



**Notice of Proposed Rule Making
NPRM 16-24
1 December 2016**

**Part 102
Unmanned Aircraft Operator
Certification**

**Docket CAR/16/102/01
2016-2017 Rules Review**

Background to the Civil Aviation Rules

The Civil Aviation Rules establish the minimum regulatory safety boundary for participants to gain entry into, operate within, and exit the Papua New Guinea civil aviation system. The Rules as structured in a manner similar to the Civil Aviation Rules of New Zealand and the Federal Aviation Regulations of the USA. Where practicable the Rules also align with the regulatory code of the Civil Aviation Safety Authority of Australia.

Rules are divided into Parts and each Part contains a series of individual rules which relate to a particular aviation activity.

Advisory Circulars accompany many rule Parts and contain information about standards, practices and procedures that the Director has established to be an Acceptable Means of Compliance (AMC) with the associated rule. An Advisory Circular may also contain guidance material (GM) to facilitate compliance with rule requirements.

The objective of the Civil Aviation Rules system is to strike a balance of responsibility between, on the one hand, the State and regulatory authority, the Civil Aviation Safety Authority of PNG (CASA PNG) and, on the other hand those who provide services and exercise privileges in the civil aviation system. This balance must enable the State and regulatory authority to set standards for, and monitor performance of aviation participants whilst providing the maximum flexibility for the participants to develop their own means of compliance within the safety boundary.

Section 45 of the Civil Aviation Act 2000 prescribes general requirements for participants in the civil aviation system and requires, amongst other things, participants to carry out their activities safely and in accordance with the relevant prescribed safety standards and practices.

Section 69 of the Act allows the Minister to make ordinary rules for any of the following purposes:

- The implementation of Papua New Guinea's obligations under the Convention
- To provide for safe, sustainable, effective and efficient aviation services
- To provision of aviation metrological services, search and rescue services and civil aviation security programs and services
- Assisting aviation safety and security, including but not limited to personal security
- Assisting economic development
- Ensuring environmental sustainability

1. Purpose of this NPRM

The purpose of this Notice of Proposed Rulemaking (NPRM) is to put forward for consideration of a proposed new Civil Aviation Rule (CAR) Part 102.

2. Background to the Proposal

The civilian use of remotely piloted aircraft systems (RPAS) has increased markedly in recent years. Research and developments into the civilian application of RPAS is a dynamic and rapidly evolving area. Growth of RPAS use is currently concentrated in smaller aircraft, similar to model aircraft in size (though not necessarily in performance).

RPAS operations will be conducted either under Part 101 or Part 102.

Part 101 operators are not required to seek authorisation from CASA PNG. As a result, there are no direct controls over the skills and qualifications of the operator, or the airworthiness of the aircraft itself.

Part 101 applies to both recreational and commercial users. This means that a wide range of commercial activities can be conducted without any interaction with CASA PNG. This is in contrast with the approach taken by other national regulators where all commercial operators are required to obtain a certificate or seek permission from the regulatory authority, regardless of the risk of operation. The CASA PNG approach allows lower-risk commercial operations to take place without burdensome certification requirements, as long as the operators remain compliant with the restrictions set out in Part 101.

A wide range of terms are used to describe RPAS and include unmanned aerial vehicle (UAV), unmanned aerial system (UAS), drones or model aircraft. Part 101 and Part 102 use different terms which are defined in different parts of the rules.

For Part 102 operations the key term is ‘unmanned aircraft’. An unmanned aircraft is ‘*an aircraft designed to operate with no pilot on board and includes unmanned balloons, kites, control line model aircraft, free flight model aircraft and remotely piloted aircraft*’. The rules also refer to an unmanned aircraft system which is ‘*an aircraft and its associated elements which are operated with no pilot on board*’.

Part 101 uses the term ‘remotely piloted aircraft’, defined as a subclass of unmanned aircraft and includes its associated remote pilot station or stations, the required command and control links, and any other components required to operate the system.

While Part 101 still refers to subcategories of ‘model aircraft’, such as free flight model aircraft and control line model aircraft, the more general term ‘model aircraft’ no longer exists. Model aircraft are now referred to as ‘remotely piloted aircraft’ (RPA) under Part 101, and ‘unmanned aircraft’ for the purposes of Part 102.

Part 102 applies to *all* unmanned aircraft that do not operate under Part 101 including fully autonomous aircraft, and programmable RPAS that operate automatically or on an automatic

basis where the operator may still intervene.

3. Costs associated with this NPRM

Costs associated with implementation of this Rule amendment has not been assessed

4. Summary of changes

Part 102 102 New Rule initial issue.
(01 Apr 2017)

5. Legislative Analysis

The Minister may make ordinary rules under Sections 69, 70, 71 and 72 of the Civil Aviation Act 2000, for various purposes including implementing Papua New Guinea's obligations under the Convention, assisting aviation safety and security, and any matter contemplated under the Act.

