

Safety Management Plan

Omarama Cross Country Classic

Specifically: Omarama Cross Country Classic: February 2022

Cross Country flying event based in Omarama.

Document Management: This document, though specifically oriented towards the ‘**Omarama Cross Country Classic**’ 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.

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. The event organiser/s have a copy of this document for viewing at any time throughout the competition.

The NZHGPA Operations Manual available from the NZHGPA website at www.nzhgpa.org.nz has a wealth of information on organisation and procedures.

Contents

- Document Management.....1
- Event Overview.....3
- Participants3
- Event Promotion.....4
- Primary Event Location.....4
- Primary Contacts.....4

Safety Strategy and Objectives.....	4
Pilot Vetting.....	5
Pilot Information.....	5
Safety Personnel.....	5
Zero Harm Farm (Treble Cone).....	6
Visitors.....	6
Task Selection and Safety related Competition Issues and Rules.....	6
Pilot Check-In and Check-Out System.....	7
Traffic Management.....	7
Communication and Pilot Tracking.....	8
Emergency Plan in the Event of Pilot Injury.....	8
Emergency Plan in the Event of a Missing Person.....	9
Hazards and Risks.....	9
Situation Management and Mitigation.....	13
Accidents and Reporting.....	14
Media.....	14
Appendix.....	15

Event Overview

The '**Omarama Cross Country Classic**' is a flying event with a competition endorsed, and conducted in accordance with FAI and NZHGPA guidelines and Rules as amended, when required by the organiser.

Up to 30 pilots may attend but numbers are likely lower. They will launch their aircraft from the Omarama area where they choose then attempt to fly cross country as far as they can. The object is to interpret and understand the weather and terrain to maximise distance flown, improve skills and break site records.

Participants

Pilots are members of the New Zealand Hang Gliding and Paragliding Association (NZHGPA). NZHGPA membership requires the provision of a license issued either in New Zealand or overseas and this ensures that pilots have been trained to an international standard which includes instruction on safety management and aeronautical competency. Pilots of lesser than Advanced rating are permitted to fly only under guidance of a qualified instructor present.

Primary Locations

The Omarama area is where most pilots will be staying.

Take off locations may change on a case by case basis depending on weather and wind direction on the task day. Pilots can choose their preferred location but should travel to each site together.

Typically distances will be under 50km but can be over 100km in suitable.

Primary Contacts

- Bill Degen Main Organiser, 021 247-2676 aero@xtra.co.nz

Safety Strategy and Objectives

The aim of the event is to improve the cross country flying skill of those attending and encourage and promote hang gliding.

It is the intention of the organiser/s to complete the event with no preventable 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 viewing on site and online to all attendees with a request that they study it.
- Notice of the event is notified to other air users. Prior to the event the organiser also notifies local air user groups of impending increased hang glider activity and they are advised of the flying 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 crash, missing pilot or pilot injury.
- Briefings are available covering any specific site hazards and safety considerations.
- Pilots are advised to carry a radio, satellite tracker or phone tracker for monitoring their progress, and of any safety related issues.
- Pilots, particularly those visiting New Zealand, are made aware of the contact details for emergency services in the area and are reminded that medical treatment, in the event of an accident, is free in New Zealand thanks to ACC!

Safety

- The Event Director has extensive cross country, competition and instruction experience, and is highly familiar with the terrain and climate of the flying areas.
- All pilots are required to register with their phone, radio and accommodation details so that any missing pilots can be located as quickly as possible. Pilots are required to confirm that all in their group (usually within each vehicle/retrieve driver/s) is located at the end of each day. Given that cross country flying may continue till late in the day, a search and rescue may not be extensive until the next day so pilots are advised to carry emergency communication (radio, cellphone, sim cards for both networks, satellite tracker, epirob etc). Txt or social media may be utilised to locate and retrieve pilots along similar routes.
- A ground based safety officer or a launch marshal may be appointed. Instructors are required to carry recognised and current First Aid endorsements as part of their NZHGPA licencing. These are renewed every two years.
- Though most sites have room for multiple launches, a dedicated launch marshal may be placed in charge of the take off area to ensure safety, keeping visitors clear, and for launch efficiency. 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 air traffic.
- All pilots are reminded that they hold primary responsibility for their own safety and of others and thus also form part of the safety personnel framework.
- Due to frequent changes in wind during thermal conditions, common launch and landing sites are provided with windsocks or streamers.

Sites

- Magic Mountain has multiple launch areas covering many wind directions and altitudes. The road is narrow, steep and rocky so carries its own risks. There is a printed briefing available on how to use the road safely. The owners require a waiver of liability which all pilots must agree to. At the time of writing this plan, the landowner has closed this site for 2022 until the road can be repaired.
- Some other likely sites are the Omarama Saddle, Buscot, Ewe Range (Tara Hills), Mount Eric, Benmore. These sites are subject to conditions and pilots are expected to travel up together to minimise disruption. Travel must be slow to minimise dust

Visitors

- Visitors and non-flyers may observe and attend to the proceedings. If experienced in competition matters, driving or flying procedures they may be called upon to assist with launches, observation, retrieves and even to help facilitate rescue services if required.
- Dogs are not permitted on site even if kept in vehicles.

