Safety Management Plan New Zealand Paragliding Open 2023





Specifically: New Zealand Paragliding Open: 7th January-8th January 2023

Paragliding Competition based in Wanaka and nearby environs.

Document Management: This document, though specifically oriented towards the 'New Zealand Paragliding Open 2023' acts as a template for all NZ paragliding competition events. It endeavours to outline the various safety strategies and frameworks in place that support a safe event, and the strategies and processes that will be enacted in the event of a safety related incident. The New Zealand paragliding Open 2023 is a 'not for profit' event hosted by The Southern Hang Gliding and Paragliding Club recreational sports Club for and on behalf of the members and participants for the development the sport of paragliding and for promoting the selection of New Zealand National champions for world class events.

This document is available to every person involved in the competition, whether competing or otherwise. Everyone involved is encouraged to read, understand and make a copy if appropriate. This document is updated and edited each year prior to a specific event in order to incorporate unique safety

concerns for conducting a competition in its specific region. Copies of this document are submitted to the NZHGPA executive, and the PCC for review.

Competition directors and organisers have a copy of this document for viewing at anytime throughout the competition.

The NZHGPA Operations Manual available from the NZHGPA website has a wealth of information on paragliding organisation and procedures

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Event Overview

The 'Southern Fun' competition is a FAI (Federation Aeronautique International) sanctioned, NZAC (New Zealand Aeronautical Corporation) endorsed, cross-country paragliding event conducted in accordance with FAI and NZHGPA guidelines and Rules as amended, from time to time, by the New Zealand Paragliding Competitions Committee. The event forms part of the National Paragliding Championship.

Up to 70 paraglider pilots will launch their aircraft from elevated terrain, usually a recognised paragliding take-off site and then attempt to complete a flying course that can be as long as 200km. This is known as a 'task' and there will be one task on each day of the event, weather permitting.

Participants

Competing pilots have a variety of competition experience. All participants have been vetted to ensure that they are members of the New Zealand Hang Gliding and Paragliding Association (NZHGPA). Acquiring NZHGPA membership requires the provision of a paragliding license issued either in New Zealand or overseas and this ensures that competing pilots have been trained to an international standard which includes instruction on safety management and aeronautical competency.

Whilst this competition, in part, aims to promote novice cross-country pilots into competition, each pilot has been encouraged to do a SIV course as part of their training. These novice pilots have been vetted further as being suitably experienced in order to participate. It is anticipated that by flying with more experienced pilots that these novice pilots will be mentored and safely guided to participate and encouraged confidently to participate in competition, and perhaps even to represent New Zealand in international events. This event also provides the more experienced pilots with a safe but challenging environment in which to hone their skills for competition flying at national and international level.

Pilot selection is based primarily on national and international competition ranking which indicates a high level of experience of proficiency. As mentioned a small number of competitors have no specific experience in flying competitions but have been vetted in regards to their capabilities regarding safety and airmanship especially with regards to mountain flying considerations.

Event Promotion

The 'Airtribune' event hosting website: (<u>Airtribune/southernfun2020/info</u>) has been used to promote and provide detailed information for the event for all interested parties.

Primary Event Locations

The initial compulsory safety briefing will be conducted at the: Lake Wanaka Centre: 89 Ardmore St, Wanaka and there-after briefings will be conducted upstairs at Kai's Restaurant or when congregating at the base of the flying site prior to flying each day. Details and information for the day, and the next, will be posted on a discreet 'What's App' platform.

The primary take off location is:

Treble Cone's 'Pub Corner': 44°38'16"S 168°54'28"E. Elevation: 701 m.

However: Should weather conditions dictate then alternate launch sites may be used. These include, but are not limited to:- Grandview, Long Gully, Coronet Peak and Mt Ida.

Take off locations may be changed on a case by case basis depending on weather and wind direction on the task day.

Typical tasks will keep pilots within about 60km of these takeoff sites.

Primary Contacts

- Timothy Brown Competition Director and Main Event Organiser, 021 182 4243
 tjbro137@gmail.com
- Louis Tapper Assistant Competition Organiser

Safety Strategy and Objectives

The aim of the competition is provide a fair, fun and rewarding platform to encourage and promote New Zealand paragliding competition.

