



AUSTRALIAN PARACHUTE FEDERATION

DZSO Endorsement Guide



VERSION 01-2022

STATUS: EDUCATIONAL/ADVISORY

Warning***Parachuting and flying in parachuting aircraft can be dangerous.***

This guide is not a do-it-yourself guide to skydiving instruction and should only be used while under the supervision of a qualified APF instructor.

IMPORTANT: Version Control

It is important that members refer to the current version of this Guide. Current version number is shown on the front cover and in the below table. As this Guide is administered exclusively by the APF, it will be updated and amended when and as required.

Significant changes made from the previous version are shown in Amendments.

CURRENT VERSION	RELEASE DATE
01-2022	01 April 2022
PREVIOUS VERSIONS	REPLACED BY

AMENDMENTS

VERSION	AMENDMENT DETAILS
Initial Issue:	<ul style="list-style-type: none"> Minor administration changes

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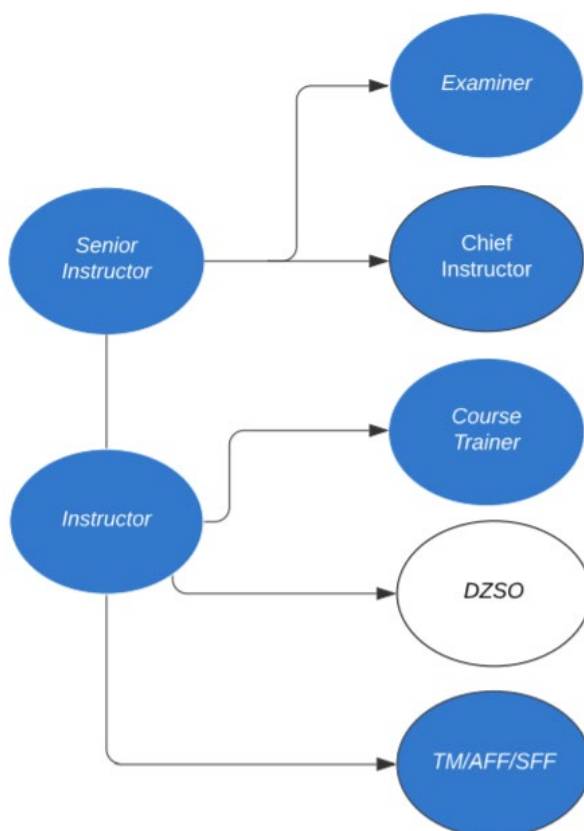
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PART 1 - THE DROPZONE SAFETY OFFICER

The Dropzone Safety Officer (DZSO) is an important and essential role, providing the skills, knowledge and judgement to enable safe and efficient day-to-day operation of a dropzone. The APF expects candidates to be a proficient skydiver who displays a safe, professional attitude to the sport.



1.1 DZSO Responsibilities

An Instructor with a DZSO Endorsement may be appointed by the CI to act as DZSO of a training organisation. DZSOs have a variety of important duties and responsibilities which can carry potential liabilities.

A DZSO is responsible to:

Ensure:

- A reasonable system is in place to make certain:
 - operations comply with APF Regulations
 - operations are conducted in accordance with the organisation's Safety Management System.
- A suitably qualified Loadmaster has been appointed
- A suitably qualified GCA has been appointed and, if required, a suitably qualified TA
- Meteorological conditions are monitored and meet standards for safe operations
- All persons involved in parachuting operations are current APF members
- All parachutists are qualified for the descents being undertaken
- Equipment used complies with Part Seven of the Operational Regulations
- All parachutists are accounted for after their descents
- The aircraft to be used is suitable and prepared for parachuting
- The pilot is briefed and is qualified to drop parachutists
- A suitable ground-to-air communications system is in operation
- Student log entries are correctly signed and suitably detailed
- The dropzone is conducted in accordance with the organisation's Training Operations Manual
- Master packing log is kept up to date and packers are suitably qualified
- Master log/manifest details are kept as per Operational Regulations.

Directly supervise:

- All descents
- All training descents, ensuring all instructors/coaches have the required relevant qualifications
- All instructional activities on the dropzone of which they have relevant authorisation over.

Approve:

- All descents
- Directly supervise descents that the DZSO is rated for in accordance with OR 14.5.4
- Canopy downsizing (Refer to Canopy Pilot Guide)
- Parachutists to carry a camera on a descent
- Qualified parachutists to jump without a hard helmet
- Clothing, footwear, jewellery, or any object worn or carried for a descent, or the absence of any of these items.

Additionally:

- Assess Risk minimisation
- Assess parachutists/packers recent experience requirements
- Take disciplinary action against members when necessary
- Complete Incident Notifications as required per RS 55.