Flight Objectives, Competition Issues and Rules

- The object of the event is for pilots to improve their thermalling and cross country skills with minimal competition and tactical pressures. Some pilots will try to set distance records or get the best total of three flights. Others will try to gain altitude (within legal limits), and fly back to base. Pilots can fly at sites and in conditions they are comfortable with, knowing that they will not be penalised for not flying.
- A penalty and protest system is in place 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 organiser 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.

Typically pilots will launch around midday or early afternoon with some will land shortly after while more experienced pilots flying long distances may fly until late afternoon. This allows time for retrieves but search and rescue prior to last light during the long summer days opportunity will be limited. Therefore pilots are all advised to fly with trackers such as Spot Garmin, Delorme. Use cell tracking such as Airtribune and to carry a charged phone with battery backup. A second sim card can improve phone & txt communication. Those without trackers are advised to always land close to paved roads. Water, snack food and warm clothes are all normally carried to pilots can survive a night out if required (glider and parachutes can provide shelter and warmth if needed).

- Safety, the primary concern, is ongoing throughout the competition.

Pilot Registration

A mandatory system is in place for all pilots to ensure that they are accounted for each day. The organiser or appointed assistant maintains the list and contact details of all pilots attending.

The list enables the organisation to alert to any potential missing pilot situation so that the missing pilot procedure can be enabled (see Emergency Plan).

As pilots may travel in different directions and locations, all are expected to verify all in their group are accounted for at the end of each flying day. If any pilots are missing, it should be reported to the organiser/s who will check contact details, and alert police if the pilot is unaccounted for.

Traffic Management

See Magic Mountain road briefing.

A Convoy Marshall may be assigned to enforce and monitor the safe behaviour of all vehicles proceeding up to launch. Four wheel drive vehicles with low ratio and engine braking are required on most sites. All vehicles must comply with local (e.g. forestry and farmer) requirements and this may include the carriage of shovels and fire extinguishers which are recommended anyway.

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

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

Gates are to be left as they are found. Gates must not be left open for the next vehicle unless the first vehicle has assured the next knows it is to be closed after them. All drivers are to be educated on this and to report if for some reason a gate can't be shut properly so that we can send someone back to fix it.

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

Communication and Pilot Tracking

- All competitors are required to carry, and know how to use a means of communication such as, radio, satellite tracker, cellphone etc. Those being visually monitored by an instructor are exempted.
- SMS (text) and social media apps can be used for retrieves.
- Mobile phones – are used for all types of communication. It is known, and communicated to pilots, that there are large areas of the flying arena with no, or limited, cell phone reception. Vodafone and Spark cover different areas so carry a sim card for each provider can help.

- Satellite trackers, though not mandatory, 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 common models are Garmin, Delorme InReach and Spot. Pilots are recommended to enable “tracking mode” on these devices during all flights. This enables the organisation to track the pilots on a map via ‘Highcloud’ website.
- ‘Airtribune’ tracking – is not mandatory but 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 distress protocol is that a hang glider left unmoved on the ground after landing is a distress signal. All pilots are briefed of this with instruction to make a call on the radio if this signal is observed. All pilots are reminded to move their wings immediately after landing if they do not require assistance.
- Should there be an injury that requires helicopter evacuation; pilots flying are be warned on radio, a ground air signal will be placed nearby in the shape of an ‘X’ or a ‘Y’ and repeated two short blasts of on a car horn shall be used to attract attention of any flying nearby to clear the area. Gliders near the injured person are to be packed up or cleared from the area to make it safe.
- Contact Details – are pilots are obliged to provide phone and social media contact details to the organiser 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

The emergency plan, in the event of injury, is available to all pilots and 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).

The organiser will carry a First Aid kit in their vehicle and others are advised to do the same. There is a high number of instructors, all who have a current first Aid certificate.

For minor and superficial injuries, there is a nurse in Omarama and medical centres in Twizel and Kurow, Wanaka and Cromwell.

Emergency Plan in the event of a missing person

The emergency plan, in the event of a missing person, is given to all pilots and 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 20:00 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, social media and checking pilot accommodation and known associates).

If, by 20:45 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 hang glider
- Last known location based on satellite tracker and information from witnesses
- Details of the expected course line and pilot's likely position in relation to it

Hazards and Risks

Hang gliding 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 events inevitably present a different kind of risk to the average pilot.