The first strategic pillar of the organisation is safety. It is the intention of the organisers to complete the event with a level of zero safety related incidents, meaning that any level of injury, other than entirely trivial, is deemed unacceptable.

Several processes and frameworks are in place to support this goal, as described below.

Pilot Vetting

Pilots have been vetted for safety and capability. This is described above.

Pilot Information

Safety related information is available to the pilots in the following forms.

- This Safety Management plan is available for download and has been emailed to all competitors with a request that they study it.
- Notice of the impending competition is notified to other air users by utilising Aeronautical Information Publications (AIPs) and /or NOTAMs. Prior to the competition the Competition director also notifies local air user groups of impending increased paraglider activity and they are in contact with those 'user groups' daily advising of the days' flying activity location.
- An emergency plan has also been provided to all competitors which guidance and instruction on what to do in the event of an emergency such as a paraglider crash, missing pilot or pilot injury.
- A mandatory safety briefing takes place at the start of the event. Pilots are not able to partake unless they have attended this. This briefing covers all the safety aspects that are covered in this plan.
- Daily briefings take place before proceeding to the flight area. This will cover any specific hazards and safety considerations related to the day and the chosen flight location.
- A 'Task Committee', nominated at the initial briefing and made up typically of the most experienced pilots to have flown in the region, create a task suitable and safe for all levels of pilots competing. Ideally, a little simpler at the start and becoming somewhat more challenging for the advanced pilots as the flight progresses. Normally the novice pilots end up landing quite early.
- Task briefings will take place, before launch, at the chosen site location and will further include or amplify any safety considerations such as local site hazards and weather conditions.
- All competitors must carry a UHF radio for the purposes of monitoring the progress, and of any safety related issues, throughout the flight. The 'safety' frequency /channel is not a chatter frequency.
- The flying safety committee, nominated at the initial safety briefing, will be providing radio based updates at a frequency of every 10 minutes or greater on the mandatory competition safety channel whilst in flight as to inflight flying conditions (see below)
- Pilots, particularly those visiting New Zealand, are made aware of the contact details for emergency services I NZ and are reminded that medical treatment, in the event of an accident, is free in New Zealand thanks to ACC!

Safety Personnel

• A three person safety committee will be flying with the competitors on paragliders. The job of the safety committee is to monitor conditions, weather and otherwise and provide information on safety to all competitors. This committee also has the prerogative of stopping the days flying

- activities if there is sufficient safety concern (examples could be wind that may increase to unsafe levels or a perceived risk of thunderstorm activity). The committee consists of experienced paraglider pilots who are familiar with the terrain and climate of the respective flying arenas. All pilots are able to express safety concerns to the safety committee / CD during flight by using a standardised number format.
- The Competition Director is also an experience paraglider and competition pilot who is familiar with the terrain and climate of the flying arenas. The Competition Director also has the prerogative of amending a task or stopping the days activities for the same reasons as described above.
- A dedicated launch marshal may be placed in charge of the take off to ensure maximum safety, keeping visitors clear, and launch efficiency. They are not required at Regional competitions. This launch marshal will be in attendance on the launch area until the final pilot has taken off. They have the ability to close, or suspend, the launch at any time for safety reasons. They are equipped with, or have access to, a wind-meter, a first aid kit and fire extinguisher and perhaps an airband radio to communicate with other airtraffic.
- A ground based safety officer may be present. They are trained in first aid and search and rescue procedures.
- All senior pilots (PG3 and above) have completed a recognized First Aid endorsements as part of their NZHGPA licencing.
- All pilots are constantly briefed and reminded that they hold primary responsibility for their own safety and then of others and thus also form part of the safety personnel framework.

Zero Harm Farm

• The Treble Cone Takeoff at 'Pub Corner' lies within the region of DoC land that is leased by "Cardrona Alpine Resort Ltd" and as part of their lease they are required to have a health and Safety plan in place for all personnel accessing their property. All paraglider pilots and their associated visitors are required to register with CAR's 'ZeroHarmFarm' work safety computer /phone application and must sign in /sign out each time they wish access, through the locked gate, to Treble Cone / Pub Corner. This ensures that pilots and their visitors are then encompassed by the Cardrona Alpine Resort's Work Safety plan.

