Notice of Proposed Rule Making
NPRM 21/09-29
Date: 02/11/2021

Part 121
Air Operations – Large Aeroplanes

Consequential Amendments
Nil

Docket 21/09/CAR121/29
2021 Rules Review

Proposed Effective 02 November 2021

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 are 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 International Civil Aviation Organization Annexes and 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 that 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 the 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 (CASA) 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 while 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, among 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:

(a) The implementation of Papua New Guinea's obligations under the Convention

(b) To provide for a safe, sustainable, effective and efficient aviation services

(c) The provision of aviation meteorological services, search and rescue services and civil aviation security programmers and services

(d) Assisting aviation safety and security, including but not limited to personal security

(e) Assisting economic development

(f) Improving access and mobility

(g) Protecting and promoting public health

(h) Ensuring environmental sustainability

(i) Any matter related or reasonably incidental to any of the following:

  (i) The Minister's functions and role under section 8 of the Act;

  (ii) The Authority's general objects and functions under section 11 of the Act;

  (iii) The Authority's functions in relation to safety under section 12 of the Act; and

  (iv) The Director's functions and powers under section 17of the Act

  (v) The Director's powers under section 52A, 53 and 54 of the Act

(vi) Any other matter contemplated by any provision of the Act.

Contents

1. Purpose of this NPRM

The purpose of this rule making proposal is to further update the Civil Aviation Rule Part 121 to correct editorial errors and to refine certain rules parts to make it more viable to the PNG aviation environment.

2. Background to the Proposal

2.1 General Summary

Proposed changes to rules parts, 121.87, 121.85 (duplicate), 121.161 and 121.603 included in this NPRM are related to grammatical errors requiring immediate change to provide clarity in their intent. This changes have no consequential amendments to other rules parts or any significant safety impact to the industry.

Proposed amendment to rule part 121.69 (a) (2) has evolved after continuous feedback from part 121 operators indicating how the requirement for the Runway End Safety Area (RESA) to be included on performance calculations is affecting the payload capacity of operators. Reduction of declared runway distance by 90m reduces payload significantly especially in high altitude aerodromes where performance is already limited by environmental factors.

A RESA is defined as an area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway. This rule requirement is not an ICAO annex 6 Part 1 standard and removing it will not deviate from Annex 6 requirements. RESA requirements are captured in ICAO Annex 14, Aerodrome Design and Operations and is addressed and adopted to CAR Part 139.

Furthermore, Part 121, subpart D Titled Performance, prescribes the aeroplane performance operating limitation for certificate holders to adhere to. Provided all operators comply to this rule requirement it reduces any safety risks identified or related to an aeroplane undershooting or overrunning a runway.

This rule was originally adopted from the CAA New Zealand CAR's during CASA PNG's rule transition phase. It has now become apparent through PNG operators that the rule requirement is currently not practical or a viable option in our existing aviation system.

2.2 NPRM Development

As a signatory to the convention on international civil aviation, Papua New Guinea is committed to aligning its regulations to ICAO SARPS and, where practicable other relevant Civil Aviation Authorities.

CASA PNG Rules Technical Working Group has incorporated changes into this rule part after credible industry feedback and after internal review of the CASA PNG rules.

Refer section 4 for the summary of changes.

2.3 Key Stakeholders

The Civil Aviation Safety Authority identifies the following as key stakeholders for the proposed rule amendments contained in this NPRM:

- The Civil Aviation Safety Authority
- The Minister for Transport
- The Minister for Civil Aviation
- Aircraft operators
- Aircraft maintenance organizations
- Other aviation industry stakeholders

3. Issues Addressed during Development

3.1 Consequential Amendments

There are no other consequential amendments in other Rule Parts.

3.2 Exemptions

There are no current Exemptions against this Rule Part.

3.3 ICAO SARPS and Level of Risk to Papua New Guinea Aviation Safety

The proposed rule amendments are intended to align, where practicable, ICAO Annex 6 Part I.

3.4 Compliance Costs

The proposed amendments will not incur any cost.

