



**PURSUANT** to Section 30 of the Civil Aviation Act 1990

**I, STEVEN JOYCE**, Minister of Transport,

**HEREBY MAKE** the following ordinary rules.

**SIGNED AT** Wellington

This *11<sup>th</sup>* day of *October* 2011

by **STEVEN JOYCE**

Minister of Transport

**Civil Aviation Rules**

**Part 115, Initial Issue**

**Adventure Aviation – Certification and Operations**

*Docket 5/CAR/1*

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### **Rule objective**

The objective of Part 115 is to introduce a new rule Part for the purpose of regulating the adventure aviation industry. Part 115 will require adventure aviation operators to be certificated in much the same way as air transport operators who use helicopters and small aeroplanes and are required to be certificated under Part 119/135. In particular, operators will need to satisfy the Director, through their exposition, that:

- they have appropriate management systems, structures, and operating procedures in place to ensure compliance with the relevant safety standards;
- employees are appropriately qualified, and trained;
- equipment is appropriate to the task and properly maintained; and
- key people are fit and proper to undertake their responsibilities.

### **Extent of consultation**

The Director was approached by interested parties in the early 1990's requesting that a rule be developed to allow the carriage of passengers for hire or reward in aircraft engaged in activities that could best be described as 'adventure aviation'. The basic concepts were discussed in 1994 at an industry meeting that was attended by CAA. The concepts included types of aircraft eligible, and passengers flying at their own risk.

In 1996 McGregor & Company and Aviation Consultancy Services Pty Ltd presented a report to the Civil Aviation Authority on adventure aviation. The report concluded that the adventure aviation sector should be either regulated or stopped. As a result, CAA agreed to proceed with the selection of a Civil Aviation Rules Advisory Group (CIRAG) for the development of Rule Part 115 Adventure Aviation.

Part 115 was originally put to the industry as an NPRM in 1999. This NPRM attracted a number of comments, and prompted a review of CAA's policy which limited proposed "extreme" activities. The Part 115 Project was suspended in June 2002 due to other CAA priorities.

In 2003, the industry and CIRAG requested that the CAA undertake another review to determine the need for Part 115. The request was based on a concern that operational standards for adventure aviation operators were below the standards required for Part 135 certificate holders.

In July 2006, the Director agreed to introduce a new Part 115 rule development project with updated regulatory objectives that reflect the contemporary environment. Prior to the publication of notice of proposed rulemaking (NPRM) 10-02, the rule development project for Part 115 was undertaken in consultation with a project working group (PWG) that consisted of representatives from each of the adventure aviation industry sectors (i.e. hot air ballooning; hang gliding; paragliding; gliding; parachuting; special category aircraft – warbirds; and microlight aircraft operations).

NPRM 10-02, containing the proposed amendment to Part 115 was issued for public consultation under Docket 5/CAR/1 on 23 September 2010.

The publication of the NPRM was notified in the Gazette (No. 124) on 23 September 2010. The NPRM was published on the CAA web site and mailed to identified stakeholders.

A period of 42 working days to 19 November 2010 was allowed for comment on the proposed rule.

### **Summary of submissions**

A total of 33 written submissions were received on the NPRM. The submissions were considered and the following changes were made as a result of the comments:

- Rule 115.13(b)(2) – Amend by inserting “except for hot air balloons, hang gliders, and paragliders”. Delete “including any applicable launch sites and landing areas”.
- Rule 115.19(b) – Amend by deleting the requirement for certificate holders to submit notification of certificate renewal to the CAA at least 60 days before the expiry of their current certificate.



- Rule 115.53(b) – Reformat rule and insert reference to organisations certificated in accordance with Part 149.
- Rule 115.77 – Amend the organisational management system requirements to align with the current requirements stated in rule 119.124.
- Rule 115.79(a)(8)(ii) – Amend the requirement for adventure aviation operator exposition by including “the briefing of training to be provided to each passenger in the safety and emergency procedures applicable to the type of adventure aviation operation to be performed”.
- Rule 115.205 – Amend by deleting “applicable to the type of adventure aviation operations to be performed”.
- Rule 115.207 – Amend by deleting the requirement for hot air balloons to be equipped with an axe, and delete requirement for gliders to be equipped with a fire extinguisher.
- Rule 115.211(b) – Amend by deleting “and” after aircraft flight manual and inserting “or”.
- Rule 115.215 – Amend the requirement for manipulation of flight controls by inserting a reference to rules 115.613 and 115.667. Insert new rules 115.613 and 115.667.
- Rule 115.217(b)(1) – Amend by changing the requirement from “must not plan to operate the balloon over water” to “must not plan to operate the balloon over any lake or sea”.
- Rule 115.219(a)(2) – Amend by deleting paragraph (a)(2) and reformatting paragraph (a). The proposed wording created a redundant requirement to those already stated in rule 105.15.
- Rule 115.301(b)(2) – Amend requirement for contract training by inserting a reference to organisations certificated in accordance with Part 149.

- Rule 115.311(2) – Amend flight crew member instructor qualifications for glider operations by adding a new paragraph (iv).
- Rule 115.503 – Amend by deleting the requirement for hot air balloons to be equipped with an Emergency Locator Transmitter (ELT).
- Rule 115.507(3) – Amend hot air balloon pilot qualification and experience requirements by reducing the number of hours for the PIC of a hot air balloon from 200 to 100, and by further reducing the number of hours as PIC in the type of balloon used for the operation from 20 to 10.
- Rule 115.557 – Amend incorrect references by deleting “91.705(b)(7) and (8) and 91.705(c)” and inserting 91.705(c)(1), (c)(2), and (d).
- Rule 115.571(1) – Amend by inserting a reference to the standards prescribed in Appendix A.25 of Part 91 or an “equivalent” standard that is acceptable to the Director.
- Rule 115.575 – Amend by inserting a new paragraph (3) requiring the procedures for a tandem parachute operation to be at least equivalent to the procedures required for a parachute organisation certificated in accordance with part 149.
- Rule 115.577 – Amend by inserting a requirement for tandem masters to comply with the privileges and limitations of the parachute certificate issued in accordance with rule 105.5(a)(3).
- Rule 115.607(3)(i) – Amend by deleting “exercising the privileges of a commercial pilot”.
- Rule 115.609(5)(i) – Amend by changing “commercial pilot licence” and inserting “current pilot licence”.
- Rule 115.611 – Delete rule prohibiting glider winch launches and renumber remaining rules in Subpart L.

- Rule 115.613 – Amend by inserting rule to allow manipulation of flight controls of a glider by a passenger.
- Rule 115.651 – Amend by inserting current airworthiness standards for hang gliders and paragliders and by including a reference to an “equivalent” standard that is acceptable to the Director.
- Rule 115.653 – Amend by deleting the requirement for a paraglider to be equipped with an airspeed indicator, and by deleting the requirement for hang gliders and paragliders to be equipped with an ELT. Further amend by deleting reference to “reserve parachute” and inserting “emergency parachute”.
- Rule 115.663 – Amend by deleting the requirement for hang glider operators to ensure that passengers are equipped with back protection devices (only applies to paragliders), and insert requirement for paraglider operators to ensure that the back protection device is one that is acceptable to a hang gliding organisation certificated in accordance with Part 149.
- Rule 115.667 – Amend by inserting rule to allow manipulation of flight controls of hang glider or paraglider by a passenger as prescribed in rule.
- Rule 115.757 – Amend by changing the pilot-in-command qualification requirements for special aircraft operations from 500 hours to 300 hours.

### **Examination of submissions**

Submissions may be examined by application to the Docket Clerk at the Civil Aviation Authority between 8:30 am and 4:30 pm on weekdays, except statutory holidays.

### **Insertion of Amendments**

A new Part 115 is inserted.

### **Effective date of rule**

The new Part 115 comes into force on 10 November 2011.

### **Availability of rules**

Civil Aviation Rules are available from–

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

Freephone: 0800 GET RULES (0800 438 785)

*The following new rule Part is inserted:*

## **Part 115 Adventure Aviation – Certification and Operations**

### **Subpart A — General**

#### **115.1 Purpose**

This Part prescribes the requirements for the certification and operation of a person conducting an adventure aviation operation.

#### **115.3 Definitions**

In this Part—

**Adventure aviation aerobatic operation** means an adventure aviation operation that incorporates aerobatic flight:

**Adventure aviation formation flight operation** means an adventure aviation operation that incorporates formation flight:

**Ground crew member** means a person who is necessary for the safety of an adventure aviation operation that has been assigned by the holder of an adventure aviation operator certificate for ground-based duty and has been trained in accordance with the operator's approved training programme.

**Simulated military operation** means adventure aviation operation comprising one or more aircraft carrying out manoeuvres such as a mock dogfight or tail chase, or one or more aircraft carrying out a military flight profile:

#### **115.5 Requirement for certificate**

A person must not perform an adventure aviation operation except under the authority of, and in accordance with the privileges of, an adventure aviation operator certificate that has been issued by the Director under the Act and this Part.

#### **115.7 Application for certificate**

An applicant for the grant of an adventure aviation operator certificate must complete form CAA 24115/01 and submit it to the Director with—

- (1) the applicant's exposition required by rule 115.79; and
- (2) the details for the operations specifications specified in rule 115.13(b).

### **115.9 Issue of certificate**

An adventure aviation operator certificate may be issued by the Director under the Act and this Part if the Director is satisfied that—

- (1) the applicant meets the applicable requirements of Subpart B; and
- (2) the applicant and the applicant's senior persons required by rules 115.51(a)(1) and (2) are fit and proper persons; and
- (3) the granting of the certificate is not contrary to the interests of aviation safety.

### **115.11 Privileges of certificate holder**

(a) An adventure aviation operator certificate and the accompanying operations specifications specify the types of adventure aviation operations that the certificate holder is authorised to perform.

(b) An adventure aviation operator certificate and the accompanying operations specifications may authorise the certificate holder to—

- (1) conduct any of the following adventure aviation operations:
  - (i) an A to A flight in an aeroplane or helicopter issued with a *standard category* airworthiness certificate conducting formation flight, aerobatic manoeuvres, and similar non-standard flight manoeuvres such as steep climbs, steep descents, and steep turns:
  - (ii) an A to A flight (including an interim water landing for amphibious aircraft) in an aircraft issued with a *special category-primary*, *special category-LSA*, or *special category-limited* airworthiness certificate including formation flight, aerobatic manoeuvres, and similar non-standard flight manoeuvres such as steep climbs, steep descents, and steep turns:

- (iii) an A to A flight in a Class 2 microlight aircraft:
  - (iv) a flight in a hot air balloon:
  - (v) a flight in a glider:
  - (vi) a parachute-drop aircraft operation:
  - (vii) a tandem parachute operation:
  - (viii) a tandem hang glider or paraglider flight; and
- (2) conduct ground or flight training under the training programme required by rule 115.301; and
  - (3) conduct tests or check flights under the operational competency assessment programme required by rule 115.351; and
  - (4) conduct tests or checks to determine the competence of other persons providing the services or carrying out the operations listed in the certificate holder's exposition.

### **115.13 Operations Specifications**

- (a) An adventure aviation operator certificate issued by the Director under the Act and this Part is to be accompanied by operations specifications that meet the requirements specified in paragraph (b).
- (b) The operations specifications must include the following—
  - (1) details to identify the physical location of the certificate holder's principal base of operations:
  - (2) except for hot air balloon, hang glider and paraglider operations, details to identify each location that the certificate holder is authorised to use for the purpose of conducting the adventure aviation operations referred to in paragraph (5):
  - (3) the certificate holder's address for service in New Zealand:

- (4) a list of any business names under which the certificate holder may operate:
- (5) a list of the types of adventure aviation operations that the certificate holder is authorised to conduct:
- (6) a list of the type, serial number, identification, and registration if applicable, of each aircraft that the certificate holder is authorised to use for the adventure aviation operations referred to in paragraph (5):
- (7) except for hot air balloon, hang glider and paraglider operations, a list of the routes and areas of operations that the certificate holder is authorised to use for the adventure aviation operations referred to in paragraph (5), including any limitations or maximum operating distances from a point of departure for an adventure aviation operation:
- (8) a list of any exemptions granted to the certificate holder from a requirement prescribed in this Part or any other applicable Part:
- (9) details of any safety limitation or requirement that is applicable to an adventure aviation operation referred to in paragraph (5):
- (10) details of any other condition that the Director determines is necessary to cover a particular situation.

#### **115.15 Maximum period**

An adventure aviation operator certificate may be granted or re-issued for a maximum period of 5 years.

#### **115.17 Notification of termination of operations**

A holder of an adventure aviation operator certificate that terminates adventure aviation operations must notify the Director of the termination in writing within 30 days of the date of termination.



### **115.19 Re-issue of certificate**

A holder of an adventure aviation operator certificate must make an application for the re-issue of an adventure aviation operator certificate on form CAA 24115/01 under rule 115.7.

### **115.21 Transitional arrangements**

(a) Despite rule 115.5, and except for operations using an aircraft issued with a *special category* airworthiness certificate, a person conducting an adventure aviation operation immediately before 10 November 2011 is not required to comply with this Part until—

- (1) for a hot air balloon, a hang glider, a paraglider, a tandem parachute, or a parachute-drop aircraft, 1 May 2012; and
- (2) for a microlight aircraft, 1 November 2012; and
- (3) for a glider, 1 May 2013.

(b) Despite rule 115.5, a person conducting an adventure aviation operation under the authority of an air operator certificate issued by the Director under the Act and Part 119 may continue to conduct adventure aviation operations until the expiry of that certificate or 10 November 2012, whichever comes first.

## **Subpart B — Adventure Aviation Operator Certification Requirements**

### **115.51 Qualifications and experience of senior persons**

(a) An applicant for the grant of an adventure aviation operator certificate must employ, contract, or otherwise engage—

- (1) a senior person identified as the chief executive who—
  - (i) has the authority within the applicant's organisation to ensure that every activity undertaken by the organisation can be financed and carried out in accordance with the requirements and standards prescribed by this Part; and

- (ii) is responsible for ensuring that the organisation complies with this Part; and
  - (2) a senior person or persons—
    - (i) responsible for ensuring that the applicant's organisation complies with its exposition; and
    - (ii) responsible for the functions referred to in paragraph (b)(1); and
    - (iii) ultimately responsible to the chief executive; and
  - (3) sufficient personnel to plan, perform, supervise, inspect, and certify the operations listed in the applicant's exposition.
- (b) The senior person or persons required by paragraph (a) must—
- (1) unless otherwise acceptable to the Director as a consequence of the size and expected scope of the applicant's organisation, each be responsible for not more than one of the following functions—
    - (i) adventure aviation operations, including the flight and descent operations and any applicable ground support operations:
    - (ii) crew member and ground crew training and competency assessment:
    - (iii) the control and scheduling of maintenance (Maintenance Controller):
    - (iv) the organisational management system:
    - (v) conducting occurrence investigations under Part 12; and
  - (2) hold the minimum qualifications and experience listed in Appendix A as applicable to the function for which the person is responsible.

**115.53 Personnel competency requirements**

(a) An applicant for the grant of an adventure aviation operator certificate must establish procedures for the planning, performance, supervision, inspection and certification of adventure aviation operations listed in the applicant's exposition, including—

- (1) initial assessment and maintenance of the competence of the personnel authorised by the certificate holder to plan, perform, supervise, inspect, or certify the adventure aviation operations listed in the applicant's exposition; and
- (2) providing written authorisation to the personnel referred to in paragraph (1), which includes the scope of the authorisation.

(b) An applicant may contract with an aviation training organisation certificated under Part 141, or an appropriate aviation recreation organisation certificated under Part 149, that is appropriately authorised under that certificate to perform the functions of checking to assess, or training to maintain, the competence of the applicant's personnel under paragraph (a)(1).

(c) An applicant that contracts with an organisation under paragraph (b) must include in its exposition details of—

- (1) the functions to be contracted to the organisation; and
- (2) the scope of the checking or training to be carried out by the organisation; and
- (3) the authority of the organisation in respect of the checking and training functions to be carried out.

**115.55 Resource requirements**

(a) An applicant for the grant of an adventure aviation operator certificate must provide resources, acceptable to the Director—

- (1) for conducting the adventure aviation operations listed in the applicant's exposition; and
- (2) that must, where appropriate, include—

- (i) accommodation, offices, workshops, hangars, and buildings; and
  - (ii) equipment, tools, material, training aids, data, and documentation necessary to conduct the operations listed in the applicant's exposition.
- (b) The applicant must ensure that the environment it provides—
- (1) is appropriate for the tasks to be performed; and
  - (2) where appropriate, offers protection from weather elements.

### **115.57 Proving flights or tests**

- (a) An applicant for the grant of an adventure aviation operator certificate must, if required by the Director, perform proving flights or tests to satisfy the Director that the applicant can meet the relevant requirements prescribed in this Part or any other applicable Part.
- (b) The flights or tests must be performed in a manner acceptable to the Director.

### **115.59 Maintenance procedures**

- (a) An applicant for the grant of an adventure aviation operator certificate must establish procedures for ensuring the continued airworthiness of—
- (1) every aircraft that is operated under the authority of the certificate; and
  - (2) any equipment installed in or attached to the aircraft.
- (b) An applicant for the grant of an adventure aviation operator certificate that contracts with another person to perform maintenance on the applicant's aircraft or equipment must include in the exposition required by rule 115.79 details of—
- (1) the functions to be transferred to the other person; and
  - (2) the scope of the maintenance to be carried out by the other person; and

- (3) the authority of the other person in respect of the functions and maintenance to be carried out.

### **115.61 Maintenance programme**

(a) An applicant for the grant of an adventure aviation operator certificate must establish a maintenance programme for every aircraft, including a parachute assembly, that is operated under the authority of the certificate.

(b) The maintenance programme required by paragraph (a) must include—

- (1) the type, serial number, identification, and registration mark if applicable, of each aircraft that is subject to the programme; and
- (2) instructions and procedures for the performance of maintenance on the aircraft including any required inspection and test of the aircraft and its components, together with details of the parts and areas that—
  - (i) must be inspected; and
  - (ii) could result in a failure, malfunction, or defect endangering the safe operation of the aircraft if maintenance is not performed properly or if an improper part or material is used; and
- (3) a schedule for the performance of the maintenance under paragraph (2) expressed in terms of the time in service, cycles, calendar time, number of system operations, or any combination of these; and
- (4) procedures for inducting an aircraft onto the maintenance programme; and
- (5) procedures for ensuring that every inspection required by the programme is performed; and
- (6) procedures for recording defects, including examples of records; and

- (7) procedures for the correction or deferral of defects found during maintenance; and
  - (8) procedures for the retention of—
    - (i) the maintenance records under rule 91.623; or
    - (ii) for a parachute assembly, a hang glider, or a paraglider—
      - (A) a description of the work performed, or a reference to data acceptable to the Director; and
      - (B) the name of the person certifying the release-to-service for the work if the work is to be performed by a person outside the applicant’s maintenance organisation.
- (c) The instructions and procedures required by paragraph (b)(2) must be equivalent to—
- (1) the applicable requirements prescribed in Subpart G of Part 91; and
  - (2) the applicable requirements prescribed in this Part; and
  - (3) the manufacturer’s maintenance schedule.

### **115.63 Documentation**

- (a) An applicant for the grant of an adventure aviation operator certificate must establish procedures for controlling, amending, and distributing the documentation required by any applicable Part, including but not limited to Parts 91 and 115.
- (b) The procedure referred to in paragraph (a) must require that—
- (1) all documentation is reviewed and authorised by the appropriate senior person before issue; and
  - (2) current issues of all relevant documents are available to personnel at each location where they need access to such

documentation, in either hard copy, electronic, or other form acceptable to the Director; and

- (3) all obsolete documentation is promptly removed from all points of issue or use; and
- (4) changes to documentation are reviewed and approved by the appropriate senior person; and
- (5) the current version of each item of documentation can be identified to preclude the use of superseded material.

### **115.65 Records—personnel**

An applicant for the grant of an adventure aviation operator certificate must establish procedures for ensuring that—

- (1) an accurate record is maintained of—
  - (i) each employee who, in the performance of his or her duties, is required to be the holder of a licence, rating or certificate; and
  - (ii) each employee who is exercising any delegation of the Director’s functions or powers; and
  - (iii) each employee who is exercising any authorisation granted by the certificate holder; and
- (2) the record includes details of—
  - (i) the relevant experience, qualifications, and training of each employee referred to in paragraph (1); and
  - (ii) the scope, validity, and currency of any licence, rating, or certificate referred to in paragraph (1)(i); and
  - (iii) the delegations referred to in paragraph (1)(ii); and
  - (iv) the authorisations referred to in paragraph (1)(iii); and

- (3) the record is retained for 6 years from the date that the employee—
  - (i) ceases to perform duties requiring a licence, rating, or certificate; or
  - (ii) ceases to exercise any delegation or authorisation.

### **115.67 Records—resources**

An applicant for the grant of an adventure aviation operator certificate must establish procedures for ensuring that details are accurately recorded of any required testing, checking, and calibration of resources used in carrying out the operations specified on the certificate.

### **115.69 Flight authorisation and control**

An applicant for the grant of an adventure aviation operator certificate must establish procedures for ensuring that the adventure aviation operations conducted by the certificate holder are authorised by the person referred to in rule 115.51(b)(1)(i).