These proposed rules are made pursuant to:

- (a) Section 69(1)(a) which provides for the Minister to make rules for the implementation of Papua New Guinea's obligations under the Convention;
- (b) Section 72(a) which provides for the Minister to make rule for the designation, classification and certification of-
 - (1) Air services:
 - (2) Aerodrome operators:
 - (3) Aviation security providers:
 - (4) Aviation training organizations"
 - (5) Aircraft design, manufacture, maintenance and supply organizations:
 - (6) Air traffic services;
 - (7) Aviation meteorological services:
 - (8) Aeronautical communication services:
 - (9) Aeronautical procedures.

The proposed new rule Part 102 complies with the requirements of the Civil Aviation Act 2000 (as amended) and does not contravene the Constitution, the Aerodrome (Business Concession) Act, Civil Aviation (Aircraft Operator Liability) Act, Aircraft Charges Act, Airport Departure Tax Act, the Explosive Act, Firearms Act, Customs Act, Plant and Disease Control Act and the Environmental Act.

The proposed Rule has been checked for language and compliance with the legal conventions of Papua New Guinea.

6. Submissions on the NPRM

6.1 Submissions are invited

Interested persons are invited to participate in the making of the proposed rule amendment by submitting written data, views, or comments. All submissions will be considered before final action on the proposed rule amendment is taken. If there is a need to make any significant change to the rule requirements in the proposal as a result of the submissions received, then interested persons may be invited to make further submissions.

6.2 Examination of submissions

All submissions will be available in the rules docket for examination by interested persons both before and after the closing date for submissions. A consultation summary will be published with the final rule.

Submissions may be examined by application to the Docket Clerk at the Civil Aviation Safety Authority between 8:30 am and 3:30 pm, on weekdays, except statutory holidays.

6.3 Disclosure

Submitters should note that any information attached to submissions will become part of the docket file and will be available to the public for examination at the Civil Aviation Safety Authority offices.

Submitters should state clearly if there is any information in their submission that is commercially sensitive or for some other reason the submitter does not want the information to be released to other interested parties.

6.4 How to make submission

Submissions may be sent by the following methods:

By Mail: Docket Clerk (NPRM 16-24)
Civil Aviation Safety Authority
PO Box 1941
Boroko,
Port Moresby NCD

Delivered: Docket Clerk (NPRM 16-24)
Civil Aviation Safety Authority
Morea-Tobo Road
Six Mile, Jacksons Airport
Port Moresby NCD

By Fax: Docket Clerk (NPRM 16-24)
3251789 / 325 1919

By Email: Docket Clerk (NPRM 16-24)
rules@casapng.gov.pg

6.5 Final date for submissions

Comments must be received before **4:00pm, Friday 31st of March 2017.**

6.6. Further information

For further information contact:

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102.1 Purpose

The purpose of this Part is to enable the Director to determine whether to grant an unmanned aircraft operator certificate to a person after giving consideration to whether that person—

- (1) has conducted an adequate assessment of the risk to safety of conducting the proposed unmanned aircraft operation; and.
- (2) has developed procedures to adequately manage the risks and to ensure that the operation is conducted safely.

102.3 Application

This Part applies to the following:

- (1) a person who operates an unmanned aircraft other than in accordance with Part 101:
- (2) a person who operates an unmanned aircraft in accordance with Part 101 and who wishes to apply for an unmanned aircraft operator certificate:

102.5 Definitions

Exposition, unless the context otherwise requires, means the exposition required by 102.11.

102.7 Requirement for certificate

A person must not operate an unmanned aircraft other than in accordance with Part 101 except under the authority of, and in accordance with the terms of, a valid certificate to operate an unmanned aircraft issued by the Director under this Part.

102.9 Application for certificate to operate an unmanned aircraft

- (a) Before operating an unmanned aircraft other than in accordance with Part 101 a person must apply for an unmanned aircraft operator certificate.
- (b) A person who operates an unmanned aircraft in accordance with Part 101 may apply for an unmanned aircraft operator certificate.
- (c) A person in (a) or (b) must apply by—
 - (1) submitting an application to the Director; and
 - (2) paying the appropriate fee specified in regulations.
- (d) An application must include—
 - (1) the name and address for service in Papua New Guinea of the applicant; and
 - (2) the details required by 102.15 for the operations specification; and
 - (3) the applicant's exposition required by rule 102.11; and
 - (4) any other information relating to the application as may be required by the Director.

