

CIVIL AVIATION SAFETY AUTHORITY OF PAPUA NEW GUINEA

PNG Civil Aviation Rule Part 101

Gyrogliders and Parasails and Unmanned Balloons, Kites, and Rockets – Operating Rules

Applicable 02 November 2021

DESCRIPTION

Part 101 prescribes the requirements for the operation of gyrogliders, parasails, certain unmanned aircraft including balloons, kites and rockets, control line model aircraft and free flight model aircraft.

Part 102 requirements now apply to unmanned aircraft type remotely piloted aircraft (RPAs), including radio-controlled model aircraft, and RPAs are no longer subject to Part 101.

BULLETIN

This Part first came into force on 01 January 2004 and incorporates the following amendments:

Amendment	Applicable Date
Amendment 1	01 May 2017
Amendment 2	14 December 2020
Amendment 3	02 November 2021

Summary of Amendments

Amendment 3 (Docket 21/09/CAR101/23)

Part 101 Title— amended: Title amended to remove words 'Aircraft (including...)'.

Rule 101.1 Applicability – amended: Rule amended including additions of new paragraphs (1)(a), (1)(b), and (1)(c), repeal of paragraphs (2) and (4) and subsequent renumbering to make Part 101 apply only to unmanned aircraft types to which this Part now applies including balloons, kites and control line and free flight model aircraft, rockets and gyrogliders and parasails. This amendment removes applicability to remotely piloted aircraft (RPAs).

Rule 101.3 Definitions—amended: Definitions referenced to Part 1. RPA definition repealed and added to Part 102.

Rule 101.5 Registration – amended: Rule amended and referenced to rule 47.51. Deleted paragraph (b) to remove applicability to RPAs.

Rule 101.7 Restricted, military operating, and danger areas – amended: Paragraphs (a) and (b) amended to remove applicability to RPAs by use of the term 'to which this Part applies' in reference to aircraft prescribed in amended rule 101.1.

Rule 101.9 Low flying zones – amended: Rule amended to remove applicability to RPAs by use of the term 'to which this Part applies' in reference to aircraft prescribed in amended rule 101.1.

Rule 101.11 Controlled airspace – amended: Rule amended to remove applicability to RPAs by use of the term 'to which this Part applies' in reference to aircraft prescribed in amended rule 101.1.

Rule 102.12 Airspace knowledge – amended: Paragraph (a) repealed and paragraphs (b) and (c) renumbered. Editorial amendments to remove applicability to RPAs by use of the term 'to which this Part applies' in reference to aircraft prescribed in amended rule 101.1.

Rule 102.13 Hazard and risk mitigation – amended: Rule amended to remove applicability to RPAs by use of the term 'to which this Part applies' in reference to aircraft prescribed in amended rule 101.1. Paragraphs (1), (2), (3) and (4) repealed.

Rule 102.15 Dropping of articles – amended: Rule amended to remove applicability to RPAs by use of the term 'to which this Part applies' in reference to aircraft prescribed in amended rule 101.1. Paragraphs (1), (2), (3) and (4) repealed.

Rule 102.17 Notification and reporting of occurrences – amended: Rule amended to remove applicability to RPAs by use of the term 'to which this Part applies' in reference to aircraft prescribed in amended rule 101.1. Paragraphs (1), (2), (3) and (4) repealed.

Rule 102.19 Approval for areas for operation – amended: Title amended. Paragraphs (a), (a)(1) and (b)(2)(ii) amended to remove applicability to RPAs by use of the term 'to which this Part applies' in reference to aircraft prescribed in amended rule 101.1.

Subpart E Title— amended: Title amended to remove applicability to RPAs.

Rule 101.201 Applicability – amended: New Title amended to remove applicability to RPAs by repeal of paragraph (1) and renumbering of paragraphs (2) and (3).

Rule 101.202 Approved person or organisation – repealed: Rule repealed. RPA requirements in new rule 102.59

Rule 101.204 Remotely piloted aircraft above 400ft AGL – repealed: Rule repealed. RPA requirements in new rule 102.59

Rule 101.205 Within 5nm of aerodrome boundary – reserved: Rule repealed and number reserved. Amended RPA requirements in new rule 102.75

Rule 101.206 More than 5nm from aerodrome boundary and above 400ft AGL – repealed: Rule repealed. Amended RPA requirements in new rule 102.77.

Rule 101.207 Consent for operation over property – reserved: Rule repealed and number reserved. Amended RPA requirements in new rule 102.81.

Rule 101.208 Consent for operation over and near people – repealed: Rule repealed. Amended RPA requirements in new rule 102.83.

