



Australian Government
Civil Aviation Safety Authority

CASR PART

105

GUIDE FOR **PARACHUTING FROM AIRCRAFT**

PLAIN ENGLISH GUIDE



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About this guide

Safety is our priority. To keep you, others and our operating environment safe, it is essential to know and understand the rules that apply to a parachuting operation.

Part 105 of the *Civil Aviation Safety Regulations 1998 (CASR)* sets out:

- › the operational requirements for aircraft used to facilitate parachute descents
- › the requirements for parachute airworthiness
- › the operational rules for safely conducting parachute activities.

These rules must be followed in addition to the general operating and flight rules that can be found in the CASR Part 91 General operating and flight rules plain English guide.

Parachuting is a sport aviation activity that may be self-administered. Part 149 of CASR contains the requirements for an organisation to be approved as a self-administering aviation organisation to administer parachuting activities. Everyone involved in a parachuting activity must follow the exposition of an approved self-administering aviation organisation (ASAO), which must reflect the regulations. There are additional requirements if the parachute activity involves a student or tandem parachute descent.

This guide doesn't include the requirements of any ASAO but does explain what Part 105 regulations the ASAOs need to address in their expositions.

This guide combines and reorders this information to make it easier for you to find, understand and apply the rules. By following this guide, it is expected you will understand the rules applicable to parachuting operations. The guide provides references to the corresponding legislation so you can easily refer to the full text if you wish. The current legislation can be found on the [Federal Register of Legislation website](#).

We are committed to providing you with accurate, consistent and clear information to help you understand your legal obligations. The information contained in this guide was correct at the time of publication but is subject to change without notice. You should ensure you are using the most current version of the guide, which can be found on the CASA website. Please visit the CASA website regularly for updates.

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Quick Guide



Chapter 1: Introduction

Sets out the regulations and documents that apply to parachuting activities and how they interact.



Chapter 2: Required roles and responsibilities

Details the roles and responsibilities of drop zone safety officers, loadmasters, chief parachuting instructors, ground control assistants, display organisers and packers/riggers.



Chapter 3: Requirements and responsibilities for parachutists

Describes the requirements and responsibilities of anyone that is involved in conducting a parachuting activity.



Chapter 4: Requirements for reserve and emergency parachutes

Sets out the requirements for manufacturing and maintaining reserve and emergency parachutes as well as the requirement to report defective parachutes.



Chapter 5: Parachute airworthiness regulations

Outlines the airworthiness regulations for parachutes to ensure that the design, maintenance and operational standards are met.



Chapter 6: Main parachute and equipment compatibility

Provides details on compatibility assessments. For example, how often they need to be carried out, who can do them, what procedures to follow and who checks they have been done.



Chapter 7: Inspections

Covers the inspection requirements that are essential in maintaining the quality, safety and performance of main, reserve and emergency parachutes.



Chapter 8: Operational requirements

Outlines the requirements of various operational activities.



Chapter 9: Pilot operators

Details the specific requirements for a jump pilot, their licence and recency requirements as well as their authorisations and radio procedures.



Chapter 10: Jump aircraft requirements

Covers the requirements for aircraft used in parachuting operations including door removal in flight, loading, weight and balance requirements as well as carrying oxygen, radio and emergency equipment.



Appendix

Appendix A Acronyms and abbreviations

Appendix B Definitions

Appendix C Exemptions included in this guide

Appendix D Version history

Who is this guide for?

This guide is for anyone involved in a parachuting activity which includes:

- › a parachute descent
- › packing a parachute
- › maintaining a parachute
- › assembling a parachute
- › supervising a parachute descent including
 - » ground control assistants
 - » drop zone safety officers
 - » loadmaster
 - » chief parachuting instructors
- › operating an aircraft to facilitate a parachute descent including:
 - » pilot in command
 - » aircraft operator
- › providing training in the above-mentioned activities
- › carrying on a business involving providing services or equipment for undertaking a parachute descent (a parachute operator)
- › an activity prescribed by the Part 105 Manual of Standards including:
 - » display organisers
 - » Part 105 approved self-administering aviation organisations (ASAO).



While Part 105 applies to the these people, a Part 105 exemption, CASA EX105/23 states that an ASAO authorisation is not required for:

- › an operator who provides services or equipment not directly linked to the conduct of a parachute descent
- › a person that conducts Part 61 pilot training for pilots of parachuting aircraft
- › an operator of an aircraft that is used for a parachute descent that is not operating as part of parachuting training operation.



Image: Icarus Media Group

How to use this guide

In this guide, certain words have been defined to avoid repetition and improve readability. The legal definitions of many of these terms are in the civil aviation legislation. A list of acronyms and abbreviations can be found in Appendix A and a list of definitions can be found in Appendix B.

Table 1:Terminology

Terminology	Meaning
ASAO	a Part 105 approved self-administering aviation organisation (unless otherwise specified)
authorisation	an authorisation issued by a Part 105 approved self-administering aviation organisation (ASAO) (unless otherwise specified)
emergency parachute	a parachute carried on an aircraft to be used by you to abandon the aircraft in an emergency
MOS	the Part 105 Manual of Standards (unless otherwise specified)
packing card	packing logbook that remains with the parachute
parachutist	<p>any person descending from an aircraft using a parachute assembly including:</p> <ul style="list-style-type: none">› authorised parachutists (those who hold parachutist certificates)› trainee or student parachutists› tandem parachutists <p>(Where a regulation applies only to an authorised parachutist, we will be specific. Also, where a regulation does not apply to a trainee or tandem parachutist, we will be specific.)</p> <p>Note: a parachute does not include a parasail or a powered parachute.</p>
pilot in command (PIC)	the pilot designated by the operator as being in command and charged with the safe conduct of the flight
jump aircraft	an aircraft that is being operated to facilitate a parachute descent
you	any person conducting a parachuting activity (see 'Who is this guide for' at the beginning of this guide) unless otherwise specified



To the extent possible, the terms crewed/uncrewed in this guide are used as the gender-neutral terms for manned/unmanned (which are used in in the regulations and the MOS). This reflects the intention to phase out the terms manned/unmanned from the regulations and MOS.

Where we do not define a word, you should consider its meaning to be that given in the CASR Dictionary, other relevant CASR regulations or the MOS Dictionary. Any word that is not defined has its ordinary meaning (refer to the Macquarie Dictionary).

For improved understanding, the guide includes *exceptions*, *notes* and *lightbulbs*.

Exceptions – certain regulations set out requirements that do not need to be followed in specified circumstances. You must read these exceptions to understand the requirements fully.

Notes – these are included to provide additional information or context.

Lightbulbs – provide a more detailed explanation and are generally based on CASA's Advisory Circulars (AC) and other guidance material.

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CHAPTER 1

INTRODUCTION



1.1 Overview

This chapter sets out which regulations cover the activity of parachuting from aircraft.

All aviation operations in Australia are governed by the Civil Aviation Act 1988. This Act is supported by the Civil Aviation Safety Regulations 1998 (CASR) which sets the rules for aviation activities.

There are three Parts of the Civil Aviation Safety Regulations that directly affect parachuting from aircraft.

Table 2: How the rules for parachuting operations interact

Part number	Part name	What it includes
Part 105	Parachuting from aircraft	sets out rules for: <ul style="list-style-type: none">› parachute airworthiness and compatibility (of the main and reserve parachutes)› responsibilities of persons involved in parachuting activities› what you may and may not do while involved in all aspects of the parachuting activity (packing parachutes, communicating by radio etc)› pilot licensing requirements› some requirements that an approved self-administering aviation organisation (ASAO) must include in its exposition for its authorisation holders
Part 149	Approved self-administering organisations (ASAOs)	sets out what self-administering aviation organisations involved in sport and recreational aircraft activities need to do
Part 91	General operating and flight rules	sets out general operating and flight rules for all pilots and operators. Pilots should refer to the CASR Part 91 General operating and flight rules plain English guide, casa.gov.au/search-centre/plain-english-guides

The Part 105 regulations are supported by a Manual of Standards (MOS).

This guide focuses on Part 105 regulations and the requirements in the MOS.

There are exemptions in CASA EX105/23 for the pilot in command and operator of the aircraft. We have incorporated these into this guide.

1.2 Who Part 105 applies to

(105.005)

Part 105 only applies to parachute descents that are intentional and originate from an aircraft.

Part 105 does not apply when you abandon the aircraft in an emergency situation and use an emergency parachute.



Part 105 does not apply to:

- › parachute descent of cargo, machinery etc
- › BASE jumping, for example parachuting from buildings, antennas (radio masts), spans (bridges) and earth (mountains/cliffs)
- › parasails or powered parachutes.



Image: Icarus Media Group

1.3 The Part 105 Manual of Standards

(105.015, 105.100)

CASA prescribes standards in a Manual of Standards (MOS) for Part 105 where:

- › it is required or permitted by the regulations
- › it is necessary or convenient for carrying out or giving effect to Part 105.

Effectively, a MOS allows CASA the ability to keep the standards up to date in a timely manner to meet the demands of the ever-changing environment while retaining the legislated change process that includes general and industry consultation.

The MOS includes:

- › personnel fatigue management
- › aircraft loading
- › airworthiness standards for reserve and emergency parachutes
- › aircraft equipment and oxygen requirements
- › parachutists dropping things over populous areas
- › other operational matters such as entering cloud, radio broadcasts and management of drop zones
- › the types of additional sport/recreational aircraft (operating under Part 103 regulations) that can be used
- › pilot requirements for sports/recreational (Part 103) aircraft.

If a provision in the MOS applies to you, you must comply with it.

1.4 Approved self-administering aviation organisations

Part 149 of CASR enables a sport aviation body to become an approved self-administering aviation organisation (ASAO). It allows an ASAO to:

- › specify the operational and technical standards that must be met
- › issue certificates and other relevant authorisations and set and conduct assessments necessary to obtain these certificates and approvals
- › monitor the conduct of its authorisation holders, with a view to ensuring their compliance with applicable organisational requirements
- › exercise disciplinary control over authorisation holders when necessary.

The Part 105 MOS sets the outcomes sought, rather than the path towards the outcomes. The ASAO then specifies the pathways and specific requirements to arrive at the desired outcomes.

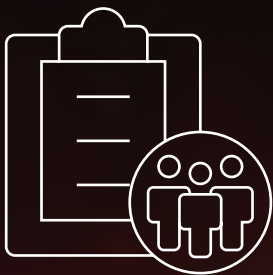
An ASAO will develop an administrative, maintenance, airworthiness, operations, training, experience and authorisation (qualification) framework. The framework must meet or exceed the minimum standards set out in the regulations and MOS.

Throughout this guide we refer to the requirements of the ASAO's exposition as it is applicable to the section.

If you hold an authorisation issued by an ASAO, you are obliged to comply with the procedures set out in the ASAO's exposition.



Image: Icarus Media Group



CHAPTER 2

REQUIRED ROLES AND RESPONSIBILITIES



2.1 Overview

This chapter outlines the key roles and responsibilities of persons involved in parachuting activities. Understanding these duties is essential for ensuring safety in every jump.

The authorisations established under Part 105 and the Part 105 MOS are for:

- › drop zone safety officers
- › loadmasters
- › chief parachuting instructors
- › ground control assistants
- › display organisers.

Part 105 sets out the specific operational requirements for ASAOs that administer parachuting activities. The ASAO develops the competency standards for these roles. The standards are approved by CASA as part of the ASAO's exposition.

2.2 Drop zone safety officers

(MOS 5.27, 5.28 and 5.49)

Responsibilities

A drop zone safety officer is responsible for:

- › directly supervising all parachute descents
- › nominating a loadmaster for each descent
- › nominating a ground control assistant for each descent (other than for a display descent)
- › sighting documents that:
 - » relate to the parachute equipment satisfying airworthiness standards
 - » confirm a main parachute and parachute container compatibility assessment has been conducted
- › retaining copies of documents or making a record of the sighting
- › ensuring the drop zone is free of obstacles
- › ensuring the drop zone and ground communication panels are clear of any aircraft movement areas
- › ensuring the distance from the drop zone to any landing hazard is:
 - » 180 m for student parachutists
 - » the distance set out in the ASAO's exposition for any other parachutist.



Image: Icarus Media Group



'Direct supervision' means the drop zone safety officer must be present throughout all phases of the operation, whether at the drop zone or in the jump aircraft.

When dropping items (other than wind drift indicators) outside populous areas, the drop zone safety officer is responsible for:

- › establishing a drop zone big enough to present no risk of the item landing outside the drop zone
- › clearing the drop zone of livestock and persons not involved with the descent
- › obtaining the permission of the owner or occupier of the land on which the drop zone is located.

If the drop zone safety officer is supervising a parachute descent undertaken over or near a body of water, their responsibilities include the matters set out in the ASAO safe conduct procedures. These include assessing the following risks:

- › the exposure of a parachutist to injury or death, including chances of survival in the water
- › the condition of the surface of the water including wave height, wind conditions and swell size
- › the water temperature and air temperature
- › the distance the parachutist would be, at any time during the descent, from a suitable landing area on land
- › the availability of search and rescue facilities and the time it would take to conduct a search.

Drop zone safety officers are also responsible for the following operational actions as detailed in chapter 8 of this guide:

- › communicating safe management of parachute drop zones
- › safety management system of a training organisation
- › floatation device assessment
- › meteorological conditions assessment.

Minimum requirements

To perform the duties of a drop zone safety officer, you must hold a parachutist certificate with an authority to act as a drop zone safety officer.