### **115.71 Flight following service**

- (a) An applicant for the grant of an adventure aviation operator certificate must establish procedures for ensuring that a flight following service is provided for each adventure aviation operation that is conducted under the authority of the certificate.
- (b) The procedures required by paragraph (a) must require that for each adventure aviation operation the person providing the flight following service—

- (1) has the following information:
  - (i) the aircraft registration or identification markings; and
  - (ii) the type of aircraft; and
  - (iii) the departure aerodrome or the location of the departure area and the intended landing area; and
  - (iv) the fuel endurance, if applicable; and



- (v) the total number of persons carried; and
  - (vi) the name and contact details of the adventure aviation operator; and
  - (vii) the details of the emergency and survival equipment carried on the operation available for immediate communication to rescue coordination centres; and
- (2) has a pre-arranged time for the completion of the adventure aviation operation; and
  - (3) has a time for re-establishing communications with the pilot-in-command if the flight is intended to operate in an area where communications cannot be maintained; and
  - (4) has details of any other arrangements that may be appropriate for the safety of the operation for the pilot-in-command to report to the flight following service; and
  - (5) makes timely notification to—
    - (i) the national rescue co-ordination centre; or
    - (ii) an organisation capable of taking emergency activation action that is acceptable to the Director—if the pilot-in-command fails to establish communications within the pre-arranged times under paragraphs (2), (3), or (4).

### **115.73 Establishment of procedures**

- (a) An applicant for the grant of an adventure aviation operator certificate must establish procedures for ensuring compliance with the applicable requirements prescribed in this Part and any other applicable Part.
- (b) The procedures required by paragraph (a) must—
  - (1) be applicable to the type of operation to be conducted; and

- (2) contain sufficient detail to show the means for complying with the particular requirement; and
- (3) contain sufficient detail to show how the safety risks associated with the intended operation will be managed; and
- (4) be acceptable to the Director.

### **115.75 Reporting of accidents and incidents**

An applicant for the grant of an adventure aviation operator certificate must establish procedures necessary for the notification, investigation, and reporting of all occurrences under Part 12.

### **115.77 Organisational management system**

(a) An applicant for the grant of an adventure aviation operator certificate must establish an organisational management system to ensure compliance with, and adequacy of, the procedures required by this Part.

(b) The organisational management system procedures must be of sufficient detail when considering the size and complexity of the operation to ensure that the appropriate organisational procedures are understood, implemented, and maintained at all levels of the organisation.

(c) The organisational management system must include—

- (1) a safety policy and safety policy procedures, including the procedure for occurrence investigations conducted under Part 12; and
- (2) a procedure for ensuring that personnel and customer feedback are monitored to identify existing problems or potential causes of problems within the system; and
- (3) a procedure for ensuring that problems, or potential problems, that have been identified within the system are—
  - (i) corrected; and

- (ii) checked to ensure that any corrections have been effective; and
- (4) a procedure for hazard identification; and
- (5) a procedure for risk assessment and mitigation; and
- (6) a procedure for checking that the organisation’s programmes and procedures achieve the stated aims of its safety policy; and
- (7) a procedure for ensuring that the management of the organisation continues to be effective in satisfying the requirements of this Part, including—
  - (i) a regular plan of review; and
  - (ii) regular feedback to personnel including the results of the review and any actions undertaken to correct problems identified.
- (d) The senior person who is responsible for the organisational management system must communicate with the Chief Executive on matters affecting safety.
- (e) Paragraph (c) does not apply to an applicant for the grant of an adventure aviation operator certificate that intends to conduct adventure aviation operations—
  - (1) with a total of 3 or less aircraft listed on the applicant’s operations specifications; and
  - (2) from a total of 2 or less bases.

### **115.79 Adventure aviation operator exposition**

- (a) An applicant for the grant of an adventure aviation operator certificate must provide the Director with an exposition that contains—
  - (1) a statement signed by the chief executive on behalf of the applicant’s organisation confirming that the exposition and any included manuals—

- (i) define the adventure aviation organisation and demonstrate its means and methods for ensuring ongoing compliance with the requirements prescribed in this Part and any other applicable Part; and
  - (ii) are required to be complied with by the organisation's personnel at all times; and
- (2) the titles and names of the senior persons required by rules 115.51(a)(1) and (2); and
- (3) the duties and responsibilities of the senior persons referred to in paragraph (2) including matters for which they have responsibility to deal directly with the Director on behalf of the applicant's organisation; and
- (4) if appropriate, an organisation chart showing lines of responsibility of the senior persons referred to in paragraph (2) and extending to each location referred to in paragraph (5); and
- (5) details of the principal place of operation and the main maintenance base; and
- (6) details of the applicant's procedures required by this Part; and
- (7) details of—
  - (i) the maintenance procedures required by rule 115.59 and rule 115.61; and
  - (ii) the maintenance programme required by rule 115.61; and
  - (iii) every maintenance organisation that performs maintenance on the applicant's aircraft; and
- (8) details of—
  - (i) the scheme for regulation and recording of flight and duty times required by Subpart G; and

- (ii) the briefing or training to be provided to each passenger in the safety and emergency procedures applicable to the type of adventure aviation operation to be performed; and
  - (iii) the emergency situation action plans required by rule 115.209; and
  - (iv) the flight crew and ground crew training programme required by Subpart E; and
  - (v) the crew member and ground crew competency assessment programme required by Subpart F; and
- (9) details of the programmes required, as appropriate, by this Part; and
- (10) procedures for controlling, amending, and distributing the exposition.
- (b) The exposition must remain acceptable to the Director.

## **Subpart C—Operating Limitations and Requirements**

### **115.101 Continued compliance**

- (a) A holder of an adventure aviation operator certificate must comply with the operations specifications required by rule 115.13.
- (b) A holder of an adventure aviation operator certificate must—
- (1) continue to meet the applicable standards and comply with the requirements of Subpart B; and
  - (2) comply with every procedure and programme detailed in the certificate holder’s exposition; and
  - (3) hold at each location specified in the certificate holder’s exposition—
    - (i) at least 1 current copy of the certificate holder’s operations specifications; and

- (ii) in hard copy, electronic, or other form acceptable to the Director and available to all of the certificate holder's staff, at least 1 current copy of the relevant sections of the certificate holder's exposition applicable to the operations at the location.

### **115.103 Flight crew qualifications**

(a) A holder of an adventure aviation operator certificate must not authorise any person to act as a flight crew member, and a person must not serve as a flight crew member, on an adventure aviation operation, unless the person holds the appropriate pilot licence, pilot certificate and rating, issued by the Director under the Act and Part 61 or the procedures of an appropriate aviation recreation organisation that is certificated under Part 149 to issue the pilot certificate or rating.

(b) A holder of an adventure aviation operator certificate must not authorise any person to act as a tandem master, and a person must not serve as a tandem master, on an adventure aviation operation, unless the person holds the appropriate tandem master certificate issued by the Director under the Act and in accordance with the procedures of an appropriate aviation recreation organisation that is certificated under Part 149 to issue the tandem master certificate.

### **115.105 Business or trading name**

(a) A holder of an adventure aviation operator certificate must conduct its adventure aviation operations using the trading or business name that appears on the certificate holder's certificate.

(b) A person must not perform an adventure aviation operation unless the trading or business name of the certificate holder conducting the adventure aviation operation is displayed in such a manner that it is clearly identifiable, visible, and legible to any intending passenger before the passenger boards the aircraft or participates in the adventure aviation operation.

(c) A holder of an adventure aviation operator certificate must ensure that any advertisement that is associated with the certificate holder's adventure aviation operations includes a clear reference to the business or trading name that appears on the certificate holder's adventure aviation operator certificate.

**115.107 Limitations of adventure aviation operator certificate holder**

A holder of an adventure aviation operator certificate must not conduct an air transport operation or a commercial transport operation under the authority of an adventure aviation operator certificate.

**115.109 Changes to certificate holder's organisation**

(a) Subject to paragraph (b), a holder of an adventure aviation operator certificate must—

- (1) ensure that the exposition required by rule 115.79 is amended—
  - (i) so as to remain a current description of the certificate holder's organisation; and
  - (ii) to ensure continued compliance with the applicable requirements prescribed in the Part or any other Part; and
- (2) ensure that any amendments made to its exposition meet the applicable requirements of this Part or any other Part and comply with the amendment procedures contained in its exposition; and
- (3) forward to the Director for retention a copy of each amendment to its exposition as soon as practicable after the amendment is incorporated into its exposition; and
- (4) amend its exposition as the Director considers necessary in the interests of aviation safety.

(b) If the holder of an adventure aviation operator certificate changes or proposes to change, any of the following, the certificate holder must notify the Director prior to the change or as soon as practicable if prior notification is not possible, and the change must be accepted by the Director, including applicable fit and proper person criteria under section 10 of the Act, before being incorporated into the certificate holder's exposition:

- (1) the person identified as the chief executive:

- (2) the title or name of any senior person specified in the exposition as required by rule 115.79:
  - (3) the locations referred to in rule 115.79(5), from which the certificate holder conducts adventure aviation operations:
  - (4) the scope of the certificate holder's certificate:
  - (5) the overall scope or intent of the organisation's management system required by rule 115.77:
  - (6) the maintenance programme required by rule 115.61:
  - (7) any contractor carrying out the certificate holder's maintenance:
  - (8) the scheme for regulation of flight and duty time required by rule 115.401:
- (c) The Director may specify conditions on an adventure aviation operator certificate during or following any of the changes specified in paragraph (b).
- (d) The certificate holder must comply with any conditions specified by the Director under paragraph (c).
- (e) If any of the changes referred to in paragraphs (b) require an amendment to the certificate or the operations specifications, the certificate holder must forward the certificate or the operations specifications to the Director as soon as practicable.

### **115.111 Changes to the maintenance programme**

A holder of an adventure aviation operator certificate must, upon the Director's request, amend the maintenance programme required by rule 115.61 if the Director considers that an amendment is necessary to satisfy the continuing airworthiness requirements of the programme.



## Subpart D — Flight Operations

### 115.201 Restriction or suspension of operations

(a) A holder of an adventure aviation operator certificate must ensure that an adventure aviation operation conducted under the authority of the holder's certificate is—

- (1) conducted under day VFR; and
- (2) conducted within the approved radius from the point of departure as specified in the certificate holder's operations specifications; and
- (3) for a tandem parachute operation, is conducted from the launch site(s) and landing area(s) authorised in the certificate holder's operations specifications, unless the tandem master, determines that in the immediate interest of safety, it is safer to conduct the landing at a location other than the location authorised in the operations specifications; or

(b) A holder of an adventure aviation operator certificate must not conduct an adventure aviation operation over a congested area of a city, town, or settlement, or over an open-air assembly of persons, unless the certificate holder's operations specifications authorise the specific type of adventure aviation operation to be conducted over a specified area of a city town, or settlement, or open-air assembly of persons.

(c) A holder of an adventure aviation operator certificate must, on becoming aware of any condition that is a hazard to safe operations, restrict or suspend operations as necessary until the hazard is removed.

### 115.203 Passenger safety

A person performing an adventure aviation operation must ensure that—

- (1) a passenger is not carried on an adventure aviation operation if the passenger appears to be under the influence of alcohol or drugs, or exhibits behavioural characteristics that may endanger the safety of the operation or it's participants; and

- (2) a disabled passenger is appropriately cared for, including allocation of seating and appropriate handling assistance if an emergency occurs.

### **115.205 Passenger training and briefing**

In addition to the applicable requirements of rule 91.211, a holder of an adventure aviation operator certificate must ensure that, before conducting an adventure aviation operation, each passenger receives appropriate briefing or training in the safety and emergency procedures under the procedures required by rule 115.79(a)(8)(ii).

### **115.207 Emergency equipment requirements**

A holder of an adventure aviation operator certificate must ensure that—

- (1) each aircraft other than a hang glider, paraglider, or tandem parachute, is equipped with—
  - (i) a first aid kit that meets the requirements of Appendix A.12 of Part 91 and is readily accessible to the occupants of the aircraft; and
  - (ii) except for a glider, a fire extinguisher that meets the requirements of Appendix A.13 of Part 91; and
  - (iii) except for a hot air balloon, or a glider, an axe that is readily accessible to the crew.
- (2) for a hang glider, paraglider or tandem parachute descent operation, the pilot in command, or tandem master has reasonable access to a first aid kit that is suitable for treatment of minor injuries.

### **115.209 Emergency situation action plans**

(a) A holder of an adventure aviation operator certificate must establish emergency situation action plans for handling in-air and on-ground emergency situations.

(b) The emergency situation action plans required by paragraph (a) must be based upon data and information relating to but not restricted to—

- (1) the type and length of the adventure aviation operation including the types of routes or areas over which operations are carried out; and
  - (2) aerodrome, launch site, and landing area ground facilities; and
  - (3) local emergency services; and
  - (4) ATC facilities; and
  - (5) the type of the aircraft likely to be involved; and
  - (6) the seating configuration of the aircraft involved and the number of passengers to be carried.
- (c) The emergency situation action plan required by paragraph (a) for an in-air emergency must include the following—
- (1) procedures to be followed by management personnel to ensure that, if the management personnel become aware of an emergency situation arising on an aircraft during flight that requires an immediate decision and action,—
    - (i) the pilot-in-command is advised of the emergency; and
    - (ii) the decision of the pilot-in-command is ascertained; and
    - (iii) the decision is recorded; and
  - (2) procedures to be followed by management personnel to ensure that, if management personnel are unable to communicate with the pilot-in-command under paragraph (c)(1),—
    - (i) an emergency is declared; and
    - (ii) any action considered necessary under the circumstances is taken.

(d) The emergency situation action plan required by paragraph (a) must include a means for ensuring that appropriate operations personnel are trained and competent to perform their duties during an emergency in accordance with the emergency situation action plan.

### **115.211 Operational safety check**

(a) A holder of an adventure aviation operator certificate must, for each adventure aviation operation, ensure that every flight crew member including a tandem master has available for use an operational safety checklist covering the procedures, including emergency procedures, applicable to the operation.

(b) The operational safety checklist required by paragraph (a) must include applicable information from the aircraft flight manual or manufacturer's operating instructions to ensure the safety of the operation.

(c) A person performing an adventure aviation operation must perform an operational safety check of the aircraft and all associated equipment in accordance with the operational safety checklist required by paragraph (a) before each flight.

### **115.213 Flight preparation and flight planning**

A holder of an adventure aviation operator certificate must ensure that for each adventure aviation operation conducted under the authority of the certificate, appropriate information is available to the pilot-in-command to meet the requirements of rule 91.217 and to complete the preparation for the intended operation.

### **115.215 Manipulation of controls**

Except as provided in rules 115.613, 115.667 and 115.759, a holder of an adventure aviation operator certificate must ensure that a person does not manipulate the flight controls of an aircraft performing an adventure aviation operation under the authority of the certificate, unless the person is—

- (1) a flight crew member assigned for the flight; or
- (2) an authorised representative of the Director who—

- (i) has the permission of the certificate holder and the pilot-in-command; and
- (ii) is performing a required duty.

### **115.217 Flights over water**

(a) Except for an amphibious aircraft operation as referenced in paragraph (c), a person performing an adventure aviation operation must not operate an aircraft over water if the flight distance to shore is more than the gliding distance for the aircraft.

(b) A person performing an adventure aviation operation in a hot air balloon—

- (1) must not plan to operate the balloon over any lake or sea; and
- (2) if the flight path of the balloon will or might possibly cross the shore of any lake or sea, or if the wind is offshore or less than 5 knots onshore at the time of take-off from a site located within 1 nm of water measured at the ordinary high water mark, must equip the balloon with a life preserver for each person on board.

(c) A person performing an adventure aviation operation in an amphibious aircraft must not take off from, or land on, water unless—

- (1) the aircraft is equipped with life rafts of sufficient rated capacity to carry every occupant of the aircraft; and
- (2) a life preserver is worn by each passenger, or a life preserver for each passenger is available for use in a position that is accessible to each passenger.

### **115.219 Use of aerodromes, landing areas and launch sites**

(a) A holder of an adventure aviation operator certificate must not conduct an adventure aviation operation under the authority of the certificate unless the aerodrome, landing area or launch site used for the operation has physical characteristics, obstacle limitation surfaces, and

visual aids that meet the requirements of the characteristics of the aircraft being used for the operation.

(b) A holder of an adventure aviation operator certificate must ensure that any heliport used in its adventure aviation operations meets the applicable requirements of rule 91.127.

(c) Except for a person performing an adventure aviation operation in a hot air balloon, if an aircraft operated under the authority of an adventure aviation operator certificate is operated from an aerodrome, landing area, or launch site that is not promulgated in the AIPNZ, the holder of the adventure aviation operator certificate must maintain a register containing—

- (1) the aerodrome, landing area, or launch site data; and
- (2) procedures for ensuring that the condition of the aerodrome, landing area, or launch site is safe for the operation; and
- (3) procedures for ensuring that the condition of any required equipment, including safety equipment, is safe for the operation; and
- (4) details of any limitations on the use of the aerodrome, landing area, or launch site.

### **115.221 Meteorological conditions**

A person operating an aircraft under the authority of an adventure aviation operator certificate must ensure that a flight is not commenced unless current meteorological information indicates VFR minima prescribed in rule 91.301 can be complied with throughout the flight.

### **115.223 Aircraft load limitations**

(a) A holder of an adventure aviation operator certificate must ensure that—

- (1) the limitations contained in the aircraft flight manual, aircraft manufacturer's instructions, or other approved document,

relating to the weight and balance of an aircraft are complied with; and

- (2) maximum allowable weights are not exceeded for—
  - (i) zero fuel, if applicable; and
  - (ii) manoeuvre; and
  - (iii) take-off; and
  - (iv) landing; and
- (3) the aircraft's centre of gravity is within the limits referred to in paragraph (a)(1) at departure, and will remain within those limits throughout the adventure aviation operation.

(b) A holder of an adventure aviation operator certificate performing a special aircraft operation under Subpart O must—

- (1) determine the actual total weight of—
  - (i) every passenger; and
  - (ii) every crew member.

(c) Before performing an adventure aviation operation, the pilot-in-command must assess the information required by rules 115.455(b)(11) to (b)(15) to ensure that the aircraft remains within the weight and balance limitations specified in the flight manual, or other approved document, for the duration of the flight.

### **115.225 Responsibility for airworthiness**

(a) A holder of an adventure aviation operator certificate is responsible for the airworthiness of—

- (1) every aircraft, including tandem parachute assembly, that is operated under the authority of the certificate; and
- (2) any equipment installed in or attached to the aircraft.

(b) A holder of an adventure aviation operator certificate must ensure that every aircraft that is operated under the authority of the certificate is maintained in accordance with the maintenance programme required by rule 115.61.

### **115.227 Fuel**

(a) Except for a hang glider, paraglider, glider, or tandem parachute descent operation, a holder of an adventure aviation operator certificate must establish a fuel policy for the purpose of flight planning to ensure that each aircraft operated under the certificate carries sufficient fuel, including reserve fuel, for the planned flight.

(b) The fuel policy must ensure that the planning of fuel requirements is based upon—

- (1) the applicable fuel requirements prescribed in Part 91; and
- (2) procedures, tables, and graphs, that are contained in, or derived from, the manufacturer’s manuals and that conform to the parameters contained in the aircraft’s type certificate or manufacturer’s instructions; and
- (3) the operating conditions under which the planned flight is to be conducted.

(c) A holder of an adventure aviation operator certificate must ensure that the calculation of useable fuel required for a flight takes into account the following factors as applicable to the type of operation conducted by the certificate holder:

- (1) taxi fuel:
- (2) trip fuel:
- (3) reserve fuel.

(d) A person performing the flight planning for an adventure aviation operation must comply with the fuel policy required by paragraph (a).



### **115.229 Carriage of dangerous goods**

A person must not offer or accept dangerous goods for carriage during an adventure aviation operation.

## **Subpart E — Training**

### **115.301 Training – General**

- (a) A holder of an adventure aviation operator certificate must—
- (1) establish a training programme to ensure that each person assigned to act as a crew member or a ground crew member on an adventure aviation operation conducted under the certificate is trained and competent to perform the duties assigned to the person; and
  - (2) ensure that each crew member and each ground crew member is trained in accordance with the training programme required by paragraph (1); and
  - (3) ensure that the training programme required by paragraph (1) is controlled by the certificate holder.
- (b) A holder of an adventure aviation operator certificate may—
- (1) conduct the training programme; or
  - (2) contract with the holder of an aviation training organisation certificate issued under the Act and Part 141, or the holder of an aviation recreational organisation certificate issued under the Act and Part 149, to conduct the training programme where the Part 141 or Part 149 certificate authorises the holder to conduct that training.

### **115.303 Flight crew and ground crew training programme**

- (a) A holder of an adventure aviation operator certificate must ensure that the training programme required by rule 115.301(a)(1) includes a flight crew training programme and a ground crew training programme that comprises initial training, transition training, and recurrent training that is applicable to—

- (1) the aircraft type, model, or variant to be used for each adventure aviation operation, including special equipment fitted to the aircraft; and
  - (2) the routes, areas, aerodromes, landing areas, and launch sites appropriate to the intended adventure aviation operation; and
  - (3) the certificate holder's policies and procedures that are appropriate to its adventure aviation operations.
- (b) The flight crew training programme must include, where appropriate, both ground and flight instruction utilising an aircraft or when applicable, an approved simulator.
- (c) The flight crew training programme must be conducted by a flight crew member instructor who meets the requirements of rule 115.311.
- (d) A holder of an adventure aviation operator certificate must ensure that the records required by rule 115.65 accurately record the training that each flight crew member and ground crew member has received.

### **115.305 Initial training for crew members and ground crew**

A holder of an adventure aviation operator certificate must ensure that prior to serving as a crew member or a ground crew member on an aircraft operated under the authority of the certificate, each crew member and each ground crew member completes the initial training segment of the training programme—

- (1) in a structured manner; and
- (2) in accordance with a syllabus that includes training applicable to—
  - (i) the aircraft type, model, or variant to be used for the intended adventure aviation operation, including special equipment fitted to the aircraft; and
  - (ii) the type of adventure aviation operation to be conducted; and

- (iii) the routes, areas, aerodromes, landing areas, and launch sites appropriate to the intended operation; and
- (iv) crew member and ground crew assignments, functions, and responsibilities; and
- (v) the location and operation of emergency equipment that is available for use by crew members and ground crew; and
- (vi) if appropriate, the location and use of all normal and emergency exits; and
- (vii) the certificate holder's policies and procedures that are appropriate to its adventure aviation operations.