Equipment certification, maintenance, and varying pilot experience are part of the event 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 participate. 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 they must be free of alcohol or impairing 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	<ul style="list-style-type: none"> • Pilot / spectator injury ranging from minor to fatal 	<ul style="list-style-type: none"> • Alert launch director • Launch safety briefing; wire launch procedure. • Hazards; Sun, shingle slopes • Vehicle briefing; use of 4WD, engine braking, brake use etc. • Personnel trained in first aid and the availability of a first aid kit at

		take off.
Other air traffic / Users	<ul style="list-style-type: none"> • Collision • Pilot injury (self /other) ranging from minor to fatal 	<ul style="list-style-type: none"> • Communications with local Air Users to advise of heightened hang glider activity. • Site safety briefings • VFR Flight Rules • Local MBZ procedure • Hazard identification • Use of radios (airband) • Use Flarm • Listen out. • Use your radios. Alert others of air traffic.
Power cables	<ul style="list-style-type: none"> • Electrocution injuries, ranging from serious to fatal • Public inconvenience 	<ul style="list-style-type: none"> • Identification of specific hazards • Keep eyes out to identify for possible lines. • Immediate contact with emergency services to disconnect power
Weather	<ul style="list-style-type: none"> • Pilot Injury ranging from minor to fatal. • Turbulence • Variability. 	<ul style="list-style-type: none"> • Detailed briefings • A plethora of weather and flight planning websites. • Pilots can choose to fly another day if conditions become difficult. • Pilot check back process
Mountains	<ul style="list-style-type: none"> • Remoteness • Lack of Communications. • Mountain passes used by other air traffic - congestion. • Turbulence • Flight close to terrain. 	<ul style="list-style-type: none"> • Briefings • Instruction and mentoring • Do not 'push on' outside your own flying limits. Know when to say 'enough' • Add on-board maps to smartphone.
Extended no landing zones – forests, wooded areas, water	<ul style="list-style-type: none"> • Injury • Remoteness and long walk outs • Fatigue • Delays in Reporting /rescue • Exposure 	<ul style="list-style-type: none"> • Briefings; some areas are locked. • Don't take unnecessary risks. • Always have landing options. • Instruction and mentoring • Land beside roads and houses where possible • Use of emergency services

Equipment	<ul style="list-style-type: none"> • Injury 	<ul style="list-style-type: none"> • Ensure equipment is WoF'd and maintained to manufacturer standards. • Parachute repack is up to date. • Fly a wing you are familiar with. • Wheels recommended
Pilot Fitness – Mental Emotional Physical	<ul style="list-style-type: none"> • Injury to self and or other • Nervousness 	<ul style="list-style-type: none"> • Be prepared • Illness, Medication, Stress, Alcohol, Drugs, Fatigue, Hydration, Food. All issues dealt with. • Ask for Flight Briefings • Instruction and mentoring • Briefings with respect to use of medicines and drugs • Carry a personal first aid kit • Do not follow others unless capable
Poor radio reception	<ul style="list-style-type: none"> • Check back delays. • Search and rescue delays • Isolation • Exposure • Fatigue 	<ul style="list-style-type: none"> • Pre-flight check radios • Beware of flying behind ridges and mountains • Use satellite trackers. • Check back protocols. • Carry 'Pilot Safety Plan' • Carry UHF, airband, 2M • Carry mobile phone with 'navigation' details: compass / GPS for co-ordinates. • Carry spare batteries / portable charger.
Traffic accident, breakdowns	<ul style="list-style-type: none"> • Injury ranging from minor to fatal • Blockage of access for emergency response 	<ul style="list-style-type: none"> • 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 • All vehicles have WoF, equipped with spare tyre, water and tool kit
Heat, Sunburn and Sunstroke	<ul style="list-style-type: none"> • Dehydration • Blistering / pain • Distraction and poor thinking skills. 	<ul style="list-style-type: none"> • Pilots reminded to bring and use sun cream, hats • Pilots reminded to hydrate during flight • Provide sun shelters at launch.

	<ul style="list-style-type: none"> • Lack of coordination 	
Animals and farm stock	<ul style="list-style-type: none"> • Injury to Self /other • Injury to stock • Damage to property • Public inconvenience 	<ul style="list-style-type: none"> • Briefings where stock considerations • Keep a good lookout • Be considerate and stay well clear • NZHGPA 'code of conduct' • NZHGPA insurance • Visit unhappy farmers asap. If stock injured affected. • Do not bring dogs
Fire	<ul style="list-style-type: none"> • Forest fire • Burn injuries • Blockage of access for emergency response 	<ul style="list-style-type: none"> • Fire extinguishers and shovels in event 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
Crash at launch	<ul style="list-style-type: none"> • Pilot injury ranging from minor to fatal 	<ul style="list-style-type: none"> • Experienced launch director • Site safety briefing • Hazard identification • Personnel trained in first aid • Availability of first aid kit at take off • Cell phone/ satellite coverage for calling emergency services where possible
Crash on course	<ul style="list-style-type: none"> • Pilot injury ranging from minor to fatal 	<ul style="list-style-type: none"> • Safety briefing • Hazard identification • Ground based responder trained in first aid with first aid kit and fire extinguisher

