101.161 Pre-launch notice**

Except for a large model rocket, a person must not launch a rocket unless they provide the following information to the New Zealand NOTAM office at least 24 hours prior to launch:

- (1) their name, address, and telephone number or, where there are multiple participants at a single event, the name, address, and telephone number of the person whose duties include co-ordination of the launch data estimates required by paragraphs (2), (3), and (4) of this rule and co-ordinating the launch event:
- (2) the estimated number of rockets to be operated:
- (3) the estimated size and the estimated weight of each rocket:
- (4) the estimated highest altitude or flight level to which each rocket will be operated:
- (5) the location of the operation:
- (6) the date, time, and duration of the operation:
- (7) any other relevant information requested by the person to whom notification is given.

## **Subpart E — Remotely Piloted Aircraft, Control Line Model Aircraft and Free Flight Model Aircraft**

### **101.201 Applicability**

Subject to rule 102.21, this Subpart applies to—

- (1) remotely piloted aircraft; and
- (2) control line model aircraft; and
- (3) free flight model aircraft.

### **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 (but not greater than 25kg); or
- (5) inspecting and approving the construction of a remotely piloted aircraft greater than 15kg (but not greater than 25kg); or
- (6) authorising the operation of a remotely piloted aircraft greater than 15kg (but not greater than 25kg).

### **101.203 Control line model aircraft**

A person must not operate a control line model aircraft with a single or multiple wire system longer than 30 m.

### **101.205 Aerodromes**

- (a) A person must not operate a remotely piloted aircraft or a free flight model aircraft on or within 4 km from the boundary 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 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 (see rule 101.202); 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 (see rule 101.202); 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.

**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 —
- (1) operate in a danger area designated for that purpose under Part 71; or
  - (2) ensure that the operation remains within Class G airspace and that at least 24 hours before the operation, a person authorised by an approved person or organisation (see rule 101.202), 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.

### **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.

### **101.211 Night operations**

A person must not operate a remotely piloted aircraft or free flight model aircraft at night unless the operation is—

- (1) indoors; or
- (2) a shielded operation.

### **101.213 Right of way**

(a) A person who is operating a remotely piloted aircraft or a control line model aircraft must ensure the aircraft that the person is operating gives way to, and remains clear of, all manned aircraft on the ground and in flight.

(b) A person who is operating a free flight model aircraft must before launching the aircraft ensure that during the operation the aircraft will remain clear of all manned aircraft on the ground and in flight.

### **101.215 Aircraft mass limits**

(a) A person must not operate a remotely piloted aircraft, a control line model aircraft or a free flight model aircraft with a gross mass of more than 25 kg.

(b) A person must not operate a remotely piloted aircraft with a gross mass of between 15 kg and 25 kg unless the aircraft, and any modification made to it, is—

- (1) constructed under the authority of, or inspected and approved by, an approved person or organisation defined in rule 101.202; and
- (2) operated under the authority of an approved person or organisation (see rule 101.202).

## **Subpart F — Gyrogliders and Parasails**

**101.251 Applicability**

This Subpart prescribes rules governing the operation of gyrogliders and parasails.

**101.253 Aerodromes**

(a) A person must not operate a gyroglider or parasail on an aerodrome or within 4 km of an aerodrome boundary unless—

- (1) at an uncontrolled aerodrome, the gyroglider or parasail is operated—
  - (i) in accordance with an agreement with the aerodrome operator; and
  - (ii) at a height not exceeding 400 feet AGL; or
- (2) at a controlled aerodrome, the gyroglider or parasail is operated in accordance with an authorisation from the aerodrome air traffic control service.

(b) A person must not operate a gyroglider or parasail—

- (1) on or over any aircraft movement area of an aerodrome; or
- (2) on or over any active runway or runway strip area of an aerodrome.

**101.255 Airspace**

A person operating a gyroglider or parasail above a height of 400 feet AGL must—

- (1) ensure that the gyroglider or parasail remains more than 4 km from any aerodrome boundary; and
- (2) operate in Class G airspace; and
- (3) provide the following information to the New Zealand NOTAM office at least 24 hours before the operation:
  - (i) the name, address, and telephone number of the operator:

- (ii) the date, time, and duration of the operation:
- (iii) a brief description of the gyroglider or parasail (including size and predominant colour):
- (iv) the height to which the gyroglider or parasail will be operated.

### **101.257 Meteorological limitations**

(a) Except as provided in paragraph (b), a person operating a gyroglider or parasail must—

- (1) not operate closer than 400 feet below cloud; and
- (2) limit operations to an area where the ground visibility is at least 5 km.

(b) Paragraph (a) does not apply to the shielded operation of a gyroglider or parasail.

### **101.259 Night operations**

A person must not operate a gyroglider or parasail at night.

### **101.261 Airworthiness**

A person who operates a gyroglider or parasail must ensure that it is fit for the intended purpose and is maintained in an airworthy condition in accordance with the manufacturer's instruction.

### **101.263 Safety equipment**

A person operating a gyroglider or parasail must ensure that each person carried by the gyroglider or parasail—

- (1) when flying over water, or within gliding distance of water, wears a positive buoyancy aid; and
- (2) wears a rigid protective helmet; and
- (3) is secured to the gyroglider or parasail by a harness; and

- (4) for a parasail operation conducted with an extended towline length exceeding 600 feet, as measured from the winch drum to the parasail canopy yoke, is equipped with a positive means of communicating with the parasail operator if an emergency occurs.

#### **101.265 Pre-flight briefing**

A person operating a gyroglider or parasail must ensure that each person carried by the gyroglider or parasail receives a pre-flight briefing on—

- (1) the nature of the flight; and
- (2) the standard operating procedures; and
- (3) the emergency procedures including:
  - (i) the location and use of emergency equipment;
  - (ii) the procedures to be followed in the event of a water landing, or towline separation; and
  - (iii) the method for communicating with the gyroglider or parasail operator if an emergency occurs.

#### **101.267 Emergency towline release**

A person must not release the towline of a gyroglider or a parasail in flight except in an emergency.

#### **101.269 Operating procedures**

A person operating a gyroglider or parasail must do so in accordance with the operating procedures and limitations recommended by the manufacturer.

#### **101.271 Wind speed**

A person operating a parasail must—

- (1) use a method or device to accurately determine and monitor the wind speed at the location where the parasailing operation is being conducted; and
- (2) not conduct a parasailing operation in conditions where the sustained wind speed exceeds 20 knots.

**101.273 Passenger age limitation**

A person operating a parasail must not—

- (1) perform a parasailing operation with an extended towline length of more than 300 feet, as measured from the winch drum to the parasail canopy yoke, when carrying any solo passenger who is between 8 and 11 years old; and
- (2) perform a parasailing operation with a passenger carried by a parasail who is less than 8 years old unless the passenger is accompanied by another passenger who is at least 18 years old, and is able to assist the younger passenger if an emergency occurs.