1.2 The DZSO Role

Three Ways to Ensure DZSO Responsibilities Are Met

- 1) Think Clearly and exercise common sense, if in doubt, err on the side of caution– Stop when required – *In almost all situations, there is time to stop and think*
- 2) Follow the APF Rules, Regulations, Policy & Procedures / Club's Policy, Procedures & SMS
- 3) Follow the chain of command

1.3 Requirements for DZSO Rating

Before being issued a DZSO rating, the candidate must:

- hold a valid Certificate Class E,
- hold a valid Instructor Rating with an AFF, SFF or Tandem endorsement for at least the preceding 12 months,
- hold certificate of competency HLTAID011 Provide/Apply First Aid (or equivalent) that has been completed within the preceding three years
- completed the pre-course requirements from the Course Instructor, including having spent time learning about the administrative aspects of the job and have been regularly involved with the DZSO for student training operations,
- have the approval of the STM or the CI under whom the candidate intends to be registered,
- have the approval of the STO,
- have successfully completed the DZSO course and passed the written, oral and practical assessments as set by the APF and,
- be recommended to receive the rating by the Examiner.

PART 2 - COURSE TIMETABLE AND ASSESSMENT

The timetable will be planned by the Course Convener in consultation with the STO and the candidates. The course should be at least five days in duration. The primary focus being on the conduct of dropzone operations, aircraft operations, incidents and lesson planning/presentation.

2.1 The Assessment

The assessment process consists of written, oral and practical aspects.

The assessments are sent to the course Examiner when the candidate and course details are finalised.

An 80% pass mark is required for each assessment.

Written

The DZSO exam consists mainly of multiple-choice questions which will examine knowledge on Operational Regulations and Regulatory Schedules, general knowledge, equipment and instructional technique. The Instructor Guide should also be used as a reference.

Oral

The Oral examination will be held in front of a panel of three Instructors, one of whom is an Instructor Examiner and all of whom hold a current DZSO Endorsement. The examination panel will ask as many questions as necessary (minimum 10) to test your knowledge of the DZSO's duties and responsibilities. Each panel member scores the answer to each question and the Examiner computes the final percentage by averaging the three Examiners scores.

Practical

During the practical assessment candidates will need to demonstrate competence in all aspects of the duties of a DZSO.

The practical assessment consists of a combination of the following:

- a) Dropzone inspection and preparation
- b) Pilot briefing and aircraft inspection
- c) Briefings (e.g.-visiting jumpers, new instructors, night jumps)
- d) Dealing with a dropzone emergency

2.2 Preparation

This study guide is intended to be used in addition to a Course of Instruction, and the DZSO candidate should be familiar with the contents of this guide as well as the Instructor Guide prior to the commencement of the Course of Instruction.

It aims to provide information and guidance to:

- Assisting in preparation for your examination
- Give a foundation of knowledge for the duties of a DZSO
- Be a useful source for future reference during your career

In addition to this guide, you will require a working knowledge of all APF documents.

PART 3 - APF PUBLICATIONS AND WEBSITE

A DZSO requires a broad knowledge of all APF documents and where these documents can be located. Every DZSO should be familiar with the APF website and its contents.

3.1 APF Publications

APF publications that DZSOs are expected to have a comprehensive knowledge of include:

- Operational Regulations and Regulatory Schedules
- Training Operations Manual (TOM)
- The Instructor Guide
- Procedures Manual, APF Constitution and Code of Ethics
- All training and endorsement guides
- The Misconduct Policy and Procedures Manual
- CASA Specification's, CAOs and legal aspects of that responsibility
- Additional APF documents

3.2 APF Website

DZSOs are expected to be familiar with APF website navigation, and should:

- Have general understanding of the content
- Know where to find the contact list for APF staff and officers
- Be able to locate APF manuals and publications
- Be able to locate application forms
- Be able to perform a member look up

PART 4 - DROPZONE MANAGEMENT

The responsibilities of a DZSO cover all aspects of skydiving operations as well as the list in Part 1 of this document, the following needs to be considered as well:

The DZSO's daily responsibilities can include:

- Suitable weather conditions are monitored and met
- The dropzone is conducted in accordance with the organisation's Training Operations Manual
- The overall management and safety of operations on the dropzone and other operational areas
- APF memberships and medicals are in date, Instructors/Coaches meet currency requirements
- The aircraft to be used is suitable and prepared for parachuting
- The pilot is briefed and is qualified to drop parachutists
- A suitable ground-to-air communications system is in operation
- Student log entries are correctly signed and contain suitable remarks
- The master log is recorded correctly
- The Master packing log is up to date and packers suitably qualified
- Infringements of the APF Operational Regulations are reported to an STO
- Incident and accident reports are completed within the relevant time frame
- Disciplinary action against members is taken when necessary

The DZSO is to approve:

- All training descents are conducted by relevant endorsement holders
- Canopy downsizing
- Parachutists to carry a camera on a descent
- Qualified parachutists to jump without a hard helmet
- Exemptions to clothing requirements

The DZSO must directly supervise:

- All descents
- All instructional activities are being given with corresponding endorsements
- The review of emergency procedures