Rule 101.209 Visual line of sight operation — amended: Paragraphs (a) repealed. Paragraphs (b), (c) and (d) amended and renumbered to apply to free flight model aircraft only and remove applicability to RPAs.

Rule 101.210 Weather and day limitations – repealed: Rule repealed. RPA requirements in new rule 102.87.

Rule 101.211 Night operations – reserved: Rule repealed and number reserved. RPA requirements in new rule 102.89.

Rule 101.212 Remotely piloted aircraft operating area – repealed: Rule repealed. Amended title and RPA requirements in new rule 102.79.

Rule 101.213 Right of Way – amended: Paragraphs (a) amended to remove applicability to RPAs. RPA requirements in new rule 102.91.

Part 101

Rule 101.215 Aircraft mass limits – amended: Paragraphs (a)(1), (a)(2), (b)(1) and (b)(2) repealed. Paragraph (a) amended to remove applicability to RPAs, reduce the mass requirement to 10kg, and made subject to the Director. RPA requirements in new rule 102.93.

Rule 101.217 Standard operating conditions – reserved: Rule repealed and number reserved. RPA requirements in new rule 102.55.

Rule 101.219 Open category operations – reserved: Rule repealed and number reserved. RPA requirements in new rule 102.95.

Rule 101.221 Requirement for remote pilot licence – reserved: Rule repealed and number reserved. RPA requirements in new rule 102.103.

Rule 101.223 Requirement for the use of aeronautical radio in controlled airspace – reserved: Rule repealed and number reserved. RPA requirements in amended rule 102.9.

Rule 101.225 Prohibited operations – amended: Paragraphs (a) and (b) amended to remove applicability to RPAs by use of the term 'to which this Subpart applies' in reference to aircraft prescribed in amended rule 101.201. RPA requirements in new rule 102.97

Rule 101.227 Prohibited psychoactive substances – amended:

Paragraphs (a) amended and edited to remove applicability to RPAs by use of the term 'to which this Subpart applies' in reference to aircraft prescribed in amended rule 101.201. RPA requirements in new rule 102.99.

Rule 101.229 Inspection and compliance – amended: Paragraph (a) amended and edited to remove applicability to RPAs by use of the term 'to which this Subpart applies' in reference to aircraft prescribed in amended rule 101.201. Paragraphs (b) repealed. RPA requirements in new rule 102.5.

Schedule of Rules

Subpart A	— General	8
101.1	Applicability	8
101.3	Definitions	8
101.5	Registration	
101.7	Restricted, military operating, and danger areas	9
101.9	Low flying zones	9
101.11	Controlled airspace	10
101.12	Airspace knowledge	10
101.13	Hazard and risk minimisation	10
101.15	Dropping of articles	10
101.17	Notification and reporting of occurences	
101.19	Approval for areas of operation	11
Subpart B	— Moored Balloons and Kites	
101.51	Applicability	
101.53	Aerodrome area	11
101.55	Aerodrome boundary	
101.57	Airspace	12
101.59	Night operation	
101.61	Balloon mooring line marking	12
101.63	Balloon rapid deflation device	
101.65	Balloon escape	12
Subpart C	— Free Balloons	13
101.101	Applicability	13
101.103	Meteorological limitations	13
101.105	Operating limitation	13
101.107	Equipment	13
101.109	Termination	13
101.111	Night operations	14
101.113	Trailing antenna	14
101.115	Suspension device	14
101.117	Pre-launch notice	14
101.119	Launch notice	15
101.121	Cancellation notice	15
101.123	Balloon position reports	15
101.125	Pre-descent position report	15
101.127	Completion of operation	15
Subpart D	— Rockets	
101.151	Applicability	16
101.153	Aerodromes	
101.155	Meteorological limitations	16
101.157	Night operations	
101.159	Pre-launch notice	16

Subpart E -	— Control Line Model Aircraft and Free Flight Model Aircraft	17
101.201	Applicability	17
101.203	Control line model aircraft	17
101.205	Reserved	17
101.207	Reserved	17
101.209	Visual line of sight operation	17
101.211	Reserved	17
101.213	Right of way	17
101.215	Aircraft mass limits	18
101.217	Reserved	18
101.219	Reserved	18
101.221	Reserved	18
101.223	Reserved	18
101.225	Prohibited operations.	18
101.227	Prohibited psychoactive substances	18
101.229	Inspection and compliance	18
Subpart F -	— Gyrogliders and Parasails	19
101.251	Applicability	
101.253	Aerodromes	
101.255	Airspace	
101.257	Meteorological limitations	
101.259	Night operations	19
101.261	Airworthiness	19
101.263	Safety equipment	20
101.265	Pre-flight briefing	20
101.267	Emergency towline release	20
101.269	Operating procedures	20
101.271	Wind Speed	20
101.273	Passenger age limitation	20

Subpart A — General

101.1 Applicability

This Part prescribes rules governing the operation of—

- (1) the following unmanned aircraft:
 - (a) moored and free balloons;
 - (b) kites;
 - (c) control line model aircraft, and free flight model aircraft;
- (2) rockets;
- (3) gyrogliders and parasails.