4. Summary of changes

- 121.69 (a) (2) - Sub paragraph deleted as per brief in section 2.1 and (3) renumber to (2).
- 121.87 (c) - Deleted entire paragraph (c) due duplication to paragraph (b)
- Deleted Duplicated rule inserted after current rule 121.105. Hence Deleted Entire Paragraph incorrectly labelled as 121.85. This paragraph is Duplicate of 121.103 _ Search and Rescue Information.
- 121.161 (c) – amended rule reference in paragraph.
- 121.603 (b) (2) - Standardising spelling of "authorise" to UK English

5. Legislative Analysis

5.1 Power to Make Rules

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 allows the Minister to make rules for the purpose of the implementation of Papua New Guinea's obligations under the Convention:

(b) Section 69(b) which allows the Minister to make rules for the purpose of assisting aviation safety and security, including (but not limited to) personal security:

(c) Section 69(5) which allows the Minister to make rules that provide for matters to be determined or approved by the Authority, the Director, or any other person or empower the Authority, the Director or any other person to impose requirements, or conditions on the performance of any activity including but not limited to procedures to be followed:

(d) Section 70(c) which allows the Minister to make rules providing for general operating rules, air traffic rules, and flight rules, including but not limited to the following:

(i) the conditions under which aircraft may be used or operated, or under which any act may be performed in or from an aircraft:

(ii) the prevention of aircraft endangering persons or property.

(e) Section 72(a) which allows the Minister to make rules for the designation, classification, and certification of all or any of the following:

(i) aircraft:

(ii) aircraft pilots:

(iii) flight crew members:

(iv) air traffic service personnel:

(v) aviation security service personnel:

(vi) aircraft maintenance personnel:

(vii) aviation examiners or medical examiners:

(viii) air services:

(ix) air traffic services:

(x) aerodromes and aerodrome operators:

(xi) aeronautical navigation service providers:

(xii) aviation training organizations:

(xiii) aircraft design, manufacture, and maintenance organizations:

(xiv) aeronautical procedures:

(xv) aviation security services:

(xvi) aviation meteorological services:

(xvii) aeronautical communication services:

(xviii) any other person who provides services in the civil aviation system, and any aircraft, aeronautical products, aviation related services, facilities, and equipment operated in support of the civil aviation system, or classes of such persons, aircraft, aeronautical products, aviation related services, facilities, and equipment operated in support of the civil aviation system:

(f) Section 70(b) which allows the Minster to make rules for the setting of standards, specifications, restrictions, and licensing requirements for all or any of those persons or things specified in paragraph 70(a) including the specifications of standards of design, construction, manufacture, processing, testing, supply, approval, and identification of aircraft and aeronautical products:

(g) Section 70(c) which allows the Minister to make rules setting the conditions of operation of foreign aircraft and international flights to, from, or within Papua New Guinea:

(h) Section 70(d) which allows the Minister to make rules for the definitions, abbreviations, and units of measurement to apply within the civil aviation system.

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

5.2 Matters to be taken into account

The development of this NPRM and the proposed rule changes take into account the matters under section 75 of the Act that the Minister must take into account when making ordinary rules including the following:

5.2.1 ICAO Standards and Recommended Practices

The proposed rule amendments comply with applicable sections of the International Civil Aviation Organization (ICAO) Annexes listed in 3.3 above.

5.2.2 Assisting Economic Development

The proposed rule amendments will have no detrimental impact on economic development, and in some cases will reduce costs incurred by the aviation industry.

5.2.3 Assisting Safety and Personal Security

The proposed rule will have no detrimental impact on safety and personal security.

5.2.4 Improving Access and Mobility

The proposed rule amendments will have no impact on access and mobility.

5.2.5 Protecting and Promoting Public Health

The proposed rule amendments will have no impact on protecting and promoting public health.

5.2.6 Ensuring Environmental Sustainability

The proposed rule amendments will have no impact on environmental sustainability

6. Submissions on the NPRM

6.1 Submissions are invited

Interested persons are invited to participate in the making of the proposed rules by submitting written data, views, or comments. All submissions will be considered before final action on the proposed rulemaking is taken. If there is a need to make any significant change to the rule requirements in this 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 on the CAA web site and provided to each person who submits a written submission on this NPRM. Submissions may be examined by application to the Docket Clerk at the Civil Aviation Safety Authority Headquarter Building 1, Level 1, Morea Tobo Road, Six Mile, NCD Port Moresby 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 CASA office.

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.

