Australian Government Civil Aviation SafetyAuthority

# SUMMARY OF PROPOSED CHANGE

# Proposed new rules for parachuting from aircraft

Civil Aviation Legislation Amendment (Part 105) Regulations 2019

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# Introduction

CASA has been progressively transitioning the *Civil Aviation Regulations 1988 (CAR)* to the *Civil Aviation Safety Regulations 1998 (CASR)* as part of the CASA Regulatory Reform Program. Following the making of the flight operations CASR Parts (Parts 91, 119, 121, 133, 135 and 138) and Part 149 (Approved Aviation Administration Organisations) in 2018, CASA has prioritised the finalisation of the proposed Parts 103, 105 and 131 of CASR in 2019.

With the commencement of Part 149 of CASR on 14 July 2019, a formal regime for the regulatory oversight of organisations that administer sport and recreational aviation activities (Approved Self-Administering Aviation Organisations - ASAOs) came into being. Part 149 improves aviation safety by introducing a consistent framework for self-administration that requires each organisation to ensure its activities are not likely to have an adverse effect on the safety of air navigation. This outcome extends to the safety of all airspace users, not just the affiliates and members of individual ASAOs.

Parachuting activities are presently administered by two sport aviation bodies in accordance with a series of legislative instruments that prescribe requirements specific to each of those bodies. The proposed Part 105 of CASR will replace those instruments with the parachute-specific Part of the CASRs that will integrate parachuting activities within the Part 149 self-administration framework and will apply to any organisation that administers parachuting activities.

One of the fundamental principles behind regulatory reform is to express aviation safety regulations in the form of enabling positive requirements. Part 105 has been designed to be a discrete rule set for parachuting activities from aircraft that follows the same principles and structure as other CASR operational Parts. These rules are relatively few and are intended to be simple requirements for parachuting from aircraft. This means that the parachuting sector should require a level of CASA regulatory effort that reflects CASA's strategic priorities, provided that administering ASAOs continue to undertake proper and diligent oversight of parachuting activities.

# Purpose and scope of the proposed amendments

The proposed new rules will apply to all parachute descents from aircraft in Australia conducted using a personnel parachute. They will not apply to emergency parachute descents, parachute descents that are not from aircraft and descents from State aircraft.

The proposed parachuting regulations would consolidate all existing legislative requirements (operations, maintenance, personnel, aircraft and equipment) applicable to parachuting from aircraft, into a new Part 105 of CASR that sets out detailed requirements for the conduct of parachuting activities (including training, parachute maintenance and defect reporting, pilot requirements and related activities), as well as aircraft operating rules that are additional to the rules of Parts 91, 103 and 131. The regulations would also introduce new requirements in relation to personnel fatigue management, aircraft loading, and drug and alcohol testing and reintroduce airworthiness standards for reserve and emergency parachutes.

In keeping with the three-tier approach to regulation recognised in the government's in-principle agreement with Recommendation 31 of the Aviation Safety Regulation Review (ASRR) Report, Part 105 will include a Manual of Standards (MOS). Where practicable, requirements in relation to parachuting activities are to be prescribed in the Part 105 MOS, if they would benefit from

regulatory flexibility, particularly where the nature of the activity may change over time with the advent of new technologies, procedures or processes. For example, specific requirements for the maintenance of parachute equipment could change with the advent of new airworthiness standards. The Part 105 MOS will be the subject of a separate public consultation in 2020.

### Key proposals for the Part 105 regulations

### Parachuting activities (Subpart 105.A)

Proposed Part 105 of CASR defines certain actions undertaken by a person in relation to parachuting as a parachuting activity, such that those actions can be administered by an ASAO whose approved aviation administration functions include administering parachuting activities. The definition enables the regulations and the Part 105 MOS to provide specific requirements pertaining to those actions. This ensures consistency in the application of the regulations by parachuting ASAOs, which, together with the flexibility provided by the Part 105 MOS, will contribute to minimising the regulatory impost. It will be an offence to undertake a parachuting activity that is not authorised by an ASAO, or is in contravention of the ASAO authorisation.