4.1 Administration

The DZSO is responsible to ensure the administration of a skydiving operation is being carried out to APF standards by suitably qualified staff. An understanding of the following is required:

- APF chain of command – MUST KNOW
- Legal liability and risk minimisation – See Instructor Guide PART 1.4
- The Organisation's SMS
- Supervision of:
 - Instructors
 - Student packing and those packing for themselves
 - Ground crew
 - Office staff
- Records to be kept and readily accessible – see Part 12 of the Op Regs for Master Log and record keeping requirements.
- Ensure pilot and aircraft suitability - liaise with Senior Pilot

4.2 Preparation & Inspection of Dropzone

Each operating day a comprehensive preparation of the dropzone is required. A DZSO must be familiar with and have systems in place for the following:

- Weather checks – ground observations, consult pilot, various websites/apps etc
- Daily briefings – Instructors, GCA, TA, Manifest, pilot
- Aircraft preparation
- Visitor identification and classification
- Ground-to-air communications check
- Procedure for manifesting
- Procedures for equipment inspection
- Spectator control
- Expected workload and any time constraints

4.3 Safety Management System - SMS

DZSOs must ensure they have in depth knowledge of the Organisation's SMS and that operations are consistent with the procedures it contains and should:

- Follow local risk mitigation actions
- Follow the Emergency Response Plans
- Submitting any new hazard identification forms as required

4.4 Safety Surveillance

Throughout the day the DZSO is responsible to:

- Ensure that ALL parachutists on the dropzone are familiar with the equipment they are using (especially with new equipment/compatibility)
- Ensure that ALL safety procedures are being followed by everyone
- Be aware of any infringements, take action and record as necessary
- Remain aware of potential accidents; do not wait for them to happen
- Ensure qualifications for various certificate classes are met
- Evaluate overseas jumpers (See Operational Regulations Part 4)

DZSOs are responsible for oversight of all activities on the dropzone. This will likely include disciplines they aren't highly experienced in – perhaps wingsuiting or canopy piloting. It is vitally important that DZSOs have a solid grounding of information in these disciplines to understand what is happening at the dropzone.

DZSOs and DZSO candidates should ensure they are well versed in the manuals and guides for all disciplines they are supervising. A DZSO must be able to meaningfully discuss flight patterns with wingsuiters and angles groups as well as understand the issues and dynamics raised when inexperienced freefliers get together.

4.5 Accident Prevention

The DZSO is required to:

- Be familiar with the rules, regulations and policies, adherence is the key to accident prevention
- Always evaluate the risk factor (Is it worth it?)
- Know their own capabilities and recognise their own limitations.
- Maintain control of a situation
- A feeling of uncertainty is a danger warning
- Do not let emotion influence judgement
- Do not hesitate in aborting any operation when concerned about safety
- Ensure buddy checks – as per the Operational Regulations

4.6 Safety on the Ground

The DZSO's responsibility extends to ground and pre-jump activities. For example, while the aircraft is taxiing or parked:

- No movement forward of the aircraft wings
- Do not approach the aircraft while it is moving
- Appointing a jumpmaster responsible for loading the aircraft
- Do not get out of the aircraft if the propeller is still turning
- Ensuring restricted areas are sign posted and adhered to

4.7 Safety in the Air

By communicating with the Loadmaster and parachutists, the DZSO will ensure:

- Helmets on for take-off
- Use of single point restraints
- Careful movement in the aircraft
- Keep the door closed as much as possible
- Visually check the spot and communicate with pilot
- Correct exit order depending on disciplines and group sizes

4.8 Cloud Manual

A DZSO must have a good working knowledge of the Cloud Jumping Procedures Manual (if the organisation has a valid CJPM in place), including:

- Pilot and GCA requirements
- Cloud base limits
- Skydiver licence requirements
- Where to find it at the dropzone
- How to ensure compliance

4.9 Students and Visiting Jumpers

DZSOs are responsible for ensuring that every parachutist meets APF requirements and dropzone standards. Standard procedures for checking or dealing with jumpers presenting themselves at the dropzone might include:

- Ensuring APF membership is current
- Examining their logbook to determine currency and ability
- Checking equipment they wish to jump to ensure it is in date, complies with standards and is appropriate for their ability level.
- Club waiver and indemnity signed
- Briefing Jumpers that are new to the dropzone
- Assessing overseas visiting sport jumps and approving equivalent qualifications.
- Ensuring any equipment used by overseas jumpers complies with APF Service Bulletins
- Ensuring Student parachutists are current and are at the appropriate stage of the relevant training table. If students have transferred from another dropzone, this will require speaking to their previous CI.

4.10 Briefing the GCA and TA

- Check that the GCA and TA are aware of their responsibilities and are suitably qualified
- Confirm method of ground-to-air communication with GCA
- Advise the TA how many parachutists need canopy control assistance and advise how to recognise their canopies
- Confirm the method to be used by the TA and ask the TA to record distance and performance details

4.11 Weather for DZSOs

A DZSO candidate should be familiar with the aviation services offered by the BOM, as well as being able to read TAFs (Terminal Aerodrome Forecasts) and access METARs where possible.