Visitors

• Visitors and non-flyers are welcome to observe and even to attend to the proceedings. If experienced in competition matters or flying procedures they may be called upon to assist with launches, observation, retrieves and even to help facilitate rescue services if required. The more eyes the merrier!

Task Selection and Safety Related Competition Issues and Rules

• A penalty and protest system is in place within the competition rules that can be activated in the event of any unsafe behaviour by competitors (for example, flying in cloud or aggressive piloting).

- Punitive measures for unsafe activities can include censure, warnings, points penalties and exclusion from the task or competition overall.
- The three person task committee is responsible for setting the daily flying task. The three person safety committee has the prerogative to overview the proposed task before it is presented to the pilots and to suggest alternatives, or enforce changes, if there are safety concerns. The Competition director may have an input into both committees.
 - The task committee is particularly familiar with local weather patterns and flight planning. They have access to a plethora of online, gliding specific, weather and flight planning websites such as MetService, MetVuw, NZ RASP, SkySight, XC Skies. Etc for the latest in actual and forecast weather situations. By nature, paragliders can only operate in a very small window of fine weather conditions such as Visual Meteorological Conditions (VMC) and light winds (less than about 10 kts in the mountains)
 - Typically tasks are set for a launch around midday /early afternoon and the first of the pilots will be landing shortly thereafter with the slower possibly flying until 4 or 5pm. This allows ample time for retrieves and even search and rescue prior to last light during the long summer days.
- A system is in place to award competition points to pilots if they choose not to fly due to a safety related concerns. This mitigates the pressure to fly that may otherwise occur.
- A system is in place to reward pilots (with competition points) that assist in the event of a safety related incident and, by doing so, jeopardise their own competition performance.
- Safety, the primary concern, is ongoing throughout the competition.

Pilot Check In and Check Out system

A mandatory system is in place for all pilots to ensure that they check-in each day (thus, registered as flying) prior to flying and then check-out once safely landed. This is enabled by systems such as SMS, WhatsApp. And GPS trackers. There is a central coordinator who maintains the list of all pilots flying and they are marked off as 'safe' once they have 'checked out' of the competition. This person is primarily the ground based safety officer but responsibility may be moved to another staff member at the discretion of the event Director.

The list enables the organisation to monitor the status of each competitor after each days task and to alert to any potential missing pilot situation so that the missing pilot procedure can be enabled (see attached Emergency Plan).

All competition safety staff stay on alert until all pilots are marked off as safe. Consumption of alcohol by competition safety staff is forbidden until all pilots are marked off as 'safe' each day.

Traffic Management

See 'Zero Harm Farm' above for Treble Cone.

A Convoy Marshall may be assigned to enforce and monitor the safe behaviour of all vehicles proceeding up to launch. Four wheel drive vehicles may be required. All vehicles must comply with local (e.g. forestry and farmer) requirements and this may include the carriage of shovels and fire extinguishers.

Vehicles may be required to travel in convoy to facilitate ease of movement and reduced congestion.

Only road worthy vehicles and trailers are permitted to be part of the competition convoy. All vehicles are requested to monitor the radio safety channel during the convoy process.

Safe convoy protocol is clearly briefed at the safety briefing.

Traffic down the mountains and between the flying sites is not monitored.