# Emergency and reserve parachute equipment rules (Division 105.C.4, C.5 & Subpart 105.D)

Part 105 includes defect reporting, equipment rules and operational requirement provisions that have been drafted to require reserve parachutes and emergency parachutes, carried by pilots of parachuting aircraft or pilots of aircraft administered by an ASAO, to be subject to the following continuing airworthiness principles:

- Reserve parachute and emergency parachute equipment must meet a design standard prescribed by the Part 105 MOS.
- Reserve parachute and emergency parachute equipment must be maintained to the requirements prescribed by the Part 105 MOS.
- Packing, inspecting, maintaining, assembling, repairing or modifying a reserve or emergency parachute must be carried out in accordance with requirements prescribed by the Part 105 MOS.
- Defects found in reserve parachute equipment must be reported to the administering ASAO and thereafter, to CASA and the equipment manufacturer.

In addition, it will be an offence for a parachutist to undertake a parachute descent without a reserve parachute, or with a reserve parachute that is defective. It will also be an offence to supply a person with a defective reserve or emergency parachute.

#### Aircraft requirements (Division 105.C.6)

Only certain kinds of aircraft may be used to facilitate a parachute descent. The permitted aircraft are aeroplanes, helicopters, balloons, powered-lift aircraft and Part 103 aircraft prescribed by the Part 105 MOS. The kinds of Part 103 aircraft that will be prescribed by the MOS will be subject to public consultation with the Part 105 MOS.

In addition, an aircraft that is used for a descent by a trainee or tandem parachutist must have a standard certificate of airworthiness, a current maintenance release or release to service, and its engines must be maintained in accordance with standards prescribed by the Part 105 MOS.

A Part 103 aircraft may not be used for a descent by a trainee parachutist or by a tandem parachutist.

#### Pilot requirements (Division 105.C.6 and Subpart 105.N)

For all parachute descents that are not in a Part 103 aircraft or a balloon, the pilot-in-command must have either an ATPL, CPL or PPL in the category of aircraft used for the descent. For PPL holders, the pilot-in-command must also have the aeronautical experience required for the grant of a CPL(A), gained in the category of aircraft used for the descent.

For all parachute descents from a balloon, the pilot-in-command must have either a CPL in the balloon category, or a pilot certificate issued by an ASAO that administers balloons, and have 75 hours aeronautical experience in a balloon.

For all parachute descents from a Part 103 aircraft, the aircraft and the pilot-in-command must satisfy the requirements prescribed by the Part 105 MOS.

The pilot-in-command of an aircraft used for a descent by a trainee or tandem parachutist (a defined parachuting activity) must have an authorisation from a Part 105 ASAO and also satisfy additional requirements that will be prescribed by the Part 105 MOS. Those requirements will be subject to public consultation with the Part 105 MOS.

The pilot-in-command of an aircraft used for a descent by a trainee or tandem parachutist must also satisfy additional flight time requirements in a multi-engine aeroplane, turbine-powered aeroplane or powered-lift aircraft, if the aircraft is of that class or category.

#### Fatigue management (Subpart 105.G)

The proposed Subpart provides for the Part 105 MOS to prescribe requirements to manage the risk of fatigue in persons exercising a duty in relation to the operation of a parachuting aircraft. These requirements would mitigate the risk of fatigue impairment of persons with such operational duties.

The requirements and the persons to whom they will apply, will be developed in collaboration with industry and publicly consulted with the Part 105 MOS.

#### Weight and balance (Subpart 105.J)

The proposed Subpart provides for the Part 105 MOS to prescribe requirements in relation to the loading of a parachuting aircraft. These requirements would mitigate the risk of loss of control of parachuting aircraft that may result from improper loading.

The requirements will be developed in collaboration with industry and publicly consulted with the Part 105 MOS.

#### Drug and alcohol testing (Part 2)

The proposed Part 105 amends regulation 99.015 of CASR to include:

- undertaking a parachute descent,
- supervising a parachute descent and
- the manufacture or maintenance of a reserve parachute or emergency parachute

as safety-sensitive aviation activities for the purposes of Part 99 of CASR.

The effect of this amendment will be to include parachutists, drop zone safety officers and manufacturers and maintainers of reserve and emergency parachutes, within the scope of persons subject to drug and alcohol testing by CASA under Subpart 99.C. Crew members of parachuting aircraft (including pilots) are already subject to CASA drug and alcohol testing. The amendments will require holders of a production certificate for the manufacture of reserve or emergency parachutes, to have a drug and alcohol management plan (DAMP) that complies with the requirements of regulation 99.045 of CASR or, if they employ 10 or fewer persons, a CASA Micro-business DAMP that complies with CASA EX66/18.