Before operations begin (or are put on hold), a DZSO should know the forecast winds at all relevant heights, any expected changes or fronts, and an expectation of the spot, in order to brief the GCA and Loadmasters.

DZSOs should understand local conditions and how to interpret forecasts and approaching weather patterns. Ideally, this knowledge should be represented in the Club's SMS.

DZSO's need to have a thorough knowledge of all the limitations and skill level requirements for all APF certificate classes. It is very possible that the ground winds might be suitable for Certificate A and above, but the upper winds, or a strong direction change at 1,000ft might mean that overall conditions are only suitable for Certificate C and above. Remember, as a DZSO – the accountable and responsible person, it is always the best policy to remain cautious and allow a considerable safety margin.

There is more information available on weather types and spotting in the Instructor Guide and the APF Weather Guide.

PART 5 - AIRCRAFT MANAGEMENT

The DZSO is responsible to ensure the pilot is qualified and aircraft meets the APF requirements.

5.1 Senior Pilot

Each training organisation must appoint a Senior Pilot. The Senior Pilot will maintain all relevant information regarding aircraft and pilot compliance and can be consulted regarding this information.

5.2 Pilot Briefing

Briefing a new Jump Pilot includes:

- Checking qualifications (at least a valid Private Pilot's Licence, minimum 200hrs (100hrs in command) or Certificate Class D and minimum 120 hrs (70 hours in command), 10hrs on aircraft type, and current JPA), be a current APF member
- Airspace – understand local requirements and/or restrictions
- Weather conditions and procedures
- Ensure an understanding of local radio procedures for GCA and load master
- Ensure familiarity on how load weights are determined, including refuelling between loads
- How the spot is determined (visually, GPS wind readings), jump run procedures, heights and how to communicate with jumpers (Loadmaster, verbally, hand signals, Lights etc)
- Explain exit procedures; group sizes, climb outs, etc and reducing airspeed
- Point out the importance of the wheel brake being operational if the wheel is to be used as a step (depending on aircraft type)
- Emphasise the importance of knowing where canopies are while descending and landing
- Ensure they have an Emergency Parachute available and know how to use it
- Ensure they are aware of aircraft emergency procedures

5.3 Aircraft Inspection

Aircraft inspection includes reviewing:

- Certificate of Airworthiness
- Certificate of Registration
- Flight Manual
- Current Maintenance Release (MR)
- Aircraft logbooks, Supplements (POB, Door), Registered Operator
- Aircraft suitability and general inspection, including but not limited to:
 - Remove door (the door removal should be such that the pilot can occupy their normal position, i.e. the left front seat) and fit the wind deflector, plug or in-flight door
 - Remove the right-hand control column if a parachutist is to occupy the RH control position

- Remove at least the seat adjacent to the open door
- Tape up or remove any projections that could possibly catch on any part of a parachutist's equipment, i.e. door catch, hinges, ash trays, seat anchorages, etc
- Remove seat belts and fit approved single point restraints
- Remove any loose objects (check the carpet is secure or remove)
- If students are using the aircraft, remove the wheel covers from the exit side of the aircraft.
- If fitted, check the operation of the in-flight door.
- Check that the pilot's parachute is serviceable.
- Ensure seat stops fitted, if required.
- At least one radio is required and a transponder (if required). See Regulatory Schedule 51-1 Part 10
- Ensure that a sharp knife is carried and is available to the pilot and parachutists.
- If static-line students are to use the aircraft, ensure that a suitable S/L strong point is available. A seat belt anchorage is a useful mounting for the strong point; never attach a static-line to the pilot's seat.

PART 6 - PEOPLE MANAGEMENT

Managing a dropzone requires sound technical skills, an administrative ability and excellent people skills. Whether it is manifest explaining something to an irate customer, or the DZSO directing GCAs in an emergency, it is important to have tact and control in the variety of situations that present themselves on a dropzone.

6.1 Communication and Customer Service

A DZSO should have the ability to deliver high quality customer service to clients and staff, understanding the importance of communication. The overall policies of the organisation will generally come from upper management, be it the CI or the Organisation itself. On a busy day at the dropzone a DZSO is the main point of contact for a lot of the interactions. Quality people skills and customer service will make everyone's lives more pleasant at work.

Techniques for good customer service are:

- Listen to customers and staff, maintain a friendly attitude towards them
- Smile when talking to people in person or on the phone
- Treat them how you would like to be treated
- Be sensitive - take into consideration skydiving is an emotional event
- Show people you care, for example: an injured skydiver, at the first opportunity you should maintain communication following the incident
- Timely and honest communication to the customer is the best method to avoid complaints
- Treat your staff well and they will treat your customers well

6.2 Conflict Resolution Strategy – 4 steps

A DZSO should be able to identify and effectively respond to client and staff needs and/or complaints.

