

## Advisory Circular AC115-4

Revision 1

# Adventure Aviation—Tandem Parachute Operations

**Xx xxxx 202x** 

#### General

Civil Aviation Authority (CAA) Advisory Circulars (ACs) contain information about standards, practices, and procedures that the Director has found to be an **acceptable means of compliance** with the associated rule.

Consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices, or procedures are found to be acceptable they will be added to the appropriate AC.

#### **Purpose**

This AC describes an acceptable means of compliance with Civil Aviation Rule Part 115 Adventure Aviation Certification and Operations relating to tandem parachute operations.

#### **Related Rules**

This AC relates to Civil Aviation Rule Part 115 specifically Subpart K – Tandem Parachute Operations. It also refers to Parts 91 and 105.

#### **Change Notice**

Revision 1 adds a section on Rule 115.573, Maintenance of tandem parachutes, updates format and style to align with current ACs and adds a Version History. This is the initial issue of AC115-4.

#### **Version History**

#### **History Log**

Revision No.	Effective Date	Summary of Changes
0	26 July 2016	Initial issue of this AC.
1	Xx xxxx 202x	Adds a section on Rule 115.573, Maintenance of tandem parachutes  Updates format and style to align with current ACs  Adds a Version History

Published by Civil Aviation Authority PO Box 3555 Wellington 6140

### **Table of Contents**

Rule 115.571 Airworthiness and Equipment—Tandem Parachutes	3
Rule 115.573 Maintenance tandem parachutes	3
Rule 115.575 Operating Procedures—Tandem Parachutes	. 4

#### Rule 115.571 Airworthiness and Equipment—Tandem Parachutes

Rule 115.571(1) allows the Director to accept an equivalent standard for the specified equipment. At the time of publishing this AC, there are no equivalent standards that have been accepted.

Rule 115.571(2) requires the applicant to ensure the requirements of Part 105 and its associated ACs are understood and complied with.

Rule 115.571(3) this requires the fitting of supplemental oxygen equipment if the operation plans descents to take place above FL130. More importantly it requires each person on board to start using the supplemental oxygen when passing through 10000 ft AMSL.

The key to this requirement is blood oxygen saturation level, which at sea level is generally around 93%. At 8000 ft to 10,000 ft, the oxygen saturation level is generally around 88% and at this level cognitive functions begin to degrade.

#### Rule 115.573 Maintenance tandem parachutes

Rule 15.573 (a) specifies that a holder of an adventure aviation operator certificate (AAOC) conducting a tandem parachute descent operation must ensure that:

- (1) the operation is only conducted under the authority of the AAOC if the applicable requirements regarding parachute maintenance prescribed in Subpart C, *Parachute Maintenance*, of Part 105 are complied with, and
- (2) each tandem parachute assembly is maintained in accordance with the maintenance programme required by rule 115.61, *Maintenance programme*, which includes:
  - the type, serial number, identification, and registration mark if applicable, of each aircraft that is subject to the programme
  - ii. 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:
    - must be inspected, and
    - 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
  - iii. a schedule for the performance of the maintenance expressed in terms of the time in service, cycles, calendar time, number of system operations, or any combination of these
  - iv. procedures for:
    - inducting an aircraft onto the maintenance programme
    - ensuring that every inspection required by the programme is performed
    - recording defects, including examples of records
    - correcting or deferring defects found during maintenance, and

Xx xxxx 2023 CAA of NZ

- retaining the maintenance records under rule 91.623, or 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.

Rule 115.573 (b) specifies that a holder of an AAOC conducting tandem parachute operation must ensure that any maintenance on a tandem parachute assembly is carried out by a holder of a valid parachute technician certificate issued by a parachute organisation.

#### **Rule 115.575 Operating Procedures—Tandem Parachutes**

This rule directs the applicants' attention to Part 105 and the need to be familiar with and comply where necessary with the appropriate Part 105 rules. The operational procedures, generally referred to as standard operating procedures (SOPs), need are to clearly define each operating procedure.