In addition, for all tandem or training descents, the drop zone safety officer must:

- › have an endorsement on a parachute instructor authorisation giving them permission to act as a drop zone safety officer
- › be approved by the chief parachuting instructor of the parachute training organisation.

For tandem parachute descents at a parachuting display, the drop zone safety officer must be the display organiser or nominated to act as the drop zone safety officer by the display organiser.

ASAO exposition requirements

An ASAO's exposition must include procedures that:

- › establish the requirement for a drop zone safety officer at every parachute descent
- › set minimum experience and qualification requirements to issue a drop zone safety officer authorisation
- › set out how the drop zone safety officer can apply for the authorisation
- › establish units of competency, competency standards and any other training requirements to issue drop zone safety officer authority.

2.3 Loadmaster

(MOS 5.29)

A loadmaster is a person chosen by the drop zone safety officer to handle responsibilities for a parachute descent.

Responsibilities

The nominated loadmaster must:

- › conduct a pre-descent briefing with all persons on board the aircraft addressing the safety issues of the descent
- › confirm the surrounding airspace and drop zone is clear of air traffic and clearances have been obtained from the ground control assistant and the controlling authority
- › confirm the integrity of the exit point
- › ensure the drop zone is clearly visible before commencing the descent unless the drop zone safety officer (or the chief parachuting instructor for a training or tandem descent) approves descent in lower visibility conditions.

2.4 Chief parachuting instructor

(MOS 2.04, 5.44 and 5.45)

A chief parachuting instructor is the person appointed by the parachute training organisation conducting the training.

Responsibilities

The chief parachuting instructor is responsible for:

- › managing the training of trainee or tandem parachutists
- › ensuring the parachuting organisation's safety management system (SMS) complies with the regulations and is implemented
- › complying with the parachute training organisation's SMS
- › ensuring parachuting instructors and persons receiving parachute training:
 - » abide by the training organisation's SMS
 - » comply with the relevant procedures of the ASAO's exposition
 - » comply with the civil aviation legislation
- › approving a drop zone safety officer for each training or tandem descent.



Image: Icarus Media Group

When given documentary evidence regarding parachute assemblies and containers, the chief parachuting instructor must either:

- › retain copies of the documents for a period of 12 months
- › record that they sighted the documents, including the name of the relevant person and the date the documents were sighted.



Documents can be hard copy or electronic. A photo of the document is acceptable under the Electronic Transactions Act 1999. See advisory circular AC 11-03 Electronically formatted certifications, records and management systems.

Chief parachuting instructors are also responsible for the following requirements as detailed in this guide:

- › inspecting the packing card for reserve or emergency parachutes
- › inspecting the packing card for main parachutes used by tandem or student parachutists
- › determining meteorological conditions for parachute descents
- › determining wind velocity requirements for parachute descents
- › safely managing parachute drop zones
- › ASAO procedures for safe conduct at a drop zone
- › aircraft weight and balance documents for parachute training operations.

ASAO exposition requirements

An ASAO that administers a parachute training organisation must set out in its exposition:

- › procedures to appoint a chief parachuting instructor
- › the experience and qualification required for the appointment.

A parachute training organisation must have a chief parachuting instructor appointed before any training in or supervision of parachute descents can occur.

2.5 Ground control assistants

(MOS 1.06, 5.39 and 5.43)

Responsibilities

Ground control assistants are responsible for ground to air communications with the jump pilot.

The ground control assistant must comply with the parachute training organisations SMS.

Minimum requirements

The holder of a ground control authorisation must have a radio licence if communicating:

- › on frequencies published by air traffic services
- › in aeronautical emergencies
- › at mandatory broadcast areas (MBAs)
- › at certain aerodromes (see 91.625 in the CASR Part 91 General operating and flight rules plain English guide for further information).



Parachuting operations are often conducted in locations where published frequencies are not used. If this is the case, ground control assistants do not need a radio licence.

Nominating a ground control assistant

Ground control assistants are nominated by drop zone safety officers for any given descent.

At a display, the display organiser nominates the ground control assistant.

ASAO exposition requirements

The duties and responsibilities of ground control assistants must be set out in the ASAO's exposition.



You must be authorised by the ASAO to act as a ground control assistant.

2.6 Display organisers

(MOS 5.28 and 5.46)

A display organiser must hold an authorisation issued by a Part 105 ASAO.

Responsibilities

A display organiser is responsible for appointing a suitably qualified drop zone safety officer and a ground control assistant for any display descent.

The display organiser must ensure the ground control assistant:

- › holds a ground control authorisation
- › meets any requirements specified in the ASAO's exposition for a ground control assistant performing duties at a parachuting display.

The display organiser may act as the drop zone safety officer for a display descent, provided they are qualified and will directly supervise the descent.

Display organisers are also responsible for the following actions as detailed in this guide:

- › safely managing the parachute display
- › overseeing the parachuting display.

ASAO exposition requirements

An ASAO that administers a display descent must set out in their exposition:

- › the experience and qualifications necessary to grant a display organiser authorisation
- › the duties of the display organiser on a display descent including:
 - » the management and oversight of the parachute display descent
 - » the requirement for the display organiser to nominate a suitably qualified person to the following roles for a display descent:
 - ground control assistant
 - drop zone safety officer
- › the duties and responsibilities of ground control assistants on a display descent.

2.7 Packers and riggers

(MOS 5.06 and 5.11)

An authorised packer or rigger may carry out maintenance on parachutes and assemble and pack them following maintenance.

A packer holds a packer authorisation for packing, and may also be authorised to carry out minor repairs.

A rigger can carry out all repairs and modifications.

See also section 6.3 of this guide.

Assessment responsibilities

A packer or rigger is responsible for assessing that the main parachute is compatible with the parachute container.

The packer or rigger must record on the packing card of the reserve parachute assembly:

- › a statement that they consider the main parachute, and the parachute container are compatible
- › information that identifies both the main parachute and the reserve parachute assembly.

An authorised packer and rigger may:

- › carry out maintenance on:
 - » a reserve parachute assembly
 - » an emergency parachute
 - » a parachute that requires a packing card
- › assemble and pack a parachute following maintenance.



Image: Icarus Media Group

When undertaking any of the above you must keep your own parachute personal packing logbook. You must record when you:

- › carry out maintenance on:
 - » a reserve parachute assembly
 - » an emergency parachute
 - » a parachute that requires a packing logbook
- › assemble and pack a parachute following maintenance.

Note: You must be satisfied of the compatibility requirements before approving the return to service of a reserve parachute. See chapter 7 of this guide.



A packing card contains details of a parachute and always stays with the equipment.

A personal logbook belonging to a packer or rigger contains details of the work they have performed on parachutes.

ASAO exposition requirements

The ASAO that administers the airworthiness of the main parachute must include in its exposition:

- › procedures to be followed by a packer or rigger on how to assess the compatibility of the main parachute and the parachute container
- › the requirement for the person conducting the assessment to physically inspect the equipment (see section 6.4 of this guide)
- › procedures that set out how the packer or rigger is to record this information.



2.8 Other assessors

(MOS 5.12)

If you are not an authorised packer or rigger, you may still assess the compatibility of a main parachute with a reserve parachute container provided you hold a compatibility assessment authorisation. This authorisation is granted by the ASAO that administers the airworthiness of the reserve parachute assembly. You cannot conduct a compatibility assessment on equipment being used by a student parachutist or tandem parachutist with this authorisation.

ASAO exposition requirements

The ASAO must set out in its exposition the required experience, qualifications and competency standards required to grant the compatibility assessment authorisation.

Procedures for how to assess the compatibility of the main parachute and the parachute container must be included in the administering ASAO's exposition. See chapter 6 of this guide for the details.



CHAPTER 3

REQUIREMENTS AND RESPONSIBILITIES FOR PARACHUTISTS



3.1 Overview

This chapter sets out requirements and responsibilities of anyone conducting a parachuting activity including:

- › conducting the parachuting activity
- › equipment requirements
- › any records that must be kept.

In this chapter, 'you' refers to the parachutist (unless otherwise specified).

3.2 Drop zone safety officer requirements

(MOS 5.27)

You must ensure a drop zone safety officer is performing their duties for the parachute descent.

3.3 Do not create hazards

(105.020 and 105.025)

You must not create a hazard to an aircraft (including the jump aircraft), to other people or to property while undertaking a descent.

3.4 Personnel fatigue management

(105.120)

The regulations currently require you to comply with the requirements set out in the MOS to manage the risk of fatigue in persons who operate aircraft that facilitate parachute descents. However, at the time of going to print, the MOS does not prescribe any fatigue management standards.



Personnel fatigue management relates to those who have a duty in relation to the jump aircraft, for example, the operator, jump pilot and drop zone safety officer.



Image: Germanskydiver | Shutterstock



3.5 Requirements for undertaking parachuting activities

(105.065)

You must have the required authorisation from an ASAO to undertake a parachuting activity, and you must carry out that activity in accordance with the authorisation.



A Part 105 ASAO authorisation is not required for:

- › an operator who provides services or equipment not directly linked to the conduct of a parachute descent
- › a person who conducts Part 61 pilot training for pilots of parachuting aircraft
- › an operator of an aircraft that is used for a parachute descent that is not operating as part of parachuting training operation.

3.6 Parachute descent equipment

(MOS 5.09)

You must wear parachute equipment that has a reserve parachute assembly and a main parachute for a parachute descent.

If you are a parachute instructor who is supervising a student parachutist, you must ensure the student is wearing parachute equipment that has both a reserve parachute assembly and a main parachute.

3.7 Parachute descents: carrying altimeters and other objects

(MOS 5.42)

You must not carry an object on a parachute descent that, if dropped, would be a hazard to property or persons on the ground.

For parachute descents longer than 10 seconds in freefall, a parachutist must wear a visual altimeter that:

- › shows the height above the drop zone
- › is secured
- › can be read throughout the descent.

For any kind of freefly descent, a parachutist must also wear an audible altimeter that:

- › is set to indicate the height above the drop zone
- › is secured
- › is clearly audible throughout the descent.

You must ensure that no clothing or other equipment will interfere with the operation of the main or reserve parachute.

Note: Visual altimeters and audible altimeters must meet the ASAO's exposition requirements.

If required by your parachutist certificate, your parachute assembly must have either:

- › a functional reserve static line
- › an operational automatic activation device, which must comply with the ASAO's exposition.

3.8 Parachutist logbook: records by parachutists

(MOS 5.26)

All parachutists (excluding tandem parachutists) must maintain a personal logbook of their parachute descents which must include:

- › the date and location of the descent
- › the type of descent
- › the exit height
- › any other information required by the ASAO.

A parachute logbook must be:

- › accessible to a person authorised by the ASAO or CASA
- › able to be downloaded in a legible format if the logbook is in an electronic form
- › able to be produced if requested by the ASAO or CASA.



CHAPTER 4

REQUIREMENTS FOR RESERVE AND EMERGENCY PARACHUTES



4.1 Overview

This chapter sets out the requirements for reserve and emergency parachutes. This includes:

- › requirements for manufacture and maintenance of reserve parachutes
- › requirements for manufacture and maintenance of emergency parachutes
- › determining what is a defective parachute
- › reporting defects.



A reserve parachute is a second or auxiliary parachute.

An emergency parachute is a parachute used by a person, usually the pilot in command, for abandoning an aircraft in an emergency.



A reserve parachute assembly is all the assembled components that make up a complete, functional reserve parachute, including the following:

- › the parachute container (but not including a main parachute that is packed in the container)
- › the container harness, and any dual harness (worn by a tandem parachutist) that attaches to the container harness
- › the ripcord, pilot parachute and all associated components and attachments
- › the reserve parachute, including suspension lines and associated components.

4.2 Requirements for manufacturing and maintaining reserve parachute assemblies

(MOS 2.04, 2.05 and 2.06)

Manufacture

A reserve parachute assembly must have been manufactured by the holder of a production approval. Also, it must either:

- › meet one of the following standards:
 - » TSO-C23
 - » ETSO-C23
 - » the repealed Air Navigation Order S103.18 (if it met that standard before it was repealed)
- › have been determined by the national aviation authority (NAA) of a contracting state (and accepted by CASA in writing) to meet the requirements of a parachute equipment specification or standard and have been manufactured under a production approval.