#### Integration of existing legislative instrument requirements (Subpart 202.FE)

The existing legislative instruments that impose requirements in relation to parachuting, instruments CASA 263/02, CASA 36/19, CASA 11/17, CASA 84/18 and Civil Aviation Order 20.16.3, are proposed to be incorporated within Division 105.C.6 (Miscellaneous requirements), Subpart 105.D (Operational requirements), Subpart 105.K (Instruments, indicators, equipment and systems) and the Part 105 MOS.

Part 105 will continue the application of these instruments after the commencement of Part 105 until the repeal of the transitional Part 149 provisions that currently enable sport aviation bodies to perform aviation administration functions without an ASAO certificate. That date is three years after the day on which Part 149 of CASR commenced, *i.e.* 14 July 2022.

# **Previous consultations**

CASA initially published NPRM 9811RP on Parachuting Operations in November 1998, which set out the proposed new rules in plain language. That NPRM attracted 573 responses which were taken into account in the development of subsequent draft regulations. In 2002, the project teams were re-convened to define a set of policy guidelines for sport and recreational aviation as a whole. This set the framework for the development of CASR Part 149 (Approved Self-administering Aviation Organisations), Part 103 (Sport and recreation aircraft) and Part 105 (Parachuting from aircraft).

In December 2006, CASA published NPRM 0605OS (Parachuting Operations from Aircraft) which set out the policy framework for parachuting operations under self-administration. While the policy development was largely settled, the development of the accompanying draft regulation was incomplete. Two submissions were received in response to that NPRM.

Subsequent policy development for the proposed Part 105 of CASR has focused mainly on:

- modifications to support the three-tier regulatory framework
- integration of the Part with CASR Parts 149, 103, 131, 91 and 61
- the introduction of a framework for the regulatory oversight of fatigue in persons involved in parachuting aircraft operations
- a framework for the loading of parachuting aircraft
- the expansion of the coverage of CASA drug and alcohol testing regime under Part 99 of CASR to include persons undertaking or supervising parachute descents and maintainers of reserve and emergency parachutes.

The Aviation Safety Advisory Panel (ASAP) has advised that it does not require to be consulted on the Part 105 project.

### Impact on industry

The proposed regulations in the main, conform to the parachuting model that has been developed over the past 60 years in collaboration with the parachuting sector. The regulations largely continue existing policy, but within the framework of self-administration.

CASA expects individual members of the existing organisations will not need to change their existing practices. The only substantive change will be some transitional costs for ASAOs to adjust their expositions to be consistent with the Part 105 requirements, but these are expected to be relatively minor and would be marginal, relative to the costs to the affected organisations obtaining their Part 149 approval. CASA expects that the adjustment of the manuals for the specific Part 105 changes, is likely to take one person in an organisation approximately five days.

The regulatory reforms include positive actions in relation to equipment standards and aircraft loading that directly address safety issues highlighted by recent accident investigations and other inquiries, while improving safety, by imposing uniform aeronautical experience requirements on parachuting pilots largely consistent with those recently adopted by the parachuting sector. CASA anticipates that the impact of the drug and alcohol testing requirements will be minor because the changes are largely transparent to affected persons, and they impose no additional compliance costs above those imposed by existing applicable requirements.

Part 105 of CASR will introduce a head of power for the Part 105 MOS to specify requirements in relation to fatigue and the loading of aircraft. This would be a new requirement for the industry. The specific requirements will be developed in consultation with industry. CASA will analyse the impact of these requirements when the Part 105 MOS requirements are finalised and before it is made.

# Safety risk analysis

CASA has conducted a safety risk analysis in relation to the hazards associated with parachuting activities covered by the regulations addressing parachute descents, pilot skills, drug and alcohol issues, restraint of parachutists on aircraft, operational requirements and the design, maintenance and use of parachute emergency equipment. The risks associated with the identified hazards ranged from low to extreme. The proposed regulations are expected to enhance safety by mitigating the identified hazards to a predominantly low residual risk, noting however the inherently hazardous nature of parachuting.

# **Regulation impact statement**

The proposed regulations have minor impacts, and CASA has submitted a preliminary impact assessment to the Office of Best Practice Regulation (OBPR) and will prepare a Regulation Impact Statement (RIS) if required.

# **Closing date for comment**

CASA will consider all comments received as part of this consultation process and incorporate changes as appropriate. Comments on the draft Civil Aviation Legislation Amendment (Part 105)

Regulations 2019 should be submitted through the online response form by close of business 23 September 2019.