### **115.307 Transition training for crew members and ground crew**

(a) A holder of an adventure aviation operator certificate must ensure that each of its crew members and ground crew members already qualified and serving as a crew member or ground crew member on an adventure aviation operation authorised under the certificate, completes appropriate transition training if—

- (1) the crew member or ground crew is changing from one aircraft type, model, or variant to another aircraft type, model, or variant; or
- (2) new procedures or equipment are introduced on an existing aircraft type, model, or variant; or
- (3) new procedures are introduced due to changes in the certificate holder's adventure aviation operations.

(b) The transition training must address—

- (1) the use of all safety and emergency equipment and procedures applicable to the aircraft type, model, or variant; and

- (2) new procedures or equipment introduced on existing aircraft type, model, or variant; and
- (3) new procedures applicable to the certificate holder's adventure aviation operations.

### **115.309 Recurrent training for crew members and ground crew**

A holder of an adventure aviation operator certificate must ensure that each of its crew members and ground crew members remain current and proficient for each aircraft, crew member position, ground crew member position, and type of operation, in which the crew member and ground crew member serves.

### **115.311 Flight crew member instructor qualifications**

A holder of an adventure aviation operator certificate must ensure that a person carrying out the functions of an instructor in its flight crew member training programme under this Part—

- (1) has satisfactorily completed the training required by this Part to serve as a pilot-in-command or tandem master, as applicable, in the adventure aviation operations conducted under the authority of the certificate; and
- (2) holds—
  - (i) an appropriate current instructor rating issued by the Director under the Act and Part 61; or
  - (ii) for a hang glider or paraglider operation, a current hang glider instructor certificate issued by a hang gliding organisation; or
  - (iii) for a tandem parachute operation, a current tandem instructor/examiner certificate issued by a parachute organisation; or
  - (iv) for a glider operation, a current glider instructor certificate issued by a glider organisation.

- (3) completes initial and recurrent training applicable to the instruction carried out.

### **115.313 Training records**

A holder of an adventure aviation operator certificate must ensure that the records required by rule 115.65 include a record of all the training undertaken by each crew member and ground crew member.

## **Subpart F — Crew Member and Ground Crew Competency Requirements**

### **115.351 Operational competency assessment programme**

A holder of an adventure aviation operator certificate must establish and implement an operational competency assessment programme under this Subpart to ensure that crew members and ground crew members continue to be competent to perform the adventure aviation operations conducted under the authority of the certificate.

### **115.353 Flight crew competency checks**

A holder of an adventure aviation operator certificate must ensure that—

- (1) each pilot acting as pilot-in-command of an aircraft performing an adventure aviation operation under the authority of the certificate has, within the immediately preceding 12 months, passed a competency check, administered by an appropriate flight examiner that—
  - (i) is based on a typical adventure aviation operation normally performed by the pilot; and
  - (ii) consists of a ground-based procedure check and a flight check including applicable launch site, landing area, and aerodrome proficiency checks with 1 or more landings at an aerodrome or landing area; and
  - (iii) establishes that the pilot can satisfactorily perform the duties and responsibilities of a pilot-in-command of an aircraft performing the particular type of adventure aviation operation; and

- (2) each pilot has, within the immediately preceding 12 months, successfully completed a written or oral test of the pilot's knowledge of the following:
  - (i) the relevant Civil Aviation Rules:
  - (ii) the certificate holder's operations specifications and exposition:
  - (iii) the aircraft systems, performance, operating procedures, and the content of the flight manual or manufacturer's operating instructions for each aircraft type or model normally flown by the pilot:
  - (iv) the navigation and ATC procedures as appropriate to the type of operation normally conducted by the pilot:
  - (v) meteorology relevant to the type of operation normally conducted by the pilot:
  - (vi) special flight operations as appropriate to the type of operation normally conducted by the pilot:
  - (vii) new equipment, procedures, and techniques:
  - (viii) the location and operation of emergency equipment fitted to an aircraft of the type or model normally flown by the pilot; and
- (3) the flight examiner who administered the check or test required by paragraph (1)—
  - (i) certifies in the training record required by rule 115.65 for the pilot that the check or test has been completed and certifies the result of the check or test; and
  - (ii) if the check or test was completed satisfactorily, certifies in the pilot's logbook under rule 61.29(a)(3) satisfactory completion of the check or test; and

- (4) each tandem master has, within the immediately preceding 12 months, passed a tandem master competency check administered by a tandem instructor/examiner that—
  - (i) consists of a ground-based procedure check over 1 adventure aviation tandem parachute operation, and a check with 1 or more tandem parachute descents and landings at an aerodrome or landing area representative of the tandem parachute operations conducted by the certificate holder; and
  - (ii) establishes that the tandem master can satisfactorily provide instruction to tandem passengers including all aspects of the intended tandem parachute operation, and that the tandem master is competent to ensure the safety of the tandem passenger throughout the tandem parachute operation; and
- (5) the tandem instructor/examiner who administered the check or test required under paragraph (4)—
  - (i) certifies in the training record required by rule 115.65 for the tandem master that the check or test has been completed and certifies the result of the check or test; and
  - (ii) if the check or test was completed satisfactorily, certifies in the tandem master’s parachutist logbook satisfactory completion of the check or test; and
- (6) flight crew competency checks are carried out in an aircraft or flight simulator approved for the purpose.

### **115.355 Crew member and ground crew member competency checks**

A holder of an adventure aviation operator certificate must not use a crew member or ground crew member, and a person must not serve as a crew member or ground crew member, unless within the immediately preceding 12 months the certificate holder has determined, by appropriate initial and recurrent assessment, that the person has adequate knowledge and is competent in the following areas as appropriate—

- (1) passenger management, including procedures to be followed for managing the behaviour of persons whose conduct might jeopardise the safety of an adventure aviation operation:
- (2) crew member and ground crew assignments, functions, and responsibilities during emergencies, including evacuation of persons who may need assistance:
- (3) briefing of passengers:
- (4) use of cabin equipment and controls:
- (5) location and operation of items of emergency equipment:
- (6) location and operation of all normal and emergency exits, including evacuation chutes and escape ropes:
- (7) seating and special requirements of persons who may need assistance:
- (8) first aid competency to the level of NZQA unit standard 424 or an equivalent standard acceptable to the Director.

### **115.357 Flight examiner qualifications**

A holder of an adventure aviation operator certificate must ensure that each person performing the functions of a flight examiner in an operational competency assessment programme required by rule 115.351—

- (1) holds an aircraft type rating for the aircraft used to conduct the adventure aviation operation; and
- (2) is familiar with the types of adventure aviation operations conducted by the certificate holder; and
- (3) holds—
  - (i) an appropriate current flight examiner rating issued by the Director under the Act and Part 61; or



- (ii) for a hang glider or paraglider operation, a current hang glider flight examiner certificate issued by a hang glider organisation; or
  - (iii) for a tandem parachute operation, a current tandem instructor/examiner certificate issued by a parachute organisation; and
- (4) completes initial and recurrent training applicable to the competency check carried out.

### **115.359 Completion of crew member test or flight check before required date**

If a crew member completes a test or flight check within 60 days before the date on which the test or flight check is required, the crew member is deemed to have completed the test or flight check on the date that it is required to be completed.

### **115.361 Competency and testing records**

A holder of an adventure aviation operator certificate must maintain accurate records of all competency assessments and testing of its crew members and ground crew under rule 115.65.

## **Subpart G — Fatigue of Flight Crew**

### **115.401 Operator responsibilities – flight and duty scheme**

- (a) A holder of an adventure aviation operator certificate must ensure that an adventure aviation operation is not performed unless a scheme has been established for the recording and regulation of all flight and duty times for each person performing the duties of a flight crew member or tandem master.
- (b) The flight and duty time scheme required by paragraph (a) must be acceptable to the Director and address the following factors where appropriate to the operator's type of operation:

- (1) rest periods prior to flight:
- (2) mixed duties:

- (3) standby periods:
  - (4) flight duty period:
  - (5) type of operation:
  - (6) cumulative duty time:
  - (7) cumulative flight time:
  - (8) discretionary increases in flight time limitations or flight duty limitations or both:
  - (9) circadian rhythm:
  - (10) days off:
  - (11) record keeping.
- (c) A holder of an adventure aviation operator certificate conducting an adventure aviation operation must—
- (1) ensure that a person does not act as a flight crew member or tandem master if the certificate holder knows or has reason to believe that the person is suffering from, or, having regard to the circumstances of the flight to be undertaken, is likely to suffer from, such fatigue while the person is acting as a flight crew member or tandem master that the safety of the aircraft or its occupants may be endangered; and
  - (2) keep an accurate record of the flight time and duty time of each flight crew member and tandem master, including any other hire or reward flight and ground duties; and
  - (3) retain the flight time and duty time record required by paragraph (c)(2) for a period of 12 months from the date on which it was made.

### **115.403 Flight crew member responsibilities – flight and duty time**

- (a) A person must not act as a flight crew member on an adventure aviation operation if the person knows or suspects that he or she is

suffering from, or, having regard to the circumstances of the flight to be undertaken, is likely to suffer from, such fatigue that the safety of the aircraft or its occupants may be endangered while the person is acting as a flight crew member.

(b) A person must not act as a flight crew member of on an adventure aviation operation unless the person ensures that the limitations prescribed in the scheme required by rule 115.401(a) relating to the person are not exceeded.

## **Subpart H — Manuals, Logs, and Records**

### **115.451 Operating information**

A holder of an adventure aviation operator certificate must ensure that the parts of the certificate holder's exposition relevant to the duties of each crew member and ground crew are current and are accessible to the crew member and ground crew.

### **115.453 Documents to be carried**

A holder of an adventure aviation operator certificate must ensure that the following documents, where appropriate, are carried on each flight—

- (1) NOTAM and aeronautical information service briefing documentation appropriate to the operation; and
- (2) meteorological information appropriate to the operation; and
- (3) copies of the relevant flight guide charts and plates.

### **115.455 Daily flight record**

(a) A holder of an adventure aviation operator certificate must keep accurate daily flight records for every aircraft, unless the information is recorded in another document in a manner that enables the daily flight record details for every flight to be constructed.

(b) Daily flight records must contain the following details for every flight as applicable to the operation:

- (1) the date of the flight:

- (2) the name of the operator:
  - (3) the name of the pilot-in-command:
  - (4) for a tandem parachute operation, the name of the tandem master(s):
  - (5) the registration markings or identification of the aircraft:
  - (6) the total flight time:
  - (7) except for a tandem parachute operation, a hang glider operation, or a glider operation, the number of passengers:
  - (8) the type of adventure aviation operation:
  - (9) the name or identification of the aerodrome, launch site, and landing area used for take-off and landing:
  - (10) the total of, the empty weight of the aircraft, the weight of any removable equipment, the weight of consumables, and the weight of crew members:
  - (11) the actual total weight of each passenger:
  - (12) except for a hang glider operation or a glider operation, the total weight of usable fuel:
  - (13) the take-off weight:
  - (14) evidence that the centre of gravity is within the specified limits:
  - (15) the maximum allowable weights for the operation, including as applicable zero fuel weight, take-off weight, and landing weight for the operation.
- (c) Before every adventure aviation operation the holder of an adventure aviation operator certificate must ensure that the information required by paragraphs (b)(11) to (b)(15) is made available to the pilot-in-command in a timely manner to enable

the pilot to make the assessment required by rule 115.223 regarding the weight and balance of the aircraft.

### **115.457 Retention period**

- (a) A holder of an adventure aviation operator certificate must ensure that the flight following and flight plan information required by rule 115.71 is retained for 12 months from the date of the flight.
- (b) A holder of an adventure aviation operator certificate must ensure that each of its flight crew records of flight and duty time is retained for 12 months from the date of the records entry.
- (c) A holder of an adventure aviation operator certificate must ensure that its records of training, checking, and qualifications of each crew member is retained until 12 months after the crew member has left the certificate holder's employment.
- (d) A holder of an adventure aviation operator certificate must ensure that its daily flight record required by rule 115.455 is retained for a period of not less than 12 months after the date of the flight.
- (e) A holder of an adventure aviation operator certificate must ensure that the resource records required by rule 115.67 are retained for a period of 24 months from the date the details are recorded.

## **Subpart I — Hot Air Balloon Operations**

### **115.501 Airworthiness – hot air balloon**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hot air balloon must ensure that each balloon used for the operation has a current standard category airworthiness certificate.

### **115.503 Instruments and equipment – hot air balloon**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hot air balloon must ensure that—

- (1) each balloon used for the operation is equipped with the applicable instruments and equipment prescribed in Subpart F of Part 91 and this Part; and

- (2) despite rule 91.509(a)(3), each balloon used for the operation is equipped with a means of indicating altitude in feet.

### **115.505 Maintenance – hot air balloon**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hot air balloon must ensure that each balloon used for the operation is maintained under the maintenance programme required by rule 115.61.

### **115.507 Pilot qualification and experience requirements – hot air balloon**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hot air balloon must not assign a person to act as pilot-in-command of the balloon unless the person—

- (1) holds a current commercial pilot licence - balloon issued under the Act and in accordance with Part 61; and
- (2) holds an aircraft type rating for the balloon issued by the Director under the Act and Part 61; and
- (3) has acquired at least—
  - (i) 100 hours flight time experience as pilot-in-command of a balloon; and
  - (ii) 10 hours flight time experience as pilot-in-command of the type of balloon used for the adventure aviation operation.

## **Subpart J — Parachute-Drop Aircraft Operations**

### **115.551 Airworthiness – parachute-drop aircraft**

A holder of an adventure aviation operator certificate conducting a parachute-drop aircraft operation must ensure that each aircraft used to conduct a parachute-drop aircraft operation under the authority of the certificate—

- (1) meets the requirements of rule 91.705(b)(2) to (6); and

- (2) despite rule 91.705(b)(1), has a current—
  - (i) *standard category* airworthiness certificate; or
  - (ii) *special category - primary* airworthiness certificate; or
  - (iii) *special category - limited* airworthiness certificate.

### **115.553 Instruments and equipment – parachute-drop aircraft**

A holder of an adventure aviation operator certificate conducting a parachute-drop aircraft operation must ensure that the parachute-drop aircraft is equipped with the applicable instruments and equipment prescribed by Part 91 and this Part.

### **115.555 Maintenance – parachute-drop aircraft**

A holder of an adventure aviation operator certificate conducting a parachute-drop aircraft operation must ensure that each aircraft operated under the authority of the certificate to conduct a parachute-drop aircraft operation—

- (1) has a review of airworthiness carried out under rule 91.615; and
- (2) is maintained in accordance with the maintenance programme required by rule 115.61.

### **115.557 Operating procedures – parachute-drop aircraft**

A holder of an adventure aviation operator certificate conducting a parachute-drop aircraft operation must establish procedures for ensuring compliance with rules 91.705(c)(1), (c)(2), and (d).

### **115.559 Pilot qualification and experience requirements – parachute-drop aircraft**

A holder of an adventure aviation operator certificate conducting a parachute-drop aircraft operation must not assign a person to act as pilot-in-command of an aircraft to perform a parachute-drop aircraft operation unless the person—

- (1) holds an appropriate and current commercial pilot licence issued by the Director under the Act and Part 61; and
- (2) a current parachute drop rating issued by the Director under the Act and Part 61; and
- (3) an aircraft type rating for the aircraft used for the operation; and
- (4) has acquired at least 150 hours flight time experience as pilot-in-command of the category of aircraft used for the parachute-drop aircraft operation.

## **Subpart K — Tandem Parachute Operations**

### **115.571 Airworthiness and equipment – tandem parachutes**

A holder of an adventure aviation operator certificate performing a tandem parachute descent operation must ensure that—

- (1) each main parachute, reserve parachute, tandem-master harness, and associated safety equipment complies with a technical standard prescribed in Appendix A.25 of Part 91 or an equivalent standard that is acceptable to the Director; and
- (2) each tandem pair are equipped in accordance with the parachute equipment requirements of Part 105 and this Part; and
- (3) each person participating in the tandem parachute descent operation is equipped with, and uses, supplementary oxygen above 10000 feet AMSL when a tandem parachute descent is planned to take place above FL130.

### **115.573 Maintenance – tandem parachutes**

(a) A holder of an adventure aviation operator certificate conducting a tandem parachute descent operation must ensure that—

- (1) a tandem parachute descent operation is not conducted under the authority of the certificate unless the applicable



requirements regarding parachute maintenance prescribed in Subpart C of Part 105 are complied with; and

- (2) each tandem parachute assembly used for a tandem parachute descent operation under the authority of the certificate is maintained in accordance with the maintenance programme required by rule 115.61.

(b) A holder of an adventure aviation operator certificate conducting tandem parachute operation must ensure that the maintenance on a tandem parachute assembly that is used for a tandem parachute descent operation under the authority of the certificate is performed by a holder of a valid parachute technician certificate issued by a parachute organisation.

### **115.575 Operating procedures – tandem parachutes**

(a) A holder of an adventure aviation operator certificate conducting a tandem parachute operation must establish operating procedures to ensure—

- (1) compliance with the applicable operating requirements prescribed in Subparts A and B of Part 105; and
- (2) that the records required by rule 115.67 include the record required by rule 105.111(c).

(b) The procedures required by paragraph (a) must be at least equivalent to the operating procedures of a parachuting organisation.

### **115.577 Tandem-master qualification requirements**

A holder of an adventure aviation operator certificate conducting a tandem parachute descent operation must not assign a person to act as a tandem-master on a tandem parachute descent unless the person—

- (1) holds a current commercial parachutist certificate with a current tandem-master rating issued by a parachute organisation that is authorised to issue a commercial parachutist certificate; and
- (2) is at least 18 years old; and

- (3) holds a current class 2 medical certificate issued under the Act; and
- (4) complies with the privileges and limitations of the certificate and ratings required by paragraph (1).

## **Subpart L — Glider Operations**

### **115.601 Airworthiness – glider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a glider must ensure that each glider used for the operation has a current *standard category* airworthiness certificate.

### **115.603 Instruments and equipment – glider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a glider must ensure that—

- (1) each glider used for the operation is equipped under the applicable instrument and equipment requirements prescribed in Subpart F of Part 91, Subpart C of Part 104, and this Part; and
- (2) the instruments and equipment required by Part 104 have been installed under the glider manufacturer’s instructions or other equivalent instructions acceptable to the Director; and
- (3) despite rule 91.529(e), each glider used for the operation is equipped with an automatic ELT, or the pilot-in-command is equipped with an ELT(S) or PLB that meets the applicable standard in Part 91 Appendix A.

### **115.605 Maintenance - glider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a glider must ensure that each glider used to the operation is—

- (1) inspected under the maintenance programme required by rule 115.61; and

- (2) maintained under—
  - (i) the maintenance programme required by rule 115.61; and
  - (ii) the general maintenance requirements prescribed in rule 104.103; and
  - (iii) the applicable requirements prescribed in Subpart G of Part 91.

### **115.607 Pilot qualification and experience requirements - glider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a glider must not assign a person to act as pilot-in-command of a glider to perform an adventure aviation operation unless the person—

- (1) holds a current commercial pilot licence - glider issued by the Director under the Act and Part 61; and
- (2) holds an aircraft type rating for the glider; and
- (3) has acquired—
  - (i) at least 200 hours flight time experience as pilot-in-command; and
  - (ii) at least 50 hours flight time experience as pilot-in-command of the category of aircraft used for the adventure aviation operation.

### **115.609 Towing a glider in flight**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a glider must not tow a glider in flight unless—

- (1) the aircraft used to tow the glider has a current—
  - (i) *standard category* airworthiness certificate; or

- (ii) *special category* – LSA airworthiness certificate; and
- (2) the aircraft meets the applicable instrument and equipment requirements of Part 91 and this Part; and
- (3) the flight manual or manufacturer’s instructions allows the aircraft to be used for a glider tow operation; and
- (4) the aircraft is maintained under the maintenance programme required by rule 115.61; and
- (5) the pilot of the tow aircraft holds—
  - (i) a current pilot licence issued by the Director under the Act and Part 61; and
  - (ii) a current glider tow rating issued by the Director under the Act and Part 61; and
- (6) the pilot of the tow aircraft has acquired—
  - (i) at least 200 hours flight time experience as pilot-in-command of an aircraft; and
  - (ii) at least 50 hours flight time experience as pilot-in-command of the type of aircraft used for the glider tow aircraft operation; and
- (7) the certificate holder ensures that no passengers are carried aboard the glider tow aircraft while performing an adventure aviation operation under the authority of the certificate; and
- (8) each aircraft used by the certificate holder to tow a glider is operated under the requirements of rule 91.709.

### **115.611 Operating limitations – glider**

Despite rule 104.53, a person performing an adventure aviation operation using a glider must not fly in IMC.

**115.613 Manipulation of controls – glider**

(a) Despite rule 115.215, a holder of an adventure aviation operator certificate may permit a passenger to manipulate the flight controls of a glider while performing an operation under the authority of the certificate, if—

- (1) the purpose of the flight is to provide the passenger with a flight experience that requires the passenger to manipulate the flight controls; and
- (2) no other passenger is carried on the flight.

(b) A holder of an adventure aviation operator certificate intending to permit a passenger to manipulate the flight controls of a glider under paragraph (a) must establish procedures for—

- (1) providing the passenger with applicable ground instruction including—
  - (i) the intended flight manoeuvres; and
  - (ii) the functions that the passenger will be permitted to perform during the flight; and
  - (iii) the applicable aircraft operating procedures; and
  - (iv) emergency procedures; and
- (2) assessing the passenger's competency to participate in the intended operation.