Commonly used is the 4-step process set out below. This process enables satisfactory delivery of customer service, staff performance and resolution of complaints.

1. Listen to and clarify client/staff requests
2. Acknowledge and clarify client/staff complaints
3. Liaise with other staff members to refer and follow up complaints (if appropriate)
4. Communicate outcomes to clients/staff

6.3 Communication Skills for Customer Service

- Identify problems by responding to client/staff requests and implement actions to promote client/staff satisfaction
- Assess complaints, identify appropriate actions to resolve the complaints, and decide when to refer to management or a suitable person
- Recognise and act within role and level of responsibilities when receiving client/staff requests and dealing with complaints
- Customer service techniques to satisfy customer requirements and requests
- Develop rapport and promote suitable products and services
- Language and literacy skills to develop service knowledge and complete documentation related to client/staff requests and complaints

6.4 Required Knowledge

Additional problem-solving skills may also include:

- Knowledge of organisational policies and procedures are in place to enable ethical and non-discriminatory treatment of client/staff requests and resolution of complaints
- Customer service protocols are met, specific for the industry sector and organisation are met
- Standards of personal presentation that apply to customer service industry and the organisation in particular
- Knowledge of different cultural groups and appropriate communication protocols

PART 7 - INCIDENTS

7.1 Incident Notification

Incident Notifications are an important part of the APF Safety Management System.. As well as being a CASA requirement, the APF derive statistics in order to compare the occurrence rates of different types of incidents. When particular types of incidents increase, the APF can sometimes locate a cause and help prevent further occurrences. Further reports or educational material may be compiled and published for the benefit of all jumpers.

An incident refers to any event which may or may not result in injury, illness, property damage or a near miss, including:

- Any breach of the APF Regulations
- Any happening which, in the course of operations, causes injury to any person or damage to property
- Any unusual occurrence which it is reasonable to conclude might have caused injury to any person, or damage to property, or significantly increased the risk of a descent
- Includes an off dropzone landing by a Student Parachutist, a tree or water landing, any equipment malfunction, defect or failure, and the activation of a reserve parachute or an AAD

These incidents must be reported to the APF within 7 days of occurrence. Refer to RS 55 for further information.

Serious Incidents

The DZSO must immediately report an incident to the STO and the APF Office if it involves any of the following:

- A fatality
- A serious injury
- Major equipment failure
- Likely media interest
- Likely legal action
- Likely attention from CASA or other aviation authority

7.2 Five Golden Rules when Handling Incidents

1. Availability – Maintain the ability to be contacted by each party involved in the incident
2. Knowledge – Share knowledge with relevant personnel. Ask questions, familiarise yourself with immediate surrounds
3. Honesty - Be truthful with students, staff, other jumpers and public
4. Keep cool – Stay calm, ignore distractions
5. Be aware - Of your surroundings, other jumpers/staff/gathering crowds, weather etc

7.3 Incidents – Go to Your Emergency Response Plan

The Emergency Response Plan must be followed when an incident occurs and should include:

- Incident definition
- Emergency Contact List, in order of relevance
- Reporting to the APF
- Addressing incidents at dropzone level
- Disciplinary matters (if relevant)

7.4 Major Accidents – Always Go Directly to Your Emergency Response Plan

- Serious accidents must be reported to an STO immediately (and the CI if not present or aware)
- Contact APF Office as they will be receiving calls from various sources (police, media, public)
- If APF Office is unattended, leave a message: give name, place, date & description of accident.

7.5 Managing the Scene

Serious accidents are rare, but the DZSO must be prepared to handle the situation should it arise. The following procedures are recommended:

- Send a reliable person to call an ambulance by the fastest possible means.
- Immediately notify the Police (who may notify ATSB and/or CASA), the STO and the APF Office.
- Appoint a responsible person to prevent spectators and others from approaching the accident area
- Appoint a responsible person to discourage all persons present (staff, witnesses, spectators) from posting anything on social media (i.e. family and friends who may hear of an incident need only know the skydiver is okay, not additional details). Any contact with outsiders should include such caution. This should also include the retention of any video footage or photographs taken by others of the incident – this becomes evidence and should be passed on to the DZSO/CI or APF investigator and not circulated
- Proceed to the parachutist, if there is anyone qualified to render first aid assistance take them with you
- If the parachutist is beyond first aid assistance **do not disturb the body or the equipment**
- If the weather or other factors may destroy any possible evidence, take precautions to protect the scene. It may be helpful to take photographs from as many angles as possible. Take close-ups of any abnormality in the equipment that is apparent
- **The body or equipment should not be moved for any reason.** Consider putting a rock on the canopy if the wind is trying to inflate it
- Detail a responsible member of the organisation to handle enquiries from any press. It is far better to give the media the relevant facts concerning the fatality than to have the reporters base their stories on information gleaned from unqualified witnesses. (Refer to the APF publication: Incident Communications Guide)
- Give every assistance to ATSB, Police or APF officials in their investigation into the causes of the accident

Complete an Incident Notification Report giving as much information as possible and including written statements from anyone who may have useful information.