Maintenance

A reserve parachute assembly must be maintained in accordance with the following requirements:

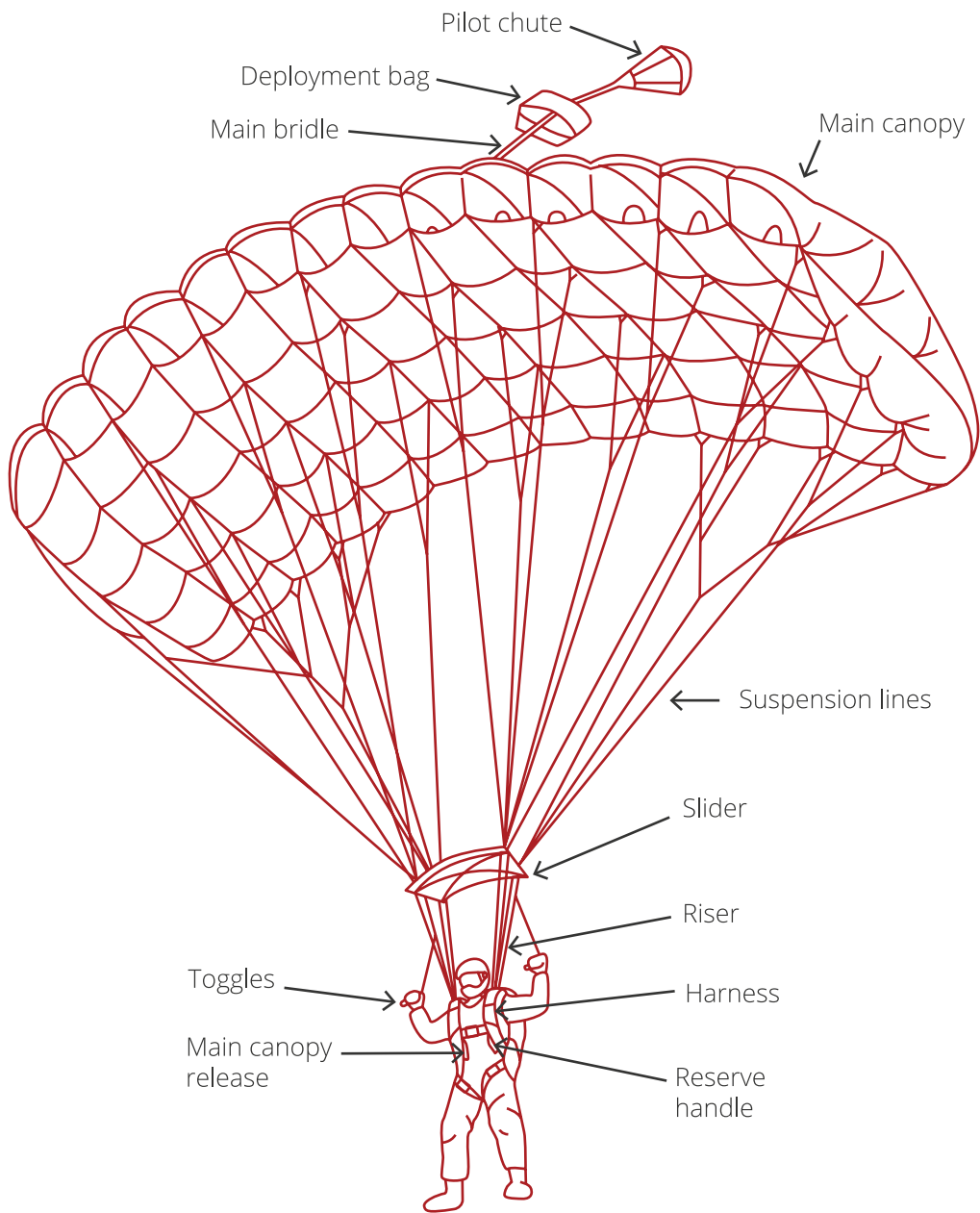
- › the manufacturer's issued requirements about the continuing airworthiness of the assembly
- › the ASAO's issued requirements about the airworthiness of the assembly.

If there is an inconsistency between a manufacturer's requirement and an ASAO's requirement, the assembly must be maintained in accordance with the manufacturer's requirement.

If the manufacturer no longer provides airworthiness support, the reserve parachute assembly must be maintained either:

- › in accordance with the ASAO's requirements (provided that the ASAO has assumed the provision of airworthiness support for that equipment)
- › by the organisation responsible for airworthiness support for that equipment.

Figure 1: Parts of a parachute system



4.3 Requirements for manufacturing and maintaining emergency parachute assemblies

(MOS 2.08 and 2.09)

Manufacture

An emergency parachute assembly must have been manufactured by the holder of a production approval. Also, it must either:

- › meet one of the following standards:
 - » TSO-C23
 - » ETSO-C23
 - » the repealed Air Navigation Order S103.18 (if it met that standard before it was repealed)
- › have been determined by the national aviation authority (NAA) of a contracting state (and accepted by CASA in writing) to meet the requirements of a parachute equipment specification or standard and have been manufactured under a production approval.

Maintenance

An emergency parachute must have been maintained in accordance with the manufacturer's issued requirements about the continuing airworthiness of the parachute.

If the manufacturer no longer provides airworthiness support, the emergency parachute assembly must be maintained:

- › in accordance with the ASAO's requirements (provided that the ASAO has assumed the provision of airworthiness support for that equipment)
- › by the organisation responsible for airworthiness support for that equipment.



Image: Michael Clarke



Image: Kenzi Skepper

4.4 Requirements for reserve parachute and emergency parachute equipment

(105.055)

If you provide a reserve parachute to a parachutist, you must ensure it meets the applicable standards above.

If you provide an emergency parachute to someone onboard the jump aircraft, you must ensure it meets the applicable standards above.

4.5 Reporting major defects in reserve and emergency parachutes

(105.045 and 105.050)

If, as an ASAO-authorised packer or rigger, you know there is a major defect in a reserve or emergency parachute, you must report it within 3 business days to the ASAO.

If, as an ASAO-authorised parachutist, you become aware a major defect in a reserve parachute has not been reported to the ASAO within 3 business days, you must report it to the ASAO within 3 business days of becoming aware of the defect.



A major defect of an emergency parachute is a defect of any part of the emergency parachute that may affect the safe operation of the parachute or cause the parachute to become a danger to persons or property.

A major defect of a reserve parachute is a defect of any part of the reserve parachute assembly that may affect the safe operation of the parachute or cause the parachute to become a danger to persons or property. The assembly includes the reserve parachute, the container, harnesses, the ripcord, pilot parachute, suspension lines and all associated components and attachments.

The ASAO must provide a copy of a major defect report to CASA, the manufacturer of the parachute and all other Part 105 ASAOs within 3 days of receiving the report.

In every case, the report must:

- › be in writing
- › be made in a form approved by the ASAO and include:
 - » the make and type of parachute
 - » the serial number of the parachute
 - » the name and address of the owner of the parachute
 - » the description of the defect
 - » how the defect may affect the safety of the parachute, or how the defect may cause the parachute to be a danger to persons or property.

4.6 Defective reserve parachutes and defective emergency parachutes

(105.060)

You must not make a parachute descent while equipped with a defective reserve parachute. This responsibility does not apply to you if you are a tandem parachutist or a trainee parachutist.

You must not provide a person with a defective reserve parachute or defective emergency parachute.

A defective reserve parachute is a reserve parachute:

- › that has had a major defect reported by a parachute maintainer or another parachutist
- › that is the subject of an airworthiness directive
- › whose assembly does not meet the requirements for a reserve parachute (see earlier in this chapter)
- › is subject to a manufacture-issued safety notice that has not been acquitted.

A defective emergency parachute is an emergency parachute:

- › that has had a major defect reported by a parachute maintainer
- › that is the subject of an airworthiness directive
- › whose assembly does not meet the requirements for an emergency parachute (see earlier in this chapter)
- › is subject to a manufacture-issued safety notice that has not been acquitted.



CHAPTER 5

PARACHUTE AIRWORTHINESS REGULATIONS



5.1 Overview

Airworthiness refers to the condition of an item, ensuring it is safe and suitable for flight. This includes design, maintenance and operational standards set by aviation authorities. It confirms the item can be operated without posing a risk to its occupants or people on the ground.

This chapter sets out the airworthiness regulations for parachutes. It includes the documentation to be kept in relation to parachute maintenance and for parachute maintainers.



A reserve parachute is a second or auxiliary parachute.

An emergency parachute is a parachute used by a person, usually the pilot in command, for abandoning an aircraft in an emergency.

5.2 Airworthiness authorisation

(MOS 5.02)

An ASAO may choose to administer parachute airworthiness as an approved function. They must be approved to do so by CASA under their Part 149 certificate.

If one of an ASAO's approved functions is to administer the airworthiness of a parachute, then its exposition must set out the competency requirements for a person:

- › to be issued a packer authorisation or a rigger authorisation
- › to be authorised to carry out a compatibility assessment.

5.3 Part 105 requirements for reserve parachutes

(MOS 5.03)

The exposition of an ASAO that administers airworthiness of reserve parachutes must include procedures for:

- › reviewing the manufacturers requirements for the airworthiness of a reserve parachute
- › determining if there should be additional airworthiness requirements and establishing a process to make this determination
- › implementing, overseeing and reviewing any additional ASAO requirements.

If the manufacturer of the reserve parachute no longer provides airworthiness support for the assembly, and the ASAO assumes the provision of that ongoing airworthiness support, the ASAO's exposition must include procedures for:

- › establishing requirements for airworthiness support for the reserve parachute assembly to ensure it continues to meet airworthiness requirements
- › how it implements, oversees and reviews these airworthiness requirements.

A reserve parachute assembly must meet the airworthiness requirements of the MOS when in use.

5.4 Packing cards for reserve or emergency parachutes

(MOS 5.04)

A reserve parachute or emergency parachute must have a packing card that is maintained by the owner of the parachute.



It is standard industry practice to use the term 'packing card' or 'parachute packing card' to refer to the packing logbook. A parachute packing card is a small card (or piece of paper) with the details of that parachute equipment on it. This 'card' is kept in a small pocket on the parachute container and always stays with the equipment.

The reserve parachute or emergency parachute packing card must:

- › for a reserve parachute, be available for inspection with the parachute by:
 - » the drop zone safety officer
 - » the chief parachuting instructor
 - » a packer or rigger
 - » another parachutist who uses the parachute
 - » CASA
- › for an emergency parachute, be made available to a packer, a rigger or CASA
- › identify the reserve parachute or the emergency parachute and any other parachute carried in the parachute container
- › identify any automatic activation device carried in the parachute container
- › contain the records required to be made by a packer or rigger who packs, maintains, inspects or assembles the parachute.



A parachute container is a component of the reserve parachute assembly in which the packed reserve parachute and packed main parachute are held.

5.5 Packing cards: main parachutes used by tandem or student parachutists

(MOS 5.05)

The owner of a main parachute that is being used by a student or a tandem parachutist must maintain a packing card for that parachute.

The packing card must:

- › be available for inspection with the parachute by
 - » a drop zone safety officer
 - » a chief parachuting instructor
 - » a packer or rigger
 - » a parachutist who uses the parachute
 - » CASA
- › identify the parachute
- › contain the records made by a packer or rigger who packs, maintains and inspects, or assembles the parachute.

5.6 Packing cards: records and certification of maintenance

(MOS 5.06)

As a packer or rigger, you must make a record on the packing card whenever you:

- › carry out maintenance on:
 - » a reserve parachute assembly
 - » an emergency parachute
 - » a parachute that requires a packing card (a tandem or trainee main parachute)
- › assemble and pack a parachute following maintenance.

The ASAO's exposition must include procedures that set out how to record this information.

The packing card must contain:

- › a record of the activity for the parachute
- › any inspections made on the reserve or emergency parachute
- › the date of any recurring inspections on a reserve parachute or an emergency parachute
- › the name or identifier (given by an ASAO) of the person who carried out any maintenance
- › a signature and date for the parachute's return to service.

Note: An ASAO might provide for specified acronyms or abbreviations that may be used on a packing card. For example, 'AIR' is known to be short for 'air, inspect and repack'.

5.7 Approving return to service of parachutes

(MOS 5.07)

The person who carried out the maintenance on the parachute or parachute assembly must approve it to be returned to service by signing the parachute card. That person must be satisfied the parachute or parachute assembly meets the requirements for approval of return to service before signing the parachute card.

See section 7.7 of this guide for information about approving the return to service of a parachute following maintenance.

5.8 Personal logbooks: packers and riggers

(MOS 5.08)

As a packer or a rigger, you must maintain a personal logbook which records the following activities:

- › packing or assembling a reserve or emergency parachute
- › conducting a compatibility assessment
- › conducting a recurring inspection (on a reserve or emergency parachute)
- › repairing or modifying a parachute
- › carrying out any other maintenance on a parachute.

You must include in your personal logbook the following information for each activity:

- › information identifying the parachute or other equipment
- › the date of the activity
- › the description of activity performed.

You must ensure the logbook is readily accessible and available for inspection when requested by the ASAO or CASA. The logbook must be capable of being downloaded in a legible format if it is kept in electronic form.



Information identifying a parachute may include:

- › model
- › date of manufacture
- › size
- › serial number (for example, AF120 DOM 12/3/2018, #123221).



CHAPTER 6

MAIN PARACHUTE AND EQUIPMENT COMPATIBILITY



6.1 Overview

Parachute equipment, specifically the main parachute, must be compatible with other equipment to ensure the components operate as intended for safe operation. This chapter sets out:

- › how often compatibility assessments need to be conducted
- › who must check that the compatibility assessment has been conducted within the specified time
- › who must check if a compatibility assessment needs to be conducted
- › who may complete a compatibility assessment
- › what procedures the ASAO must put in their exposition.



The regulations and standards regarding main parachutes relate principally to the compatibility of the main parachute assembly and the parachute container.

This does not apply to a parachute descent in which fore-and-aft parachute equipment is used. A fore-and-aft parachute is an older type of parachuting equipment, with the main parachute on the parachutist's back and the reserve parachute on their front (belly). These are sometimes referred to as 'belly-mounted reserves' and are seldomly used except for historic or novelty reasons.

6.2 Parachutist responsibilities for main parachute and container compatibility

(MOS 5.10)

As a parachutist certificate holder, before you commence a parachute decent, you must ensure that your main parachute and parachute container have been assessed as compatible with each other. This assessment must have been made within the last 12 months.