Communication and Pilot Tracking

- As mentioned: All competitors are required to carry, and know how to use, serviceable UHF radios.
- Commonly two radio channels are identified and agreed for use by the pilots. One is a safety channel and it is mandatory for all pilots to monitor it whilst flying. It is used by the safety committee to provide regular updates on safety. Non safety related communication is not allowed
- SMS (text) and WhatsApp these are used for the Check In and Check Out system. Non-safety related communication on the WhatsApp group is not allowed. All pilots are added to the group before the first flying task.
- Mobile Phone these are used for all types of communication. It is known, and communicated to the pilots, that there are large areas of the flying arena with no, or limited, cell phone reception. The take off areas are known to have strong cell phone reception.
- Satellite trackers, though not mandatory for Regional competitions, are encouraged to be used by each pilot. These allow an emergency SOS message to be broadcast in the event that no cell phone coverage is available. The accepted models are Delorme InReach and Spot. Pilots are obliged to enable "tracking mode" on these devices during all flights. This enables the organisation to track the pilots on a map via the 'Highcloud' website.
- 'Airtribune' tracking this is not mandatory but all pilots are encouraged to use this application which works when 3G cell phone cover is available.
 It enables the competition organisers, and other pilots, to track the location of all competitors during a task.
- Visual signal of emergency the international paraglider distress protocol is that a paraglider being left fully unfolded on the ground after landing is a distress signal. All pilots are briefed of this with instruction to make a call on the radio safety frequency if this signal is observed. All pilots are urged to fold /scrunch up their wings immediately after landing if they do not require assistance.
- Contact Details are pilots are obliged to provide cell phone and WhatsApp contact details to the organisation as part of the pilot registration process, along with the address of their local accommodation and contact details for a third party to be used in the event of an emergency.

Emergency Plan in the event of pilot injury

A copy of the emergency plan, in the event of injury, is given to all pilots as part of their pilot pack and as included with this Safety Management Plan.

If an observed injury is deemed to be anything other than trivial then emergency services (ambulance) must be called (111).

In the event that a pilot is deemed to have crashed in an area where injuries cannot be assessed immediately, and that pilot is unable to communicate then Search and Rescue (LSAR) is to be contacted immediately via the Police (111).

Emergency Plan in the event of a missing person

A copy of the emergency plan, in the event of a missing person, is given to all pilots as part of their pilot pack and as included with this Safety Management Plan.

The Check-In and Check-Out process is designed to alert the organisation to any pilot that has not reported themselves as safe after flying.

If, after 1900 NZT a pilot is still not reported as safe then the Competition Director and Ground Safety Officer will commence activities to locate the pilot. This includes trying all known methods of contact (Cell phone, WhatsApp and checking pilot accommodation and know associates).

If, by 1945 NZT, the pilot has not been located then Land Search and Rescue are notified via the Police (111).

Information to be provided to LSAR include:

- Name and cell phone contact details for the missing pilot
- Address of local accommodation
- Colour of paraglider
- Last known location based on satellite tracker and information from witnesses
- Details of the course line and pilot's likely position in relation to it

Hazards and Risks

Paragliding is by nature a hazardous activity that involves recognisable elements of risk. The CAA and the NZHGPA insist on a rigorous licensing, safety and monitoring program for all pilots and their equipment to mitigate these concerns.

Cross- country competitions inevitably present a different kind of risk to the average pilot.

Equipment certification, varying pilot experience levels and constant briefings are part of the competition environment.

New Zealand's Southern Alps provide for some of the world's most stunning and challenging flying, but it has changeable weather conditions. Weather provides for unique and challenging planning scenarios.

Pilot fitness is a significant hazard. If a pilot is not fit to fly then they must not compete. The onus is on the pilot. A pilot must consider if they are free from any Illnesses, That if they are on Medication – that it is safe medication only. Pilots must not be overly Stressed or Fatigued and that they must be free of Alcohol or Drugs. The NZHGPA has a zero tolerance for Drugs and Alcohol as per the NZHGPA Operations Manual.

Pilots must be suitably nourished and hydrated before flight.

Hazards in cross-country competitions may include but is not limited to:

Hazard	Potential Risk / Degree	Mitigation
Spectators	Pilot / spectator injury ranging from minor to fatal	 Use of a launch director Task safety briefing Hazard identification / marked off area "for take-off only" Personnel trained in first aid and the availability of a first aid kit at take off.
Other air traffic / Users	 Collision Pilot injury (self /other) ranging from minor to fatal 	 AIPs, NOTAMs and timely communications with local Air Users to advise of heightened paraglider activity. Task safety briefing VFR Flight Rules Hazard identification Use of Airband radios Listen out. Use your radios Speak up!
Power cables	 Electrocution injuries, ranging from serious to fatal Public inconvenience 	 Identification of this specific hazard at task briefing Keep your eyes out to identify for possible lines. Immediate contact with emergency services to disconnect power
Weather	Pilot Injury ranging from minor to fatal.	 Detailed briefings A plethora of weather and flight planning websites.