If it is possible, contact an STO and have them attend the scene of the accident, as their experience and assistance at this time would be of great value. In any case, remain in contact with the STO and the APF Office.

Note: When calling for the ambulance ensure that the nature of the accident is clearly understood as the ambulance service may have to make special arrangements.

Aircraft Incident

Notifying CASA and/or the ATSB is a requirement for an aircraft related serious incident. Information about the process is available on the ATSB website at www.atsb.gov.au. Consultation with STO, STM of APF Office is strongly recommended when contemplating contacting CASA or ATSB. Additionally, the PIC, Senior Pilot or CI must immediately notify the APF National Aviation Officer (NAO), and then in writing within 24 hours to the NAO and the APF Office.

Rigging issues

In accordance with RAC 212 and Regulatory Schedule 55, equipment reports must be submitted by packers and riggers to the NRO and the APF within seven days of the occurrence or defect being identified.

7.6 Media

The DZSO must have the knowledge on how to deal with the media following an accident. Following are guidelines found in the Incident Communications Guide:

- Do not provide comment or information about an incident unless you are permitted to do so. To avoid misinformation or unnecessary commentary, designated staff and members such as Chief Instructors are best placed to be official spokespeople.
- If approached by media, you have the right not to comment. Be aware that journalists can use extended declinations as quotes in their stories (e.g.: "I don't want to comment because I saw the body after the accident and it's just traumatic to talk").
- Do not say "No comment" as journalists can use this as the basis to report that the APF or member organisation 'refused to comment'. It is best to politely advise them to contact your manager or the APF.
- Do not release the names or details of people involved in an incident. The police are responsible for managing the release of such information.
- Do not post commentary or details about an incident on social media (business or private). The media is legally allowed to use information posted on social media, including photos and videos, even when on personal pages.
- Do not provide media outlets with footage of an incident unless you are permitted to do so. In Catastrophic or Serious Incidents, this can be a legal concern given such material will likely be used as evidence in potential police and coronial investigations. In Minor Incidents, the release of such footage can lead to increased and often sensationalist coverage of an event the skydiving community would consider routine (e.g.: use of reserve parachute after a main parachute malfunction)

PART 8 - DISCIPLINARY MATTERS

This section should be read in conjunction with the Misconduct Policy and Procedures Manual.

8.1 Misconduct and Compliance

The Misconduct Policy and Procedures manual describes "proscribed conduct". APF members must not:

- Breach, fail, refuse or neglect to comply, or be reckless as to whether they comply, with a provision of the Constitution, the Rules and Regulations or any resolution or determination of the Board or any duly authorised committee
- Act in a manner dangerous to themselves or others in the course of parachuting activities or any other associated activity
- Act in a manner unbecoming of a Member or prejudicial to the Objects and interests of the APF and/or Parachuting
- Bring the APF and/or Parachuting into disrepute
- Interfere in a disciplinary investigation

When a person becomes an APF member, that person does so on the understanding that they agree to abide by the APF's rules including those rules that provide for penalties to be imposed upon that member, in accordance with the Misconduct Policy and Procedures Manual.

Members undertaking parachuting activities may additionally be required to abide by particular policy requirements imposed through legislative requirements or the APF's involvement with external parties. One example is members participating as athletes in certain competitions must abide by the APF 'Anti-Doping Policy' that applies to Sporting Administration Bodies.

8.2 DZSO Dealing with Misconduct – Handling Infringements

The DZSO should ascertain the relevant facts as soon as possible after the infringement occurs, or an allegation of an infringement (this might be as a result of an incident or accident). This should be done by taking each person involved aside and asking questions designed to find the facts. Do not ask opinions, just the facts.

If the matter is a serious one, ask each person involved and any witnesses to put their statements in writing.

Gather and consider the facts before forming your opinion on the matter. Come to a decision on what action if any should be taken to prevent a recurrence of the infringement.

Additional guidance may be found in senior dropzone staff and local council or APF officials, as well as in the Misconduct Policy and Procedures Manual, or for additional information, in the following APF publications:

- The APF Constitution
- The Operational Regulations and Regulatory Schedules
- The Member Protection Policy

8.3 Disciplinary Action

The DZSO may, find it necessary to discipline parachutists either for safety reasons, regulatory reasons or any other reason deemed necessary. Discipline should preferably be aimed at modifying behaviour, rather than as punishment. Refer also to "just culture" in APF incident notification processes (R.S. 55) and Safety Management System (SMS).

There can be no hard and fast rules for penalties and administering discipline because there are so many variable factors which influence what the penalty should be. However attempts should be made to keep penalties uniform. The best way to do this is to have meetings with other DZSOs, talk to your CI or speak to the local STO.