101.3 Definitions

In this Part:

Aerodrome means an aerodrome that is promulgated in the current PNG AIP:

Controlled aerodrome means an aerodrome at which air traffic control service is being provided:

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 balloon without propulsion in free flight, having a gas capacity greater than 1.5 m³:

Free flight model aircraft means a model aircraft with a maximum wing loading of 62 g/dm² (20 oz/ft²), 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/cm²; 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:

Part 101

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 balloon:

Model aircraft means control line model aircraft or free flight model aircraft but does not include radio controlled model aircraft:

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, that has a maximum diameter of more than 1.5 m or a gas capacity of more than 3 m³:

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:

Rocket means a pilotless vehicle propelled by a system that contains all the ingredients 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 the same as in Part 1.

101.5 Registration

(a) Subject to rule 47.51, the requirements in Part 47 do not apply to unmanned aircraft, rockets, gyrogliders and parasails.

101.7 Restricted, military operating, and danger areas

- (a) A person must not operate an aircraft to which this Part applies within a restricted area designated under Part 71 unless the person has the approval to do so from the administering authority responsible for the restricted area.
- (b) A person must not operate an aircraft to which this Part applies within a military operating area designated under Part 71 unless the person has the 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 an aircraft to which this Part applies within a low flying zone designated under Part 71.

101.11 Controlled airspace

A person must not operate an aircraft to which this Part applies in controlled airspace without prior authorisation from the ATC unit responsible for that airspace unless the operation is a shielded operation:

101.12 Airspace knowledge

- (a) Subject to paragraph (b), a person to whom this Part applies must
 - (1) ensure before each flight, that the person is familiar with 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 has knowledge of and is familiar with the airspace designation under Part 71 and any applicable airspace restrictions in place in the area of intended operation;
- (b) A person who intends to operate an aircraft to which this Part applies, prior to conducting operations, must be able to demonstrate, in a manner and to a standard acceptable to the Director
 - (1) basic knowledge of airspace designation under Part 71; and
 - (2) any applicable airspace restrictions in place in the area of intended operation.

101.13 Hazard and risk minimisation

A person operating an aircraft to which this Part applies must take all practicable steps to minimise hazards to persons, property and other aircraft.

101.15 Dropping of articles

A person operating an aircraft to which this Part applies must not allow any object to be dropped in flight if such action creates a hazard to other persons or property.

101.17 Notification and reporting of occurrences

- (a) A person operating an aircraft to which this Part applies, must notify the Director as soon as practicable, after an incident involving:
 - (i) serious injury to any person; or
 - (ii) damage to any property other than the aircraft.
- (b) The notification required in paragraph (a)(i) must be provided in manner acceptable to the Director.
- (c) The details of the notifiable incidents in paragraph (a) must be provided to the Director on form CA005 prescribed in Part 12, or by a means acceptable to the Director.

101.19 Approval of areas for operation

(a) A person may apply to the Director for the approval of an area for aircraft to which this Part applies as an area for the operation of —

- (1) aircraft generally, or for a particular category of aircraft, and such approval when granted:
 - (i) will have effect from the time and date specified in the approval contained in the written notice issued to the applicant by the Director; or
 - (ii) will have effect for a particular period, including a period of less than 1 day, or longer, as specified by the Director; and
 - (iii) may be subject to conditions imposed by the Director in the interests of aviation safety.
- (2) Details of an approval granted by the Director under paragraph (1), will be published, including any conditions, in accordance with the Part 175 requirements for the publication of aeronautical information.
- (b) The Director may revoke the approval of an area, or change the conditions that apply to such an approval, in the interests of aviation safety and security, and-
 - (1) publish details of any such revocation or change in accordance with the requirements for publication of aeronautical information of Part 175; and
 - (2) make available written notice of the revocation or change to the person who:
 - (i) applied for the approval of the area; or
 - (ii) currently holds the office, if the person who applied for the approval as an officer of an organization concerned with unmanned aircraft, no longer holds that office.