(c) A holder of an adventure aviation operator certificate must not conduct a glider operation under the authority of the certificate that allows a passenger to manipulate the flight controls of the aircraft unless—

- (1) the requirements prescribed in paragraph (a) are met; and
- (2) the passenger intending to manipulate the flight controls—
  - (i) has been provided with the ground instruction under the procedures required by paragraph (b)(1); and

- (ii) has been assessed as competent to participate in the intended operation under the procedures required by paragraph (b)(2).

## **Subpart M — Hang Glider and Paraglider Operations**

### **115.651 Airworthiness – hang glider and paraglider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hang glider or a paraglider must ensure that—

- (1) each hang glider used for an adventure aviation operation meets one of the following certification standards—
  - (i) a DHV Gutesiegel certification standard; or
  - (ii) a British Hang Glider and Paraglider Association certification standard; or
  - (iii) the United States HGMA certification standard; or
  - (iv) an equivalent certification standard that is acceptable to the Director; and
- (2) each paraglider used for an adventure aviation operation meets one of the following certification standards—
  - (i) a CEN/AFNOR certification standard; or
  - (ii) a DHV Gutesiegel certification standard; or
  - (iii) an LTF certification standard; or
  - (iv) a European Norm (EN) certification standard; or
  - (v) an equivalent certification standard that is acceptable to the Director.

**115.653 Instrument and equipment – hang glider and paraglider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hang glider or a paraglider must ensure that—

- (1) each hang glider used for the operation is equipped with a means of accurately measuring airspeed; and
- (2) each hang glider or paraglider used for the operation is equipped with an emergency parachute that is fit for the purpose of the operation and meets the standards prescribed in Part 91 Appendix A.25.

**115.655 Maintenance – hang glider and paraglider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hang glider or a paraglider must ensure that—

- (1) each hang glider or paraglider used for the operation—
  - (i) has a current warrant of fitness under rule 106.17; and
  - (ii) is maintained under the maintenance programme required by rule 115.61; and
  - (iii) is maintained by a person who is authorised to perform maintenance on the particular make and model of hang glider or paraglider, by a hang gliding organisation whose aviation recreation organisation certificate authorises the hang gliding organisation to authorise maintenance personnel.

**115.657 Aircraft identification – hang glider and paraglider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hang glider or paraglider must ensure that—

- (1) each hang glider or paraglider used for the operation is identified by a unique number or marking that is readable from the ground at a distance of 100 metres; and
- (2) the number or marking required by paragraph (1) for each hang glider or paraglider is recorded in the operator's operations specifications under rule 115.13.

### **115.659 Pilot qualification requirements – hang glider and paraglider**

A holder of an adventure aviation operator certificate must not assign a person to act as pilot-in-command of an adventure aviation operation using a hang glider or paraglider unless the person—

- (1) despite rule 61.5(n), holds a current commercial tandem pilot rating issued by a hang gliding organisation; and
- (2) holds a current class 2 medical certificate issued by the Director under the Act and Part 67.

### **115.661 Operator requirements – hang glider and paraglider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hang glider or a paraglider must ensure that—

- (1) the aircraft is, at all times, operated in compliance with the operating limitations specified in the aircraft flight manual or aircraft manufacturer's operating instructions; and
- (2) an aircraft flight manual or manufacturer's operating instruction, applicable to the aircraft being used, is available to the pilot-in-command prior to flight.

### **115.663 Passenger safety requirements – hang glider and paraglider**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hang glider or a paraglider must ensure that in addition to the safety equipment required by rule 106.19, and this Part, each passenger—



- (1) of a paraglider wears a back protection device that meets a standard that is acceptable to a hang gliding organisation or an equivalent standard that is acceptable to the Director; and
- (2) wears protective clothing appropriate for the environmental conditions in which the flight is to be carried out.

### **115.665 Towing a hang glider in flight**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a hang glider must not tow a hang glider in flight unless—

- (1) the aircraft used to tow the hang glider is a Class 2 microlight aircraft that—
  - (i) has a current flight permit issued by the Director under the Act and Part 103; and
  - (ii) conforms to a type design standard referred to in rule 103.207 that is applicable to the flight permit required by paragraph (i); and
  - (iii) is equipped as specified in rules 103.221 and 103.223; and
  - (iv) the flight manual or manufacturer's instruction allows the microlight aircraft to be used for a hang glider tow operation; and
  - (v) is maintained under the maintenance requirements prescribed in Subpart G of Part 103 and the maintenance programme required by rule 115.61; and
- (2) the hang glider is equipped as specified in rule 103.223(2); and
- (3) the pilot of the tow aircraft holds an appropriate and current pilot licence or advanced microlight pilot certificate and a current microlight tow rating under rule 103.157; and

- (4) the towing operation is conducted as specified in rule 103.157(c).

### **115.667 Manipulation of controls – hang glider and paraglider**

(a) Despite rule 115.215, a holder of an adventure aviation operator certificate may permit a passenger to manipulate the flight controls of a hang glider or paraglider while performing an operation under the authority of the certificate, if the purpose of the flight is to provide the passenger with a flight experience that requires the passenger to manipulate the flight controls.

(b) A holder of an adventure aviation operator certificate intending to permit a passenger to manipulate the flight controls of a hang glider or paraglider under paragraph (a) must establish procedures for—

- (1) providing the passenger with applicable ground instruction including—
  - (i) the intended flight manoeuvres; and
  - (ii) the functions that the passenger will be permitted to perform during the flight; and
  - (iii) the applicable aircraft operating procedures; and
  - (iv) emergency procedures; and
- (2) assessing the passenger's competency to participate in the intended operation.

(c) A holder of an adventure aviation operator certificate must not conduct a hang glider or paraglider operation under the authority of the certificate that allows a passenger to manipulate the flight controls of the aircraft unless—

- (1) in the circumstance specified in paragraph (a); and
- (2) the passenger intending to manipulate the flight controls—

- (i) has been provided with the ground instruction under the procedures required by paragraph (b)(1); and
- (ii) has been assessed as competent to participate in the intended operation under the procedures required by paragraph (b)(2).

## **Subpart N — Reserved**

## **Subpart O — Special Aircraft Operations**

### **115.751 Aircraft airworthiness**

A holder of an adventure aviation operator certificate conducting a special aircraft operation must ensure that—

- (1) each aircraft used to conduct a special aircraft operation has a current—
  - (i) *standard category* airworthiness certificate; or
  - (ii) *special category - primary* airworthiness certificate; or
  - (iii) *special category – LSA* airworthiness certificate; or
  - (iv) *special category - limited* airworthiness certificate; and
- (2) the flight manual for the aircraft used for the operation permits the aircraft to be used for the types of manoeuvres that are intended to be performed on the operation.

### **115.753 Instruments and equipment**

A holder of an adventure aviation operator certificate conducting a special aircraft operation must ensure that each aircraft used for the special aircraft operation is equipped with—

- (1) instruments and equipment that meet the requirements of Part 91 and this Part; and
- (2) an automatic ELT under rule 91.529.

**115.755 Aircraft maintenance**

A holder of an adventure aviation operator certificate conducting a special aircraft operation must ensure that each aircraft used for a special aircraft operation—

- (1) is maintained under the maintenance programme required by rule 115.61; and
- (2) has a review of airworthiness under rule 91.615.

**115.757 Pilot qualifications and experience requirements**

A holder of an adventure aviation operator certificate conducting a special aircraft operation must not assign a person to act as pilot-in-command of an aircraft used to perform a special aircraft operation unless the person—

- (1) holds an appropriate and current commercial pilot licence issued by the Director under the Act and Part 61; and
- (2) holds an aircraft type rating for the aircraft used for the operation; and
- (3) for an adventure aviation aerobatic operation, and adventure aviation formation flight operation, and a simulated military operation, holds a current aerobatic rating issued by the Director under the Act and Part 61; and
- (4) has acquired at least 200 hours flight time experience as pilot-in-command, and at least 30 hours flight time experience as pilot-in-command on the category of aircraft being used for the operation; or
- (5) for multi or turbine engine aeroplanes and multi or turbine engine helicopters, has acquired at least 300 hours flight time experience as pilot-in-command, and at least 30 hours flight time experience as pilot-in-command on the category of aircraft being used for the operation; or
- (6) for aeroplanes or helicopters carrying out an adventure aviation aerobatic operation, an adventure aviation formation

flight operation, or a simulated military operation, has acquired at least—

- (i) 300 hours flight time experience as pilot-in-command; and
- (ii) 30 hours flight time experience as pilot-in-command on the category of aircraft used for the operation; and
- (iii) 30 hours flight time experience as pilot-in-command carrying out the types of manoeuvres to be performed during the operation.

### **115.759 Manipulation of controls – simulated military operation**

(a) Despite rule 115.215, a holder of an adventure aviation operator certificate may permit a passenger to manipulate the flight controls of an aircraft while performing a simulated military operation under the authority of the certificate, if—

- (1) the purpose of the flight is to provide the passenger with a simulated military flight experience that requires the passenger to manipulate the flight controls; and
- (2) no other passenger is carried on the flight; and
- (3) the pilot-in-command holds a valid and applicable flight instructor rating issued by the Director under the Act and Part 61.

(b) A holder of an adventure aviation operator certificate intending to permit a passenger to manipulate the flight controls of an aircraft under paragraph (a) must establish procedures for—

- (1) providing the passenger with applicable ground instruction including—
  - (i) the intended flight manoeuvres; and
  - (ii) the functions that the passenger will be permitted to perform during the flight; and

- (iii) the applicable aircraft operating procedures; and
  - (iv) emergency procedures; and
- (2) assessing the passenger’s competency to participate in the intended operation.
- (c) A holder of an adventure aviation operator certificate must not conduct a simulated military operation under the authority of the certificate that allows a passenger to manipulate the flight controls of the aircraft unless—
- (1) the requirements prescribed in paragraph (a) are met; and
  - (2) the passenger intending to manipulate the flight controls—
    - (i) has been provided with the ground instruction under the procedures required by paragraph (b)(1); and
    - (ii) has been assessed as competent to participate in the intended operation under the procedures required by paragraph (b)(2).

## **Subpart P — Microlight Aircraft Operations**

### **115.801 Airworthiness – microlight aircraft**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a microlight aircraft must ensure that each microlight aircraft used for the operation—

- (1) has a current Class 2 microlight flight permit issued by the Director under the Act and Part 103; and
- (2) conforms to the type design standards in rule 103.207.

### **115.803 Instruments and equipment – microlight aircraft**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a microlight aircraft must ensure that each microlight aircraft used for the operation—

- (1) is equipped with the applicable instruments and equipment specified in rules 91.509, 103.221(a), and 103.221(c)(2); and
- (2) despite rule 91.529(e), is equipped with an automatic ELT, or the pilot-in-command is equipped with an ELT(S) or PLB that meets the applicable standard in Part 91 Appendix A and is maintained under rule 91.605(e)(4).

### **115.805 Maintenance – microlight aircraft**

A holder of an adventure aviation operator certificate conducting an adventure aviation operation using a microlight aircraft must ensure that—

- (1) each microlight aircraft used for the operation is maintained and inspected under rule 103.217; and
- (2) each microlight aircraft used for the operation is maintained under the maintenance programme required by rule 115.61; and
- (3) despite rule 103.217(d)(1)(i), each person authorised to perform maintenance on, and perform the annual condition inspection required by paragraph (1) on, a microlight aircraft operated under the authority of the certificate holds an appropriate qualification issued by the Director under the Act and Part 66.

### **115.807 Technical log**

Despite rule 91.601(b)(4), a holder of an adventure aviation operator certificate conducting an adventure aviation operation using a microlight aircraft must provide a technical log under rule 91.619.

### **115.809 Pilot qualification and experience requirements – microlight aircraft**

A holder of an adventure aviation operator certificate must not assign a person to act as pilot-in-command of a microlight aircraft performing an adventure aviation operation unless the person—

- (1) holds a current and appropriate commercial pilot licence issued by the Director under the Act and Part 61; and

- (2) holds an appropriate aircraft type rating for the aircraft; and
- (3) has acquired at least—
  - (i) 200 hours flight time experience as pilot-in-command of an aircraft; and
  - (ii) 30 hours flight time experience as pilot-in-command of the type of microlight aircraft used for the adventure aviation operation.

### **115.811 Minimum heights – microlight aircraft**

Rules 91.311(c) and 103.153 do not apply to a pilot of a microlight aircraft performing an adventure aviation operation under the authority of an adventure aviation operator certificate issued by the Director under the Act and Part 115.



## Appendix A — Qualifications and competencies of senior persons

<b>Hot Air Balloon Operation</b>		
Senior person responsible for adventure aviation operations	Document required	CPL (B)
	PIC experience required	3 years PIC experience with Part 115 certificate holder or equivalent commercial hot air balloon operations; and  200 hours PIC experience on hot air balloons; and  Experience acceptable to the Director in the type of adventure aviation operation to be performed.
	Managerial experience required	3 years experience in an operational control position that is acceptable to the Director.
Senior person responsible for crew training and competency assessment	Document required	CPL (B)
	Currency	Meets currency requirements to act as PIC in one of the operator's hot air balloons; and  200 hours experience in hot air balloon operations.
	Managerial experience required	3 years experience with Part 115 certificate holder or equivalent commercial hot air balloon operations; and  2 years experience in a pilot check and training role that is acceptable to the Director.

<b>Hot Air Balloon Operation</b>		
Senior person responsible for the control and direction of maintenance	Document required	Certificate of training acceptable to the Director that provides evidence of competency to perform maintenance planning and maintenance control functions.
	Vocational experience required	Demonstrable knowledge and understanding of the certificate holder's exposition and maintenance programme requirements, and  Sufficient knowledge of hot air balloon maintenance to ensure that all hot balloons operated under the certificate holder's authority are maintained in an airworthy condition, and that all maintenance activities required by the certificate holder's maintenance programme are satisfactorily accomplished.
	Aviation experience required	3 years of relevant experience that is acceptable to the Director.
Senior person responsible for the organisational management system	Document required	Certificate of training for quality assurance that is acceptable to the Director.
	Vocational experience required	Demonstrable knowledge and awareness of general quality assurance/quality management systems and 3 years of experience in an operational role in the aviation industry; or  2 years experience with organisational management systems in the aviation industry.

<b>Parachute-Drop Aircraft Operation</b>		
Senior person responsible for adventure aviation operations	Document required	CPL
	PIC experience required	150 hours experience as PIC on the category of aircraft to be operated by the certificate holder; and  750 hours TT PIC; or  Experience acceptable to the Director in the type of adventure aviation operation to be performed.
	Managerial experience required	3 years experience in an operational control position that is acceptable to the Director.
Senior person responsible for crew training and competency assessment	Document required	“A” or “B” category instructor rating
	Currency	Holds a current “A” or “B” category instructor rating; and  Meets currency requirement to act as PIC in at least one type of the certificate holder’s aircraft, with 500 hours experience in that category of aircraft.
	Managerial experience required	2 years experience as a qualified instructor; or  2 years experience in a pilot check and training role that is acceptable to the Director.

<b>Parachute-Drop Aircraft Operation</b>		
Senior person responsible for the control and direction of maintenance	Document required	LAME or able to successfully complete a test or examination administered by the Director to determine the applicant's competency to perform maintenance planning and maintenance control functions.
	Vocational experience required	Demonstrable knowledge and understanding of the certificate holder's exposition and maintenance programme requirements, and  Sufficient knowledge of aircraft maintenance to ensure that all parachute-drop aircraft operated under the certificate holder's authority are maintained in an airworthy condition, and that all maintenance activities required by the certificate holder's maintenance programme are satisfactorily accomplished.
	Aviation experience required	3 years of relevant experience that is acceptable to the Director.
Senior person responsible for the organisational management system	Document required	Certificate of training for quality assurance that is acceptable to the Director.
	Vocational experience required	Demonstrable knowledge and awareness of general quality assurance/quality management systems and 3 years of experience in an operational role in the aviation industry; or  2 years experience with organisational management

		systems in the aviation industry.
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<b>Tandem Parachute Descent Operation</b>		
Senior person responsible for adventure aviation operations	Document required	Commercial tandem master rating issued by a parachute organisation that has certificated under Part 149.
	Tandem master experience required	Commercial tandem master having completed 1000 tandem descents; and  3 years experience as a tandem master; or  3 years experience that is relevant to the position and is acceptable to the Director.
	Managerial experience required	3 years experience in an operational control position that is acceptable to the Director.
Senior person responsible for crew training and competency assessment	Document required	Holds and instructor rating issued by a parachute organisation that has been certificated under Part 149.
	Currency	Meets currency requirements to act as a parachute organisation instructor.
	Managerial experience required	3 years experience in a parachutist check and training role that is acceptable to the Director.

<b>Tandem Parachute Descent Operation</b>		
Senior person responsible for the control and direction of maintenance	Document required	Able to successfully complete a test or examination administered by the Director to determine the applicant's competency to perform maintenance planning and maintenance control functions.
	Vocational experience required	Demonstrable knowledge and understanding of the certificate holder's exposition and maintenance programme requirements, and  Sufficient knowledge of tandem parachute maintenance to ensure that all tandem parachutes operated under the certificate holder's authority are maintained in an airworthy condition, and that all maintenance activities required by the certificate holder's maintenance programme are satisfactorily accomplished.
	Aviation experience required	3 years of relevant experience that is acceptable to the Director.
Senior person responsible for the organisational management system	Document required	Certificate of training for quality assurance that is acceptable to the Director.
	Vocational experience required	Demonstrable knowledge and awareness of general quality assurance/quality management systems and 3 years of experience in an operational role in the aviation industry; or  2 years experience with organisational management systems in the aviation industry.

<b>Glider and Glider Tow Aircraft Operation</b>		
Senior person responsible for adventure aviation operations	Document required	CPL (G)
	PIC experience required	3 years experience as PIC on the category of aircraft to be operated by the certificate holder; and  150 hours TT PIC; or  Experience acceptable to the Director in the type of adventure aviation operation to be performed.
	Managerial experience required	3 years experience in an operational control position that is acceptable to the Director.
Senior person responsible for crew training and competency assessment	Document required	CPL (G) or an “A” or “B” glider instructor rating issued by a gliding organisation that has been certificated under Part 149.
	Currency	Meets currency requirement to act as PIC in at least one type of the certificate holder’s aircraft, with 150 hours experience in that category of aircraft.
	Managerial experience required	2 years experience as an “A” or “B” category glider instructor for a gliding organisation certificated under Part 149.

<b>Glider and Glider Tow Aircraft Operation</b>		
Senior person responsible for the control and direction of maintenance	Document required	Able to successfully complete a test or examination administered by the Director to determine the applicant's competency to perform maintenance planning and maintenance control functions.
	Vocational experience required	Demonstrable knowledge and understanding of the certificate holder's exposition and maintenance programme requirements, and  Sufficient knowledge of glider and glider tow aircraft maintenance to ensure that all gliders and glider tow aircraft operated under the certificate holder's authority are maintained in an airworthy condition, and that all maintenance activities required by the certificate holder's maintenance programme are satisfactorily accomplished.
	Aviation experience required	3 years of relevant experience that is acceptable to the Director.
Senior person responsible for the organisational management system	Document required	Certificate of training for quality assurance that is acceptable to the Director.
	Vocational experience required	Demonstrable knowledge and awareness of general quality assurance/quality management systems and 3 years of experience in an operational role in the aviation industry; or  2 years experience with organisational management systems in the aviation industry.



<b>Hang Glider/Paraglider and Hang Glider Tow Aircraft Operation</b>		
Senior person responsible for adventure aviation operations	Document required	NZHGPA PP2 certificate or Tandem Professional Certificate
	PIC experience required	3 years experience as PIC on the category of aircraft to be operated by the certificate holder; and  200 hours TT as PIC; and  Experience acceptable to the Director in the type of adventure aviation operation to be performed.
	Managerial experience required	3 years experience in an operational control position that is acceptable to the Director.
Senior person responsible for crew training and competency assessment	Document required	HGPG instructor rating, NZHGPA PP2, or Tandem Professional Certificate
	Currency	Meets currency requirements to act as PIC in one of the operator's aircraft or a similar type; and  200 hours experience in HGPG operations.
	Managerial experience required	2 years experience as a qualified instructor for a HGPG organisation certificated under Part 149; or  2 years experience in a pilot check and training role that is acceptable to the Director.

<b>Hang Glider/Paraglider and Hang Glider Tow Aircraft Operation</b>		
Senior person responsible for the control and direction of maintenance	Document required	Able to successfully complete a test or examination administered by the Director to determine the applicant's competency to perform maintenance planning and maintenance control functions.
	Vocational experience required	Demonstrable knowledge and understanding of the certificate holder's exposition and maintenance programme requirements, and  Sufficient knowledge of hang glider/paraglider and hang glider tow aircraft maintenance to ensure that all hang gliders/paragliders and hang glider tow aircraft operated under the certificate holder's authority are maintained in an airworthy condition, and that all maintenance activities required by the certificate holder's maintenance programme are satisfactorily accomplished.
	Aviation experience required	2 years of relevant experience that is acceptable to the Director.
Senior person responsible for the organisational management system	Document required	Certificate of training for Quality Assurance that is acceptable to the Director.
	Vocational experience required	Demonstrable knowledge and awareness of general quality assurance/quality management systems and 3 years of experience in an operational role in the aviation industry; or  2 years experience with

		organisational management systems in the aviation industry.
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<b>Special Aircraft Operation</b>		
Senior person responsible for adventure aviation operations	Document required	CPL (A) or CPL (H)
	PIC experience required	150 hours experience as PIC on the category of aircraft to be operated by the certificate holder; and  750 hours TT PIC; or  Experience acceptable to the Director in the type of adventure aviation operation to be performed.
	Managerial experience required	3 years experience in an operational control position that is acceptable to the Director.
Senior person responsible for crew training and competency assessment	Document required	CPL
	Currency	Holds a current “A” or “B” category instructor rating; and  Meets currency requirement to act as PIC in at least one type of the certificate holder’s aircraft, with 500 hours experience in that category of aircraft.
	Managerial experience required	2 years experience as a qualified instructor; or  2 years experience in a pilot check and training role that is acceptable to the Director.