If the APF imposes corrective/remedial conditions, then that member must comply with those conditions providing they are imposed in accordance with the rules and regulations. If a member refuses to abide by any conditions imposed or actions taken against them under the Misconduct Policy and Procedures Manual or refuses to abide by any rules and regulations of the APF, then the APF may withdraw membership privileges.

8.4 Disciplinary Procedures

The DZSO and CI share the same enforcement powers under the Misconduct Policy and Procedures Manual (MPPM). This includes suspending a member's parachuting privileges for up to 28 days. The STO has similar powers except for additional suspension period up to 90 days. Consult the MPPM for more detailed information and before taking any disciplinary action.

8.5 Drug and Alcohol procedures

DZSOs have significant authority and responsibility for drug and alcohol procedures during operations and they must be familiar with the APF Drug and Alcohol Procedures. See the APF website for details.

PART 9 - EQUIPMENT

A DZSO needs substantial knowledge of all types of equipment. Familiarity with components and manufacturers will complement the DZSO's judgement regarding equipment requirements.

The equipment knowledge should cover:

- Equipment responsibility
 - Equipment – the DZSO's responsibility
 - Instructor / rigger relationship and responsibilities
- Main Canopies
 - Different types (brands and models)
 - High Performance/high wing loading
 - Wing loading relative to experience and currency
 - Compatibility of components
 - Cross-braced canopies, 7 cell and 9 cell
 - Tandem mains
- Reserve Canopies
 - Different types (brands and models)
 - Opening, flight and landing characteristics
- Commonly Used Rigs
- Deployment Systems
- AAD's / RSL's
- Canopy releases
 - Two Action Systems (TAS)
 - Single Operations Systems (SOS)
 - Dual Operation System (DOS)
- Harness/Container Assemblies and component compatibility
- Materials and Hardware

PART 10 - RECORD KEEPING

A DZSO must have a sound understanding of the requirements for record keeping in accordance with OR Part 12 and RS 55.

10.1 The Master Log

A Master Log must be maintained in accordance with the APF Operational Regulations. The Master Log contains all the relevant information for accountability purposes of each skydive that occurs under the Clubs auspices. The DZSO is responsible for ensuring the Master Log is properly kept.

10.2 The Parachutist's Log

Each parachutist (there are some exceptions) must keep a record of all their descents. The Operational Regulations stipulate what information is to be recorded for each jump. A logbook shows history, experience and currency, particularly required when attaining ratings and endorsements. It should be completed by each parachutist and validated by a witness. There are circumstances where electronic records may be kept.

10.3 Parachute Maintenance Log and Parachute Packing Log

Training organisations are required to keep packing records for student and tandem parachutes as well as a log detailing information on the condition of the equipment. Refer to the Operational Regulations for more precise guidance.

PART 11 - THE WEATHER AND SPOTTING

The DZSO must understand local weather conditions and to detect imminent changes in these conditions.

11.1 Weather Check – General Observation

A DZSO must have a comprehensive understanding of:

- Wind meters and wind socks
- Websites and apps to determine current and forecast weather
- Environment indicators - smoke / dust / water
- Effects of wind direction and strength
- Effects of changes in the wind
- Wind at different levels
- Conditions that may lead to unexpected turbulence
- Different landscapes effect on wind
- Weather phenomena and interpreting synoptic charts (See the APF's Weather guide.)

11.2 Spotting

Spotting is one of the most important tasks on a dropzone and is usually determined by the DZSO. The DZSO will therefore need an in-depth knowledge of local weather conditions and surrounding landscapes. Any changes in conditions and spot changes will need to be communicated to other jumpers, the pilot and the ground crew.

11.3 Determining the conditions

Listed are some of the ways to determine the weather conditions.

- Dropzone Observations
 - Ground wind reading, visual observation of clouds, windsocks
- Bureau of Meteorology website
 - Ground wind
 - Canopy wind
 - Upper wind
 - Clouds / rain
 - Regional forecast / weather warnings
- Other Websites
 - "Willy Weather", "Sea Breeze", "WindyTY"
- Aircraft
 - During ascent, gather wind strengths at various heights (e.g. at 2000', 4000', 6000')
 - Cloud observations during climb to height
 - Jump run – Observe bearing, tracking, distance to target, groundspeed

11.4 Factors to consider when determining the exit point (spot)

There are multiple factors to consider, including:

- Weather and wind conditions
- Types of jumps
- Number of exits
- Landscape (beach, mountains)
- Aircraft capabilities (i.e. attainable air speeds)

11.5 Determining the spot – exit point and jump run direction

For consideration is:

- Distance from target
- Central run in, offset run in or cross wind run in
- Into uppers or with the uppers

- Number of passes
- Exit separation
- Visual confirmation – looking for position, clouds, aircraft, groundspeed
- Air restrictions / limitations for the area

Evaluation – after each load

- Observe the opening point (freefall drift),
- Determine if there is any canopy drift,
- Observe landings,
- Adjust for any changing conditions

11.6 Calculations for Exit Separation (example)

- 350 – 400m between groups, approx. 0.2NM
- 1kt = approximately 0.5m/s:
 - 100kts = approx. 50 m/s – to get separation of 350m, approx. 7 secs
 - 70kts = approx. 35m/s – to get separation of 350m, approx. 10 secs

Freefall Drift

Consideration must be made to allow for differing freefall drift with different groups:

- Flat, Freely, AFF, Tandem, Moving groups, Wingsuit, CRW, size of the group

PART 12 - TRAINING DESCENT TABLES

A DZSO should be familiar with Training Tables and their use.