As a parachute instructor supervising a student parachutist, before you permit a student to commence a descent, you must ensure the student parachutist's main parachute and parachute container have been assessed as compatible within the last 6 months.

As a parachute instructor, before you commence a tandem parachute descent, you must ensure the main tandem parachute and the tandem parachute container have been assessed as compatible within the last 6 months.

Table 3: Compatibility assessment requirements

Situation	Compatibility assessment must have been completed within the last:
parachute certificate holder – before descent	12 months
parachute instructor supervising a student – before permitting student parachutist to make a descent	6 months
parachute instructor – before conducting a tandem parachute descent	6 months



Image: Icarus Media Group

6.3 Change of parachute components

(MOS 5.13)

If a packer or rigger carries out maintenance on a main parachute and changes a main parachute component, they must conduct an assessment as to whether the main parachute continues to be compatible with the parachute container of the reserve assembly. This assessment is not necessary if the replaced component is identical in specification and design to the original.

6.4 Who can conduct compatibility assessments

(MOS 5.06, 5.11 and 5.12)

Compatibility assessments can be conducted by:

- › packers
- › riggers
- › holders of a compatibility assessment authorisation (in certain circumstances)

Packer and rigger assessment responsibilities

The ASAO that administers the airworthiness of the main parachute must have exposition procedures that:

- › require the person conducting the assessment to physically inspect the equipment
- › specify how to assess the compatibility of the main parachute and the parachute container
- › set out how to record the relevant information.

As a packer or rigger, you must follow these procedures.

You must record in the packing card of the reserve parachute assembly:

- › a statement that you consider the main parachute, and the parachute container to be compatible
- › information that identifies both the main parachute and the reserve parachute assembly.

You must also keep a personal parachute packing logbook whenever you:

- › carry out maintenance on:
 - » a reserve parachute assembly
 - » an emergency parachute
 - » a parachute that requires a packing logbook
- › assemble and pack a parachute following maintenance.

Your parachute packing logbook must contain:

- › a record of the activity for the parachute
- › the date of any recurring inspections on a reserve parachute or an emergency parachute
- › your name or identifier (given by an ASAO)
- › your signature and date if the parachute is returned to service.

Note: You must be satisfied of the compatibility requirements before approving the return to service of a reserve parachute. See section 7.7 of this guide.

Other assessors: holders of a compatibility assessment authorisation

If you are not a packer or rigger, you can assess the compatibility of a main parachute, provided:

- › you hold a compatibility assessment authorisation
- › the equipment will not be used for a descent by a student parachutist or a tandem parachutist.

The compatibility assessment authorisation is granted by an ASAO that administers the airworthiness of the reserve parachute assembly. The ASAO's exposition must include procedures regarding:

- › the experience and qualifications required for the grant of a compatibility assessment authorisation to a person other than a packer or rigger
- › the competency standards and units of competency and any other required training to be successfully completed for the grant of the authorisation.

The ASAO's exposition must also have procedures that:

- › require the person conducting the assessment to physically inspect the equipment
- › specify how to assess the compatibility of the main parachute and the parachute container
- › set out how to record the relevant information.

If, after the inspection, you are satisfied that the main parachute and the parachute container are compatible for safe operation, you must record in the parachute packing card of the reserve parachute assembly:

- › a statement that you consider the main parachute and the parachute container to be compatible
- › information that identifies both the main parachute and the reserve parachute assembly.



CHAPTER 7

INSPECTIONS



7.1 Overview

Inspections are an essential part of parachuting operations, carried out to maintain quality, safety and performance.

This chapter sets out the inspection requirements for a:

- › reserve parachute
- › emergency parachute
- › main parachute.

7.2 Reserve parachutes: recurring inspection

(MOS 5.14 and 5.15)

Parachutists (including instructors) must ensure their reserve parachute assembly has been inspected, packed, and approved for return to service by an authorised rigger/packer within the specified time frames in the table below.

Table 4: Relevant time period for recurring inspections (repack cycle)

Type of parachute	Time period for inspections
certified parachutist's parachute	12 months
student parachute (must be checked by the supervising instructor)	6 months
tandem parachute	6 months

If the manufacturer requires a shorter period since the last inspection, then this period must be followed.

Note: If a packer or rigger signs the logbook, then this is accepted as being a return to service (MOS 5.07).

7.3 Inspecting and packing reserve parachutes

(MOS 5.16)

The inspection and packing of a reserve parachute assembly must be carried out by:

- › a packer authorised to inspect and pack a reserve parachute
- › an authorised rigger.

The inspection must assess the airworthiness requirements set out in chapter 4 of this guide.

If the reserve parachute assembly is also fitted with an automatic activation device (AAD), the inspection must assess that the AAD:

- › meets the airworthiness requirements set by the manufacturer
- › is installed in accordance with the reserve parachute assembly manufacturer's requirements.



7.4 Recurring compatibility checks for reserve parachutes after inspection

(MOS 5.17)

A packer or rigger who inspects the reserve parachute assembly must, after completing the inspection, conduct a compatibility assessment (see chapter 6 of this guide).



A compatibility assessment assesses the compatibility of a main parachute and the parachute container of a reserve parachute assembly.

Note: The packer or rigger must be satisfied that the main parachute that is packed in the container has been assessed as being compatible, and continues to be compatible, before approving a return to service of the reserve parachute. See section 7.7 of this guide.

7.5 Maintenance of a parachute: packers and riggers

(MOS 5.19)

A packer or rigger who repairs or modifies a main parachute must carry out those repairs or modifications either:

- › according to the manufacturer's requirements
- › in accordance with the Federal Aviation Administration (FAA) Parachute Rigger Handbook FAA-H-8083-17A.

If the maintenance is conducted on a reserve parachute assembly or an emergency parachute, it must be carried out in accordance with the requirements as set out in chapter 4 of this guide.

Note: A packer may be authorised to carry out minor repairs. A rigger is authorised to carry out all repairs and modifications.

7.6 Maintaining a parachute authorised under a parachutist certificate

(MOS 5.20 and 5.20A)

A certified parachutist may pack or conduct maintenance on a main parachute if authorised by an ASAO who is approved to administer a parachute descent and the airworthiness of the parachute for the descent.

A main parachute (used by a tandem parachutist or a student parachutist certificate holder) may only be maintained by a packer or rigger for whom there are recordkeeping responsibilities.

Main parachute repairs or modifications must be carried out in accordance with either the:

- › manufacturer's documented airworthiness requirements
- › FAA Parachute Rigger Handbook FAA-H-8083-17A.

A parachutist certificate holder who carries out repairs on a main parachute, or modifies the parachute, must carry out that maintenance in accordance with this section.

If an ASAO's documented maintenance requirements differ from either the manufacturer or the FAA requirements listed above, the manufacturer and FAA requirements take precedence.

7.7 Approval for return to service: reserve parachutes

(MOS 5.21)

A packer or rigger may only approve a reserve parachute for return to service following any maintenance carried out if:

- › the packer or rigger assembled and packed the parachute after the maintenance
- › the reserve parachute meets all the requirements for a reserve parachute
- › the reserve parachute assembly is not defective
- › a compatibility assessment has been conducted.

Chapter 4 of this guide sets out the manufacturer's requirements in relation to reserve parachutes.

7.8 Inspecting and packing emergency parachutes

(MOS 5.18)

The parachute owner must ensure that the inspection and packing of an emergency parachute is carried out by either:

- › a packer authorised to inspect and pack an emergency parachute
- › a rigger.

The inspection must assess whether the emergency parachute satisfies the manufacturers requirements for airworthiness.

The emergency parachute owner must ensure the person who inspects and packs the parachute indicates on the packing card that the emergency parachute has been inspected and the date of the inspection.

Chapter 4 of this guide sets out the manufacturer's requirements in relation to emergency parachutes.

7.9 Approval for return to service: emergency parachutes

(MOS 5.07 and 5.22)

A packer or rigger must only approve an emergency parachute for return to service following any maintenance carried out if:

- › the packer or rigger assembled and packed the parachute after the maintenance
- › the emergency parachute meets all the requirements for an emergency parachute set out in chapter 4 of this guide
- › the emergency parachute is not defective (see chapter 4 of this guide).

Note: A packer may be authorised to carry out minor repairs. A rigger is authorised to carry out all repairs and modifications.

Note: The signature of the person approving the maintenance carried out constitutes the approval for return to service of the parachute in relation to the maintenance. This signature appears on the applicable packing card.



CHAPTER 8

OPERATIONAL REQUIREMENTS



8.1 Overview

A parachute operator is a person who carries out a business or undertaking involving the provision of services or equipment for undertaking parachute descents.

Included in this chapter are the following:

- › obligations of parachute operators
- › safety management system requirements
- › requirements for safe operating procedures
- › safe conduct requirements of parachutists
- › permissions required and parachute descent supervision requirements
- › operational responsibilities of the drop zone safety officer, loadmaster and chief parachuting instructor
- › communication requirements between ground crew and the jump aircraft
- › requirements for dropping things from an aircraft or during a descent
- › opening heights for parachutes
- › different types of descents and their requirements
- › meteorological requirements for parachute descents
- › parachute descents near water and personal flotation device requirements
- › display descent requirements.

8.2 Obligations of parachute operators

(105.070)

A parachute operator must ensure that the following people/organisations are aware of their obligations under Part 105 and comply with the operator's written procedures to safely provide services and safely conduct parachute descents. This includes:

- › employees
- › persons engaged by the operator to supply services or equipment for parachute descents
- › parachutists.

You are considered a parachute operator if you are carrying on a business or undertaking involving:

- › training, or providing a service relating to training in:
 - » a parachute descent
 - » supervising a parachute descent undertaken by a trainee parachutist or tandem parachutist or both
 - » operating an aircraft to facilitate a parachute descent undertaken by a trainee parachutist or tandem parachutist or both
- › supervising a service relating to supervision of a parachute descent undertaken by a trainee parachutist or tandem parachutist or both.



Image: Icarus Media Group

8.3 Parachute training organisation: safety management system

(MOS 5.43)

A parachute training organisation must have a safety management system which is appropriate for the size, nature and complexity of the organisation and must include:

- › a statement of their safety policy and objectives:
 - » their commitment and responsibility for safety
 - » the safety accountabilities of their personnel
 - » the coordination of a safety plan
 - » safety management system documentation
- › a safety risk management process:
 - » hazard identification
 - » safety risk assessment
 - » mitigation processes
- › a safety assurance system:
 - » safety performance monitoring and measurement
 - » change management
 - » continuous improvement of the safety management system
- › a safety training and promotion system.

You must comply with the safety management system.

8.4 ASAO procedures for safe conduct at a drop zone: keeping compatibility assessment records

(MOS 5.51)

An ASAO must include procedures in its exposition covering:

- › parachutists providing documentary evidence that:
 - » the parachute assembly (the parachute container, container harness and reserve parachute) satisfies the standards referred to chapter 4 of this guide
 - » a packer, rigger or holder of a compatibility assessment authorisation has conducted an assessment of the main parachute with the parachute container (if the container of the reserve parachute assembly is configured to carry a main parachute)
 - » the packing card includes records made by either:
 - the packer or rigger, for the purposes of main parachute and container compatibility
 - the holder of a compatibility assessment authorisation
- › the drop zone safety officer performing duties for a parachute descent or the chief parachuting instructor (if a parachute training operation) either:
 - » sighting the documentary evidence and recording the sighting (including the name of the relevant person and date the document was sighted)
 - » retaining the documentary evidence for a period of 12 months.

These procedures must be followed the first time a parachutist plans to undertake a descent using a particular parachute assembly at a drop zone and at 12 month intervals thereafter.

Chapter 6 of this guide sets out the requirements for compatibility assessments.



Documents can be hard copy or electronic. A photo of the document is acceptable under the Electronic Transactions Act 1999. See advisory circular AC 11-03 Electronically formatted certifications, records and management systems.



8.5 Procedures for safely conducting parachute descents

(MOS 5.25 and Part 149.410)

If an ASAO administers the following parachute descents, it must have procedures in its exposition that enable the descents to be conducted safely:

- › parachute descents conducted at high altitudes
- › relative-work descents
- › canopy relative-work descents
- › parachute descents at night
- › parachute descents over or near a body of water where there is a reasonable possibility that a person undertaking the descent will land in the body of water
- › parachute descents by a trainee parachutist
- › cutaway descents
- › display descents
- › cloud descents including procedures for the approval of a drop zone for the cloud descent
- › tandem descents
- › other kinds of parachute descents specified in the exposition.



Relative work is when parachutists attempt to bring themselves together while in freefall. Canopy relative work is when parachutists attempt to bring themselves together while under an opened parachute.



A cutaway descent is a descent in which a parachutist intentionally jettisons the main parachute and deploys a reserve parachute.

The holder of an authorisation issued by the ASAO must:

- › comply with the procedure specified for each kind of parachute descent
- › only undertake a parachute descent if there are set procedures for the above-mentioned parachute descents.

CASA has published advisory material in [Civil Aviation Advisory Publication \(CAAP\) 1521, Parachuting through cloud: evaluation of applications by parachuting operators and issue of approvals by CASA](#) that is relevant to acceptable procedures for the approval of cloud descent procedures.

8.6 Safe conduct in relation to operation of jump aircraft by parachutists

(MOS 5.52)

Each person on board a jump aircraft must:

- › mitigate the risk of the parachutist fouling the aircraft
- › not cause adverse stress on the aircraft
- › ensure they do not carry any loose objects on the aircraft that, if dropped, would pose a danger to people or property on the ground.