<b>Special Aircraft Operation</b>		
Senior person responsible for the control and direction of maintenance	Document required	LAME or able to successfully complete a test or examination administered by the Director to determine the applicant's competency to perform maintenance planning and maintenance control functions.
	Vocational experience required	Demonstrable knowledge and understanding of the certificate holder's exposition and maintenance programme requirements, and  Sufficient knowledge of aircraft maintenance to ensure that all aircraft operated under the certificate holder's authority are maintained in an airworthy condition, and that all maintenance activities required by the certificate holder's maintenance programme are satisfactorily accomplished.
	Aviation experience required	3 years of relevant experience that is acceptable to the Director.
Senior person responsible for the organisational management system	Document required	Certificate of training for Quality Assurance that is acceptable to the Director.
	Vocational experience required	Demonstrable knowledge and awareness of general quality assurance/quality management systems and 3 years of experience in an operational role in the aviation industry; or  2 years experience with organisational management systems in the aviation industry.

<b>Microlight Aircraft Operation</b>		
Senior person responsible for adventure aviation operations	Document required	CPL (M)
	PIC experience required	150 hours experience as PIC on the category of aircraft to be operated by the certificate holder; and  500 hours TT PIC; or  Experience acceptable to the Director in the type of adventure aviation operation to be performed.
	Managerial experience required	3 years experience in an operational control position that is acceptable to the Director.
Senior person responsible for crew training and competency assessment	Document required	Microlight instructor certificate issued by a microlight organisation that has been certificated under Part 149.
	Currency	Meets currency requirement to act as PIC in at least one type of the certificate holder's aircraft, with 500 hours experience in that category of aircraft.
	Managerial experience required	2 years experience as a qualified instructor for a microlight organisation that has been certificated under Part 149; or  2 years experience in a pilot check and training role that is acceptable to the Director.

<b>Microlight Aircraft Operation</b>		
Senior person responsible for the control and direction of maintenance	Document required	LAME or able to successfully complete a test or examination administered by the Director to determine the applicant's competency to perform maintenance planning and maintenance control functions.
	Vocational experience required	Demonstrable knowledge and understanding of the certificate holder's exposition and maintenance programme requirements, and  Sufficient knowledge of microlight aircraft maintenance to ensure that all microlight aircraft operated under the certificate holder's authority are maintained in an airworthy condition, and that all maintenance activities required by the certificate holder's maintenance programme are satisfactorily accomplished.
	Aviation experience required	3 years of relevant experience that is acceptable to the Director.
Senior person responsible for the organisational management system	Document required	Certificate of training for Quality Assurance that is acceptable to the Director.
	Vocational experience required	Demonstrable knowledge and awareness of general quality assurance/quality management systems and 3 years of experience in an operational role in the aviation industry; or  2 years experience with organisational management

		systems in the aviation industry.
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**Consultation Details**

A Notice of Proposed Rulemaking, NPRM 10-02 *Part 115 Adventure Aviation – Certification and Operations*, was issued for public consultation under Docket 5/CAR/1 on 23 September 2010.

A total of 33 responses to the NPRM were received - 9 submissions were from individuals, and 24 from organisations.

Submissions were received from:

- Skylimit Adventures
- Nimbus Paragliding
- Dominic Eller
- Gavin Taylor
- Nelson Hang Gliding Adventures
- Cumulus Paragliding
- Snowbiz G-Forces Paragliding
- Gliding NZ
- Glide Omarama and Southern Soar
- Brendon Sinclair
- Sunrise Balloon Adventures
- Aoraki Balloon Safari Methven
- Early Morning Balloons
- Scott Cursons
- Lemmy Tanner
- Terry Johnson
- NZ Warbirds
- Barry Waterland
- LetsGoBallooning
- Balloon Safaris
- Coronet Peak Tandems
- Ballooning NZ
- Jason Livingston

Kiwi Balloon Company  
The Sky Sailing Company  
New Zealand Parachute Industry Association  
Wings & Waves  
Balloon Expeditions  
Whangarei Gliding Club  
David Phillips  
Skytrek Tandem Hang Gliding  
Trevor Leighton  
Fox-Heli

### **Subject Area**

Most of the submitters commented on the proposed rules in a narrative form. The submissions covered multiple subject areas with some overlap across the range of submissions. Where possible the comments have been grouped. In many cases, the comments made by some of the submitters are verbatim copies of comments made by other submitters. Each submission is addressed under the headings listed below.

### **Rule 1.1 Definition of Adventure Aviation**

A total of 13 submitters commented on the definition of adventure aviation. 12 submitters asserted that they should be excluded from Part 115 requirements on the basis that their operation does not actually fall within the definition of adventure aviation. 1 submitter asserted that an omission had been made in the definition that will prevent aircraft with a special category – limited airworthiness certificate from performing formation flight, aerobatic manoeuvres, and similar non-standard flight manoeuvres.

- “Tandem paragliding is at times advertised as an adventure activity,” but “does not qualify as Adventure Aviation.” Tandem paragliding operations have to follow strict rules defined by the NZHGPA, which “already has very effective measurement in place to protect passengers.” Instead of implementing Part 115, recommend that the CAA “ask the NZHGPA to include the valid parts of this NPRM into their OPM and to enforce their rules.”



- Hot air balloons should be excluded from the definition of “adventure aviation” in Part 1. “A hot air balloon ride operation is for the carriage of passengers by air for hire or reward where the object of the operation IS NOT for the passenger’s recreational experience of participating in the flight, or engaging in the aerial operation.” A hot air balloon does not carry out any “abnormal manoeuvres” during commercial operations.
- “Hot air ballooning is a low risk form of aviation and is outside the scope of/ or does not fit correctly within the adventure aviation framework.”
- Paragraph (2) of rule 1.1 General definitions does not address aerobatic flight, formation flight, etc, for special category – limited aircraft. “This omission is made throughout the document.”
- “Passengers in a hot air balloon ride do not actively participate in the operation of the flight, they are passive and cannot choose to engage in any dangerous activity. Accordingly CAA needs to create a separate rule to cover hot air balloon operations.”
- “Since there is already a regime that adequately provides for appropriate management systems, structures, and operations procedures... there is no requirement to include ‘a flight in a glider’ within [the definition of] Part 115.”
- “Part 115 for parachute-drop aircraft was not intended or by definition does not meet the definition of adventure aviation. For this reason the rule is currently not tailored or structured for the specific nature of parachute dropping.”
- “A tandem paraglider flight” should be added to the definition of adventure aviation.

### ***CAA Response***

*The CAA considers that adventure aviation activities are operations conducted for hire or reward that fall outside the definition of an air*

*transport operation (definition contained in proposed amendment to Part 1). Part 115 will introduce operator certification requirements for all activities falling within the proposed definition, and clearly highlights the separation of hire or reward operations from recreational activities.*

### **Rule 61.39 Biennial Flight Review**

2 submitters asserted that there should be only 1 rating for hot air balloon pilots without A, B, or C categories and that the current requirement for BFRs is adequate.

- “There should be just one overall rating with no (A, B, or C categories).” “The current system for BFRs works really well using the current CAA examiners (2-3) they should also be able to issue pilots with an instructor rating after the appropriate training has been completed.”

### **CAA Response**

*The CAA believes that the submitters have raised an issue that is outside the scope of the Part 115 adventure aviation rulemaking project. The proposed consequential amendment to rule 61.39 simply adds Part 115 to the exceptions on the basis that a pilot performing operations under Part 115 will be required to complete an annual competency check.*

### **Rule 91.112 Daily Flight Records**

4 submitters asserted that the reference to “departure aerodrome” in rule 91.112 should be changed to “departure point” for hot air balloon operations.

- “The name of the departure aerodrome [rule 91.112] should be renamed to departure points for balloons.”

### **CAA Response**

*The CAA believes that the submitters appear to have overlooked paragraph (c) of rule 91.112 which includes an exception to paragraphs (a) and (b). The daily flight record requirements for adventure aviation operators are prescribed in rule 115.455(b), which states that operators must record the “applicable” details for every flight, including the details required by paragraph (b)(9). Specifically, the operator must record, as applicable, “the name or identification of the aerodrome, launch site, and landing area used for take-off and landing.”*

**Rule 115.11 Privileges of certificate holder**

1 submitter asserted that the proposed rule discriminates against glider operations.

- “This proposed section [privileges of certificate holder] discriminates against glider flying activities when compared to the proposed regimes for other adventure aviation activities.” The distinction of adventure aviation is applied only to certain types of activities (e.g. formation flight , aerobatic manoeuvres, non-standard flight manoeuvres) for aeroplanes and helicopters with standard category airworthiness certificates, “yet a flight in a glider” is considered adventure aviation.

**CAA Response**

*The CAA disagrees with the submitter’s assertion that the proposed rule discriminates against glider operators conducting adventure aviation operations. As gliding operations are not covered by the definition of air transport the only avenue for operator certification is through the requirements stated in Part 115.*

**Rule 115.13 Operations Specifications**

A total of 9 submitters asserted that their adventure aviation operations should be excluded from the requirement to be issued Operations Specifications.

- 1 submitter asserted that “This is not acceptable but would be acceptable if balloons were excluded from this provision.”
- 4 submitters stated that there are three main areas of concern regarding the operations specifications requirements for hot air balloons. Firstly, it is “relatively impossible to list the landing areas” for balloons as they fly with the wind. Secondly, commercial balloon operators not only have an area of physical operations, but also travel to “Balloon Fiestas” around the country. Lastly, balloon operators ask other balloon operators to “help out when they have more groups of passengers to fly that they can carry at one time.”
- 3 submitters commented that “As balloons sail with the wind there can be no list of routes.” “The Director should give exemptions to the defined area of operations to hot air balloon

operators to include the whole of New Zealand on condition of approval.”

- 1 submitter commented that the requirement for the location of a tandem paragliding flight to be registered on Operations Specifications is “unrealistic.”

### ***CAA Response***

*The CAA agrees that it will be unintentionally difficult for hot air balloon and hang glider/paraglider operators to comply with the proposed rule requirement to identify launch sites and landing areas in the operator’s Operations Specifications. The CAA proposes to insert an exception to the proposed requirement stated in rule 115.13(b)(2) thereby removing this requirement for hot air balloon operators and hang glider/paraglider operators.*

### **Rule 115.19 Re-issue of certificate**

1 submitter asserted that there should be no requirement for adventure aviation operators to re-apply for a certificate.

- “Provided currency is maintained, and audits satisfactorily achieved, we see no reason for re-application.”

### ***CAA Response***

*The Civil Aviation Act 1990(Act) Section 7(2) requires a maximum period for which each aviation document may be issued to be prescribed by the Civil Aviation Rules. In addition, Section 7(3) of the Act allows the Director to specify the period for which an aviation document may be issued as the Director considers appropriate in each particular case. In accordance with the recommendations made in the Swedavia-McGregor Report (April 1988) following a review of civil aviation safety regulations, resources, structure and functions, the CAA adopted the life cycle approach for all operator certificates which requires the renewal of the operator certificate at five year intervals.*

### **Rule 115.21 Transitional arrangements**

A total of 9 submitters commented that the proposed transitional arrangements are unacceptable for hot air balloon operations.

- 1 submitter commented that the transitional arrangement for hot air balloon operations are not acceptable. Hot air balloon

operations should have the transition period increased to “18 or 24” months.

- 4 submitters stated that “There is no available data to justify a six month period, suggest an increase to 12 or 18 months.”
- 2 submitters asserted that “If as stated hot air balloons must comply within 6 months because of the safety risk factor, then this rule is based on flawed information and balloons should not have to comply until 24 months from the date that this rule comes into force...”
- 1 submitter commented that “The time should be extended to at least 12-24 months as most operators will be trying to fly over the coming summer season and do not need the added stress combined with running their business and becoming compliant...” “All industry participants under Part 115 should have the same compliance time of 12-24 months.”
- 1 submitter commented that the proposed transitional arrangements for hot air balloons are not acceptable and should be increased to 12-18 months. “Combined with running a business and becoming Part 115 compliant will result in stress/fatigue and therefore increase flight safety risk.”

### ***CAA Response***

*The CAA proposed the transitional timeframes based on the estimated level of safety risk, the estimated economic impact related to each adventure aviation activity, and CAA resource availability to conduct certification and surveillance activities.*

*Hot air ballooning involves safety risks that are not found in other aircraft operations. For example, the landing phase of a hot air balloon operation can involve a tip-over incident causing potential injury to passengers and crew. The CAA believes that the potential safety risk associated with the number of passengers that may be carried by hot air balloon operators supports the requirement to gain certification within the first 6 month period.*

**Rule 115.51 Qualifications and experience of senior persons**

A total of 9 submitters commented that the proposed senior person requirements should be changed. Some of the submitters expressed concern over the number of senior persons required for an adventure aviation operation, whilst other submitters commented on proposed senior person qualification and experience requirements.

- 8 submitters commented that “The minimum number of senior ‘personnel’ [persons] for an operator with 3 balloons or less [should] be 1.”
- 1 submitter stated that the requirements for qualifications and experience of senior persons are “unduly onerous.” “Most of these functions would be undertaken by an individual who would in all probability also be the pilot.”

**CAA Response**

*The CAA believes that the submitters have misinterpreted the wording in the proposed rule 115.51(b). Depending on the size of the operation and the acceptability to the Director, it may in fact be appropriate for an operator with 3 or less aircraft to have only 1 senior person. Rule 115.51(b) allows the Director to determine, as a consequence of the size and expected scope of the applicant’s organisation, the appropriate number of senior persons that will be required.*

**Rule 115.53 Personnel competency requirements**

1 submitter asserted that the proposed rule should allow an adventure aviation operator to contract with an aviation recreation organisation certificated in accordance with Part 149 for personnel competency assessment and training.

- “Para 115.53(b)(1) should include Part 149 organisations. In the warbirds arena there are not (currently) any Part 141 organisations with the operational or technical expertise to provide valid training and checking functions. NZQA Part 149 Aviation Recreation Organisation exposition was developed expressly for this purpose.”

**CAA Response**

*The CAA agrees that the proposed rule should include a reference to aviation recreation organizations that have been appropriately*

*certificated in accordance with Part 149 for the purpose of checking to assess, or training to maintain, the competence of the applicant's personnel.*

### **Rule 115.61 Maintenance programme**

1 submitter asserted that there are no registration or aircraft marking requirements for paragliders. The submitter inferred that the proposed rule requires adventure aviation operators to record registration markings for a paraglider in the approved maintenance programme.

- “For paragliders, there are not registration requirements or aircraft markings.” “Serial numbers are printed on labels attached to [para]gliders to identify them for maintenance purposes.”

### **CAA Response**

*The proposed requirement under rule 115.61(b)(1) states that the maintenance programme for aircraft operated by an adventure aviation operator must include, among other items, the registration marks “if applicable”. As paragliders are not registered aircraft, this requirement would not be applicable to adventure aviation operators conducting operations with a paraglider. The CAA recognizes that paragliders are not registered aircraft, therefore rule 115.61(b)(1) would instead require the operator of a paraglider to record the type, serial number and identification of the aircraft, but not a registration number.*

### **Rule 115.71 Flight following service**

A total of 9 submitters commented that the proposed flight following service requirement for adventure aviation operators is too complicated, unnecessary, and that certain types of adventure aviation operations should be excluded from the rule.

- 3 submitters commented that the rule for a flight following service should be simplified. Paraglider operations are conducted in a very small area and often within line of sight of the landing field. Suggest that when “a flight contains 2 or more gliders, the pilots will report directly to each other. If any 1 pilot takes a passenger to take off they must inform a suitably reliable person of the following: the intended take off and

landing area, identification markings and appropriate SAR time.”

- 1 submitter stated that “A driver/ground crew follow the [hang] glider to the landing zone.” “We already have a system which works fine. What need is there for this suggested complicated system?”
- 4 submitters commented that “Hot air balloons are highly visible slow moving aircraft.” “...they are in visual and radio contact with their chase crew who usually know the area very well.” “The operator’s exposition should seek an exemption by virtue of the use of a chase vehicle.”
- 1 submitter asserted that the requirement to report a pre-arranged time for the completion of the adventure aviation activity “is inappropriate for glider flying activities.” “Such predictability is not available for non-powered flight in a glider...”

### **CAA Response**

*The CAA disagrees with the comments made by the submitters, and does not believe that the proposed requirement is complicated or excessive. The CAA further believes that it can reasonably be expected that an adventure aviation operator would maintain such information as a matter of course.*

### **Rule 115.77 Organisational management system**

A total of 11 submitters made 12 comments on the proposed requirement for adventure aviation operators to implement an organizational management system. The majority of the submitters stated that the proposed rule should include a minimum number of senior persons necessary to conduct a hot air balloon operation.

One submitter commented that the proposed senior person requirements are too restrictive, whilst another submitter asserted that the proposed requirements were too permissive.

A final comment was made by 1 submitter who suggested that because hot air balloon operations are initiated from “several areas”, they should be excluded from the proposed requirement in paragraph (e)(2) to have an organizational management system. The comments made by some of



the submitters are verbatim copies of comments made by other submitters.

- 8 submitters commented that “The minimum number of senior persons for an operator with 4 balloons or more [should be] 2.”
- 1 submitter commented that “The minimum number of senior persons for an operator with 5 balloons or more [should be] 2.”
- 1 submitter asserted that “The requirement for senior personnel is too restrictive in its present form.” “...Part 115 will force the smaller ‘mum and dad’ commercial operators out of business.” “The CAA need to better determine what is fair and reasonable given the operation requirements.” “There is a need to reduce the number of senior personnel required for a small operation.”
- 1 submitter stated that “With reference to Rule 115.77(e) stating that paragraph (a) does not apply with a total of 3 or less aircraft or a total of 2 or less bases, I feel this should be the same as Rule 119.124.” “...some sort of organizational management system should apply to all operators as I believe this works extremely well in the GA sector.”
- 1 submitter commented that [Paragraph] “(e)(2) should be deleted for ballooning companies as they may have several areas they can operate from.”

### **CAA Response**

*The proposed rule requirement for an operator with 3 or less aircraft and a total of 2 or less bases is based upon the current rule requirement stated in rule 119.124. The CAA considers an operation with more than 3 aircraft to warrant the need for an organizational management system including the proposed requirements contained in rule 115.77(c).*

*It is rule 115.51 (Qualifications and experience of senior persons) that dictates the number of senior persons required in relation to the size and expected scope of the operation. The requirement for an organizational management system only requires that a responsible person is appointed to administer that system for the operator. The number of senior persons may consist of one full-time staff member in a small organization with limited scope having 3 or more aircraft as long as a*

*part-time person is available to undertake the role of senior person for the organizational management system.*

*With regard to the comment stating that hot air balloon operators should not have to comply with proposed rule 115.77(e)(2), it should be noted that paragraph (e)(2) does not refer to “launch sites”, but rather it refers to “bases” of operation.*

*The CAA agrees with the submitter who commented that some sort of organizational management system should be applied to all adventure aviation operators. It was the original intent to align rule 115.77 with existing rule 119.124. The CAA intends to amend the proposed rule 115.77(a) and (e) to reflect the same requirement – as is included in rule 119.124.*

## **Subpart B – Adventure Aviation Operator Certification Requirements**

1 submitter made 2 comments regarding proposed adventure aviation operator certification requirements. The submitter stated that the current NZHGPA tandem paraglider pilot qualification requirements are inadequate and should be revised if they are intended to be incorporated into Part 115 certification requirements. The submitter also commented that the proposed requirements for senior persons is too “prescriptive” for paragliding operations.

- “We agree that, in the case of PG [paragliding], the NZHGPA as a Part 149 organisation should continue to issue pilot qualifications for PG tandem pilots. However, in our view the requirements for tandem paragliding certification (PP1 & PP2) are inadequate, and existing NZHGPA structures also need to be revised to provide appropriate certification standards for Part 115 activities.”
- With regard to senior person requirements, “...it seems this level of detail is too prescriptive.” “That the draft rule focuses on this level of corporate detail, while showing a significant lack of understanding of the practicality of tandem PG operations is worrying.”

**CAA Response**

*The CAA agrees that the current tandem paraglider pilot qualifications under the existing NZHGPA structure will require review. The CAA will require the review to be conducted prior to the in-force date of the Part 115 rule.*

*The CAA disagrees with the comment that the proposed senior person requirements introduce a level of detail that is too prescriptive. The CAA believes that the proposed requirements set a baseline standard for an acceptable organizational structure. The CAA further believes that the senior persons of an organization are a critical link to ensuring the safety of the operation and that the proposed requirements for paraglider operators are reasonable.*

**Rule 115.105 Business or trading name**

The CAA received 4 identical submissions regarding the requirement for adventure aviation operators to display their business or trading in a manner that is clearly identifiable, visible, and legible to any intending passenger. Each of the submissions were made by hot air balloon operators who commented that the trading name details should not only be displayed on the aircraft itself, but also, in the case of hot air balloon operations, on the chase vehicle.

- “The minimum company trading name and contact details signage needs to be clearly visible on one side of a balloon basket, both sides of a vehicle and trailer.”

**CAA Response**

*The marking of chase vehicles and trailers is not within the authority and functions controlled by the CAA and is therefore not addressed in the proposed rules.*

**Rule 115.201 Restriction or suspension of operations**

A total of 15 submissions were received regarding proposed restrictions to adventure aviation operations. The submissions came from 3 of the adventure aviation sectors: paragliding; gliding; and hot air balloon operations.

- 1 submitter commented that paragliders are designed for the purpose of climbing to the cloud base. “Only the ‘Clear of

cloud and in sight of ground’ part of the VFR rule” should be applied to paragliders.