	TurbulenceVariability.	 Tasks can be stopped at any time by the Competition Director. Pilot check back process
Mountains	 Remoteness Lack of Communications. Mountain passes used by other air traffic - congestion. Turbulence Flight close to terrain. 	 Briefings Instruction and mentoring Do not 'push on' outside your own flying limits. Know when to say 'enough'
Extended no landing zones – forests, wooded areas, water	 Injury Remoteness and long walk outs Fatigue Delays in Reporting /rescue Exposure 	 Briefings Set considerate tasks. Don't take unnecessary risks. Always have landing options. Instruction and mentoring Tree rescue kits and personnel available. Use of emergency services
Equipment	• Injury	 Ensure equipment is WoF'd Know your wing characteristics.
Pilot Fitness – Mental Emotional Physical	Injury to self and or otherNervousness	 Be Prepared Illness, Medication, Stress, Alcohol, Drugs, Fatigue, Nourished. Detailed Flight Briefings Instruction and mentoring Briefings with respect to use of medicines and drugs Hydration Carry a personal first aid kit
Poor radio reception	 Check back delays. Search and rescue delays Isolation Exposure Fatigue 	 Pre-flight brief. Beware of flying behind ridges and mountains Use satellite trackers. Check back protocols. Carry 'Pilot Safety Plan' Carry UHF

Traffic accident	 Injury ranging from minor to fatal Blockage of access for emergency response 	 Carry mobile phone with 'navigation' details: compass / GPS for co-ordinates. Carry spare batteries / portable charger. Assigned convoy marshal to monitor convoy safety Tactics to reduce upward and downward vehicle traffic at the same time on the mountain roads Ground based safety officer trained in first aid and equipped with first aid kit
Heat, Sunburn and Sunstroke	 Dehydration Blistering / pain Distraction and poor thinking skills. Lack of coordination 	 Sun cream available at the take off, provided by the organisation Pilots reminded to bring and use sun cream Pilots reminded to hydrate during flight Provide sun shelters at launch.
Animals and farm stock	 Injury to Self/other Injury to stock Damage to property Public inconvenience 	 Detailed briefings and sound tasking Keep a good lookout Be considerate and stay well clear NZHGPA 'code of conduct' NZHGPA insurance Visit unhappy farmers asap.
Fire	 Forest fire Burn injuries Blockage of access for emergency response 	 Fire extinguishers and shovels in three competition vehicles Smoking ban at all competition locations other than the HQ or in enclosed vehicles Electronic cigarettes are not deemed to be a fire hazard

Situation Management and Mitigation

This table defines the some identified situations, potential outcomes and mitigation strategies.

Situation	Potential outcome	Mitigation
Paraglider crash on take off	Pilot injury ranging from minor to fatal	 Experienced launch director Task safety briefing Hazard identification

		 Personnel trained in first aid Availability of first aid kit at take off Cell phone coverage for calling emergency services
Paraglider crash on course line	Pilot injury ranging from minor to fatal	 Task safety briefing Hazard identification Ground based responder trained in first aid with first aid kit and fire extinguisher Information relayed from the air by radio In the event of inadequate cell phone coverage, correspondence to emergency service by relayed radio call or satellite beacon If the event is deemed serious then the task is stopped to allow all personnel to focus on mitigation of the event
Paraglider impact with power cables	 Falling and electrocution injuries, ranging from serious to fatal 	 Identification of this specific hazard at task briefing Immediate contact with emergency services to disconnect power Otherwise as above
Missing pilot	 Delayed response to potential injuries Exposure Exhaustion Dehydration 	 Pilot check back process Contact details available to all safety personnel Organised search party both on ground and via paraglider Alert to emergency services (LSAR) if the situation is deemed serious or sunset (20:00 NZT) is approaching
Proximity with other aircraft	Mid-air collision leading to crash	 Special airspace arranged with air traffic control Notification to other airspace users in AIP supplement Launch Marshall to suspend launch if congestion occurs
Paraglider landing in water /trees	DrowningInjury	Task course line to avoid all major areas of water /heavily forested areas
Injury from geothermic activity	 Burning, scalding injuries ranging from minor to fatal Inhalation of fumes 	 Specific hazard identification Take course line to avoid all major areas of geothermic activity Ground response as per paraglider crash
Traffic accident	Injury ranging from minor to fatalBlockage of access for emergency response	 Assigned convoy marshal to monitor convoy safety Tactics to reduce upward and downward vehicle traffic at the same time on the mountain roads