Training Operations Manual (TOM)

Types of training systems currently in use, are:

- Solo Freefall Training Table – including SLD or IAD
- Accelerated Freefall Training Table – for AFF
- Class B Training Table
- Canopy Handling Training Table
- Freely Training Table
- CRW Training Table
- Wingsuit Training Table
- Night Jump Training Table

PART 13 - DROPZONE AUDIT PROCESS AND CLUB OPERATIONAL SMS

DZSOs should understand the SMS and have knowledge of the Dropzone audit process.

13.1 Dropzone Audit

The dropzone audit is carried out periodically by an STO, who audits all aspects of the operation. It is recommended that the DZSO:

- Review and discuss dropzone audit at their dropzone with their CI
- Discuss any issues regarding dropzone, landowner, surrounding landowners and local council
- Consider geography and weather for the area and assess main and alternative landing areas
- Review a copy of completed audit

13.2 Club Operational SMS

The Club SMS forms a structured approach to safety management which identifies critical hazards, risks and minimises mistakes.

The DZSO should:

- Understand how to assess risk and how to implement this risk into the SMS
- Review the Club Operational SMS including document control, club safety policy responsibilities, hazard Identification, risk assessment and risk mitigation
- Review the emergency response procedure at your dropzone
- Hazard identification and repairing

13.3 SMS – The DZSO's responsibility.

DZSOs need to have a thorough working knowledge of the club's SMS to be able to ensure that they are able to maintain their responsibility to ensure *operations are conducted in accordance with the organisation's Safety Management System* as per the Operational Regulations.

DZSOs hold a clear position of seniority and influence at the dropzone and should be active participants of a well-constructed and continuously developed SMS.

DZSO's should have read through their Club's SMS, discussed it with the Club Safety Manager and ideally have participated in a Safety Committee meeting.

PART 14 - ADDITIONAL DISCUSSION

Other topics that can be discussed by potential DZSO with senior staff could include:

- How to deal with drug testing, reckless swooping, junior jumpers instructing, etc.
- Managing different personalities at the dropzone
- Different disciplinary techniques (grounding or not, warnings, reporting, chain of command)
- Clear briefing of new jumper/instructor/pilot – never presume knowledge no matter who it is
- Discuss skydivers with disabilities
- What to look for checking a logbook - filled out correctly, currency, accuracy, locations, type, equipment, who with
- Rig checking – date, type, numbers of jumps, main and reserve size, compatibility.

PART 15 - COURSE SYLLABUS

THE DZSO - The Job and Responsibilities

- Directly supervise and manage the daily skydiving activities on a dropzone commensurate with their endorsements
- Directly supervise Instructors commensurate with their endorsement
- Supervise all student instruction and descents commensurate with their endorsement
- Maintain all records as required by the Regulations and any Manuals applicable

PARACHUTING REGULATIONS - APF Doctrine

- Operational Regulations and Regulatory Schedules
- TOM
- Constitution
- Code of Ethics
- MPPM
- Technical Directives and Service bulletins

DROPZONE MANAGEMENT

AIRCRAFT

- Airspace
- Briefing a new Jump Pilot
- Radio procedures
- Cloud jumping procedures manuals
- Letters of Agreement
- Basic Meteorology
- Aircraft suitability and Inspection

SAFETY

- legal liability and risk minimisation
- the history and framework of parachuting regulation
- chain of command
- the DZSO - responsibilities and limitations
- Club's SMS and ERP

CUSTOMER SERVICE

INCIDENT REPORTING

- Fatalities
- Formulating an Emergency plan
- Disciplinary matters
- Handling the media

PUBLIC RELATIONS AND MEDIA

EQUIPMENT-GENERAL

KEEPING RECORDS

BASIC METEOROLOGY

EMERGENCY SITUATIONS

SPECIALISED JUMPS-INTENTIONAL CUTAWAYS, NIGHT JUMPS ETC

FURTHER READING

Reading list for the DZSO endorsement:

- Operational Regulations and Regulatory Schedules
- Instructor Guide
- DZSO guide
- TOM
- Relevant endorsement guides
- Misconduct Policy and Procedures Manual
- Drug and Alcohol Procedures
- Weather Guide
- Incident Communications Guide
- Club's SMS and ERP