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 shall 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 shall 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, a person operating a moored balloon or kite at a height of more than 400 feet AGL shall—
 - (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 shall 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 F 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 Papua New Guinea 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 shall not operate a moored balloon or kite at night.

101.61 Balloon mooring line marking

A person shall 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 1 nm.

101.63 Balloon rapid deflation device

A person shall 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 shall 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 shall 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 shall 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 shall not operate a heavy free balloon unless—

- (1) it is equipped with—
 - (i) at least two payload flight-termination devices or systems, whether automatic or by telemetry, that operate independently of each other; and
 - (ii) in an area where ground-based SSR equipment is in use, a secondary surveillance radar transponder, with an altitude reporting capability, which is continuously operating on an assigned code, or which can be turned on when necessary by the tracking station; and
- (2) for polyethylene zero pressure balloons, at least two methods, systems, devices, or combinations thereof, 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 one radar reflective device; or
 - (ii) radar reflective material that will present an echo to surface radar operating in the 200 MHz to 2,700 MHz frequency range.

101.109 Termination

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

- (1) meteorological conditions are less than those prescribed in 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 shall 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 5 nm; 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 shall 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 1 nm.

101.115 Suspension device

A person shall 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 1 nm.

101.117 Pre-launch notice

- (a) Except as provided in paragraph (b), a person shall not launch a medium or heavy free balloon unless they provide the following information to the Papua New Guinea 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 may 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 shall forward the changes to the Papua New Guinea 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 shall 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 101.117(a)(7) or (8).

101.121 Cancellation notice

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

101.123 Balloon position reports

Each person operating a medium or heavy free balloon shall—

- (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
- immediately notify the nearest ATS unit when a balloon position report is not recorded for any 2 hour period of flight. This notification shall 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 shall 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 shall 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 Aerodromes

- (a) Except as provided in paragraph (b), a person shall 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 shall not operate a rocket between 4 and 8 km of an aerodrome boundary above 400 feet AGL.

101.155 Meteorological limitations

- (a) A person shall 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 shall not operate a rocket into cloud.

101.157 Night operations

A person shall not operate a rocket at night.

101.159 Pre-launch notice

A person shall not launch a rocket unless they provide the following information to the Papua New Guinea 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 — Control Line Model Aircraft and Free Flight Model Aircraft

101.201 Applicability

This Subpart applies to —

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

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 Reserved

101.207 Reserved

101.209 Visual line of sight operation

- (a) A person must not operate a free flight model aircraft 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.
- (b) A person who operates a free flight model aircraft 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.
- (c) For the purpose 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 Reserved

101.213 Right of way

- (a) A person who is operating 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 person must not operate a control line model aircraft or a free flight model aircraft with a gross mass of more than 10 kg except with the approval of and subject to any conditions or limitations specified by the Director.

101.217 Reserved

101.219 Reserved

101.221 Reserved

101.223 Reserved

101.225 Prohibited operations

- (a) No person may operate an aircraft to which this Subpart applies in a careless or reckless manner so as to endanger or likely to be an endangerment to aviation safety and security or the safety and security of any person or property.
- (b) No person may an aircraft to which this Subpart applies while that person is operating a moving vehicle, vessel or manned aircraft.

101.227 Prohibited psychoactive substances

- (a) No person may operate or attempt to operate an aircraft to which this Subpart applies as an observer, or attempt to perform any other safety critical role
 - (1) in a state of intoxication; or
 - (2) within 12 hours of consuming any alcoholic beverage; or
 - (3) in a state of health in which the person's capacity to perform their duties would be impaired by reason of having consumed or used any alcohol, drugs or other psychoactive substances.
- (b) Where the Director has reasonable grounds to believe a person of violating the requirements of paragraph (a), that person must submit to a test required by the Director for the presence of alcohol, drugs and other psychoactive substances.
- (c) The test required by paragraph (b) must be conducted by a person authorised for the purpose by the Director within 4 hours of the person acting or attempting to act in their assigned role.

101.229 Inspection and Compliance

- (a) A person who owns or operates an aircraft to which this Subpart applies must, upon request, make available to the Director
 - (1) the person's aviation qualifications, if applicable; and
 - (2) the aircraft type rating, if applicable; and
 - (3) any other documents, records or reports required under the rules.

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 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 F airspace; and
- (3) provide the following information to the Papua New Guinea 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 permanent positive buoyancy aid; and
- (2) when flying over land, 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 receive 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 any gyroglider or 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 operating 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 any emergency occurs.