An ASAO must include in its exposition procedures to ensure there is no risk of any part of the engine or propeller becoming fouled by a parachutist or their equipment.

Note: If the jump aircraft is a Part 131 aircraft (a balloon or hot air airship), there should be procedures to ensure there is no risk of the burner system or balloon control lines being fouled by a parachutist or their equipment.

8.7 Permission to undertake a parachute descent

(105.075)

As a parachutist (other than a tandem parachutist), you must have permission from the pilot in command (PIC) or person nominated by the PIC to exit the aircraft to begin a parachute descent.

8.8 Competency standards for tandem instructors

(MOS 5.37)

An ASAO that administers tandem descents must include in its exposition competency standards and units of competency for the issue of an authorisation that permits the holder to control a tandem descent as the parachutist instructor.



Image: Michael Young

8.9 Parachute training operations

(MOS 5.45)

While onboard an aircraft supervising a trainee parachutist, a parachute instructor must wear a parachute for the entire flight.

A parachuting training organisation must have a chief parachuting instructor appointed in order to provide training in parachute descents.

8.10 Communications: ground control assistant and pilot

(MOS 5.39, 5.49 and 5.50)

The ground control assistant for a parachute descent and the PIC of the jump aircraft must maintain communication by radio or visual signals until the parachute descent commences.

If the ASAO approves using radiocommunications for the purpose of ground control, there must be an approved protocol for making the following announcements:

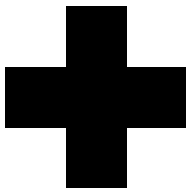
- › it is safe to jump
- › the aircraft is to orbit, do not jump
- › only experienced parachutists are safe to jump
- › it is unsafe to jump, land the aircraft.

Ground communication panels

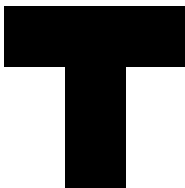
A drop zone safety officer (or the chief parachuting instructor if the descent involves a trainee or tandem parachutist) must ensure the ground communication panels (if used) meet the required dimensions as set out in the ASAO's exposition.

The following panel configurations are used to communicate with the pilot in command:

Figure 2: Ground communication panels



Safe to jump



Orbit aircraft
Do not jump



Experienced
parachutists only



Unsafe to jump
Land aircraft



8.11 Dropping things (over populous areas)

(105.090 and MOS 4.01)

A parachutist must not cause a thing to be dropped from the aircraft before the descent or during the parachute descent unless it is solely being used to indicate wind drift, for example, a paper or fabric streamer.

The object must not have any weights attached that would create a hazard to another aircraft, property or person.

8.12 Dropping things (not over populous areas)

(MOS 4.02)

A parachutist making a descent over a non-populous area, may drop something from the aircraft before or during the parachute descent if it:

- › is a paper or fabric streamer or other like object that is being dropped solely as a wind drift indicator provided it does not have any weights attached that would create a hazard to another aircraft, property or person
- › is not dangerous goods and the:
 - » ASAO's exposition permits the dropping of such objects
 - » ASAO's exposition has procedures:
 - to ensure there is no risk of the thing being dropped so that it lands outside the boundary of the drop zone
 - to ensure that the drop zone is clear of any livestock or persons prior to the descent
 - to ensure that the owner or occupier of the land (or their agent) has given written permission for the thing to be dropped.

You cannot drop dangerous goods (such as a smoke canister or a flare) even if you are permitted to carry it on the aircraft under regulations 92.180 of CASR – Consignment and Carriage of Dangerous Goods.



Regulation 92.180 of CASR gives the requirements for dangerous goods that can be carried for parachute operations when intended for use during the parachute descent. For example, carrying flares that the parachutist uses during the parachute descent.

Any objects that will be dropped must be carried inside the aircraft before being dropped unless the aircraft is carrying out approved aerial work operations under Part 138 of CASR – Aerial Work Operations.

When dropping items (other than wind drift indicators) outside populous areas, the drop zone safety officer is responsible for:

- › establishing a drop zone big enough to present no risk of the item landing outside the drop zone
- › clearing the drop zone of livestock and persons not involved with the descent
- › obtaining the permission of the owner or occupier of the land on which the drop zone is located.

8.13 Main parachute opening heights

(MOS 5.31)

Unless an ASAO prescribes a greater height, a main parachute must be fully opened by:

- › 4,000 ft AGL for tandem descents
- › 2,200 ft AGL for student descents
- › 1,800 ft AGL for any other descent (except for display descents).



Parachute opening heights for a display descent are set out in the ASAO's exposition.

8.14 Cutaway descents

(105.055 and MOS 5.32)

A cutaway descent is where a parachutist intentionally jettisons the main parachute and deploys a reserve parachute.

You must be equipped with two reserve parachutes to undertake a cutaway descent.

The second reserve parachute (the reserve parachute that is not intended to be deployed during the cutaway descent) must meet the parachute assembly and maintenance requirements set out in section 4.2 of this guide (MOS 2.04).

8.15 High altitude descents

(MOS 5.33)

A descent at high altitudes is only permitted if the ASAO:

- › permits high altitude descents
- › includes, in its exposition, procedures for safely conducting such a descent.

Any descent above flight level 250 (FL250) must:

- › be made by a parachutist who holds a parachutist certificate
- › have written approval from CASA (this includes for any tandem descent).

The PIC must not commence a high-altitude descent if there is a student parachutist on board the aircraft.



Flight level 250 (FL250) is 25,000 ft above mean sea level.

A high altitude descent is any descent that is made from above FL150 (15,000 ft above mean sea level).



Image: Michael Young

8.16 Relative-work descents

(MOS 5.34)

A relative-work descent is when parachutists attempt to bring themselves together while in freefall or while under an opened parachute (referred to as a canopy relative-work descent).

Parachutists may only undertake a relative-work descent if they hold a parachutist certificate which specifically authorises it.

A parachutist must not undertake canopy relative-work descent with a tandem parachutist.

A parachutist may conduct a freefall relative-work descent with a tandem parachutist's descent, provided it is approved by the drop zone safety officer and the tandem instructor.

An ASAO must set out in its exposition the required training to be completed by a parachutist to undertake a relative-work descent. Additional procedures must be included for the training for a relative-work descent with a tandem parachutist (if the ASAO administers this kind of descent).

During a freefall relative-work descent a parachutist must break off relative-work and separate from other parachutists at least 1,000 ft above the planned parachute opening height.



The opening height is the altitude at which a parachutist deploys the parachute.

8.17 Meteorological conditions for parachute descents

(MOS 5.38)

The PIC of a jump aircraft must ensure the parachute descent will only be made if meteorological conditions allow the drop zone to be clearly visible.

The drop zone safety officer or the chief parachute instructor, may approve a descent if the drop zone is not clearly visible.

As a parachutist you must have approval from the drop zone safety officer or the chief parachuting instructor (in the case of trainee or tandem parachutists) if either:

- › it is likely you will enter cloud during freefall
- › the drop zone is not clearly visible from the jump aircraft when at altitude.

8.18 Entering cloud during parachute descents

(MOS 5.35)

As a parachutist, you may descend through cloud only if the ASAO has approved the drop zone for a descent through cloud.

You must not commence a descent if it is likely that the parachute will be opened in cloud.

You must hold a parachutist certificate to undertake a cloud descent.

Note: A student parachutist cannot undertake a cloud descent.

For a cloud descent, the cloud base must be at least:

- › 3,500 ft AGL for a relative-work descent
- › 5,000 ft AGL for a tandem descent
- › 3,000 ft AGL for any other parachute descent.



Image: PedkoAnton | Shutterstock



Image: Michael Young

8.19 Parachute descents: wind velocity requirement

(MOS 5.41)

Maximum wind velocities are measured over a 10-minute period at a height of 10 m above the drop zone.

If the wind velocity measurement is taken at ground level, that reading must be increased by 25%.

The drop zone safety officer must ensure the maximum wind velocity during the parachute descent does not exceed 15 knots for a trainee parachutist that does not hold a parachutist certificate.

A lower wind velocity limit may be either:

- › stipulated and set out in an ASAO's exposition
- › determined by the chief instructor or drop zone safety officer in accordance with the procedures set out in the ASAO's exposition.

For certified parachutists, the drop zone safety officer must ensure the maximum wind velocity during the parachute descent does not exceed the maximum velocity set out in the ASAO's exposition.

8.20 Parachute descents near or over bodies of water

(MOS 5.36)

An ASAO must have safe conduct procedures in place for a parachutist to undertake a parachute descent over or near a body of water if there is a reasonable possibility that the parachutist may land in the water. The procedures must include requirements for the drop zone safety officer (who is supervising the descent) to identify and assess the following risks in relation to the parachute descent:

- › the exposure of a parachutist to injury or death, including chances of survival in the water
- › the surface condition of the water including wave height, wind conditions and swell size
- › the water and air temperatures
- › the distance the parachutist would be from land which would be suitable for landing
- › the availability of search and rescue facilities, including the time it would take to conduct a search and rescue should a parachutist land in the water.

8.21 Flotation devices

(MOS 5.36)

In considering the ASAO safe conduct procedures, the drop zone safety officer must decide whether a flotation device must be worn by any parachutist undertaking a parachute descent. If required, the drop zone safety officer will also determine which type of flotation device must be used.

The flotation device must have been manufactured to one of the following standards:

- › Australian Standard AS 4758 – Level 100, Level 150 and Level 275
- › ISO 12402-1 Level 150 and Level 275
- › European Standard EN399-1993 Lifejackets-275N
- › European Standard EN396-1993 Lifejackets-150N
- › New Zealand Standards NZ5823:2005 Type 401
- › ATSO-1C13 Life Preservers
- › TSO-13
- › TSO-C72.

The ASAO may also include additional requirements for flotation devices as set out in its exposition.

8.22 Parachute descents involving landings in populous areas

(MOS 5.48)

If a drop zone for a parachute descent is in a populous area, or less than 600 m from a populous area, as a parachutist you must use a steerable main parachute and a steerable reserve parachute. An ASAO may approve a parachutist, in writing, to use a main parachute that is not steerable for a descent into a populous area.

8.23 Display descents: equipment and operational requirements

(MOS 5.47)

As a parachutist, if you undertake a display descent, you must use a steerable main parachute and a steerable reserve parachute unless the ASAO has given you written approval to undertake a descent with a main parachute that is not steerable.

When conducting a display descent, you must not pass over spectators or any other person who is not a participant in the display, at a height of less than 50 ft.



CHAPTER 9

PILOTS



9.1 Overview

Pilots operating aircraft for parachute descents require additional training and an ASAO authorisation if operating an aircraft for parachute training (trainee and/or tandem) descents.

Aircraft used for parachute descents are called jump aircraft. The pilots are called jump pilots.

This chapter includes requirements for:

- › parachute descents at certified and non-controlled aerodromes
- › jump pilot training and authorisations
- › flight time requirements for operating a jump aircraft
- › competency reviews of pilots
- › radio procedures for pilots
- › pilot requirements for other types of jump aircraft.



An ASAO authorisation is not required for:

- › a person conducting Part 61 pilot training for pilots of parachuting aircraft
- › an operator of an aircraft (used for a parachute descent) that is not operating as part of parachuting training operation. (CASA EX105/23)

9.2 Jump pilot authorisation

(105.100 and MOS 5.23)

An ASAO that administers the operation of aircraft for parachuting training descents (trainee and/or tandem descents) must set out in its exposition the competency standards for training to issue a jump pilot authorisation. A jump pilot authorisation allows the holder to act as pilot in command (PIC) of the aircraft in a parachute training operation.

The training must cover:

- › civil aviation legislation that is relevant to the operation of the aircraft to facilitate a parachute descent
- › applying the flight manual instructions for the aircraft used to facilitate parachute descents
- › applying the aircraft operations procedures established by the parachute training organisation
- › safely conducting parachute training operations
- › radio procedures for parachute descents
- › emergency procedures for:
 - » the PIC relating to the safety of parachutists
 - » the parachutists undertaking a parachute descent from the aircraft
- › procedures for checking the serviceability of the jump aircraft
- › practical experience in operating the jump aircraft.

The ASAO must also set out in its exposition the procedures for authorising a jump pilot trainer who can:

- › conduct training for the issue of a jump pilot authorisation
- › assess candidates for a jump pilot authorisation
- › conduct recurrency training and the ongoing competency of jump pilot authorisation holders.

9.3 Jump pilot training requirements

(105.065 and MOS 3.03)

As PIC, if you are operating an aircraft for a parachute activity, you must:

- › have completed the training and competency standard set out in section 9.2 of this guide (MOS 5.23)
- › have completed training and meet the standards required by the ASAO for the issue of an authorisation to act as PIC of an aircraft at a parachute training organisation (a jump pilot authorisation). The authorisation must be issued by the ASAO who administers the operation of aircraft for tandem or trainee descents.
- › hold a current jump pilot authorisation by the ASAO.

Note: A Part 103 aircraft cannot be used for trainee or tandem descents.

Note: Pilot training for the issue of a jump pilot authorisation is administered under the aviation administration function mentioned in section 26 of the Part 149 MOS. A parachuting training organisation that conducts the training is administered by a Part 105 ASAO under the function mentioned in section 27 of the Part 149 Manual of Standards.



A Part 103 aircraft is a sport aviation or recreational aircraft administered by an ASAO (such as RAAus).