7. How to make a submission

Submissions may be sent by the following methods:

by Mail:	Docket Clerk (NPRM 21 29) Civil Aviation Safety Authority PO Box 1941 **BOROKO** National Capital District
delivered:	Docket Clerk (NPRM 21 29) Civil Aviation Safety Authority Morea-Tobo Road Six Mile, Jacksons Airport Port Moresby NCD
by Fax:	Docket Clerk (NPRM 21 29) 3251789 / 325 1919
by Email:	Docket Clerk (NPRM 21 29) rules@casapng.gov.pg

7.1 Final date for submissions

Comments must be received before ***COB, 24 September 2021.***

7.2 Availability of the NPRM

Any person may obtain a copy of this NPRM from- CASA web site:
www.casapng.gov.pg

or at a cost from

Docket Clerk

Civil Aviation Safety Authority Headquarter
Building 1, Level 1
Morea-Tobo Road
Six Mile, Jacksons Airport
Port Moresby NCD

7.3 Further information

For further information, contact:

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Proposed Rule Amendments
Part 121 Air Operations – Large Aeroplanes\

121.69 Use of aerodromes

(a) A holder of an air operator certificate must ensure that an aeroplane performing an air operation under the authority of the holder's certificate does not use an aerodrome for landing or taking off unless:

(1) the aerodrome has physical characteristics, obstacle limitation surfaces, and visual aids that meet the requirements of—

(i) the characteristics of the aeroplane being used; and

(ii) the lowest meteorological minima to be used.

(2) ~~if the operation is a regular air transport service operating to, from, or outside Papua New Guinea after 1 January 2017-~~

~~(i) each runway at an aerodrome within Papua New Guinea that is used for the operation has a RESA at each end of the runway in accordance with the requirements of Part 139 Appendix C.4; or~~

~~(ii) if the runway does not have a RESA as required in paragraph (a)(2)(i), the certificate holder must ensure that the take-off and landing performance calculations for the aeroplane are based on a reduction of the appropriate declared distances for the runway to provide the equivalent of a 90m RESA at the overrun end of the runway strip; and~~

~~(iii) each runway at an aerodrome outside of Papua New Guinea that is used for the operation has RESA that extends to at least 150m from the overrun end of the runway, or an engineered equivalent that is acceptable to the Director; or~~

~~(iv) if the runway does not have a RESA or an engineered equivalent as required in paragraph (a)(2)(iii), the certificate holder must ensure that the take-off and landing performance calculations for the aeroplane are based on a reduction of the appropriate declared distances for the runway to provide the equivalent of the RESA required in paragraph (a)(2)(iii) at the overrun of the runway.~~

~~(3)~~ (2) subject to their published condition of use, the aerodromes and their facilities are kept continuously available for flight operations during their published hours of operations, irrespective of weather conditions.

(b) A holder of an air operator certificate must ensure that an aeroplane performing an air operation under the authority of the holder's certificate does not use an aerodrome for landing of taking off unless the aerodrome has –

(1) when so required by the Director, rescue fire equipment that is appropriate to the aeroplane type; and

(2) for turbojet and turbofan powered aeroplanes, an operating visual approach

slope indicator system except when the aeroplane is performing a precision instrument approach that includes glideslope guidance.

(c) A holder of an air operator certificate must ensure that an aeroplane performing an air operation under the authority of the holder's certificate does not use an aerodrome for landing or taking off unless the aerodrome is specified, individually or by grouping, in the certificate holder's exposition.

(d) Notwithstanding paragraph (e)(1), an aerodrome specified under paragraph (c), that is to be used as an alternate aerodrome by an aeroplane that has a certificated seating capacity of more than 20 passengers and is engaged on domestic air operations, may be a non-certificated aerodrome.

(e) Each aerodrome specified in the certificate holder's exposition under paragraph (c), that is to be used by an aeroplane that has a certificated seating capacity of more than 20 passengers and is engaged on a regular air operation, must be an aerodrome that—

(1) for Papua New Guinea aerodromes, is associated with an aerodrome operating certificate issued in accordance with Part 139; or

(2) for aerodromes outside Papua New Guinea, is associated with a certificate that meets a standard that is equivalent to that required under Part 139 and issued by an ICAO contracting State.

(f) A holder of an air operator certificate must ensure the following information specified in a route guide or similar, for each aerodromes or groups of aerodromes specified under paragraph (c)—

(1) the route or segment of a route;

(2) the necessary level of flight crew training;

(3) the minimum flight crew experience;

(4) the flight crew pairing restrictions;

(5) the type of authorised flight operations.

(6) for non-certificated aerodromes used in accordance with the provisions of paragraph (d)-

(i) the aerodrome data; and

(ii) procedures for ensuring that the condition of the aerodrome is safe for that operation; and

(iii) procedures for ensuring that the condition of any required equipment, including safety equipment, is safe for that operation; and

(iv) details of any limitations on the use of the aerodrome.