- 3 submitters stated that normal VFR minima make it illegal for a paraglider to do what it is designed to do (climb to cloud base). Suggest changing wording to “Clear of cloud and in sight of the surface.”
- 2 submitters stated: “By their very nature, gliding operations are physically limited by the prevailing meteorological conditions.” Therefore the proposed requirement [for adventure aviation operations to be conducted with the approved radius from the point of departure as specified in the certificate holder’s operations specifications] is not necessary.
- 5 submitters asserted that hot air balloon operators should be exempt from the requirement prohibiting operation over a congested area of a city, town, or settlement, or over an open-air assembly of persons, because “competent experienced pilots routinely fly over congested areas of a city or assemblies of persons within VFR.” “Balloons are lighter than air aircraft and do not pose the same risks as other aircraft if conditions don’t permit a safe flight then [when] they are cancelled.”
- 2 submitters stated that the majority of commercial flights already do take place over cities and built up areas. “It should be accepted that we do fly over built up areas but if conditions don’t permit a safe flight, then the flight is cancelled.” Hot air balloons should not be restricted from flying over congested areas of cities, and “to specify which towns, villages or cities we will fly over in New Zealand is totally impractical.”
- 2 submitters broadly stated that hot air balloon operators should be exempt from the requirement prohibiting operation over a congested area of a city, town, or settlement, or over an open-air assembly of persons.

### ***CAA Response***

*The proposed rule does not necessarily prohibit an adventure aviation operation from being conducted over a congested area of a city, town or*

*settlement, etc., but it does require flights over such areas to be authorized on the adventure aviation operator's Operations Specifications. The proposed rule provides the CAA the ability to control the types of adventure aviation operations that may be permitted over congested areas.*

*Current CAA rules require hang gliders and paragliders to be operated in VFR conditions only. The Proposed rule will not change the current CAA position.*

*The authorization of the area of operations via Operations Specifications provides the CAA with the ability to assess the scope of the intended adventure aviation operation. This assessment could result in more or less stringent operational requirements.*

#### **Rule 115.203 Passenger safety**

1 submitter (a hang glider operator) expressed concern that the proposed rule, which includes a requirement to ensure that disabled passengers are appropriately cared for, required clarification.

- It is “not always appropriate to take a disabled person on a tandem hang glider. This needs to be the decision of the pilot in charge.”

#### **CAA Response**

*The pilot-in-command remains responsible for the safety of any passenger carried on board an adventure aviation operation. The proposed rule highlights specific considerations for the safety of disabled passengers if the PIC has elected to carry such persons on the adventure aviation operation.*

#### **Rule 115.207 Emergency equipment requirements (axe)**

A total of 11 submissions were received regarding the proposed requirement for aircraft other than a hang glider, paraglider, or tandem parachute to be equipped with an axe for emergency use.

- 2 glider operators stated: “The normal means of egress from a glider is via the opening of a relatively thin Perspex canopy which also has an emergency jettisoning capability.” The proposed requirement for an axe is “both unnecessary and impractical.”

- 9 hot air balloon operators commented that hot air balloons should not be required to carry an axe. “If an axe was required to be carried on board the balloon, balloon manufacturers would have already considered this and would have included it in their flight manuals as minimum equipment to be carried.”

### ***CAA Response***

*The CAA agrees that the proposed requirement for gliders and hot air balloons to be equipped with an axe for emergency use is unnecessary. The CAA proposed to amend rule 115.207 to remove this requirement.*

### **Rule 115.207 Emergency equipment requirements (fire extinguisher)**

3 submissions were received from glider operators commenting on the requirement for aircraft other than a hang glider, paraglider, or tandem parachute to be equipped with a fire extinguisher.

- 2 submitters stated that gliders do not carry fuel, smoking is prohibited, and electrical circuits are protected, so fires are extremely unlikely to occur in their cockpits. The proposed requirement for a fire extinguisher is “both unnecessary and impractical.”
- 1 submitter stated: “The inclusion of a fire extinguisher... is inappropriate for flight in a glider.”

### ***CAA Response***

*The CAA agrees that the proposed requirement for gliders to be equipped with a fire extinguisher is unnecessary. The CAA proposed to amend rule 115.207 to remove this requirement.*

### **Rule 115.207 Emergency equipment requirements (first aid kit)**

2 submissions were received from hang glider operators commenting on the requirement to carry or have access to a first aid kit.

- 1 submitter stated: “Carrying a first aid kit in a paraglider may be harmful as it may contain items which can cause injuries while launching and landing (e.g. scissors).”
- 1 submitter asserted that [the rule] “Seems to imply first aid kit to be carried on hang glider.” “This should be left with the

ground crew because there is limited space available in harnesses.”

### ***CAA Response***

*The proposed rule does not require hang glider operators, paraglider operators, or tandem masters to carry a first aid kit, but rather it requires the above mentioned persons to have “reasonable access” to a first aid kit. The majority of injuries sustained in the above mentioned operations occur during the landing phase. The CAA believes that the requirement for access to a first aid kit (such as in a ground crew vehicle or chase vehicle) is reasonable.*

### **Rule 115.211 Operational safety check**

A total of 4 submissions were received from paraglider operators regarding the requirement for adventure aviation operators to perform operational safety checks in accordance with an operational safety checklist.

- All 4 of the submitters made the identical comment that paragliders operate without a traditional cockpit, making the use of written checklists and or flight manuals impractical. In lieu of a checklist, “an appropriate sticker or acronym to remind the PIC to instigate checks could be placed in clear view of the pilot on the back of the passenger’s helmet.”

### ***CAA Response***

*The proposed rule does not require the adventure aviation operator to carry the operational safety checklist on the aircraft during flight. The proposed rule requires adventure aviation operators to ensure that an operational safety checklist is “available” and used by every flight crew member including tandem masters before each flight.*

**Rule 115.215 Manipulation of controls**

A total of 12 submissions were received from various hang glider, paraglider, and glider operators commenting on the proposed rule which prohibits passengers from manipulating the controls unless the operator is conducting a simulated military operations in accordance with proposed rule 115.759.

- 1 submitter stated: “It is reasonable and safe to allow the pilot to decide if a passenger can steer the paraglider during a flight. Tandem paragliders should be exempt from this rule.”
- 3 submitters stated: “Manipulation of the flight controls of a tandem paraglider by the passenger should not be a safety concern. If the pilot in command deems the exercise safe, it should be allowed to continue.”
- 1 submitter commented: “This rule should not apply to hang gliders because having the passenger on the control frame is an easy and safe thing to do on a hang glider. It is also a great teaching tool.”
- 1 submitter asserted: “On a paraglider it is impossible to ensure that the passenger cannot touch the controls unless the passenger’s hands are tied up. The only way to ensure this is to explain to the passenger that he is not allowed to touch them.”
- 2 submitters commented: “The proposed requirement does not allow a passenger to experience manipulation of the glider controls.” “Provided the pilot in command holds a current GNZ instructor rating, and an appropriate pre-flight briefing is provided, there is no intrinsic reason why a passenger should not be allowed to manipulate the glider controls.”
- 1 glider operator commented: “Manipulation of controls should not be limited to simulated military operations.” “Suggest incorporating the provisions of rule 115.759 into rule 115.215 without restricting such operations to simulated military operations.”
- 1 submitter stated: “There is no practical reason for blanket prohibition of a person from manipulating the flight controls



during a glider flight.” “...it is not unknown for passengers to want to have go at the controls...” The proposed rule “...imposes limits upon the ‘product’ that may be supplied by an adventure aviation organisation...”

- 1 submitter commented that “paragliders should be exempted from this requirement.”
- 1 submitter stated: “In the case of a tandem hang gliding flight, control can be safely passed to the customer with instruction given before and during the flight.” “Recommend exception should be made for tandem hang gliding and tandem paragliding flights.”

### **CAA Response**

*The CAA believes it is appropriate to amend the proposed rule 115.215 to allow limited manipulation of the controls in aircraft carrying no more than one passenger, and when the flight is not conducted for the purpose of providing flight instruction.*

### **Rule 115.217 Flights over water**

8 hot air balloon operators commented on the proposed rule regarding operations over water, or when the flight path of the balloon will or might possibly cross the shore of any lake or sea.

- 4 submitters stated: “Balloon operators flying out of a common gazetted launch field within 1nm of a manmade lake of less than 6 feet deep (i.e. Innes Common and Lake Henley) should be able to apply for an exemption as they are launching usually away from the lake.”
- 3 submitters commented that balloon operators should be permitted to “apply to be exempt’ from operating over certain lakes.
- 1 submitter commented: “Life jackets to be carried only if balloon is operating within 2 km of a large bodied lake or river (Waikato) only if said lake or river is deeper than 3m and more than 1 km wide.” “The rule needs clarification as to the depth and size of a body of water.”

**CAA Response**

*The CAA highlights that this rule relates to adventure aviation flights over water and not recreational hot air balloon operations such as aviation events. For clarification purposes, the CAA proposes to amend rule 115.217(b)(1) by removing the reference to “over water” and inserting “over any lake or sea”.*

**Rule 115.219 Use of aerodrome, landing areas and launch sites**

1 submitter objected to the proposed requirement to use only aerodromes, landing areas and launch sites that have physical characteristics suitable to the aircraft being used for the operation, and the requirement for an adventure aviation operator (except for hot air balloons) to maintain a register containing pertinent information about the aerodrome, landing areas and launch sites to be used.

- “As paragliders are portable, foot launched and unpowered, these requirements are unrealistic.”

**CAA Response**

*The CAA disagrees with the submitter’s comment. Launch sites can be subject to varying limitations and conditions (e.g. wind direction, slope) which may preclude some sites from being safe for passenger carrying operations. The proposed rule requires that the adventure aviation operator maintain a register of launch sites verifying that the launch site has been assessed and has been determined to be safe for the intended operation.*

**Rule 115.223 Aircraft load limits**

A total of 6 submissions were received regarding the proposed aircraft load limit requirements. 5 of the submitters are paraglider operators who expressed concern over the proposed requirement to ensure that the aircraft is operated within the appropriate limitations and the requirement to determine the actual total weight of each passenger and crew member. 1 of the submissions is from the parachute industry regarding the person responsible for ensuring that a parachute-drop aircraft is operated within applicable weight and balance requirements.

- 1 submitter commented that the rule should state that “paragliders must remain within the stated load limits according to the manufacturer.”

- 3 submitters stated: “Paragliders must remain within the stated load limits according to the manufacturer. There are no weight or balance or other traditional limits involved in flying a paraglider.” “They are [paragliders] so structurally sound, that it would be almost impossible to manoeuvre the aircraft in such a way to exceed any limitations.”
- 1 submitter stated that with regard to weight and balance of parachute-drop aircraft, “the suggested rule tries to put the responsibility on the operator to ensure they fly within the weight and balance of the AFM. This still does not absolve the pilot’s responsibility under CAR 91.109. “
- 1 submitter asserted: “While pilots must establish their passenger’s weight and assess the overall take-off weight, such are the ranges of tandem paragliders that taking actual weights is unrealistic and unnecessary (walking to a take-off site carrying a set of scales is impractical). “

### **CAA Response**

*The submitters appear to agree that an aircraft must be operated within the load limitations specified by the aircraft manufacturer. The proposed rule does not conflict with this assertion. Because maximum load limitations are established, it is necessary to determine the actual weight of each passenger to ensure that the specified load limit is not exceeded. The process of weighing passengers can be conducted at any time prior to the flight, not necessarily at the launch site.*

*With respect to the comment regarding weight and balance of parachute-drop aircraft, the CAA agrees with the submitter. The proposed rule places responsibility on the adventure aviation operator to ensure that each of its operations are conducted within the appropriate aircraft load limits. This proposed requirement does not negate the pilot’s responsibility under rule 91.109 to ensure that the aircraft is operated in compliance with the operating limitations specified in the aircraft flight manual.*

### **Rule 115.301 Training - General**

1 submission was received from an operator of warbird aircraft who commented that the proposed rule should also allow adventure aviation

operators to contract with the holder of an aviation recreation organization certificate issued in accordance with Part 149 to perform training.

- “In the warbirds arena there are not currently any Part 141 organisations with the operational or technical expertise to provide valid training and checking functions. NZWA Part 149 aviation recreation organization exposition was developed expressly for this purpose.”

### ***CAA Response***

*The CAA agrees that the proposed rule should be amended to allow an adventure aviation operator to contract training functions with an appropriate aviation recreation organization certificated in accordance with Part 149.*

### **Rule 115.303 Flight crew and ground crew training programme**

A total of 4 submissions were received from hot air balloon operators suggesting that flight crew and ground crew training could be conducted every 2 years by the same person who conducts the pilot’s biennial flight review (BFR).

- 3 submitters stated: “The flight crew and ground crew training programme could be checked by the BFR instructor at the same time when checking out the pilots.”
- 1 submitter commented: “All ground crew training should be carried out by the company to a standard approved by CAA with annual reviews every 2 years like a BFR.”

### ***CAA Response***

*In accordance with the proposed amendment to rule 61.39(b)(1), a pilot conducting adventure aviation operations is not required to have a BFR provided that they meet the flight crew competency check requirements stated in Part 115.*

*The recurrent training programme is intended to be an ongoing process that maintains competency throughout the period of operation, rather than employing a specific demonstration of skill at a 2 yearly period (such as the BFR). An appropriate training programme will ensure that flight crew and ground crew are properly trained on an ongoing basis.*

**Rule 115.309 Recurrent training for crew members and ground crew**

4 submitters commented that the recurrent training requirements for hot air balloon crew members are not acceptable and should include more stringent requirements for hot air balloon operator competency.

- Each of the submitters stated: “For recurrent/continuation training the pilot must demonstrate confidence and competency by completing at least two inflations and deflations, two landings and a flight of no less than 30 minutes duration in a balloon no larger than the largest balloon the pilot has flown previously as PIC.”

**CAA Response**

*The CAA believes that it would be ineffective to amend the proposed rule by simply incorporating the submitter’s comments. The contents of the training programme are dependent upon the size and scope of the operation, and it is the responsibility of the adventure aviation operator to develop an appropriate training programme.*

**Rule 115.311 Flight crew member instructor qualifications**

A total of 4 submissions were received regarding flight crew member and instructor qualification requirements.

- 2 submitters asserted: “As glider instructor ratings are not issued under Part 61, there needs to be similar provisions to those applying to hang gliders, paragliders and tandem parachutes.”
- 1 submitter wishing to conduct special aircraft operations stated that rule 115.311 should include “Part 149 authorised persons” to carry out the functions of an instructor for flight crew members.
- 1 submitter stated: “Under the NZ hang gliding & paragliding association (NZHGPA), our instructors are only used for training of solo pilots entering into the sport and not for training of tandem pilots. The NZHGPA have approved a list of experienced tandem pilots as “tandem assessors” to meet tandem pilot initial issue and currency requirements. I believe a senior person within an operation with a current tandem certificate would be suitable to meet the training requirement.”

**CAA Response**

*The CAA agrees that the proposed rule should be amended to include, for a glider operation, a current glider instructor certificate issued by a gliding organization that has been certificated in accordance with Part 149.*

*The CAA disagrees with the submitter’s comment regarding instructor functions for special aircraft operations. The CAA disagrees that such authorised persons should be allowed to carry out all privileges of an instructor rating, however some instructional privileges are currently authorised for such instructors under the existing rules.*

*The CAA disagrees with the comment made regarding hang glider instructor qualifications. The NZHGPA will be required to review its tandem instructor rating to ensure it is acceptable for commercial operations.*

**Rule 115.353 Flight crew competency checks**

1 submission was received from a hang glider operator who commented that the requirement to check pilot competency every 12 months was not necessary.

- “Under our current NZHGPA system a tandem seminar and first aid certificate are required every 24 months. I believe due to the simplicity of the aircraft we are flying that a competency check every 24 months [instead of every 12 months] would suffice.”

**CAA Response**

*The CAA disagrees with the submitter’s comment. The flight crew competency check process is intended to be ongoing, and takes the place of the current 24 month process. The submitter seems to have misunderstood that for commercial operations there is a requirement to continually check and train to maintain competency of flight crew members to a higher standard than those used for recreational operations.*

**Rule 115.355 Crew member and ground crew member competency checks**

1 submission was received from a hang glider operator who commented that the requirements to check crew member and ground crew member competency every 12 months was not necessary.

- “I believe due to the simplicity of the aircraft we are flying that a competency check every 24 months [instead of every 12 months] would suffice.”

**CAA Response**

*See response to comments for rule 115.353 (above).*

**Rule 115.357 Flight examiner qualifications**

A total of 6 submissions were received regarding the proposed requirements for flight examiner qualifications.

- 1 submitter stated: “No such qualification [flight examiner for hang glider] currently exists within the NZHGPA. You are asking us to comply with an impossible rule. Should be removed.”
- 1 submitter stated: “There is no hang glider flight examiner certificate issued by a hang glider organisation in New Zealand. Requesting such a certificate would effectively ground all tandem operations. If NZHGPA is required to build up a qualification, please add a ‘paraglider flight examiner.’”
- 2 submitters stated: “Similar to the proposal for hang gliders, paragliders and tandem parachutes, there should be provision for the holder of a GNZ category A instructor rating or GNZ instructor trainer approval to exercise glider flight examiners privileges under this rule.”
- 1 submitter commented: “The NZGHPA does not have a flight examiner certificate, but it does have a list of pilots that are authorised as ‘tandem assessors’.” “A senior person within an operation with a current tandem certificate would be suitable to meet the examiner requirement.”

- 1 submitter commented that the requirement proposed in rule 115.357(4) for flight examiners to complete initial and recurrent training applicable to the competency check carried out should be removed. The submitter questioned “who checks the examiner” and stated that “if a pilot submits their experience and reasons to why they should be an examiner to the CAA and this is accepted, then this should be enough.”

### ***CAA Response***

*For those sectors of the adventure aviation industry that currently do not require a flight examiner (i.e. hang gliders, paragliders, hot air balloons, gliders), under the definition of flight examiner in Part 1, suitable persons can be approved as flight examiners by the Director. The CAA intends to work with the various sectors and invite applications from appropriate persons for approval as flight examiners.*

### **Subpart F – Crew Member and Ground Crew Competency Requirements**

A total of 10 submissions were received on various aspects of the crew member and ground crew member competency requirements proposed under Part 115 Subpart F.

- 1 hang gliding operator stated: “All of this would be very difficult for owner/operator and other small business structures. Should be scrapped.”
- 2 paragliding operators commented: “Subpart F [Crew competency requirements] is very difficult for small businesses. My suggestion is not to apply the requirements from subpart F to hang gliding and paragliding.”
- 1 hot air balloon operator stated: “[The proposed crew competency requirement] is not acceptable for CPL(B) pilots but would be acceptable if deleted. CPL(B) pilots are already subject to BFR checks which fulfil this requirement!”
- 6 hot air balloon operators asserted: “CPL(B) pilots are already subject to BFR check which fulfil this requirement. Balloon companies could choose whether to complete annual competency checks or use a BFR as defined in their expositions.”



### **CAA Response**

*The CAA disagrees with the submitters commenting on the impact of the proposed requirement on small businesses. The proposed rule states that crew member and ground crew member competency checks apply only as appropriate to the type of operation, and the competency assessment for those persons is reasonable under the operator's responsibility for duty of care.*

*With regard to the comments associated with CPL(B) pilots, the CAA asserts that the purpose is to align the proposed rule requirement with other air transport rules, thereby establishing a higher standard than those in place for recreational operations. The CAA points out that the crew competency requirement proposed in rule 115.355 replaces the requirement for a BFR.*

### **Rule 115.453 Documents to be carried**

9 submissions were received with comments on the documents to be carried by adventure aviation operators. The comments revolve around 3 principle issues. Firstly, some hang glider and paraglider operators have commented that it is not possible to safely access documents in flight. Secondly, some operators have asserted that there is no need to carry weather information due to the nature of the flights that they undertake. Lastly, 1 submitter asserted that the type of documents required by the proposed rule are not applicable to the operation that they intend to conduct.

- 1 paragliding operator stated: “No documents need to be carried by paragliders in flight. Any applicable documents must be available to the pilot in either hard copy or electronic form.” “It is unreasonable due to the nature of our aircraft to expect pilots to carry these during flight as accessing any of them is not feasible and would in fact endanger the flight.”
- 3 paragliding operators commented: “No documents need to be carried by a paraglider in flight.” “It would be impossible to safely access these documents during the flight. The operator could make the documents available to the pilot before flight.”
- 1 hang gliding operators asserted: “Carrying such documents is not necessary on a tandem hang glider flight. Flights are

usually under 20 minutes and the weather will not change much in that time.”

- 1 paragliding operator stated: “All the documents requested [by the proposed rule] are not useful in hang gliding and paragliding and it would be very difficult and dangerous to handle them in flight.”
- 1 hang gliding operator stated: “The documents listed are not practical to this type of operation to have onboard.”
- 1 hot air balloon operator commented: “There is no reason to print or carry weather information [in a hot air balloon] as that information would have [been] obtained before the flight commenced...”
- 1 paragliding operator stated: “It is unrealistic to require a tandem [paraglider] pilot to carry NOTAMs, met information and flight guide charts and plates.”

### **CAA Response**

*The CAA believes that the submitters have overlooked the fact that the proposed rule only requires adventure aviation operators to carry the documents that are applicable to the operation being conducted. The CAA intends to reiterate this point in an Advisory Circular that will provide guidance for how to comply with these requirements under Part 115.*

### **Rule 115.455 Daily flight records**

A total of 16 submissions were received regarding the proposed requirement for adventure aviation operators to maintain daily flight records applicable to the operation being conducted.

- 1 paragliding operator stated: “The only daily flight record for paragliders should be date and place of the flight.” Recording of passenger weight “could be written on the passenger’s hand prior to flight, thus making easy recording of weight after an incident.” Flight time is not necessary to record, as a “rough estimate is perfectly adequate for general interest.”