9.4 Pilot requirements for a parachute descent: Part 103 aircraft

(105.135 and MOS 9.01)

As PIC of a Part 103 aircraft facilitating a parachute descent, you must:

- › hold a pilot certificate issued by an ASAO that administers a Part 103 aircraft and authorises the holder to operate the aircraft
- › have a minimum of the following experience:
 - » 200 hours of aeronautical experience
 - » 100 hours of flight time as PIC of aircraft of the same category
 - » 10 hours of flight time as PIC of the same kind of Part 103 aircraft.

Part 103 aircraft requirements

(MOS 5.54, 8.02 and 8.03)

See sections 10.4, 10.16 and 10.17 of this guide regarding removing aircraft doors or canopies, carrying radio equipment on jump aircraft, and carrying oxygen on jump aircraft.



The *Parachute club operations* VHF Radio frequency (119.2) has been allocated by the Australian Communication and Media Authority (ACMA) for use in parachuting operations.

Note: Division 26.11 of the Part 91 Manual of Standards prescribes the requirements for supplying supplemental oxygen to flight crew members and parachutists (passengers).

[See the Part 91 Guide for general operating and flight rules.](#)

9.5 Flight experience (flight time) requirements

(105.080, MOS 3.07 and Exemption Instrument CASA EX105/23)

As PIC you must meet the following minimum flight time requirements to facilitate trainee and/or tandem parachutist descents in a single-engine turbine powered aeroplane:

- › 10 hours experience as PIC of the type of aircraft being operated; or
- › 100 hours experience as PIC (or as PIC under supervision) of a multi-engine aeroplane or single engine turbine powered aeroplane.

You must meet the following minimum flight time requirements to facilitate trainee and/or tandem parachutist descents in a multi-engine aeroplane:

- › 10 hours experience as PIC of the type of aircraft being operated; or
- › 100 hours experience as PIC (or as PIC under supervision) of a multi-engine aeroplane.

You must meet the following minimum flight time requirements to facilitate trainee and/or tandem parachutist descents in a powered-lift aircraft:

- › 10 hours experience as PIC in the type of powered-lift aircraft being operated.

You must meet the following minimum flight time requirements to facilitate trainee and/or tandem parachutists in a helicopter:

- › at least 10 hours experience as PIC of the type of helicopter being operated.

Note: PIC under supervision is a defined term in Appendix B of this guide.

9.6 Requirements for pilot competency review

(MOS 3.04)

As PIC with a jump pilot authorisation, you must undergo an assessment (review) of your competency to perform the activities for which you hold an authorisation.

The competency review must be conducted by a pilot who:

- › holds an authorisation issued by the ASAO that administers parachute operations
- › is authorised to assess the jump pilot authorisation holder's competency.

You must record the competency review in your logbook.

9.7 Recency requirements for jump pilots (competency reviews)

(MOS 3.05 and 3.06)

As PIC of an aircraft being operated to facilitate trainee or tandem parachute descents, you must have completed a competency review and have been assessed as competent within the following periods:

Table 5: Recency requirements for jump pilots

6 month competency reviews	12 month competency reviews
<ul style="list-style-type: none">› for aircraft equipped to carry 11 or more persons› for aircraft with 2 or more engines	<ul style="list-style-type: none">› for aircraft equipped to carry 10 persons or fewer› for aircraft with only one engine
this is not required if you have been issued the jump pilot authorisation within that last 6 months.	this is not required if you have been issued the jump pilot authorisation within that last 12 months.

Competency reviews may be completed up to 45 days prior to your current competency review period expiring. The new period will only commence when your current competency review ends.

9.8 Pilot licence requirements for parachute descents: aeroplanes

(105.140 and CASR 61.610)

To facilitate a parachute descent as the PIC of an aeroplane (other than a Part 103 aircraft) you must hold one of the following:

- › an air transport pilot licence with a category rating for the type of aircraft you will be flying
- › a commercial pilot licence with a category rating for the type of aircraft you will be flying
- › a private pilot licence with a category rating for the type of aircraft you will be flying, with 200 hours aeronautical experience that includes:
 - » at least 190 hours flight time as a pilot
 - » at least the following hours flight time as PIC
 - 20 hours cross-country flight time
 - 10 hours instrument time

The cross-country flight time must include a flight of at least 300 NM with a full-stop at 2 aerodromes (not including the flight training area where the flight began).

The aeronautical experience that is not flight time as a pilot or PIC (10 hours) may be completed in a flight simulation training device, which must be approved for the purpose.



Image: Icarus Media Group

9.9 Pilot licence requirements for parachute descents: helicopters

(105.145, CASR 61.610 and CASA EX105/23)

To facilitate a parachute descent as the PIC of a helicopter you must hold one of the following:

- › an air transport licence with a helicopter category rating
- › a commercial pilot licence with a helicopter category rating
- › a private pilot licence with a helicopter rating with 200 hours aeronautical experience that includes:
 - » at least 190 hours flight time as a pilot
 - » at least the following hours flight time as PIC
 - 20 hours cross-country flight time
 - 10 hours instrument time.

The cross-country flight time must include a flight of at least 300 NM with a full-stop at 2 aerodromes (not including the flight training area where the flight began).

The aeronautical experience that is not flight time as a pilot or PIC (10 hours) may be completed in a flight simulation training device, which must be approved for the purpose. You must have at least 10 hours experience as pilot in command of the type of helicopter being operated to facilitate a parachute descent by a trainee parachutist or tandem parachutist, or both.

9.10 Pilot licence requirements for parachute descents: powered-lift aircraft

(105.150 and CASR 61.610)

To facilitate a parachute descent as the PIC of a powered-lift aircraft you must hold one of the following:

- › an air transport licence with a powered-lift aircraft category rating
- › a commercial pilot licence with a powered-lift aircraft category rating
- › a private pilot licence with a powered-lift aircraft rating with 200 hours aeronautical experience that includes:
 - » at least 190 hours flight time as a pilot
 - » at least the following hours flight time as PIC
 - 20 hours cross-country flight time
 - 10 hours instrument time.

The cross-country flight time must include a flight of at least 300 NM with a full-stop at 2 aerodromes (not including the flight training area where the flight began).

The aeronautical experience that is not flight time as a pilot or PIC (10 hours) may be completed in a flight simulation training device, which must be approved for the purpose.



9.11 Pilot requirements for parachute descents: crewed, free balloons

(105.155)

To facilitate a parachute descent as the PIC of a crewed, free balloon you must hold one of the following:

- › a commercial pilot (balloon) licence
- › an authorisation issued by CASA or an ASAO (that authorises you to operate a crewed, free balloon) and 75 hours experience as PIC of a crewed, free balloon.

9.12 Parachute descents at non-controlled aerodromes where carrying a radio is required

(MOS 5.55)

As PIC, you must not permit parachutists to exit the jump aircraft within 15 minutes before the estimated time of arrival of an air transport aircraft if:

- › you are flying an aircraft being operated by a parachute training organisation
- › you are within the vicinity of a non-controlled aerodrome
- › civil aviation legislation requires aircraft to carry a radio.

This does not apply if:

- › you are in direct radiocommunication with the air transport aircraft's PIC
- › each parachutist can exit the jump aircraft and complete the parachute descent before the air transport aircraft arrives in the circuit area of the aerodrome.

You must not permit parachutists to exit the aircraft if:

- › an air transport aircraft is in the circuit area and has not landed and cleared the runway
- › an air transport aircraft has broadcast that it is taxiing for departure and has not yet departed the circuit area of the aerodrome.

9.13 Parachute descent at certified aerodromes

(MOS 5.56)

At a certified aerodrome, a parachutist may only make a descent, and an operator may only permit the aircraft to facilitate a descent if:

- › the aerodrome operator has approved the parachute descent at the aerodrome
- › ground communication panels (if used) are clear of aircraft movement areas.

During parachute training operations, the PIC must not permit a parachute descent to commence if another aircraft is carrying out an instrument approach procedure at the aerodrome or expected to do so within the next 5 minutes.

As PIC, you must not allow parachutists to exit the aircraft unless you are satisfied the parachutists will not conflict with any aircraft:

- › operating on the live side of any circuit of the aerodrome being used (or that may be reasonably expected to be used) by known traffic in the prevailing conditions
- › using any apron, taxiway or runway at the aerodrome.

9.14 Jump pilot radio procedures

(MOS 5.24)

As PIC, you must make a broadcast advising your intention to drop parachutists from the aircraft at least 2 minutes before a parachutist exits the aircraft.

The broadcast must be made on all relevant aviation frequencies for the airspace which the aircraft operates and in which the parachutist is to descend.

The broadcast must include:

- › the location of the drop zone
- › the altitude at which the parachutists will exit the aircraft
- › the number of parachutist canopies expected.

This broadcast may instead be made by an air traffic service (ATS) provider on an aviation safety radio frequency for the airspace in which the aircraft is operated and the parachutists are dropped. The ATS provider must broadcast the time the parachutists will be dropped and:

- › the location of the drop zone
- › the altitude at which the parachutists will exit the aircraft
- › the number of parachutist canopies expected.

You must ensure no parachutists exit the aircraft in controlled airspace until the ATS provider has confirmed clearance '[Aircraft call sign] clear to drop' or provided clearance in some other form allowing parachutists to exit the aircraft.



CHAPTER 10

JUMP AIRCRAFT REQUIREMENTS



10.1 Overview

Aircraft being operated for parachute descents may require specific considerations to allow the parachute descents to be conducted in a safe manner.

This chapter includes:

- › general requirements for jump aircraft
- › emergency equipment
- › parachutist restraint requirements
- › opening doors in flight, removing canopies and removing doors for Part 103 aircraft
- › aircraft occupants when operating descents by trainee or tandem parachutists
- › maintenance requirements of jump aircraft
- › loading, and weight and balance requirements
- › carrying radio equipment and oxygen.

10.2 General requirements for aircraft used for parachute descents

(105.080)

For parachuting descents, as the PIC, you must ensure the aircraft is one of the following:

- › a Part 103 aircraft (aircraft used for sport and recreational aviation operations)
- › an aeroplane
- › a helicopter
- › a power-lift aircraft
- › a crewed, free balloon.

Exception: A Part 103 aircraft cannot be used to facilitate a parachute descent by a trainee parachutist or a tandem parachutist (or both).

Note: For jump PIC qualification and experience requirements refer to chapter 8 of this guide.



Image: Icarus Media Group

10.3 Emergency equipment carried on jump aircraft

(MOS 5.40)

As PIC (for all descents) or as the parachute instructor (for a training descent) you must ensure there is a knife on board the aircraft which is readily available and suitable for emergency situations.

Note: This requirement is in addition to any emergency equipment the PIC may be required to ensure is on the aircraft in accordance with the Part 91 General operating and flight rules.

10.4 Safely opening doors in flight or removing doors

(MOS 5.53 and 5.54)

You must not open or remove the doors of a jump aircraft unless there are provisions to do so set out in the aircraft flight manual.

However, for a Part 103 aircraft, if the door or canopy needs to be removed to allow the parachutist to egress the aircraft, either:

- › the flight manual instructions must allow the aircraft to be operated with the door or canopy removed
- › the removal of the door or canopy must not create a hazard to the safe operation of the aircraft.

You may only remove or refit a door or canopy from a Part 103 aircraft provided you hold an authorisation that:

- › allows you to remove and install aircraft components
- › was issued by a Part 103 ASAO that administers airworthiness functions for the Part 103 aircraft.

You must also make a record in the aircraft logbook.

10.5 Requirements for aircraft used for descents by trainee parachutists and tandem parachutists

(105.085)

Both the PIC and the operator must ensure the following for an aircraft being used for trainee or tandem parachutists:

- › a standard certificate of airworthiness is in force for the aircraft
- › if the certificate of airworthiness is granted subject to conditions or requirements, those conditions or requirements are complied with
- › there is a certificate of release to service for the most recent maintenance carried out on the aircraft or there must be a maintenance release for the aircraft
- › the aircraft and each of its engines have been maintained in accordance with the requirements in section 10.8 of this guide.

10.6 Restraints for persons other than flight crew

(105.105 and 105.110)

As the PIC you must ensure any person on the aircraft (who is not a flight crew member) is provided with one the following and instructions for their use:

- › a seatbelt
- › a shoulder harness
- › an approved single-point or dual-point restraint.

You must direct all persons on the aircraft to fasten the restraint device before taxiing, taking off or landing, or any other time you deem it necessary for the safety of the persons on board.

Any person on the aircraft (who is not a flight crew member) must comply with the restraint device safety directions of the PIC.

10.7 Restrictions on aircraft occupants for descents by trainee parachutists and tandem parachutists

(105.115)

As PIC, when operating an aircraft to enable a parachute descent by trainee parachutists or tandem parachutists, you may only also carry:

- › other parachutists
- › crew members
- › CASA officers or delegates
- › people performing a duty set out in the ASAO's exposition
- › people authorised by the ASAO to be on the aircraft for training purposes.

Exception: When carrying trainee or tandem parachutists in a crewed, free balloon, you may carry people other than those listed above provided you hold an appropriate pilot authorisation.



Image: Icarus Media Group

10.8 Maintenance requirements

(MOS 3.01)

A class B jump aircraft (including its engines) must be maintained in accordance with:

- › an approved system of maintenance
- › the following requirements:
 - » the aircraft must undergo an inspection for the purpose of a maintenance release (Part 43 of CAR) immediately after the earlier of the following:
 - the completion of 100 flight hours after the most recent maintenance release inspection
 - 12 months after the most recent maintenance inspection
 - » piston engines must be maintained in accordance with requirement 2 of AD/ENG/4 (CASA Airworthiness Directive 1/2009, Piston Engine Continuing Airworthiness Requirements)
 - » turbine engines must be maintained in accordance with requirement 1 of AD/ENG/5 (CASA Airworthiness Directive 10/2004, Turbine Engine Continuing Airworthiness Requirements).