(g) Except as provided in paragraph (h), a holder of an air operator certificate must ensure that any aeroplane performing an air operation under the authority of the holder's certificate does not land at or take off from a runway unless-

(1) the width of the runway to be used is at least that width determined in accordance with Table 2 of Appendix B.

(2) the width of the runway strip for the runway to be used is at least that width

determined in accordance with Appendix B for the aeroplane and the runway type.

(h) A runway that has a width that is less than that required under paragraph (g) may be used by an aeroplane performing an air operation under the authority of an air operator certificate if-

(1) a lesser runway width is determined by certificated flight testing and is prescribed in the aeroplanes flight manual; or

(2) a lesser runway width is acceptable to the Director.

121.87 Refuelling and de-fuelling operations

(a) Despite the requirements of rule 91.15(2), a person operating an aeroplane under the authority of an air operator certificate may refuel or defuel the aeroplane with a Class 3.1 C or a Class 3.1D flammable liquid (aviation turbine grade fuel) when a person is embarking, on board, or disembarking the aeroplane, providing the person operating the aeroplane ensures that-

(1) safety and aeroplane evacuation precautions are taken in accordance with procedures specified in the certificate holder's exposition; and

(2) two-way communication must be maintained by the aeroplanes inter-communication system or other suitable means between the ground crew supervising the refuelling and the qualified personnel on board the aeroplane.

(b) A person operating an aeroplane under the authority of an air operator certificate may refuel or defuel the aeroplane with a Class 3.1C or a Class 3.1D flammable liquid (aviation turbine grade fuel) with one or more propulsion engines running, provided that—

(1) every passenger is disembarked under supervision of a crew member and is clear of the immediate area before refuelling or defueling commences; and

(2) the pilot-in-command is responsible for every aspect of the fuelling operation.

~~(c) A person operating an aeroplane under the authority of an air operator certificate may refuel or defuel the aeroplane with a Class 3.1C or a Class 3.1D flammable liquid (aviation turbine grade fuel) with one or more propulsion engines running, provided that—~~

~~(1) every passenger is disembarked under supervision of a crew member and is clear of the immediate area before refuelling or defueling commences; and~~

~~(2) the pilot-in-command is responsible for every aspect of the fuelling operation.~~

121.105 Aircraft Tracking

(a) Each holder of an air operator certificate shall;

(1) establish an aircraft tracking capability to track aeroplanes throughout its area of operation;

(2) track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) that is planned in an oceanic area(s) under the following conditions:

(i) the aeroplane has a maximum certificated take-off mass of over 45 500 kg and a seating capacity greater than 19;

(ii) where an ATS unit obtains aeroplane position information at greater than 15 minute intervals

(b) Each holder of an air operator certificate shall establish procedures, approved by the Director for the retention of aircraft tracking data to assist SAR in determining the last known position of the aircraft.

~~121.85 Ground proximity warning system requirements~~

~~Each holder of an air operator certificate must ensure the ensure that all relevant information concerning the search and rescue services in the area over which the aeroplane will be flown is available on board.~~

121.161 IFR departure limitations

The pilot-in-command shall not commence a flight under IFR when the meteorological conditions at the aerodrome of departure are below the authorised minimum altitude prescribed under Part 95 for the instrument approach procedure likely to be used at the aerodrome of departure, unless there is an aerodrome meeting the requirements of 121.69 —

(1) for a two engine aeroplane, within a maximum of one-hour flying time, in still air at one engine inoperative cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass; or

(2) for an aeroplane having three or more engines, within a maximum of two hours flying time, in still air at an all engines operating cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass; or

(3) for aeroplanes engaged in extended diversion time operations (EDTO) where an alternate aerodrome meeting the distance criteria of ~~a)~~ (1) or ~~b)~~ (2) is not available, the first available alternate aerodrome located within the distance of the operator's specified maximum diversion time considering the actual take-off mass.

121.603 Operational competency assessment programme

(a) The certificate holder shall establish an operational competency assessment programme in accordance with this Subpart that is controlled by the certificate

holder.

(b) The certificate holder may—

(1) conduct the operational competency assessment programme; or

(2) contract with the holder of an aviation training organization certificate issued under Part 141, to conduct the operational competency assessment programme where the Part 141 certificate authorises the holder to conduct that training; or

(3) for an operational competency assessment programme conducted outside Papua New Guinea, contract with an organization that meets an equivalent standard specified by Part 141.

(c) The certificate holder shall ensure that the person responsible for its operational competency assessment programme holds a flight examiner rating or is a person approved for that purpose.