		<ul style="list-style-type: none"> • 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 pilots advised by radio or ground signals. • Pilots encouraged to buddy or team fly.
Impact with power cables	<ul style="list-style-type: none"> • Falling and electrocution injuries, ranging from serious to fatal 	<ul style="list-style-type: none"> • Identification of this specific hazard on site briefing. • Immediate contact with emergency services to disconnect power. • Pilots advised not to approach unless power is confirmed off. • Otherwise as above
Missing pilot	<ul style="list-style-type: none"> • Delayed response to potential injuries • Exposure • Exhaustion • Dehydration 	<ul style="list-style-type: none"> • Pilot check back process • Pilots encouraged to buddy or team fly. • Contact details available to safety personnel • Organised search party both on ground and via aircraft • Alert to emergency services (LSAR) if the situation is deemed serious or sunset is approaching
Proximity with other aircraft	<ul style="list-style-type: none"> • Mid-air collision leading to crash 	<ul style="list-style-type: none"> • Special airspace arranged with air traffic control • Notification to other airspace users in AIP supplement • Launch Marshall to suspend launch if congestion occurs • Hang glider pilots advised to allow for gliders down ward blind spots and hang gliders upward vision limitations. • Hang gliders advised to use Flarm where possible because of speeding gliders in the area.
Landing in water/trees	<ul style="list-style-type: none"> • Drowning • Injury 	<ul style="list-style-type: none"> • Pilots to avoid flying low at major areas water/heavily forested areas
Traffic accident	<ul style="list-style-type: none"> • Injury ranging from minor to fatal • Blockage of access for emergency response 	<ul style="list-style-type: none"> • 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
Sunburn and sun stroke	<ul style="list-style-type: none"> • Blistering • Lack of coordination 	<ul style="list-style-type: none"> • Pilot reminded to bring and use sun cream • Shade available at take-off, cars, umbrella, hats for the launch

		marshal primarily
Fire	<ul style="list-style-type: none"> • Forest/scrub fire • Burn injuries • Blockage of access for emergency response 	<ul style="list-style-type: none"> • Fire extinguishers and shovels in three competition vehicles • Smoking banned at all competition locations other than the HQ or in enclosed vehicles • Electronic cigarettes are not deemed to be a fire hazard
Hygiene	<ul style="list-style-type: none"> • Food poisoning, illness, virus 	<ul style="list-style-type: none"> • Instructions for toileting on site. Pilots advised to carry toilet paper, spade, hand sanitiser in each vehicle • COVID restrictions to be followed according to current Government guidance. Carry a mask at all times, use when required and observe distancing rules. If you get symptoms, isolate and contact local medical for testing. • COVID advice at https://covid19.govt.nz/assets/resources/posters/COVID-19-Readiness-Checklist.pdf • Event (gathering) advice, updates at hgpg.co.nz • Register by text and email to aero@xtra.co.nz

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 hang gliding 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 event 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

Participant Emergency Plan

Omarama XC Classic 2022

Your own safety must come first, You cannot help if you are injured yourself.

Contact information

Organisation	Person	Phone/txt	Frequency
All Emergency Services	Police, ambulance, fire, rescue		111
Police Omarama			
Medical Omarama			
Medical Twizel			
Medical Centre Kurow			
Event organiser	Bill Degen	021 247-2676	144.060
Safety Officer	Warren Simonsen	021 183 2126	144.060
NZHGPA			

If you are injured and require assistance;

Call for help on; radio, cell phone, satellite tracker, epirb.

Leave your glider spread open so that others see you need help, and it will be easier to find you. It can also be used for shelter. If you can move without causing further injury, spread your glider bag in the shape of an 'X' or a 'Y'.

If you witness an accident;

Note location.

If you can land safely nearby (do not put yourself at risk as this could worsen the situation).

Administer first Aid.

Call for help on; radio, cell phone, satellite tracker, epirob. Call 111 if there is injury requiring treatment. If unable to phone, radio to other pilots to do so.

If you witness an accident but cannot land;

Mark the position on your GPS, take a photo if possible to do so safely.

Report by radio and ask others on the radio to relay to ground crew.

Keep in sight of the accident scene if possible to safely do so. Watch for signs of pilot or glider movement.

Maintain contact with the pilot and ground crew/organisers/rescuers.

If you are the only witness and cannot contact anyone to do so, you may need to fly somewhere safe to land to call emergency services on 111. It is more important to call emergency services than to remaining in sight of the accident.

Check after landing that the pilot has been attended to.

Keep a copy of this with you when flying