Note: If an aircraft is in flight when the 100 flight hours are reached, they are deemed not to be completed until the termination of the flight.

If the aircraft is manufactured by Cessna Aircraft Company (a subsidiary of Textron Aviation, incorporated in the USA) and the aircraft is specified in service bulletin SEB07-5 (published by Cessna), a secondary seat stop must be fitted to the pilot's seat in accordance with the service bulletin. You can request a copy of this service bulletin from CASA, or directly from Textron Aviation.

10.9 Control seat of jump aircraft

(MOS 5.30)

A parachutist may occupy a flight control seat only if either:

- › the controls have been removed at that seat
- › if dual controls are fitted at the seat, the pilot in command and the drop zone safety officer have approved the parachutist to occupy that seat.

10.10 Loading aircraft used for parachute descents

(105.125)

You must comply with any requirements prescribed in the MOS in relation to loading the aircraft, including:

- › aircraft loading procedures that must be followed
- › aircraft loading system requirements
- › making and retention of aircraft loading records.

10.11 Weight and balance documents

(MOS 7.02)

The PIC and the aircraft operator must ensure there is a loading sheet completed before the aircraft departs.

The PIC (other than for Part 131 aircraft) and aircraft operator must ensure:

- › the loading sheet is carried in the aircraft
- › a copy of the loading sheet is given to the drop zone safety officer or the chief parachuting instructor (for a training operation)
- › the information on the loading sheet is retained by that person for 3 months after the completion of the flight.

The PIC and the operator do not require a fresh loading sheet if:

- › a loading sheet has been completed for a parachute descent and the aircraft is subsequently operated to facilitate another parachute descent (or a consecutive number of descents) on that day:
 - » carrying the same load
 - » from the same aerodrome
 - » there is no change in any of the load conditions which would adversely affect the performance of the aircraft for a flight (or consecutive flights).



Documents can be hard copy or electronic. A photo of the document is acceptable under the Electronic Transactions Act 1999. See advisory circular AC 11-03 Electronically formatted certifications, records and management systems.

Note: Under section 43 of the Transport Safety Investigation Act 2003 (about the protection of evidence that might be relevant to an investigation), the Chief Commissioner may direct that specified things, or things in a specified class of things, must not be removed or interfered with except with the Chief Commissioner's permission.

Note: Section 20.06 of the Part 91 Manual of Standards prescribes safety briefings and instructions required before an aircraft takes off for a flight, including briefings that must be made by the PIC about the physical location within, or on, the aircraft that a parachutist must occupy during the flight. [See the Part 91 Guide for general operating and flight rules.](#)

10.12 Loading requirements for aircraft (other than crewed, free balloons)

(MOS 7.03)

The loading sheet must contain the following information:

- › the name of PIC
- › the date and time of flight
- › the registration mark of the aircraft
- › the name of the person who prepared the loading sheet (if not the PIC)
- › the aerodromes of departure and destination for the flight
- › the aircraft's empty weight
- › the weights and moment arms of the aircraft occupants, cargo, any removable equipment carried on the aircraft and any fuel and consumables (e.g. water, ethanol etc) carried on the aircraft
- › the calculated load weight and total moment that shows the centre of gravity is within approved limits
- › the maximum allowable weight for the flight in the prevailing environmental conditions
- › a statement by the person responsible for planning the loading of the aircraft that the load and its distribution are in accordance with aircraft loading system.

Note: If the person making this statement is not the PIC or the co-pilot, then either the PIC or co-pilot must provide written acknowledgement that the person responsible for planning the aircraft loading accepts that the aircraft has been loaded in accordance with the load sheet.

Note: If the aircraft uses a loading system that is set out in placards in accordance with Civil Aviation Order 100.7, the requirement to show that the calculated load weight and total moment is within approved centre of gravity limits can be met if evidence is included that shows the aircraft is loaded in accordance with the placards.



Image: Icarus Media Group

10.13 Part 131 recreational aircraft facilitating parachute descents

(MOS 5.57 and 5.58)

The PIC of a recreational crewed, free balloon (Part 131 aircraft) must ensure that:

- › the flight is conducted by day
- › the maximum climb rate is not exceeded when the parachutists exit from the aircraft.

Note: A Part 131 aircraft, other than a crewed, free balloon, is not permitted to be operated to facilitate a parachute descent.

Where a Part 131 ASAO exists – and it wishes to facilitate recreational parachute descents using crewed, free balloons it must include in its exposition, procedures for safe conduct that:

- › apply to the operation of the balloons
- › are complied with by the PIC
- › preserve an acceptable level of safety.

If there is an inconsistency between a Part 131 ASAO's exposition and a Part 105 ASAO's exposition, the Part 131 exposition will prevail.

Note: The operation of a crewed, free balloon to facilitate a parachute descent may also be a balloon transport operation or a specialised balloon operation. The PIC of the balloon is subject to requirements under Part 131 in relation to those operations. See the Guide for balloons and hot air airships – plain English guide.

10.14 Loading requirements for parachuting from crewed, free balloons

(MOS 7.04)

For a crewed, free balloon the loading sheet must contain the following information:

- › the name of PIC
- › the date and time of flight
- › the type and size of the balloon and its registration mark
- › the place of departure
- › the intended exit place for each person undertaking a parachute descent on the flight
- › the calculated aircraft loaded take-off weight
- › the maximum allowable weight for the flight in the prevailing environmental conditions
- › the calculated aircraft loading weight on landing
- › a statement by the person responsible for planning the loading that the load and its distribution are in accordance with aircraft loading system and any applicable requirement in the Part 131 MOS.
- › if the person making this statement is not the PIC, then the PIC must provide written acknowledgement that they accept the aircraft has been loaded in accordance with the load sheet.

10.15 Requirements relating to radio equipment and oxygen equipment

(105.130)

As the operator you must comply with requirements prescribed in the MOS in relation to radio and oxygen equipment to be carried on a jump aircraft and when this equipment must be used.

10.16 Carrying radio equipment on jump aircraft

(MOS 8.02 and Part 91 MOS 26.18)

The operator of a jump aircraft must ensure the aircraft is fitted with:

- › a radiocommunication system capable of:
 - » collectively communicating on all frequencies necessary to meet the reporting, broadcast and listening watch requirements under CASR 91.630, 91.635, 91.640 and 91.675, from any point on the route of the flight, including in the event of any diversions
 - » 2-way voice communications
 - » communicating on the aeronautical emergency frequency 121.5 MHz.
- › a radiocommunication system capable of receiving communication on a prescribed frequency used for ground control communication (parachute club operations).



The parachute club operations VHF Radio frequency (119.2) has been allocated by the Australian Communication and Media Authority (ACMA) for use in parachuting operations.



Refer to the Plain English guide for general operating and flight rules for further detail on radio communication and equipment requirements.

The operator of a Part 103 aircraft or a crewed, free balloon that is being operated to facilitate a parachute descent, may satisfy the above requirements using a portable Airband VHF transceiver also known as an aeronautical mobile station.

10.17 Carrying oxygen on jump aircraft

(MOS 8.03 and Part 91 MOS 26.43)

As the operator of an unpressurised aircraft (other than a Part 103 aircraft) being operated to facilitate a parachute descent, you must ensure supplementary oxygen is provided in accordance with the Part 91 MOS.

You and/or a flight crew member who is carried on board the unpressurised aircraft must use supplementary oxygen in accordance with Part 91 MOS 26.43.

The plain English guide for general operating and flight rules sets out these Part 91 requirements:

Flight crew member or cabin crew member:

For any period exceeding 30 minutes when the cabin pressure altitude is continuously at least FL125 but less than FL140, there must be supply for the entire period.

For any period when the cabin pressure altitude is at least FL140, there must be supply for the entire period.

When a pressurised aircraft is flown at an altitude of FL250 or more, there must also be at least 10 minutes supply even if the entire period spent at that altitude is less than 10 minutes.

Passengers:

For any period when the cabin pressure altitude is at least FL150, there must be supply for the entire period.

When a pressurised aircraft is flown at an altitude of FL250 or more, there must also be at least 10 minutes supply after descending below FL250 even if the entire period spent at that altitude is less than 10 minutes.



APPENDICES



Appendix A: Acronyms and abbreviations

Term	Meaning
AAI	authorised aeronautical information
AAD	automatic activation device
Act	Civil Aviation Act 1988
AC	advisory circular
AGL	above ground level
AIP	Aeronautical Information Publication published by Airservices Australia and includes the AIP Supplement. The AIP is available through www.airservicesaustralia.com
ASAO	approved self-administering aviation organisation
APF	Australian Parachute Federation
ATS	air traffic service
BASE	buildings, antennas (radio masts), spans (bridges), earth (cliffs)
CAO	Civil Aviation Order
CAR	Civil Aviation Regulations 1988
CASR	Civil Aviation Safety Regulations 1998
DZSO	drop zone safety officer
FAA	Federal Aviation Administration (of the United States)
FL	flight level
ft	feet
MBA	mandatory broadcast area
m	metres
MHz	megahertz
MOS	manual of standards
NAA	national aviation authority
NM	nautical mile
PIC	pilot in command
SMS	safety management system
TSO	technical standard order of the FAA
VHF	very high frequency

Appendix B: Definitions

Term	Description of meaning
AD/ENG/4	CASA Airworthiness Directive 1/2009, Piston Engine Continuing Airworthiness Requirements, as in force from time to time
AD/ENG/5	CASA Airworthiness Directive 10/2004, Turbine Engine Continuing Airworthiness Requirements, as in force from time to time
approved system of maintenance	a system of maintenance for the aircraft that has been approved under regulation 42M, including any changes to the program that have been approved under regulation 42R
aeroplane	a power-driven, heavier than air aircraft deriving its lift in flight chiefly from aerodynamic reactions on surfaces remaining fixed under given conditions of flight, but does not include a power assisted sailplane
approved function	an aviation administration function mentioned in the ASAO certificate of the ASAO
approved restraint device	a device approved by CASA under regulation 21.305
ASAO	<p>approved self-administering aviation organisation is a person or organisation that holds an ASAO certificate that is in force.</p> <p>a Part 105 ASAO administers:</p> <ul style="list-style-type: none"> › the operation of an aircraft to facilitate a parachute descent if the ASAO has an approved function mentioned in section 26 of the Part 149 Manual of Standards in relation to the aircraft, and › a parachute descent if the ASAO's approved functions include the aviation administration functions mentioned in sections 23 and 24 of the Part 149 Manual of Standards in relation to the parachute descent; and › the airworthiness of a parachute if the ASAO has an approved function mentioned in section 28 of the Part 149 Manual of Standards in relation to the parachute
ATS provider	a person approved to provide the air traffic services (Part 172 refers)
ATSO authorisation	a CASA design and production approval issued to the manufacturer of an article that has been found to meet a specific ATSO, ETSO or TSO, or a CASA production approval issued to the manufacturer of an article manufactured in accordance with an FAA letter of TSO design approval
automatic activation device (AAD)	a self-contained device that, if carried with a parachute assembly, automatically initiates deployment of the main parachute or the reserve parachute under predetermined conditions
canopy relative-work descent	a relative-work descent that involves the intentional manoeuvring of two or more parachutists with deployed (open) parachute canopies in proximity to, or in contact with, one another
CAR	the Civil Aviation Regulations 1988
CASR	the Civil Aviation Safety Regulations 1998
certified aerodrome	an aerodrome in respect of which an aerodrome certificate is in force
chief parachuting instructor	the person appointed as the chief parachuting instructor of the parachuting training organisation that is conducting the parachuting training involving the descent

Term	Description of meaning
Civil Aviation Order 100.7	Civil Aviation Order 100.7 Instrument 2015. Weight requirements for aircraft
cloud descent	a parachute descent in which either: <ul style="list-style-type: none"> › the parachutist would enter cloud during the descent › the drop zone would not be clearly visible to the parachutist throughout the descent
compatibility assessment authorisation	an assessment of the compatibility of the main parachute, the reserve parachute assembly and the container (see chapter 6 of this guide)
competency review	an assessment of the competency of the pilot to perform an activity authorised by the pilot's jump pilot authorisation
competency standards	refer Part 105 MOS 3.04 (1)
crewed, free balloon	a free balloon that is capable of carrying one or more persons and is equipped with controls that enable the altitude of the balloon to be controlled
defective emergency parachute	an emergency parachute: <ul style="list-style-type: none"> › that is covered by a report under regulation 105.045, or › that is covered by an airworthiness directive, or › that does not meet a requirement prescribed by the Part 105 Manual of Standards for the purposes of paragraph 105.055(5)(a), or › for which the manufacturer of the parachute has issued a notice stating that action must be taken in relation to the parachute to ensure the safety of air navigation and that action has not been taken
defective reserve parachute	a reserve parachute: <ul style="list-style-type: none"> › that is covered by a report under regulation 105.045 or 105.050 or › that is covered by an airworthiness directive, or › whose assembly does not meet a requirement prescribed by the Part 105 Manual of Standards for the purposes of paragraph 105.055(3)(a), or › for which the manufacturer of the parachute has issued a notice stating that action must be taken in relation to the parachute to ensure the safety of air navigation and that action has not been taken
direct supervision	supervision where the drop zone safety officer is present throughout all phases of the operation, whether at the drop zone or in the aircraft that is facilitating the descent
display descent	a parachute descent conducted for the purpose of a parachuting display
display organiser	a person who holds an authorisation issued by a Part 105 ASAO under procedures mentioned in the MOS section 5.46
drop zone	the area, specified by the drop zone safety officer who is performing duties for a parachute descent, intended for the landing of a person undertaking the parachute descent