		 Ground based safety officer trained in first aid and equipped with first aid kit
Sun burn and sun stroke	BlisteringLack of coordination	 Sun cream available at the take off, provided by the organisation Pilot reminded to bring and use sun cream Limited shade available at take-off, for the launch marshal primarily
Fire	 Forest fire Burn injuries Blockage of access for emergency response 	 Fire extinguishers and shovels in three competition vehicles Smoking ban at all competition locations other than the HQ or in enclosed vehicles Electronic cigarettes are not deemed to be a fire hazard

Accidents and Reporting

All incidents and accidents are to be reported. The NZHGPA Operations Manual Section 6.6.13 (available from the NZHGPA website) and that same website's 'Safety' tab has details for filing and reporting accident and incident reports.

The NZHGPA insists on a 'no fault' reporting culture.

For FAI events the FAI / CiVL administration also requires an incident /accident report when the results are submitted.

Media

Though paragliding sporting events may or may not be advertised to the media the nature of the sport seems to ensure that the public wants to be notified if there is an significant incident or accident.

In the event of a significant incident or accident, the Competition director is the only person authorised to speak with the media in the first instance, and even then, they may defer to the NZHGPA executive for advice.

Appendix:

- Safety Plan
- Task SignIn-SignOut

(Logo?)

COMPNAME

_Emecgenc_y_Plan

Your own safety must come first.

You cannot help in an emergency if you are injured yourself.

Oraanisation	Contact	Teleohone
ALL Emergency Services	Police / Ambulance / Fire / Rescue	111
Meet Director	name	xXxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Tech delegate		
Organisers		
Launch Marshalls	location	Xx xxxxxxxx Xx xxxxxxxx
	names	xXx xxxxxxxxx xXx xxxxxxxxx

o Frequency
Channel 07 (476.575)
lable
Location during Comp
With Launch Marshall
Meet Directors Vehicle
With Launch Marshall

IE.YO_U_HA'IE.AN.AC.CJOENI:

Leave your glider spread open to alert others that you need help.

Call for help on radio/ cell phone.

If you have a Spot, a Delorme Inreach or PLB, activate the help/emergency function.

IE.YQIJ.WIINESS.AN.ACCJOEtII:

Note location and notify organisers by radio.

If you can land nearby SAFELY

Administer first aid

Call for help from nearby pilots.

If someone is injured call 111.Refer below.

lly.o.u_wjtness..an..accidenlbutcanno.Uand;

MARK the position on your GPS, NOTE the distance to the next tumpoint, or nearby landmark and altitude etc

REPORT info on the radio/ safely channel

KEEP IN SIGHT of the accident if you can do so safely. You will get compensation for lost points.

MAINT AIN CONT ACT by radio with the organisers and the injured pilot.

CHECK on landing that the incident has been attended to.

If you are the only witness and cannot contact anyone else to do so, you may need to land elsewhere to phone emergency services on 111. Contacting emergency services is more important that remaining in sight of the accident

PHONE NUMBERS:

EMERGENCY SERVICES	111 (request Police for Search & Rescue services)		
	Wanaka Police Station	111 or 03 443 7272	
Police	Queenstown Police Station	111 or 03 4411600	
	Wanaka	111 or 03 443 7076	
Ambulance	Queenstown	111 or 03 441 4555	

TASK NUMBER: DATE:

Pilot Nr	Name	Sign In	Phone	Signed Out	atTime / by
1 -	151000000			3922	100
2					
3					
4					
5					
6					
7					
8			1-		
9					
10					
11					
12					
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