- 3 paragliding operators asserted: “Flight time on the entire [paraglider] and its components is extremely unimportant when compared to fixed or rotary wing operations.” Daily flight records need only contain “date, place of the flight, and the pilot in command.”
- 2 glider operators remarked: “There can only be one passenger in a glider. In practice, a declared passenger weight should be perfectly adequate for weight & balance purposes.”
- 4 submitters commented that for hot air balloon operations, “the current use of either the declared weight of the passenger plus 4 kg or actual weight of all passengers and crew should suffice.”
- 4 hot air balloon operators commented that paragraphs (4), (12), and (14) should be deleted from rule 115.455 daily flight record requirement as these items “are not applicable to hot air ballooning.”
- 1 glider operator stated: “This rule is unduly complicated for the purpose of ensuring that the weight and balance of a two-seat glider is within limits.”
- 1 paragliding operator commented: “While daily records are sensible, the level of detail required is not realistic for most paragliding operations.”

### ***CAA Response***

*As is the case with the comments received for rule 115.453, the CAA believes that the submitters have failed to acknowledge the fact that the proposed rule requires adventure aviation operators to record and maintain only the items that are applicable to the operation being conducted. The CAA intends to reiterate this point in an Advisory Circular that will provide guidance for how to comply with these requirements under Part 115.*

*The CAA disagrees with the comments made regarding the use of declared passenger weights rather than actual passenger weights. In previous comments the submitters appear to agree that an aircraft must*

*be operated within the load limitations specified by the aircraft manufacturer. As indicated in the CAA response to rule 115.211, because maximum load limitations are established, it is necessary to determine the actual weight of each passenger to ensure that the specified load limit is not exceeded.*

### **Rule 115.503 Instruments and equipment – hot air balloon (ELT requirement)**

A total of 8 submissions were received from hot air balloon operators asserting that there is no need for a hot air balloon to be equipped with an Emergency Locator Transmitter (ELT) while conducting adventure aviation operations.

- 5 submitters remarked that hot air balloons “do not fly over hostile terrain, [and] they are in visual and radio contact with their chase crew who usually know the area very well. The operator’s exposition should state that a PLB should be on board for any special flights or flights outside their normal areas of operation and an ELT is not required.”
- 3 submitters stated that it is not necessary for hot air balloons to carry an ELT or PLB because “commercial balloon companies will state in their manuals that ground crew must keep visual and radio contact with the balloon at all times.” Also, there is a “high risk of accidental activation due to a bumpy or drag landing...”

### ***CAA Response***

*The CAA has considered the submitter’s comments and agrees that the requirement for a hot air balloon to be equipped with an ELT or PLB while conducting an adventure aviation operation is unnecessary. The CAA agrees that the risk of difficulty in locating a hot air balloon after an accident is low due to the use of a constant flight following service provided by balloon chase vehicles and crew, and the highly visible nature of the aircraft.*

**Rule 115.507 Pilot qualification and experience requirements – hot air balloon**

A total of 15 comments were received from 7 separate submitters regarding the proposed pilot qualification and experience requirements for hot air balloon operators.

- 6 submitters stated that the proposed requirement for hot air balloon pilots to have acquired at least 200 hours flight time experience as PIC of a balloon is “not acceptable.” “The holder of a CPL and a type rating for the specific aircraft in any other aviation field is able to carry out operations for hire and reward without any minimum hour requirement.”
- 4 submitters commented that the proposed requirement for hot air balloon pilots to have 20- hours flight time experience as PIC of the type of balloon used for the adventure aviation operation “is way too excessive.” “No other country has this and to do this could take a couple of months.” “Should be reduced down to at least 8-10 hours and only for conversion training between groups.”
- 4 submitters remarked that the proposed pilot qualification requirements in rule 115.507 contradict the requirements of rule 115.103.
- 1 submitter stated: “There should be more definition between type and group (or size) ratings” for balloons.

**CAA Response**

*The CAA notes that there is in fact a minimum flight time requirement of 200 hours for a person to be granted a CPL. However, in recognition of the fact that the average duration of a hot air balloon flight is approximately 1 hour, the CAA agrees that the length of time for a hot air balloon pilot to reach the proposed minimum of 200 hours could be considered disproportionate. The CAA acknowledges that the number of flights necessary to accumulate 200 hours is likely to be greater than the number of flights required to acquire the same number of flight hours in other types of aircraft. The CAA proposes to amend the requirement by reducing the number of hours for the PIC of a hot air balloon from 200 to 100, and by further reducing the number of hours as PIC in the type of balloon used for the operation from 20 to 10.*

*The CAA disagrees that the proposed pilot qualification requirements stated in rule 115.507 contradict the proposed requirement stated in rule 115.103. Rule 115.103 states the base pilot licence requirement while rule 115.507 states the experience requirements in terms of flight time.*

*The CAA has established a hot air balloon rating system that aligns with other Civil Aviation Authorities worldwide. The CAA believes that the rating system currently in place is reasonable and effective, and does not require amendment to achieve the desired safety outcomes for adventure aviation operations.*

### **Rule 115.559 Pilot qualification and experience requirements – parachute-drop aircraft**

1 submission was received from a parachute organization asserting that the proposed requirement for a pilot of a parachute-drop aircraft to hold a commercial pilot licence will not necessarily improve safety.

- “A CPL is the appropriate licence entry level for flying parachutists for hire and reward [parachute-drop aircraft], but this does not reflect any statistic that indicates safety will be improved.” “To make the claim that safety will be improved by the introduction of CPL for parachute-drop flying is simply not correct.”

### ***CAA Response***

*The CAA believes that an increase in the pilot certification and medical standards will likely lead to an increase in safety. These standards are an integral component of the overall increase in organizational standards applicable to adventure aviation operators/*

### **Rule 115.607 Pilot qualifications and experience requirements - glider**

3 separate submitters made 5 comments regarding the proposed qualification and experience requirements for glider pilots.

- 2 submitters stated: “It appears that the mere existence of a CPL(G) in the current CAA rules has led the Part 115 rule drafters to automatically opt for that requirement for gliders.” As commercial parachutist certificates are issued by a parachute organisation, “GNZ should therefore be authorised to

issue a commercial pilot rating and the Part 61 CPL(G) provisions should be revoked.”

- 2 submitters commented that the requirement for a glider pilot to have 200 hours flight time experience as PIC exercising the privileges of a commercial pilot is “both impractical to achieve and largely irrelevant in a gliding context.”
- 1 submitter stated: “The proposed rule is unworkable.” The rule proposes “that only persons holding a CPL in powered flight in addition to a CPL(G) be entitled to fly as pilot-in-command of a glider in an adventure aviation operation.” The proposed rule “requires insufficient experience acting as pilot-in-command of a glider, and requires irrelevant experience acting as pilot-in-command of a powered aircraft.”

### **CAA Response**

*The CAA considers that the comments asserting that CPL(G) licence should be issued by GNZ is out of scope for consideration in the Part 115 adventure aviation rulemaking project.*

*The CAA agrees that the requirement for a glider pilot to acquire 200 hours flight time as PIC exercising the privileges of a commercial pilot licence may be unreasonably difficult to achieve. The CAA proposes to amend the requirement of rule 115.607(3)(i) to require 200 hours PIC flight time experience.*

*The proposed rule does not indicate that only persons holding a CPL in powered aircraft in addition to a CPL(G) will be entitled to fly as PIC of a glider. However, the CAA acknowledges that it may be difficult to achieve 200 hours PIC exercising the privileges of a commercial pilot licence, which may have lead the submitter to conclude that such experience could only be obtained as PIC of a powered aircraft. As noted above, the CAA proposes to amend the PIC flight time experience requirement stated in rule 115.607(3)(i).*

**Rule 115.607 Pilot qualifications and experience requirements – glider (Medical)**

2 submitters made identical comments regarding the proposed medical requirements for glider pilots.

- “The CPL(G) requirement implies a Part 61 Class 1 medical requirement for the pilot-in-command, the same as for airline operations where a single pilot may be carrying up to 14 passengers. Gliders can carry only one passenger, so this requirement is clearly disproportionate in terms of limiting pilot incapacitation risk to the public.”

***CAA Response***

*The CAA considers the submitter’s comments to be out of scope for the Part 115 adventure aviation rulemaking project. The pilot medical requirements for adventure aviation operations are no different to those stated for single passenger operations conducted in accordance with Part 135. The CAA believes it is appropriate to align the medical requirements with those required for other commercial air operations.*

**Rule 115.609 Towing a glider in flight (pilot qualification requirements)**

3 submitters commented that the proposed pilot qualification requirements for pilots of glider tow aircraft to hold a CPL and a Class 1 medical certificate are excessive.

- 2 submitters stated: “The vast majority of glider tow pilots are PPL holders, many of them very experienced and skilful, but of an age where having to maintain a Class 1 medical standard would be unduly burdensome.” “Glider pilots are trained to cope with launch failure... loss of tow is largely immaterial because the glider pilot has the inherent ability to return safely to the takeoff aerodrome... the proposed tow pilot CPL requirement is not necessary.”
- 1 submitter asserted that there should be no difference between pilot qualification requirements for towing a glider in an adventure aviation operation versus recreational glider operations. The submitter believes that the current glider tow pilot qualification requirements under rule 91.709 should be sufficient for hire or reward glider operations under Part 115.



**CAA Response**

*The CAA agrees that no significant increase in safety will be achieved by requiring the pilot of a glider tow aircraft to hold a CPL. The CAA intends to remove the proposed requirement for a CPL and will continue to allow the pilot of a glider tow aircraft to hold a PPL.*

**Rule 115.611 Glider winch launches**

5 submitters commented that the proposed rule which prohibits the use of a winch to launch a glider during an adventure aviation operation is not reasonable.

- 2 submitters stated: “This proposed requirement defies logic.” “One of the reasons winch launching is so safe is that launch failures are reasonably common and therefore pilots, who are current, anticipate a failure every time they launch.”
- 1 submitter stated: “Winch launching is often seen as a highlight of a glider flight. It is exhilarating, economical and environmentally friendly.” Failure of a winch launch is not “safety critical” as pilots train for that possibility. “My suggestion is to not ban winch launching outright, but rather put in place some minima surrounding the operation.”
- 1 submitter stated: “Exclusion of winch launching from the available range of adventure aviation activities is not rational.”
- 1 submitter asserted: “It is a patently safe, economic and supremely thrilling means of launching a glider.”

**CAA Response**

*The CAA has determined that the standards for a glider winch fall under the fit for purpose requirements of the HSE Act. Adventure aviation operators will need to ensure that they are in compliance with the HSE requirements and on that basis the CAA intends to remove the prohibition against glider winch launches from the proposed rule.*

**Rule 115.651 Airworthiness – hang glider and paraglider**

3 submissions were received from paragliding operators regarding the proposed airworthiness requirements for hang gliders and paragliders. The submitters expressed concern over the standards that are proposed.

- 1 submitter commented that the German LTF certification standard should be added to the standards referenced in proposed rule 115.651 as all new tandem hang gliders will be tested to the LTF standard, but not necessarily the DHV standard.
- 1 submitter remarked that there is no DHV Guetesiegel certification standard anymore. The submitter stated that the DHV Guetesiegel standard was replaced by an LTF standard. In addition, the submitter added: “DHV/LTF is German law and it seems strange to make German law part of a Kiwi CAA regulation. European Norm seems more acceptable.”
- 1 submitter stated: “We are concerned about the Director accepting certification standards without further clarification – for example, the Director accepting an uncertified [para]glider based on type conformity, as assessed by the NZHGPA or the operators should not be acceptable.”

***CAA Response***

*The CAA acknowledges the need to include the German LTF certification standard in the rule.*

*The use of an international standard is necessary due to the absence of a New Zealand standard. It is a common practice and in the interest of aviation safety that the CAA incorporate international standards and global best practices where appropriate to the New Zealand aviation operating environment.*

*The Director would find it appropriate to accept only a formal internationally recognized standard.*

**Rule 115.653 Instrument and equipment requirements – hang glider and paraglider (Airspeed Indicator)**

A total of 9 submissions were received asserting that the proposed requirement for hang gliders and paragliders to be equipped with an

airspeed indicator when used for adventure aviation operations is unnecessary.

- 1 submitter stated: “Paragliders are not normally equipped with an airspeed indicator and would serve no useful function. No maximum speeds are published by manufacturers for paragliders so its not possible to over stress them in that sense.”
- 4 submitters asserted that paragliders should be exempt from the requirement to have an airspeed indicator because paragliders do not have VNE or VA speeds consequently there is “absolutely no safety benefit”. Airspeed indicators must be slung under the pilot on a flexible line which is dangerous in the landing approach during commercial tandem operations.
- 1 hang glider operator commented: “Experienced hang glider pilots do not crash from lack of airspeed. Airspeed is sensed by feel of control frame and by wind in your face and the sound of wind past your helmet.”
- 1 submitter asserted: “An airspeed indicator is just an additional piece of equipment that might get caught and cause problems.” “There is no particular use for an airspeed sensor in a tandem paraglider at all.”
- 1 submitter commented that it is “not practical for a paraglider to have an airspeed instrument as it is similar to a sport skydiving canopy.” “There are no ‘never exceed’ or ‘maximum manoeuvring’ speeds on a paraglider.”
- 1 submitter stated: “Airspeed indication on a paraglider is inaccurate and performs no useful purpose.”

### **CAA Response**

*The CAA agrees that due to the nature of the aircraft it is unnecessary for a paraglider to be equipped with an airspeed indicator. However, a hang glider is subject to airspeed limitations and a means of indicating airspeed to the pilot is essential. The CAA proposes to amend rule 115.653 to remove the requirement for a paraglider to be equipped with an airspeed indicator.*

**Rule 115.653 Instrument and equipment requirements – hang glider and paraglider (ELT)**

10 submitters commented on the proposed requirement which prohibits an adventure aviation operation using a hang glider or paraglider unless the pilot-in-command is equipped with an ELT(S) or Personal Locator Beacon (PLB).

- 1 submitter asserted that all tandem hang gliding flights are done within a small localised area where the chances of getting lost are “zero”. “There has never been a tandem hang gliding accident where persons were at risk because they couldn’t be found and there is no evidence that carrying an ELT(S) or PLB will increase safety, but it will increase the cost. This requirement should not be introduced.”
- 1 submitter commented that the requirement for hang gliders / paragliders to carry an ELT or PLB should be removed. “Most tandem operations are flying within a defined area not more than 6 km from take off.” “If pilots are required to have a cell phone or other communication device, then this should suffice.”
- 1 submitter commented that tandem flights are carried out in small localised areas, each flight following a “fairly restricted” flight path. No need for an ELT as other pilots and non-participants would provide quicker response than an ELT.
- 1 submitter stated that unless “operations are to be conducted out in back country or areas of poor phone signal”, paragliders should be exempt from requiring a PLB. The cost to operators will be very high, caring and maintaining a PLB is not practical, and the “chance that the ‘panic button’ on a PLB will be accidentally set off is very high.
- 3 submitters asserted that typical paragliding operations are conducted in a very small area, often in direct line of sight to the intended landing zone. A PLB is “definitely not necessary for a typical operation.”

- 1 submitter commented that ELTs are not required because tandem hang glider flights are conducted from A to B in a small area which can be seen by the ground crew.
- 1 submitter stated: “A paraglider doesn’t have a suitable location” to attach an ELT/PLB. “As with any additional item in a paraglider, this would increase the risk of accidents and injuries.” “If such a device had to be carried, it would have to be activated manually or there would be too many false alarms.”
- 1 submitter remarked that the requirement for an ELT or PLB for hang glider operations should be removed. The submitter stated that pilots carry cell phones, there is little room for storage of an ELT/PLB, and operations are within a small well-defined area.

### **CAA Response**

*The CAA has considered the submitter’s comments and agrees that the requirement for a hang glider or paraglider to be equipped with an ELT or PLB while conducting an adventure aviation operation is unnecessary. The CAA agrees that the risk of difficulty in locating a hang glider or paraglider after an accident is low due to the use of a constant flight following service and the limited duration.*

### **Rule 115.653 Instrument and equipment requirements – hang glider and paraglider (Reserve Parachute)**

6 submitters commented on the proposed requirement for hang gliders and paragliders to be equipped with a reserve parachute when being used for adventure aviation operations.

- 4 submitters commented that reserve parachutes for paragliders must be packed by a qualified packer. The submitters remarked that the proposed rule does not mention who may pack the parachute.
- 1 submitter stated: “The emergency parachute requirement is already included in NZHGPA OPM Section 4.” “Adding a standard for reserves [parachutes] would increase safety.”

- 1 submitter stated: “In relation to [paraglider] maintenance, reserve [parachute] repacking should also be covered. We have seen a considerable number of packing errors over the years.”

### ***CAA Response***

*The submitters have overlooked the fact that the packing requirements for emergency parachutes are covered under the existing rule 91.707.*

*The CAA intends to amend the proposed rule to include the standards already included in the NZHGPA OPM.*

### **Rule 115.655 Maintenance – hang glider and paraglider**

A total of 3 submissions were received regarding the proposed hang glider and paraglider maintenance requirements.

- 1 submitter asserted that hang gliding accidents are “due to in-flight or pre-flight pilot error.” “This extra level of glider maintenance authorisation is redundant and should be scrapped.”
- 1 submitter commented that the requirement for a hang glider to be maintained by a person who is authorised to perform maintenance by a hang gliding organisation cannot be met because no such qualification exists in the NZHGPA.
- 1 submitter commented that the requirement for maintenance and inspection is “already included in the NZHGPA OPM. Despite that, equipment inspection in NZ is sub-standard since it is not performed according to OPM. Many manufacturer recommended test are currently not performed in NZ (line length measurement, line strength tests, fabric strength tests, etc.)” “Suggest rewording: Must be inspected according to manufacturer standards or in accordance with rule 106.17, whichever offers a higher standard.”

### ***CAA Response***

*The proposed rules covering adventure aviation operations require that the manufacturer’s instructions are fully complied with and that the maintenance operations are carried out by suitably qualified persons*

*These requirements could be reasonably expected by a passenger of an adventure aviation operation. The development of training and skills for such maintenance persons will need to be considered by the NZHGPA.*

### **Rule 115.657 Aircraft identification – hang glider and paraglider**

3 submissions were received regarding the proposed requirement for operators to ensure that each hang glider or paraglider operated under the authority of an adventure aviation operator certificate is identified by a unique number or marking.

- 1 submitter commented that aircraft identification can be complied with, “but to what purpose?”
- 1 submitter stated: “I don’t understand how this [aircraft identification] will improve safety, but this is a rather cheap rule to follow.” “New Zealand would be amongst the two countries in the world requiring aircraft identification for hang gliders and paragliders (the other country is Switzerland).”
- 1 submitter stated: “Aircraft markings on paragliders serve no useful purpose.” “Who is going to establish that the marking is unique?”

### **CAA Response**

*The proposed requirement for aircraft identification is intended to facilitate the effective monitoring of adventure aviation operations by the CAA and interested members of the public.*

*Provided that the marking is unique and identifiable at a distance of 100 metres, the determination of an appropriate aircraft marking for a hang glider or paraglider is the responsibility of the adventure aviation operator.*

### **Rule 115.659 Pilot qualification requirements – hang glider and paraglider**

1 submission was received from a hang glider operator who commented that the proposed pilot qualification requirements would not actually improve pilot proficiency.

- “Adding a layer of CAA managed certification will not actually increase the skills proficiency of qualifying pilots, it will just

make it more costly and difficult to get certified. The extra layer will also not stop pilots with questionable skills from qualifying.”

### ***CAA Response***

*The CAA disagrees with this assertion as the prime driver of adventure aviation rulemaking is to provide acceptable standards for commercial operations, not recreational operations.*

### **Rule 115.659 Pilot qualification requirements – hang glider and paraglider (Pilot Medical)**

A total of 11 submissions were received regarding the proposed requirement for hang glider and paraglider pilots to hold a class 2 medical certificate when assigned as pilot-in-command of an adventure aviation operation.

- 1 submitter stated: “There has never been an incident where a hang glider pilot who wouldn’t pass a proposed health check has endangered a tandem flight and there is no evidence that having a Class 2 medical certificate will improve safety, but it will increase the cost. The medical certificate requirement should be scrapped.”
- 1 submitter stated: “A Class 2 medical seems to be a big step from the medical declaration that NZHGPA members make... no medical related incidents or accidents report to NZHGPA.” No benefit from requiring Class 2 medical but it will increase cost.
- 1 submitter commented that paraglider pilots should only be required to meet the current medical standard requirements of a “recreational microlight pilot” excluding the requirement for colour vision tests. Paragliding operations do not require the use of signal lights, therefore they do not need to meet the requirements of a pilot operating in an airport environment. The proposed requirement would deny colour blind pilots from operating paragliders.
- 3 submitters stated: “The medical required for a paraglider pilot should be lowered to a more reasonable and relevant standard.”



Class 2 medicals would prohibit pilots from maintaining a license “for no reason applicable to safely flying a paraglider.”

- 1 submitter asserted that hang glider pilots “are fit enough by default. There have not been any accident because of an unfit hang glider pilot.” The proposed rule will add more cost and do nothing to improve safety. The requirement should be “scrapped”.
- 1 submitter stated: “The cost for a class 2 medical certificate doesn’t rectify the increase in safety.” “Every NZHGPA member is required to complete a fit and proper person form every year.”
- 1 submitter commented that hang glider/paraglider pilots should not be required to hold a Class 2 medical. They should only be required to hold “land transport P Class” medical, the same “as required for taxi drivers.”
- 1 submitter stated: “Why specify a class 2 medical certificate [for paragliders]?” “It is not clear what a class 2 medical is, but in our view requiring more than first aid is unnecessary.”
- 1 submitter commented: “The requirement to hold a class 2 medical certificate for a tandem hang gliding or paragliding flight can be better met by each pilot sitting a medical examination more akin to what a taxi driver need to undertake to maintain a taxi drivers license.”