102.11 Unmanned aircraft operator exposition

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- (a) An applicant for an unmanned aircraft operator certificate must provide the Director with an exposition that is acceptable to the Director.
- (b) The exposition must address the following matters, having regard to the nature, degree and risk of the intended operation—
- (1) the identification of a person who will have primary responsibility for the operation; and
 - (2) the identification of any person who is to have or is likely to have control over the exercise of the privileges under the certificate; and
 - (3) details of the physical locations to be used in the operation; and
 - (4) a hazard register that—
 - (i) identifies the known and likely hazards to people, property and other aircraft of the proposed operation; and
 - (ii) for each of the hazards identified, includes an assessment of the associated risks; and
 - (iii) includes a description of the measures that can be implemented to mitigate or manage the risk; and
 - (5) procedures for reporting information to the Authority as required by Part 12; and
 - (6) operating requirements for personnel licensing, qualifications, training and competency including pilot and support crew qualifications, training or medical requirements; and
 - (7) details of the number and specifications of the aircraft to be used, including any identification system used on the aircraft (for example colour schemes, unique identification numbers, markings); and
 - (8) details of the control system to be used to pilot the aircraft; and
 - (9) procedures for maintenance of aircraft and measures to ensure continued airworthiness; and
 - (10) in-flight procedures including minimum distances from persons or property; and
 - (11) procedures for handling cargo or dropping items, if such operations are intended; and
 - (12) initial airworthiness standards that must be met; and
 - (13) procedures for controlling, amending and distributing the exposition; and
 - (14) any other approvals that are required to conduct the proposed operation.
- (c) An exposition may adopt, by reference, a requirement in a Civil Aviation Rule for the purpose of mitigating or managing a risk identified in the hazard register required by 102.11(b)(4).
- (d) The Director may require only those matters in (b) that the Director considers are appropriate in the particular circumstances to be contained in the exposition.

(e) The exposition must remain acceptable to the Director.

102.13 Grant of certificate

- (a) The Director may, in accordance with section 49 of the Act, grant a certificate to a person who has applied under 102.9
- (b) When granting a certificate under (a), the Director may—
- (1) impose requirements for unmanned aircraft systems and may specify procedures to be followed by the operator of any unmanned aircraft that are operated under the authority of the certificate; and
 - (2) in accordance with section 49(1) of the Act, specify any additional conditions that the Director considers necessary in the interests of aviation safety; and
 - (3) after considering the type of aircraft to be used, determine that any aircraft to be operated under the certificate must be registered and display identification markings in accordance with Part 47 if the Director considers that it is necessary in the interests of aviation safety.

102.15 Operations specification

- (a) If the Director grants an unmanned aircraft operator certificate under 102.13, the certificate must be issued with an operations specification containing the details described in (b).
- (b) The operations specification must include:
- (1) details of the physical location of the certificate holder's principal base of operations; and
 - (2) the certificate holder's address for service in Papua New Guinea; and
 - (3) a list of any business names under which the certificate holder is approved to operate; and
 - (4) the privileges and operations that the operator is permitted to perform, including:
 - (i) the number, type and description, including, if applicable, the serial number and registration, of every aircraft that is authorised for use; and
 - (ii) identification of the geographical areas of operations approved by the Director; and
 - (iii) any exemption granted from any requirement of this or any other Part; and
 - (5) any additional condition that the Director determines is necessary in the interests of aviation safety.

102.17 Privileges of certificate holder

- (a) The holder of an unmanned aircraft operator certificate is authorised to perform the operations specified in the accompanying operations specification.
- (b) Unless the exposition required by 102.11 specifies otherwise the holder of an unmanned aircraft operator certificate is not required to comply with Civil Aviation Rules Parts 20, 21, 26, 39, 43, 47, 61, 63, 65, 66, 67, 91, 92, 93, 95, 119, 129, 133, and 137.

102.19 Duration of certificate

- (a) When granting or renewing a certificate under this Part the Director must specify a date on which the certificate will expire.
- (b) The Director may not specify a date under paragraph (a) that is later than 5 years after the date on which the certificate was granted.

102.21 Conditions of operation of unmanned aircraft

- (a) A holder of an unmanned aircraft operator certificate must comply with—
- (1) Part 101, to the extent the requirements of Part 101 are not inconsistent with the operations specified in the operations specifications;
 - (2) the conditions imposed by the Director on the unmanned aircraft operations specification; and
 - (3) the exposition required by 102.11.
- (b) The certificate holder is responsible for ensuring that any other operator or other personnel involved in an operation conducted under the authority of that certificate are notified of and comply with the requirements of (a).

102.23 Changes to exposition

- (a) Each holder of an unmanned aircraft operator certificate must—
- (1) ensure that the exposition is amended—
 - (i) so that it remains a current description of the certificate holder's operation; and
 - (ii) to ensure continued compliance with the Civil Aviation Rules that have been adopted under 102.11(c); and
 - (2) provide the Director with a copy of each amendment to the exposition as soon as practicable after the amendment is incorporated into the exposition; and
 - (3) make such amendments to the exposition as the Director considers necessary in the interests of aviation safety.
- (b) If a holder of an unmanned aircraft operator certificate proposes to change any of the following, prior acceptance by the Director is required:
- (1) the identification of any person who is to have or is likely to have control over the exercise of the privileges under the certificate:
 - (2) the identification of locations from which the certificate holder conducts unmanned aircraft operations.

102.25 Renewal of certificate

A holder of a current unmanned aircraft operator certificate who wishes to continue to exercise the privileges of the certificate beyond its expiry date must apply for the renewal of the certificate in accordance with section 49 of the Act.