Term	Description of meaning
drop zone safety officer (DZSO)	<p>the holder of an endorsement who is approved to act as the drop zone safety officer for the descent by the chief parachuting instructor under the procedures mentioned in that paragraph, and</p> <ul style="list-style-type: none"> › if the descent is a display descent undertaken by a tandem parachutist, means the endorsement holder who has been nominated to act as the drop zone safety officer for the display descent by the display organiser of the parachuting display; and › in relation to a parachute descent other than a descent mentioned above, means the holder of an authorisation that covers that descent
emergency parachute	a personnel parachute carried on an aircraft, to be used by a person to abandon the aircraft in an emergency situation
empty weight	the weight, as determined in accordance with this section of the Civil Aviation Orders, of an aircraft, including all items of fixed equipment and other equipment which is mandatory for all operations, fixed ballast, unusable fuel and total quantities of oil, engine coolant and hydraulic fluid but excluding all other items of disposable load.as given by Civil Aviation Order 100.7
flight crew member	a crew member who is a pilot or flight engineer assigned to carry out duties essential to the operation of an aircraft during flight time.
fore-and-aft parachute equipment	<p>parachute equipment used for undertaking a parachute descent, in which the person who undertakes the parachute descent is equipped with two parachute containers:</p> <ul style="list-style-type: none"> › one of which contains the main parachute › the other comprising the container of reserve parachute assembly that is not configured to carry a main parachute
freefall	the period between when a person undertaking a parachute descent exits the aircraft and when the parachute is completely open
freefly	a freefall descent undertaken with the parachutist's body being predominantly in a vertical head-up or head-down position.
ground control assistant	a person who holds a ground control authorisation
ground control authorisation	<p>an authorisation that:</p> <ul style="list-style-type: none"> › is issued by a Part 105 ASAO that administers a parachute descent, and › authorises the holder to undertake ground control during the operation of an aircraft to facilitate a parachute descent
high altitude	a parachute descent in which the parachutist exits an aircraft used to facilitate the parachute descent at a pressure altitude above flight level (FL) 150
jump pilot authorisation	an authorisation to a person to act as pilot in command of the aircraft in a parachute training operation
letter of ATSO design approval	a CASA design approval for a foreign-manufactured article which has been found to meet a specific ATSO. Part 21 refers
live side	those parts of the circuit area in which aircraft are operating after joining the circuit area for the purpose of taking-off or landing
loading system	a system for ensuring that an aircraft is loaded within approved weight and centre of gravity limits at all times during flight

Term	Description of meaning
loadmaster	a person who is nominated by the drop zone safety officer who is performing duties for a parachute descent, to have the responsibilities mentioned in section 5.29 of the MOS in relation to the descent
main parachute	<p>a personnel parachute that is not a reserve parachute or an emergency parachute and is either</p> <ul style="list-style-type: none"> › packed into the parachute container of a reserve parachute assembly for the purpose of undertaking a parachute descent › packed into a parachute container separate to the container of the reserve parachute assembly and is used in conjunction with the reserve parachute assembly when undertaking a parachute descent
major defect	<ul style="list-style-type: none"> › for an emergency parachute, a defect of any part of the emergency parachute that may affect the safe operation of the parachute or cause the parachute to become a danger to persons or property › for a reserve parachute, a defect of any part of the reserve parachute assembly that may affect the safe operation of the parachute or cause the parachute to become a danger to persons or property
moment arm	the horizontal distance from the reference datum line to the CG of an item. The algebraic sign is plus (+) if measured aft of the datum and minus (-) if measured forward of the datum
night	the period between the end of evening civil twilight and the beginning of the following morning civil twilight
packer	the holder of a packer authorisation. A packer may be authorised to carry out minor repairs
packer authorisation	<p>an authorisation, issued by a Part 105 ASAO that administers the airworthiness of a parachute, which authorises the holder to carry out the following activities on the parachute:</p> <ul style="list-style-type: none"> › pack the parachute › assemble the parachute › inspect the overall condition of the parachute assembly to determine the airworthiness of the assembly › repair minor defects in the parachute, the parachute container or the harness › approve a reserve parachute, emergency parachute, or main parachute for return to service following maintenance the packer has carried out for the parachute › conduct an assessment of the compatibility of a main parachute and the parachute container of a reserve parachute assembly

Term	Description of meaning
parachuting activity	<p>any of the following:</p> <ul style="list-style-type: none"> › a parachute descent › packing a parachute › maintaining a parachute › assembling a parachute › supervising a parachute descent › operating an aircraft to facilitate a parachute descent › providing training in an activity mentioned above › carrying on a business or undertaking involving the provision of services or equipment for undertaking a parachute descent › an activity prescribed by the Part 105 Manual of Standards, which means: <ul style="list-style-type: none"> » ground control and radio communication between the ground controller and the PIC » ground control and visual communication between the ground controller and the PIC
parachuting display	organised parachuting performed before a public gathering
parachute operator	a person who carries on a business or undertaking involving the provision of services or equipment for undertaking parachute descents
parachute packing card (logbook)	<p>a logbook in which written records relating to the airworthiness of a parachute are kept, that:</p> <p>is attached, or carried on, the parachute; or</p> <p>if the logbook is kept electronically, may be accessed by some means (that links to the logbook) that is attached, or carried on, the parachute, such as a label or tag</p>
parachuting training	<p>training and assessment in all the units of competency required by a Part 105 ASAO that administers parachute descents:</p> <ul style="list-style-type: none"> › for a parachutist certificate to undertake a parachute descent › for a rating or endorsement on the parachutist certificate to conduct the activities authorised by the rating or endorsement › training required by a Part 105 ASAO that administers the descent for the issue of a tandem parachutist certificate › for the supervision of the descent by the parachutist instructor who controls the descent
parachuting training organisation	<p>a person or organisation which holds an authorisation issued by the ASAO to conduct:</p> <ul style="list-style-type: none"> › parachuting training › training required for the issue to a pilot of a jump pilot authorisation
parachute training operation	an aircraft operation conducted by a parachuting training organisation that involves a descent from the aircraft by a trainee parachutist or tandem parachutist (or both)

Term	Description of meaning
parachutist authorisation	<p>a parachutist certificate</p> <p>any rating or endorsement in relation to the authorisation authorising the person to conduct specified activities that relate to:</p> <ul style="list-style-type: none"> › undertaking a parachute descent › parachuting training for undertaking a parachute descent
parachutist certificate	<p>an authorisation (other than a student parachutist certificate or a tandem parachutist certificate) that authorises the holder to undertake a parachute descent</p>
parachutist instructor	<p>a person holding a parachutist authorisation, issued by a Part 105 ASAO, that authorises the person to conduct parachuting training</p>
Part 103 aircraft	<p>an aircraft is a Part 103 aircraft if the aircraft is not registered and the aircraft is any of the following:</p> <ul style="list-style-type: none"> › a powered parachute › a gyroglider › a hang glider or powered hang glider › a paraglider or powered paraglider › a touring motor glider › a rotorcraft prescribed by the Part 103 Manual of Standards for the purposes of this subparagraph › a weight-shift-controlled aeroplane prescribed by the Part 103 Manual of Standards for the purposes of this subparagraph › any other aeroplane prescribed by the Part 103 Manual of Standards for the purposes of this subparagraph <p>a sailplane is a Part 103 aircraft</p> <p>Note: This applies to all sailplanes, including sailplanes registered under Part 47 and sailplanes that are foreign registered aircraft. Sailplanes are required to be registered under Part 47, unless an exception applies.</p> <p>Note: Model aircraft and RPA's are not Part 103 aircraft</p>
Part 105 ASAO	<p>an ASAO whose approved function is or includes administering a parachuting activity</p>
Part 105 ASAO's requirements	<p>in relation to the airworthiness of a reserve parachute assembly:</p> <ul style="list-style-type: none"> › has the meaning given by paragraph 2.04(4)(b) of the MOS › in relation to the airworthiness of an emergency parachute, has the meaning given by subsection 2.09(2) of the MOS › in relation to the airworthiness of a main parachute, has the meaning given by paragraph 5.20A(1)(c) of the MOS <p>these can be found within this guide</p>

Term	Description of meaning
Part 131 aircraft	<p>either of the following:</p> <ul style="list-style-type: none"> › a crewed, free balloon › a hot air airship
Part 131 recreational activity	<p>operating a Part 131 aircraft other than for one of the following:</p> <ul style="list-style-type: none"> › a balloon transport operation › a specialised balloon operation › balloon flying training for the grant of a balloon flight crew licence or a balloon flight crew rating <p>Note: Balloon flying training for any of these purposes means an AOC is required to conduct this training. Balloon flying training conducted for other purposes is a Part 131 recreational activity</p>
pilot in command (PIC)	the pilot designated by the operator of the aircraft as being in command and charged with the safe conduct of the flight
populous areas	includes a city and a town
powered-lift aircraft	<p>a power-driven, heavier-than-air aircraft that derives its lift in flight:</p> <ul style="list-style-type: none"> › during vertical manoeuvring and low-speed flight from: <ul style="list-style-type: none"> » the reaction of air on one or more normally power - driven rotors on substantially vertical axes, or » engine thrust › chiefly from aerodynamic reactions on surfaces remaining fixed under given conditions of flight
relative-work descent	a parachute descent in which persons who are undertaking parachute descents attempt to bring themselves together while in freefall or while under an opened parachute (also known as a canopy relative-work descent)
relevant design authority	<p>for an emergency parachute or reserve parachute assembly, any of the following issued for the parachute or assembly:</p> <ul style="list-style-type: none"> › an ETSO authorisation issued under regulation (EU) No 748/2012 of the European Parliament and the Council of the European Union › a TSO authorization issued under the FARs › an FAA letter of TSO design approval › an ATSO authorisation › a letter of ATSO design approval
reserve parachute	<p>a second or auxiliary personnel parachute worn by a person undertaking a parachute descent.</p> <p>Note: Two reserve parachutes must be carried for a cutaway descent (in which the main parachute is deliberately jettisoned, and a reserve parachute then deployed as the main parachute).</p>

Term	Description of meaning
reserve parachute assembly	<p>all the assembled components that make up a complete, functional reserve parachute, including the following:</p> <ul style="list-style-type: none"> › the parachute container (but not including a main parachute that is packed in the container) › the container harness, and any dual harness (to be worn by a tandem parachutist) that attaches to the container harness › the ripcord, pilot parachute and all associated components and attachments › the reserve parachute, including suspension lines and associated components
reserve static line	a line, attached to the main parachute, that initiates the deployment of the reserve parachute following the jettisoning of the main parachute
rigger	the holder of a rigger authorisation. A rigger is authorised to carry out all repairs and modifications
rigger authorisation	<p>an authorisation, issued by a Part 105 ASAO that administers the airworthiness of a parachute, which authorises the holder to:</p> <ul style="list-style-type: none"> › carry out the following activities on the parachute: <ul style="list-style-type: none"> » pack the parachute » assemble the parachute » inspect the overall condition of the parachute assembly to determine the airworthiness of the assembly › carry out repairs and modifications of the parachute, parachute container, container harness and any dual harness that attaches to the container harness › in the case that the parachute is a main parachute—manufacture the main parachute or a component of the main parachute › approve a reserve parachute, emergency parachute, or main parachute mentioned in MOS 5.05, for return to service following maintenance the person has carried out for the parachute › conduct an assessment of the compatibility of a main parachute and the parachute container of a reserve parachute assembly
student parachutist certificate	an authorisation that authorises a trainee parachutist (who does not hold a parachutist certificate and is receiving parachuting training for the certificate) to conduct a solo parachute descent under the supervision of a parachutist instructor

Term	Description of meaning
tandem descent	<p>a parachute descent, conducted as part of a parachute training operation, by:</p> <ul style="list-style-type: none">› a parachutist instructor who holds an endorsement that authorises the person to control a parachute descent in which a tandem parachutist is carried and› a tandem parachutist
tandem parachutist	<p>a person undertaking a parachute descent in which the person's harness is attached to the harness of another person who is in control of the descent</p>
tandem parachutist certificate	<p>an authorisation that authorises a person who does not hold a parachutist certificate to undertake a parachute descent as a tandem parachutist</p>
trainee parachutist	<p>a person who is undertaking a parachute descent in the course of receiving parachutist training, for the purpose of:</p> <ul style="list-style-type: none">› obtaining a parachutist certificate (if the person holds a student parachutist certificate) or› obtaining a rating or endorsement on the parachutist certificate (if the person holds a parachutist certificate)
Technical Standard Order (TSO)	<p>Technical Standard Order issued by the FAA</p>

Appendix C: Exemptions

Exemption/Instrument	Repeal Date	Section in this guide
CASA EX105/23 – Part 105 (Parachute Operations and Pilots) Instrument 2023	1 December 2026	Who is this guide for (p3) 1.1, 3.5, 9.1, 9.5, 9.9

Appendix D: Version History

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	Initial issue

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