### ***CAA Response***

*The CAA considers the medical requirements for hire or reward operations to generally be a class 1 medical, however an exception has been in existence for parachute tandem masters which allows the use of a class 2 medical. The similarities between the parachute decent phase of and adventure aviation operation and an adventure aviation paragliding operation are such that the requirement for a class 2 medical is appropriate. One submitter has highlighted colour blindness as a possible barrier to obtaining a class 2 medical, however flexibility and the adding of conditions to a medical certificate may still allow it to be issued.*

### **Subpart M – Hang Glider and Paraglider Operations**

3 identical submissions were received from paraglider operators with a general comment regarding the proposed rules under Subpart M.

- All 3 submitters stated that it is “vital” for the CAA to accept that a paraglider is a completely different aircraft to a hang glider. The submitters propose creating a separate Subpart to be added to Part 115 distinctly for paraglider operations.

#### ***CAA Response***

*Although a paraglider is included in the Part 1 definition of a hang glider, the CAA agrees that there is a need to separate the hang glider and paraglider rules in Part 115 for clarification. It is intended that these rules will remain under a common Subpart, however the individual rules should pay respect to the differences inherent to the individual operations.*

### **Rule 115.661 Operator requirements – hang glider and paraglider**

2 submissions were received regarding the proposed requirement for adventure aviation operators to ensure that each hang glider or paraglider that is operated under the authority of the certificate is operated in compliance with the aircraft flight manual or manufacturer’s instructions, and that the flight manual or manufacturer’s instructions are available prior to the flight for the pilot-in-command to review.

- 1 submitter asserted that it is not necessary to require that the aircraft flight manual be available to the pilot-in-command prior to flight. “Just to have it with the company ops manual should be enough.”
- 1 submitter stated: “Paragliders must comply with the EN testing requirements. The aircraft flight manual is irrelevant to daily flight activities.”

#### ***CAA Response***

*The CAA points out that the proposed rule does not require that the pilot-in-command refer to the aircraft flight manual prior to every flight, but rather that the adventure aviation operator certificate holder makes the aircraft flight manual available to the pilot-in-command prior to flying the aircraft that he/she is being introduced to, and at any time thereafter that the pilot-in-command requires it for reference.*

**Rule 115.663 Passenger safety requirements – hang glider and paraglider**

A total of 5 submissions were received commenting on the proposed safety requirements for passengers of hang glider or paraglider adventure aviation operations. The proposed rule includes the requirements for passengers to wear a back protection device and protective clothing appropriate for the environmental conditions.

- 1 submitter commented that back protection is not used by hang glider operators for passengers or pilots. Also, the requirement for protective clothing is “very ambiguous” and “should be omitted.”
- 1 submitter stated: “The DHV doesn’t issue standards for back protection devices anymore.” Also, the requirement to ensure that the passenger wears protective clothing appropriate for the environmental conditions is ambiguous and should be omitted.
- 1 submitter stated: “Back protectors do not exist for hang gliders.” The requirement for wearing a back protection device should be removed.
- 1 submitter remarked: “The requirement for tested back protection is already covered in the NZHGPA OPM, and should also be covered in the approved operator’s procedures. It is not at all clear why the passenger’s clothing is relevant here (a concern over footwear and warm clothing is touching, but curious in such a regulation).”
- 1 submitter commented: “Back protection is specific to paragliding.” “Hang gliding harnesses do not have the same requirement for back protection and never have done.”

***CAA Response***

*As previously stated in the response to Subpart M, the CAA agrees that there is a need to separate the hang glider and paraglider rules in Part 115 for clarification. It is intended that these rules will remain under a common Subpart, however the individual rules should pay respect to the differences inherent to the individual operations.*

*The CAA acknowledges that the requirement for a back protection device is applicable to paraglider operations only, and proposes to remove this requirement for adventure aviation hang glider operations.*

*With regard to the requirement for a passenger to wear protective clothing, the CAA asserts that there is a need to provide a reasonable measure clothing protection that is suitable to the environment and the type of operation to be conducted. The CAA considers that it is the responsibility of the adventure aviation operator to determine the clothing that would be appropriate for the safety of the passengers depending upon the environmental conditions.*

### **Rule 115.757 Pilot qualifications and experience requirements (Special Aircraft Operations)**

1 submission was received regarding the proposed pilot experience requirements for conducting adventure aviation operations under Subpart O.

- The submitter asserted that the experience requirements “appear arbitrary and in many examples excessive.” “There is no justification, for example, to require 500 hours PIC to conduct aerobatic operations.” “By comparison, a pilot in a Part 135 operation could conduct aerobatic joyrides with a CPL (100 hours PIC) and five hours command supervision.”

### ***CAA Response***

*The CAA points out that the 100 hour PIC experience requirement for a pilot performing an operation in accordance with Part 135 is applicable to only aerobatic manoeuvres. However, the CAA has reassessed the proposed requirement and finds that it is appropriate to amend the rule by reducing the requirement for the PIC to 300 hours.*

**Rule 115.759 Manipulation of controls – simulated military operation**

1 submission was received concerning the proposed rule which allows passengers to manipulate the controls of an aircraft that is being used to conduct a simulated military operation. The proposed rule states that the pilot-in-command of an aircraft used to conduct a simulated military operation must hold a valid and applicable category A or B flight instructor rating issued in accordance with Part 61.

- The submitter commented that rule 115.759(a)(3) “should include C and D category flight instructors and Part 149 authorised persons.”

**CAA Response**

*The CAA believes that manipulation of the controls by a passenger is by nature linked to instructional activities. Therefore, the CAA agrees that it is appropriate to include C and D category flight instructors in the proposed rule.*

**Rule 115.809 Pilot qualification and experience requirements – microlight aircraft**

1 submission was received regarding the adventure aviation qualification and experience requirements for pilots of microlight aircraft.

- The submitter stated: “Having pilot-in-command time so high it will make it very difficult to find [microlight] pilots.” “30 hours on type seems high as most flight routes are short local trips and aircraft are very basic. 10-15 hours would be enough.”

**CAA Response**

*The CAA disagrees with the submitter’s comment and asserts that the 30 hour requirement is quite appropriate for commercial operations. A majority of microlight aircraft are of such performance capability that they are essentially equivalent to other general aviation aircraft and therefore warrant this standard in the interest of safety.*

**Cost**

11 submitters asserted that the cost of certification and continuing compliance will be too burdensome thereby forcing small operators out

of business, and creating a substantial impact on the New Zealand economy.

- 1 submitter commented that the proposed changes from Part 115 “will make hang gliding uneconomical while doing little to increase safety.” “I will have to close my business and so will other smaller operators.”
- 1 submitter asserted that the “sheer cost of compliance will mean the end for many of the smallest operators in the sport”. If Part 115 comes into force, “small operators like myself indicate that they will restructure their businesses to avoid compliance with CAA.” The “most obvious problem for tandem operators will be the outrageous start up costs and on-going certification expense.” “It is obvious that this [Part 115] will not assist economic development for most NZ tandem operators.”
- 1 submitter stated: “Most [paragliding] operations consist of one or two owners who are part-time and/or seasonal.” “Operators would not be able to pay for the certification process.” “Part 115 will put financial pressure on operators, add additional risks and potential fines to the business, and will require them to spend hours doing paperwork. All this would not increase safety; in fact it would distract pilots.”
- 1 submitter stated: “The proposal is not acceptable for gliding, because it would impose significant additional costs to a very small number of operators without any significant benefits to the public.”
- 1 submitter commented that the Part 115 proposal is “not acceptable for gliding because the cost of compliance would make commercial operations unsustainable, there is no relativity with EASA, ICAO, CASA or FAA which creates significant staffing issues and the proposal appears to have no significant benefits to the public.”
- 1 submitter stated: “The compliance cost is too restrictive in its present form.” Having a high compliance cost will “force the commercial operators to push the limits to make a buck...”

- 1 submitter remarked that Part 115 should not apply to gliders because “the regulation will have the effect of closing the commercial gliding organisation because of the costs involved.” Most glider pilots are volunteers and “fly because they want to and not because they have to.” Pilots will have to pay for their commercial licences and medicals themselves which will make the personal cost of compliance too high.
- 1 submitter stated: “There is no commercial incentive to pursue the NPRM in its current form and indeed it misses one of the legislative requirements, which is commercial viability.”
- 1 submitter commented: “Annual compliance monitoring (approximately 15 hours) seems very excessive...” “I understand that audits do need to take place but not annually; bi-annually like a BFR would make more sense.”
- 1 submitter stated: “The cost to aviation safety, tourism and parachuting will be substantial, as the actual risks have not been properly identified and are likely to be highlighted by failure over time.” “The cost to the economy is likely to be measured in lost jobs and lost investment into the adventure tourism industry.”
- 1 submitter stated: “The CAA’s cost expectations will severely limit the number of operators seeking certification.” The submitter recommends that the CAA does not charge for certification.

### ***CAA Response***

*The CAA has conducted a formal and systematic analysis of the estimated certification and continuing compliance costs associated with the introduction of the new Part 115 rule. The CAA’s analysis indicates that the estimated certification cost for adventure aviation operators should not exceed \$7,600, and the estimated continuing compliance costs should not exceed \$1000 per annum. The CAA does not consider these costs to be excessive nor inappropriate for a responsible commercial operation.*

*Adventure aviation operations of high quality and those demonstrating high levels of compliance will have the opportunity to reduce their continuing compliance costs and enjoy the associated benefits due to extended audit periods.*

### **Risk**

1 submitter asserted that tandem hang gliding is by nature an “adventure” activity whose inherent risks are made known to passengers in advance.

- The submitter stated: “These risks [associated with hang gliding] cannot be managed down to levels of commercial aviation (as the Part 115 proposal desires), and each passenger prior to flying completes a waiver acknowledging this.”

### **CAA Response**

*The CAA asserts that the signing of a waiver does not absolve the adventure aviation operator of their responsibilities relating to aviation and passenger safety. While the CAA recognizes that some sectors will have a higher inherent risk level than others, it is up to the operator to ensure that those risk levels are appropriately managed. The CAA believes that it is inappropriate to accept that the higher level of risk associated with an adventure aviation operation excuses the operator from providing an acceptable level safety for passengers. In this regard, an operator should not conclude that a higher accident rate is permissible because of the higher inherent risk associated with adventure aviation operations.*

### **Towing a hang glider**

1 submitter commented that “there appears to be no regulations for towing a paraglider.”

### **CAA Response**

*The CAA acknowledges that there is no proposed rule for towing a paraglider. The CAA does not intend to include such a rule.*



### **CAA Resources**

1 submitter expressed concern that the CAA does not currently have enough qualified staff members to effectively regulate adventure aviation glider operations.

- The submitter stated: “As the CAA does not currently have enough staff members with sufficient knowledge of gliding operations to effectively monitor such operations, it would need to rely on Gliding New Zealand in many respects.” “The way forward for commercial gliding is simply the status quo, whereby the CAA relies on GNZ to carry out certification and monitoring functions, some of this under delegation.” “The proposed intervention via Part 115 is simply not needed.”

### ***CAA Response***

*As part of the introduction of the Part 115 rule, the CAA is aware of this need and intends to gain the appropriate resources (noted originally in the Swedavia McGregor Report of 1988).*

### **Effect on Gliding New Zealand**

1 submission was received commenting that Part 115 will have a negative impact on Gliding New Zealand’s Aviation Recreation Organisation.

- The submitter stated: “A division between recreational and commercial operations would develop over time, weakening GNZ’s autonomy and viability through a reduction in subscription revenue.”

### ***CAA Response***

*The CAA asserts that Gliding New Zealand is an aviation recreation organization that has been established to administer the sport of gliding. Adventure aviation activities are commercial aviation operations carrying passengers for hire or reward and fall well outside the definition and purview of recreational aviation. The individual certification of operators in accordance with Part 115 is appropriate and reasonable, and is in keeping with the requirements applied to other forms of air transport in New Zealand.*

*Gliding New Zealand will retain its position in recreational aviation by maintaining the high standards and service focus that it has demonstrated in the past.*

### **Double standard for glider operations**

2 identical submissions were received asserting that because gliders are type certificated aircraft they pose a lower risk to the public than some other aircraft used for adventure aviation operations.

- Both of the submitters stated: “Gliders are type certificated aircraft designed to detailed airworthiness standards, and are maintained as such; whereas microlights aircraft, hang gliders, paragliders and tandem parachutes are not. This amounts to a ‘double standard’ in airworthiness terms.” “This double standard also permeates the proposed operational rules, which are quite unbalanced for gliders in comparison to those for other classes of aircraft.”

### **CAA Response**

*The CAA considers that adventure aviation operations span a wide variety of aircraft design standards, pilot qualifications, and operational limitations. The proposed Part 115 has established the requirements that provide the minimum safe standards for operations in all of the identified sectors. This has resulted in the provision of different requirements between sectors, but is intended to provide an overall level of safety that flows across the range of activities. The CAA accepts that there are by necessity different standards, but rejects the claim that the proposed rule creates, either intentionally or inadvertently, double standards.*

### **Operational standard - gliders**

2 identical submissions were received expressing concern over the proposed operational standards for glider operations. The submitters commented that the proposed rules would require glider pilots to meet the existing standards stated in CAR Part 104 as well as the standards proposed in Part 115.

- “CAR 104 requires the pilot of a glider to comply with the operational standards and procedures of a gliding organisation. The pilots of a gliding organisation certificated under Part 115

would therefore have to comply with the relevant parts of the GNZ Manual or Approved Procedures as well as the standard imposed by Part 115. This would be likely to create confusion in terms of standards and accountability.”

### ***CAA Response***

*The CAA disagrees with the comment made by the submitters. The glider operator will still need to comply with the standards of a gliding organization as well as the requirements of the new rules. Any identified confusion should be easily remedied by the CAA in cooperation with the gliding organization.*

### **Parachute-drop operations using a hot air balloon**

1 submitter asserted: “without the issue being addressed, there is a risk that little or no parachuting from hot air balloons will be allowed.”

### ***CAA Response***

*The CAA does not intend to permit commercial parachuting operations to be conducted from a hot air balloon. Any such operations would be permitted for sport and recreational operations only.*

### **Aircraft ownership – special aircraft operations**

1 submitter expressed concern that the proposed rules were unclear as to the direct responsibilities of the aircraft owner versus those of the aircraft operator.

- The submitter stated: “It is anticipated that many aircraft to be utilised by an organisation for ‘warbird experience flights’ would be owned by a third party and only operated by any warbirds Part 115 organisation for the duration of the specific warbirds experience flight, which realistically could be for only one or two flight hours per month. There is no definitive direction in the NPRM as regards ownership, operator, or maintenance control.”

### ***CAA Response***

*The responsibilities of an aircraft operator are clearly detailed in Subpart G of Part 91. An adventure aviation operator is responsible for the maintenance of all aircraft that are listed on the certificate holder’s Operations Specifications.*

## **Appendix A – Senior Person Requirements (Hang Glider and Paraglider)**

2 submitters made a total of 3 comments regarding the proposed senior person requirements for adventure aviation operations using a hang glider or paraglider.

- 1 submitter asserted that because under the NZ Hang Gliding & Paragliding Association (NZHGPA), instructors are only used for training of solo pilots entering into the sport and not for training of tandem pilots, the reference to “HGPG instructor” should be removed from Part 115 Appendix A – Hang Glider/Paraglider Senior Person requirements.
- 1 submitter commented that the requirement for a senior person responsible for an organisational management system should be removed. The vocational experience that is listed [in Appendix A] “is enough.”
- 1 submitter remarked that senior person “currency” for maintenance and repair work is not covered well in the proposed rule.

### ***CAA Response***

*With regard to hang glider and paraglider instructors, the NZHGPA will be encouraged by the CAA to develop an appropriate instructor rating.*

*The CAA considers that the senior person requirements proposed in Part 115, including those for maintenance, are appropriate. However, the CAA points out that the requirement allows the Director to determine whether the individual’s experience is acceptable in lieu of the quality assurance certification requirements.*

**Assertion that Part 115 is not designed for parachuting**

1 submitter asserted that the rule structure of Part 105 is “at odds with all other common parachute rules worldwide.” Specifically, the submitter commented that “only in New Zealand is Part 105 structured to cover only the parachutist and consider the aircraft under Part 105 to be the parachute and not the drop aircraft.”

- The submitter further stated: “As Part 115 is not designed for parachuting it is likely that sections of the activity will slip through and safety will be compromised, cost for the regulator will balloon and lives will be lost because the rule is no longer designed to be fit for purpose.”

**CAA Response**

*The CAA agrees with the submitter’s comment that in New Zealand the definition of an aircraft includes a parachute.*

*The CAA asserts that the proposed rules are designed to include tandem parachuting activities, and further believes that the proposed rules will not allow safety to be compromised.*

**Level of safety compared to air transport operations**

1 submitter asserted that the proposed rules covering parachute-drop aircraft operations will not provide a level of safety equal to air transport operations.

- The submitter questioned how the proposed rule for parachute-drop operations will “provide any sort of comparative safety to any other CAA rule [for] carrying passengers for hire and reward.” The submitter further questioned “How is it that if there are differing standards acceptable for different aircraft weights, passenger loadings and configurations, for every other hire and reward operation, this rule suggests in ‘adventure aviation’ a one rule fits all approach?”

**CAA Response**

*The CAA disagrees that the proposed rule structure for parachute-drop aircraft creates a “one rule fits all approach”. The CAA asserts that the proposed requirements for parachute-drop aircraft, while not making a distinction based on aircraft size, are appropriate in that they set forth*

*the requirements for aircraft airworthiness, instruments and equipment, aircraft maintenance, and pilot qualifications.*

### **Standards for parachute descent operations**

1 submitter commented that the proposed rules will allow parachute operators to choose whether they would like to operate directly under CAA oversight rather than a parachute organization certificated in accordance with Part 149.

- The submitter stated: “While the intention of the rule is to make the individual operator responsible for the activity under their certificate, it has in the process allowed the operator to set their own procedures outside acceptable or best practice standards that are considered safe for the administration of parachuting worldwide.”

### **CAA Response**

*The CAA agrees that proposed rule did not clearly include procedures established by a parachute organization as a base for operating standards. Parachuting organization standards and procedures will be incorporated into the rule by reference. In addition, the requirement to comply with any limitations entered onto a parachute certificate by a parachuting organization will be introduced.*

### **Consultation**

2 submitters commented that the consultation process for development of the proposed Part 115 rules was not sufficient.

- 1 hang glider operator stated: “If Part 115 is to proceed, then more industry consultation should happen.”
- 1 submitter stated: “It is a concern the rule was not developed with skydiving intended. The addition of skydiving has not therefore addressed many parachuting safety concerns that would have been raised if this had been the case or if proper consultation had been carried out throughout the rule development process.”

### **CAA Response**

*The CAA considers that sufficient time and opportunity has been provided for consultation. The Part 115 Adventure Aviation rulemaking*

*project has been a lengthy rulemaking process and consultation with the appropriate industry sectors has occurred over a period of more than 10 years.*

### **Concern over role of NZHGPA in Part 115 certification responsibility**

1 submitter commented that there is concern that the CAA would expect the NZHGPA to conduct “Part 115 certification, administration and monitoring” duties.

#### ***CAA Response***

*The CAA does not expect the NZHGPA to conduct Part 115 certification, administration and monitoring duties, although it may contract with the NZHGPA individual members during the initial certification period as necessary.*

### **Assertion that the CAA is not qualified to perform aircraft certification**

1 submitter asserted that the CAA is not qualified to perform aircraft certification duties with regard to paraglider aircraft.

- The submitters stated: “We do not believe that the NZHGPA or the CAA is qualified to undertake any aircraft certification. In our view, the Director should review and adopt international testing standard (e.g. the European EN standard and the German LTF standards for paragliders).”

#### ***CAA Response***

*The CAA will not perform hang glider certification and has adopted applicable international standards such as those suggested by the submitter.*

### **Concern over the Director’s authority to exercise discretion**

1 submitter commented: “There are a number of references to ‘acceptable to the Director’.” “...we are concerned at the advice that the Director may obtain in exercising such a discretion.”

#### ***CAA Response***

*The CAA believes that the ability to apply discretion allows greater flexibility in the application of the rules which would otherwise be set in stone, and could be time consuming to amend should they become unworkable as technology advances.*

**Assertion that Part 115 is the “Death Knell” for warbird operations**

1 submitter asserted: “This rule in its proposed form represents the death knell for any form of remunerated operation of warbird type aircraft.” “This rule in its present form is a blunt object with which CAA will bludgeon this resource [warbird operations] to death.” “We need a workable solution to this issue, not a bureaucrat’s exercise in responsibility evasion.”

***CAA Response***

*The CAA believes that the proposed rule provides a legitimate opportunity for those wishing to undertake commercial warbird operations. The decision to commence an operation is a commercial one for the operator to make.*

**Areas where parachuting should not be permitted to occur**

1 submitter commented: “Skydive operations should not happen in MBZ... as these areas have a radio and traffic overload now.” The submitter also asserted that skydive operations “should be away from high use areas.”

***CAA Response***

*The establishment of a parachute landing area requires the agreement of the landowner. Often the landowner is an aerodrome operator that may have an MBZ. It is a matter for the aerodrome operator to consider traffic volume and the safety factors involved in mixing of operations.*

**Certification requirements for parachuting operations**

1 submitter asserted: “Skydive operators are taking tourists so [they] should have to meet the same requirements that air transport operators have to meet.”

***CAA Response***

*The CAA believes that Part 115 appropriately introduces reasonable standard for the application of certification rules. The proposed rule structure is based upon and closely aligned with other New Zealand air transport rules.*